# UNITED STATES <br> SECURITIES AND EXCHANGE COMMISSION <br> Washington, D.C. 20549 <br> Form 8-K <br> CURRENT REPORT <br> Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 

Date of Report (date of earliest event reported): November 4, 2011

## JPMORGAN CHASE \& CO.

(Exact name of registrant as specified in its charter)

Delaware
(State or Other Jurisdiction of Incorporation)

270 Park Avenue, New York, NY
(Address of Principal Executive Offices)

1-5805
(Commission File Number)

13-2624428
(IRS Employer Identification No.)

10017
(Zip Code)

Registrant's telephone number, including area code: (212) 270-6000
Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:
o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

## Item 8.01 Other Events

On November 4, 2011, JPMorgan Chase \& Co. ("JPMorgan Chase" or the "Firm") filed with the U.S. Securities and Exchange Commission (the "SEC") its Quarterly Report on Form 10-Q for the quarter ended September 30, 2011 (the "September 2011 10-Q"). The September 2011 10-Q reflects changes in the Firm's business segments that became effective July 1, 2011.

JPMorgan Chase is filing this Current Report on Form 8-K ("Form 8-K") to revise information in the Firm's Annual Report on Form 10-K for the year ended December 31, 2010 (the "2010 10-K"), to reflect the aforementioned changes in JPMorgan Chase’s business segments. In addition, on the date hereof, JPMorgan Chase is also filing a Current Report on Form 8-K to revise information in the Firm's Quarterly Report on Form 10-Q for the quarter ended March 31, 2011, and a Current Report on Form 8-K to revise information in the Firm's Quarterly Report on Form 10-Q for the quarter ended June 30, 2011, in each case solely for the purpose of reflecting the aforementioned changes in its business segments. The revisions of the previously issued financial information do not affect the Firm's reported net income, earnings per share, total assets, stockholders' equity or regulatory capital for any of the previously reported periods

The revised financial information contained in this Form 8-K and the other Current Reports on Form 8-K referred to above reflect that the Firm's business segments have been reorganized, effective July 1, 2011, as follows:

- Auto and Student Lending transferred from the Retail Financial Services ("RFS") segment and are reported with Card Services \& Auto ("Card") in a single segment.
- Retail Financial Services continues as a segment, organized in two components: Consumer \& Business Banking (formerly Retail Banking) and Mortgage Banking (including Mortgage Production and Servicing, and Real Estate Portfolios).

The sections of the 2010 10-K most affected by these revisions, as reflected by Exhibit 99 hereto, are as follows:

| Section | Page(s) |
| :--- | ---: |
| Introduction | 54 |
| Business Segment Results | $67-68$ |
| $\quad$ Retail Financial Services | $72-78$ |
| $\quad$ Card Services \& Auto | $79-81 \mathrm{~A}$ |
| Capital Management | $102-106$ |
| Notes to Consolidated Financial Statements: |  |
| Note $17-$ Goodwill and other intangible assets | $260-263$ |
| Note $34 —$ Business segments | $290-293$ |

The information in Exhibit 99 of this Form 8-K continues to speak as of the date of the original filing of the 2010 10-K on February 28, 2011. The Firm has not revised or updated its disclosures except as referenced above. Accordingly, references in Exhibit 99 to "this Annual Report" are to the 2010 10-K as revised by the information in Exhibit 99.

The Exhibits provided with this Form 8-K shall be deemed to be "filed" for purposes of the Securities Exchange Act of 1934, as amended, except as noted below.

## Item 9.01 Financial Statements and Exhibits

(d) Exhibits

| Exhibit Number | Description of Exhibit |
| :---: | :---: |
| 23 | Consent of independent registered public accounting firm. |
| 99 | Business - Business segments; Management's discussion and analysis of financial condition and results of operations, and the audited Consolidated Financial Statements, together with the Notes thereto, revised to reflect the business segment reorganization of RFS and Card for each of the years in the three-year period ended December 31, 2010 (which replaces and supersedes Part I, Item 1: Business - Business Segments, Part II, Item 7 and Item 8, respectively, of the 2010 10-K filed with the SEC on February 28, 2011), and the Report of independent registered public accounting firm dated February 28, 2011, except for the change in the composition of business segments discussed in Note 34, as to which the date is November 4, 2011. |
| 101 | Pursuant to Rule 405 of Regulation S-T, the following financial information from the Firm's 2010 10-K, revised to reflect the business segment reorganization of RFS and Card, is formatted in XBRL (eXtensible Business Reporting Language) interactive data files: (i) Consolidated Statements of Income for each of the years in the three-year period ended December 31, 2010; (ii) Consolidated Balance Sheets at December 31, 2010 and 2009; (iii) Consolidated Statements of Changes in Stockholders' Equity and Comprehensive Income for each of the years in the three-year period ended December 31, 2010; (iv) Consolidated Statements of Cash Flows for each of the years in the three-year period ended December 31, 2010; and (v) the Notes to Consolidated Financial Statements (which replaces and supersedes Exhibit 101 of the 2010 10-K furnished to the SEC on February 28, 2011). $\dagger$ |

$\dagger \quad$ As provided in Rule 406T of Regulation S-T, this information shall not be deemed "filed" for purposes of Sections 11 and 12 of the Securities Act of 1933 and Section 18 of the Securities Exchange Act of 1934 or otherwise subject to liability under those sections.

## SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

JPMORGAN CHASE \& CO.
(Registrant)

By: /s/ Shannon S. Warren
Shannon S. Warren

Managing Director and Corporate Controller (Principal Accounting Officer)

## EXHIBIT INDEX

Exhibit Number 23

Description of Exhibit
Consent of independent registered public accounting firm.
Business - Business segments; Management's discussion and analysis of financial condition and results of operations, and the audited Consolidated Financial Statements, together with the Notes thereto, revised to reflect the business segment reorganization of RFS and Card for each of the years in the three-year period ended December 31, 2010 (which replaces and supersedes Part I, Item 1: Business - Business Segments, Part II, Item 7 and Item 8, respectively, of the 2010 10-K filed with the SEC on February 28, 2011), and the Report of independent registered public accounting firm dated February 28, 2011, except for the change in the composition of business segments discussed in Note 34, as to which the date is November 4, 2011.

Pursuant to Rule 405 of Regulation S-T, the following financial information from the Firm's 2010 10-K, revised to reflect the business segment reorganization of RFS and Card, is formatted in XBRL (eXtensible Business Reporting Language) interactive data files: (i) Consolidated Statements of Income for each of the years in the three-year period ended December 31, 2010; (ii) Consolidated Balance Sheets at December 31, 2010 and 2009; (iii) Consolidated Statements of Changes in Stockholders' Equity and Comprehensive Income for each of the years in the three-year period ended December 31, 2010; (iv) Consolidated Statements of Cash Flows for each of the years in the three-year period ended December 31, 2010; and (v) the Notes to Consolidated Financial Statements (which replaces and supersedes Exhibit 101 of the 2010 10-K furnished to the SEC on February 28, 2011). $\dagger$
$\dagger \quad$ This exhibit shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, or otherwise subject to the liability of that Section. Such exhibit shall not be deemed incorporated into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934.

## CONSENT OF INDEPENDENT REGISTERED ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on:

Form S-3
(No. 333-169900)
(No. 333-155535)

Form S-8
(No. 333-175681)
(No. 333-158325)
(No. 333-150208)
(No. 333-145108)
(No. 333-142109)
(No. 333-125827)
(No. 333-112967)
(No. 333-64476)
(No. 333-47350)
(No. 333-31666)
(No. 333-31634)
(No. 333-73119)
of JPMorgan Chase \& Co. and its affiliates ("the Firm") of our report dated February 28, 2011, except with respect to our opinion on the consolidated financial statements insofar as it relates to the change in the composition of business segments discussed in Note 34, as to which the date is November 4, 2011, relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Current Report on Form 8-K.
/s/ PricewaterhouseCoopers LLP
New York, New York
November 4, 2011

## ITEM 1: BUSINESS

## Business segments

JPMorgan Chase's activities are organized, for management reporting purposes, into six business segments, as well as Corporate/Private Equity. The Firm's wholesale businesses comprise the Investment Bank, Commercial Banking, Treasury \& Securities Services and Asset Management segments. The Firm’s consumer businesses comprise the Retail Financial Services and Card Services \& Auto segments.

A description of the Firm's business segments and the products and services they provide to their respective client bases is provided in the "Business segment results" section of Management's discussion and analysis of financial condition and results of operations ("MD\&A"), beginning on page 67 and in Note 34 on pages 290-291.

## Financial

## Five-year summary of consolidated financial highlights

(unaudited)
(in millions, except per share, headcount and ratio data)

| As of or for the year ended December 31, | 2010 |  | 2009 |  | 2008(d) |  | 2007 |  | 2006 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Selected income statement data |  |  |  |  |  |  |  |  |  |  |
| Total net revenue | \$ | 102,694 | \$ | 100,434 | \$ | 67,252 | \$ | 71,372 | \$ | 61,999 |
| Total noninterest expense |  | 61,196 |  | 52,352 |  | 43,500 |  | 41,703 |  | 38,843 |
| Pre-provision profit(a) |  | 41,498 |  | 48,082 |  | 23,752 |  | 29,669 |  | 23,156 |
| Provision for credit losses |  | 16,639 |  | 32,015 |  | 19,445 |  | 6,864 |  | 3,270 |
| Provision for credit losses - accounting conformity(b) |  | - |  | - |  | 1,534 |  | - |  | - |
| Income from continuing operations before income tax expensel(benefit) and extraordinary gain |  | 24,859 |  | 16,067 |  | 2,773 |  | 22,805 |  | 19,886 |
| Income tax expense/(benefit) |  | 7,489 |  | 4,415 |  | (926) |  | 7,440 |  | 6,237 |
| Income from continuing operations |  | 17,370 |  | 11,652 |  | 3,699 |  | 15,365 |  | 13,649 |
| Income from discontinued operations(c) |  | - |  | - |  | - |  | - |  | 795 |
| Income before extraordinary gain |  | 17,370 |  | 11,652 |  | 3,699 |  | 15,365 |  | 14,444 |
| Extraordinary gain(d) |  | - |  | 76 |  | 1,906 |  | - |  | - |
| Net income | \$ | 17,370 | \$ | 11,728 | \$ | 5,605 | \$ | 15,365 | \$ | 14,444 |

## Per common share data

Basic earnings
Income from continuing operations Net income
Diluted earnings(e)
Income from continuing operations
Net income
Cash dividends declared per share
Book value per share
Common shares outstanding
Average: Basic

| \$ | 3.98 | \$ | 2.25 | \$ | 0.81 | \$ | 4.38 | \$ | 3.83 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3.98 |  | 2.27 |  | 1.35 |  | 4.38 |  | 4.05 |
| \$ | 3.96 | \$ | 2.24 | \$ | 0.81 | \$ | 4.33 | \$ | 3.78 |
|  | 3.96 |  | 2.26 |  | 1.35 |  | 4.33 |  | 4.00 |
|  | 0.20 |  | 0.20 |  | 1.52 |  | 1.48 |  | 1.36 |
|  | 43.04 |  | 39.88 |  | 36.15 |  | 36.59 |  | 33.45 |
|  | 3,956.3 |  | 3,862.8 |  | 3,501.1 |  | 3,403.6 |  | 3,470.1 |
|  | 3,976.9 |  | 3,879.7 |  | 3,521.8 |  | 3,445.3 |  | 3,516.1 |
|  | 3,910.3 |  | 3,942.0 |  | 3,732.8 |  | 3,367.4 |  | 3,461.7 |
| \$ | 48.20 | \$ | 47.47 | \$ | 50.63 | \$ | 53.25 | \$ | 49.00 |
|  | 35.16 |  | 14.96 |  | 19.69 |  | 40.15 |  | 37.88 |
|  | 42.42 |  | 41.67 |  | 31.53 |  | 43.65 |  | 48.30 |
|  | 165,875 |  | 164,261 |  | 117,695 |  | 146,986 |  | 167,199 |

Common shares at period-end
Share price(f)
High
LOW
Close
42.42
165,875

Market capitalization


Return on common equity ("ROE")(e)
Income from continuing operations Net income
Return on tangible common equity ("ROTCE")(e)
income from continuing operations
Net income
Return on assets ("ROA")
Income from continuing operations
Net income
Overhead ratio
Deposits-to-loans ratio
Tier 1 capital ratio(g)

| 10\% |  | 6\% |  | 2\% |  | 13\% |  | 12\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 |  | 6 |  | 4 |  | 13 |  | 13 |
| 15 |  | 10 |  | 4 |  | 22 |  | 24 |
| 15 |  | 10 |  | 6 |  | 22 |  | 24 |
| 0.85 |  | 0.58 |  | 0.21 |  | 1.06 |  | 1.04 |
| 0.85 |  | 0.58 |  | 0.31 |  | 1.06 |  | 1.10 |
| 60 |  | 52 |  | 65 |  | 58 |  | 63 |
| 134 |  | 148 |  | 135 |  | 143 |  | 132 |
| 12.1 |  | 11.1 |  | 10.9 |  | 8.4 |  | 8.7 |
| 15.5 |  | 14.8 |  | 14.8 |  | 12.6 |  | 12.3 |
| 7.0 |  | 6.9 |  | 6.9 |  | 6.0 |  | 6.2 |
| 9.8 |  | 8.8 |  | 7.0 |  | 7.0 |  | 7.3 |
| 892 | \$ | 411,128 | \$ | 509,983 | \$ | 491,409 | \$ | 365,738 |
| 336 |  | 360,390 |  | 205,943 |  | 85,450 |  | 91,975 |
| 927 |  | 633,458 |  | 744,898 |  | 519,374 |  | 483,127 |
| 605 |  | 2,031,989 |  | 2,175,052 |  | 1,562,147 |  | 1,351,520 |
| 369 |  | 938,367 |  | 1,009,277 |  | 740,728 |  | 638,788 |
| 669 |  | 266,318 |  | 270,683 |  | 199,010 |  | 145,630 |
| 306 |  | 157,213 |  | 134,945 |  | 123,221 |  | 115,790 |
| 106 |  | 165,365 |  | 166,884 |  | 123,221 |  | 115,790 |
| 831 |  | 222,316 |  | 224,961 |  | 180,667 |  | 174,360 |

Tier 1 leverage ratio
ier 1 common capital ratio(h)
Selected balance sheet data (period-end)(g)
Trading assets
Securities
oans
Total assets
Deposits
Long-term debt
Common stockholders' equity
otal stockholders' equity
Headcount
 generate income in excess of its provision for credit losses.
(b) Results for 2008 included an accounting conformity loan loss reserve provision related to the acquisition of Washington Mutual Bank's ("Washington Mutual ") banking operations.
 businesses of The Bank of New York Company Inc. The results of operations of these corporate trust businesses were reported as discontinued operations.
 with and into The Bear Stearns Companies Inc. ("Bear Stearns"), and Bear Stearns became a wholly-owned subsidiary of JPMorgan Chase. The Washington Mutual acquisition resulted in negative goodwill, and accordingly, the Firm recorded an extraordinary gain. A preliminary gain of $\$ 1.9$ billion was recognized at December $31,2008$. The final total extraordinary gain that resulted from the Washington Mutual transaction was $\$ 2.0$ billion. For additional information on these transactions, see Note 2 on pages 166-170 of this Annual Report.
 resulting from repayment of U.S. Troubled Asset Relief Program ("TARP") preferred capital in the second quarter of 2009. Excluding this reduction, the adjusted ROE and ROTCE were $7 \%$ and $11 \%$, respectively, for 2009. The Firm views the adjusted ROE and ROTCE, both non-GAAP financial measures, as meaningful because they enable the comparability to prior periods. For further discussion, see "Explanation and reconciliation of the Firm's use of non-GAAP financial measures" on pages $64-66$ of this Annual Report.
 Stock Exchange and the Tokyo Stock Exchange.
 entities ("VIEs"). Upon adoption of the guidance, the Firm consolidated its Firm-sponsored credit card securitization trusts, Firm-administered multi-seller conduits and certain other consumer loan securitization entities, primarily mortgage-related, adding $\$ 87.7$ billion and $\$ 92.2$ billion of assets and liabilities, respectively, and decreasing stockholders' equity and the Tier 1 capital ratio by $\$ 4.5$ billion and 34 basis points, respectively. The reduction to stockholders' equity was driven by the establishment of an allowance for loan losses of $\$ 7.5$ billion (pretax) primarily related to receivables held in credit card securitization trusts that were consolidated at the adoption date.
 1 common ratio") is Tier 1 common divided by risk-weighted assets. For further discussion, see Regulatory capital on pages 102-104 of this Annual Report.

## FIVE-YEAR STOCK PERFORMANCE

The following table and graph compare the five-year cumulative total return for JPMorgan Chase \& Co. ("JPMorgan Chase" or the "Firm") common stock with the cumulative return of the S\&P 500 Stock Index and the S\&P Financial Index. The S\&P 500 Index is a commonly referenced U.S. equity benchmark consisting of leading companies from different economic sectors. The S\&P Financial Index is an
index of 81 financial companies, all of which are within the S\&P 500. The Firm is a component of both industry indices.
The following table and graph assume simultaneous investments of $\$ 100$ on December 31, 2005, in JPMorgan Chase common stock and in each of the above S\&P indices. The comparison assumes that all dividends are reinvested.

| December 31, <br> (in dollars) |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| JPMorgan Chase | 2005 | 2006 | 2007 | 2008 | $\mathbf{2 0 0 9}$ |
| S\&P Financial Index | $\$ 100.00$ | $\$ 125.55$ | $\$ 116.75$ | $\$ 87.19$ | $\$ 116.98$ |
| S\&P 500 Index | $\mathbf{1 0 0 . 0 0}$ | 119.19 | 96.99 | 43.34 | 50.80 |



This section of JPMorgan Chase's Annual Report for the year ended December 31, 2010 ("Annual Report") provides management's discussion and analysis ("MD\&A") of the financial condition and results of operations of JPMorgan Chase. See the Glossary of terms on pages 300-303 for definitions of terms used throughout this Annual Report. The MD\&A included in this Annual Report contains statements that are forward-looking within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements are based on the current beliefs and expectations of JPMorgan Chase's management and are subject
to significant risks and uncertainties. These risks and uncertainties could cause the Firm's actual results to differ materially from those set forth in such forward-looking statements. Certain of such risks and uncertainties are described herein (see Forward-looking Statements on page 157 of this Annual Report) and in the JPMorgan Chase Annual Report on Form 10-K for the year ended December 31, 2010 ("2010 Form 10-K"), in Part I, Item 1A: Risk factors, to which reference is hereby made.

## Management's discussion and analysis

## INTRODUCTION

JPMorgan Chase \& Co., a financial holding company incorporated under Delaware law in 1968, is a leading global financial services firm and one of the largest banking institutions in the United States of America ("U.S."), with $\$ 2.1$ trillion in assets, $\$ 176.1$ billion in stockholders' equity and operations in more than 60 countries as of December 31, 2010. The Firm is a leader in investment banking, financial services for consumers, small business and commercial banking, financial transaction processing, asset management and private equity. Under the J.P. Morgan and Chase brands, the Firm serves millions of customers in the U.S. and many of the world's most prominent corporate, institutional and government clients.

JPMorgan Chase's principal bank subsidiaries are JPMorgan Chase Bank, National Association ("JPMorgan Chase Bank, N.A."), a national bank with branches in 23 states in the U.S.; and Chase Bank USA, National Association ("Chase Bank USA, N.A."), a national bank that is the Firm's credit card issuing bank. JPMorgan Chase's principal nonbank subsidiary is J.P. Morgan Securities LLC ("JPMorgan Securities"; formerly J.P. Morgan Securities Inc.), the Firm's U.S. investment banking firm.

JPMorgan Chase's activities are organized, for management reporting purposes, into six business segments, as well as Corporate/Private Equity. The Firm's wholesale businesses comprise the Investment Bank, Commercial Banking, Treasury \& Securities Services and Asset Management segments. The Firm's consumer businesses comprise the Retail Financial Services and Card Services \& Auto segments. A description of the Firm's business segments, and the products and services they provide to their respective client bases, follows.

## Investment Bank

J.P. Morgan is one of the world's leading investment banks, with deep client relationships and broad product capabilities. The clients of the Investment Bank ("IB") are corporations, financial institutions, governments and institutional investors. The Firm offers a full range of investment banking products and services in all major capital markets, including advising on corporate strategy and structure, capital-raising in equity and debt markets, sophisticated risk management, market-making in cash securities and derivative instruments, prime brokerage, and research.

## Retail Financial Services

Retail Financial Services ("RFS") serves consumers and businesses through personal service at bank branches and through ATMs, online banking and telephone banking. Customers can use more than 5,200 bank branches (third-largest nationally) and 16,100 ATMs (secondlargest nationally), as well as online and mobile banking around the clock. More than 28,900 branch salespeople assist customers with checking and savings accounts, mortgages, home equity and business loans, and investments
across the 23-state footprint from New York and Florida to California.

## Card Services \& Auto

Card Services \& Auto ("Card") is one of the nation's largest credit card issuers, with over $\$ 137$ billion in credit card loans and over 90 million open credit card accounts. Customers used Chase credit cards to meet $\$ 313$ billion of their spending needs in 2010. Through its merchant acquiring business, Chase Paymentech Solutions, Card is a global leader in payment processing and merchant acquiring. Consumers also can obtain loans through more than 16,200 auto dealerships and 2,200 schools and universities nationwide.

## Commercial Banking

Commercial Banking ("CB") delivers extensive industry knowledge, local expertise and dedicated service to nearly 24,000 clients nationally, including corporations, municipalities, financial institutions and not-for-profit entities with annual revenue generally ranging from $\$ 10$ million to $\$ 2$ billion, and nearly 35,000 real estate investors/owners. CB partners with the Firm's other businesses to provide comprehensive solutions, including lending, treasury services, investment banking and asset management to meet its clients' domestic and international financial needs.

## Treasury \& Securities Services

Treasury \& Securities Services ("TSS") is a global leader in transaction, investment and information services. TSS is one of the world's largest cash management providers and a leading global custodian. Treasury Services ("TS") provides cash management, trade, wholesale card and liquidity products and services to smalland mid-sized companies, multinational corporations, financial institutions and government entities. TS partners with IB, CB, RFS and Asset Management businesses to serve clients firmwide. Certain TS revenue is included in other segments' results. Worldwide Securities Services holds, values, clears and services securities, cash and alternative investments for investors and broker-dealers, and manages depositary receipt programs globally.

## Asset Management

Asset Management ("AM"), with assets under supervision of \$1.8 trillion, is a global leader in investment and wealth management. AM clients include institutions, retail investors and high-net-worth individuals in every major market throughout the world. AM offers global investment management in equities, fixed income, real estate, hedge funds, private equity and liquidity products, including moneymarket instruments and bank deposits. AM also provides trust and estate, banking and brokerage services to high-net-worth clients, and retirement services for corporations and individuals. The majority of AM's client assets are in actively managed portfolios.

This executive overview of MD\&A highlights selected information and may not contain all of the information that is important to readers of this Annual Report. For a complete description of events, trends and uncertainties, as well as the capital, liquidity, credit, operational and market risks, and the critical accounting estimates, affecting the Firm and its various lines of business, this Annual Report should be read in its entirety.

## Economic environment

The business environment in 2010 continued to improve, as signs of growth and stability returned to both the global capital markets and the U.S. economy. The year began with a continuation of the trends seen at the end of 2009: although unemployment had reached $10 \%$, its highest level since 1983, signs were emerging that deterioration in the labor markets was abating and economic activity was beginning to expand. The housing sector also showed some signs of improvement, which was helped by a new round of home-buyer credits. Overall, during 2010, the business environment continued to improve and the U.S. economy grew, though the pace of growth was not sufficient to meaningfully affect unemployment which, at year-end 2010, stood at $9.4 \%$. Consumer spending expanded at a moderate rate early in the year and accelerated as the year progressed, as households continued to reduce debt and increase savings. Businesses began to spend aggressively, with outlays for equipment and software expanding at a double-digit pace over the course of the year. Additionally, businesses cautiously added to payrolls in every month of the year.
Low inflation allowed the Federal Reserve to maintain its accommodative stance throughout 2010, in order to help promote the U.S. economic recovery. The Federal Reserve maintained the target range for the federal funds rate at zero to one-quarter percent and continued to indicate that economic conditions were likely to warrant a low federal funds rate for an extended period.
The U.S. and global economic recovery paused briefly during the second quarter of 2010 as concerns arose that European countries would have to take measures to address their worsening fiscal positions. Equity markets fell sharply, and bond yields tumbled. Concerns about the developed economies, particularly in Europe, persisted throughout 2010 and have continued into 2011. However, fears that the U.S. recovery was faltering proved unfounded, and the U.S. economy continued to grow over the second half of the year. At the same time, growth in the emerging economies remained robust. During the fourth quarter, the Federal Reserve announced a program to purchase longer-term Treasury securities through 2011 in order to restrain interest rates and boost the economy. These developments, combined with record U.S. corporate profit margins and rapid international growth, continued to support stock markets as financial market conditions improved and risk spreads continued to narrow.

## Financial performance of JPMorgan Chase

| Year ended December 31, <br> (in millions, except per share data and ratios) | $\mathbf{2 0 1 0}$ | 2009 | Change |
| :--- | ---: | ---: | ---: |
| Selected income statement data |  |  |  |
| Total net revenue | $\mathbf{\$ 1 0 2 , 6 9 4}$ | $\$ 100,434$ | $2 \%$ |
| Total noninterest expense | $\mathbf{6 1 , 1 9 6}$ | 52,352 | 17 |
| Pre-provision profit | $\mathbf{4 1 , 4 9 8}$ | 48,082 | $(14)$ |
| Provision for credit losses | $\mathbf{1 6 , 6 3 9}$ | 32,015 | (48) |
| Income before extraordinary gain | $\mathbf{1 7 , 3 7 0}$ | 11,652 | 49 |
| Extraordinary gain | $\mathbf{1 7 , 3 7 0}$ | 11,768 | NM |
| Net income |  |  | 48 |
|  |  |  |  |
| Diluted earnings per share | $\mathbf{3 . 9 6}$ | $\mathbf{\$}$ | 2.24 |
| Income before extraordinary gain | $\mathbf{3 . 9 6}$ | 2.26 | 77 |
| Net income |  |  |  |
| Return on common equity | $\mathbf{1 0 \%}$ | $6 \%$ |  |
| Income before extraordinary gain | $\mathbf{1 0}$ | 6 |  |
| Net income |  |  |  |
| Capital ratios | $\mathbf{1 2 . 1}$ | 11.1 |  |
| Tier 1 capital | $\mathbf{9 . 8}$ | 8.8 |  |
| Tier 1 common capital |  |  |  |

## Business overview

Against the backdrop of the improvement in the business environment during the year, JPMorgan Chase reported full-year 2010 record net income of $\$ 17.4$ billion, or $\$ 3.96$ per share, on net revenue of $\$ 102.7$ billion. Net income was up $48 \%$ compared with net income of $\$ 11.7$ billion, or $\$ 2.26$ per share, in 2009. Return on common equity was $10 \%$ for the year, compared with $6 \%$ for the prior year.

The increase in net income for 2010 was driven by a lower provision for credit losses and higher net revenue, partially offset by higher noninterest expense. The lower provision for credit losses reflected improvements in both the consumer and wholesale provisions. The increase in net revenue was due predominantly to higher securities gains in the Corporate/Private Equity segment, increased other income and increased principal transactions revenue, partially offset by lower credit card income. The increase in noninterest expense was largely due to higher litigation expense.
JPMorgan Chase benefited from an improvement in the credit environment during 2010. Compared with 2009, delinquency trends were more favorable and estimated losses were lower in the consumer businesses, although they remained at elevated levels. The credit quality of the commercial and industrial loan portfolio across the Firm's wholesale businesses improved. In addition, for the year, net charge-offs were lower across all businesses, though the level of net charge-offs in the Firm's mortgage portfolio remained very high and continued to be a significant drag on returns. These positive credit trends resulted in reductions in the allowance for credit losses in Card Services \& Auto, the loan portfolio in Retail Financial Services (excluding purchased credit-impaired loans), and in the Investment Bank and Commercial Banking. Nevertheless, the allowance for loan losses associated with the Washington Mutual purchased creditimpaired loan portfolio in

## Management's discussion and analysis

Retail Financial Services increased, reflecting an increase in estimated future credit losses largely related to home equity, and, to a lesser extent, option ARM loans. Total firmwide credit reserves at December 31, 2010, were $\$ 33.0$ billion, resulting in a firmwide loan loss coverage ratio of $4.5 \%$ of total loans.

Strong client relationships and continued investments for growth resulted in good results across most of the Firm's businesses, including record revenue and net income in Commercial Banking, record revenue in Asset Management and solid results across most other businesses. For the year, the Investment Bank ranked \#1 for Global Investment Banking Fees; Retail Financial Services added more than 150 new branches and 5,000 salespeople, and opened more than 1.5 million net new checking accounts; Card Services \& Auto rolled out new products and opened 11.3 million new accounts; Treasury \& Securities Services grew assets under custody to \$16.1 trillion; and Asset Management reported record long-term AUM net inflows of $\$ 69$ billion.

The Firm also continued to strengthen its balance sheet during 2010, ending the year with a Tier 1 Common ratio of $9.8 \%$ and a Tier 1 Capital ratio of $12.1 \%$. Total stockholders' equity at December 31, 2010, was $\$ 176.1$ billion.

Throughout 2010, JPMorgan Chase continued to support the economic recovery by providing capital, financing and liquidity to its clients in the U.S. and around the world. During the year, the Firm loaned or raised capital of more than \$1.4 trillion for its clients, which included more than $\$ 10$ billion of credit provided to more than 250,000 small businesses in the U.S., an increase of more than $50 \%$ over 2009. JPMorgan Chase also made substantial investments in the future of its businesses, including hiring more than 8,000 people in the U.S. alone. The Firm remains committed to helping homeowners and preventing foreclosures. Since the beginning of 2009, the Firm has offered 1,038,000 trial modifications to struggling homeowners. Of the 285,000 modifications that the Firm has completed, more than half were modified under Chase programs, and the remainder were offered under government-sponsored or agency programs.
Although the Firm continues to face challenges, there are signs of stability and growth returning to both the global capital markets and the U.S. economy. The Firm intends to continue to innovate and invest in the products that support and serve its clients and the communities where it does business.

The discussion that follows highlights the performance of each business segment compared with the prior year and presents results on a managed basis. Managed basis starts with the reported U.S. GAAP results and, for each line of business and the Firm as a whole, includes certain reclassifications to present total net revenue on a tax-equivalent basis. Effective January 1, 2010, the Firm adopted accounting guidance that required it to consolidate its Firm-sponsored credit card securitization trusts; as a result, reported and managed basis relating to credit card securitizations are equivalent for periods beginning after January 1, 2010. Prior to the adoption of this accounting guidance, in 2009 and all other
prior periods, U.S. GAAP results for Card and the Firm were also adjusted for certain reclassifications that assumed credit card loans that had been securitized and sold by Card remained on the Consolidated Balance Sheets. These adjustments ("managed basis") had no impact on net income as reported by the Firm as a whole or by the lines of business. For more information about managed basis, as well as other non-GAAP financial measures used by management to evaluate the performance of each line of business, see pages 6466 of this Annual Report.

Investment Bank net income decreased from the prior year, reflecting lower net revenue and higher noninterest expense, partially offset by a benefit from the provision for credit losses and gains of $\$ 509$ million from the widening of the Firm's credit spread on certain structured and derivative liabilities (compared with losses of $\$ 2.3$ billion on the tightening of the spread on those liabilities in the prior year). The decrease in net revenue was driven by a decline in Fixed Income Markets revenue as well as lower investment banking fees. The provision for credit losses was a benefit in 2010, compared with an expense in 2009, and reflected a reduction in the allowance for loan losses, largely related to net repayments and loan sales. Noninterest expense increased, driven by higher noncompensation expense, including increased litigation reserves, as well as higher compensation expense, including the impact of the U.K. Bank Payroll Tax.
Retail Financial Services net income increased significantly from the prior year, driven by a lower provision for credit losses, partially offset by increased noninterest expense and lower net revenue. Net revenue decreased, driven by lower deposit-related fees (including the impact of the legislative changes related to non-sufficient funds and overdraft fees), and lower loan balances. These decreases were partially offset by a shift to wider-spread deposit products, and growth in debit card income. The provision for credit losses decreased from the 2009 level, reflecting improved delinquency trends and reduced net charge-offs. The provision also reflected an increase in the allowance for loan losses for the purchased credit-impaired portfolio, partially offset by a reduction in the allowance for loan losses, predominantly for the mortgage loan portfolios. Noninterest expense increased from the prior year, driven by higher default-related expense for mortgage loans serviced, and sales force increases in Business Banking and bank branches.
Card Services \& Auto reported net income compared with a net loss in the prior year, as a lower provision for credit losses was partially offset by lower net revenue. The decrease in net revenue was driven by a decline in net interest income, reflecting lower average loan balances, the impact of legislative changes and a decreased level of fees. These decreases were partially offset by a decrease in revenue reversals associated with lower net charge-offs. The provision for credit losses decreased from the prior year, reflecting lower net charge-offs and a reduction in the allowance for loan losses due to lower estimated losses. The prior-year provision included an increase to the allowance for loan losses. Noninterest expense increased due to higher marketing expense.

Commercial Banking reported record net income, driven by a reduction in the provision for credit losses and record net revenue. The increase in net revenue was driven by growth in liability balances, wider loan spreads, higher net gains from asset sales, higher lending-related fees, an improvement in the market conditions impacting the value of investments held at fair value, and higher investment banking fees; these were largely offset by spread compression on liability products and lower loan balances. Results also included the impact of the purchase of a $\$ 3.5$ billion loan portfolio during the third quarter of 2010. The provision for credit losses decreased from 2009 and reflected a reduction in the allowance for credit losses, primarily due to stabilization in the credit quality of the loan portfolio and refinements to credit loss estimates. Noninterest expense increased slightly, reflecting higher headcountrelated expense.

Treasury and Securities Services net income decreased from the prior year, driven by higher noninterest expense, partially offset by a benefit from the provision for credit losses and higher net revenue. Worldwide Securities Services net revenue was relatively flat, as higher market levels and net inflows of assets under custody were offset by lower spreads in securities lending, lower volatility on foreign exchange, and lower balances on liability products. Treasury Services net revenue was relatively flat, as lower spreads on liability products were offset by higher trade loan and card product volumes. Assets under custody grew to \$16.1 trillion during 2010, an 8\% increase. Noninterest expense for TSS increased, driven by continued investment in new product platforms, primarily related to international expansion, and higher performance-based compensation expense.

Asset Management net income increased from the prior year on record revenue, largely offset by higher noninterest expense. The growth in net revenue was driven by the effect of higher market levels, net inflows to products with higher margins, higher loan originations, higher deposit and loan balances, and higher performance fees, partially offset by narrower deposit spreads. Assets under supervision increased 8\% during 2010 driven by the effect of higher market valuations, record net inflows of $\$ 69$ billion to long-term products, and inflows in custody and brokerage products, offset partially by net outflows from liquidity products. - Noninterest expense increased due to higher headcount and performance-based compensation.

Corporate/Private Equity net income decreased from the prior year, driven by higher noninterest expense partially offset by higher net revenue. The increase in net revenue reflected higher securities gains, primarily associated with actions taken to reposition the Corporate investment securities portfolio in connection with managing the Firm's structural interest rate risk, and higher private equity gains. These gains were partially offset by lower net interest income from the investment portfolio. The increase in noninterest expense was due to an increase in litigation reserves, including those for mortgagerelated matters, partially offset by the absence of a $\$ 675$ million FDIC special assessment in 2009.

## 2011 Business outlook

The following forward-looking statements are based on the current beliefs and expectations of JPMorgan Chase's management and are subject to significant risks and uncertainties. As noted above, these risks and uncertainties could cause the Firm's actual results to differ materially from those set forth in such forward-looking statements. See Forward-Looking Statements on page 157 of this Annual Report, and Risk Factors on pages 5-12 of the 2010 Form 10-K.

JPMorgan Chase's outlook for 2011 should be viewed against the backdrop of the global and U.S. economies, financial markets activity, the geopolitical environment, the competitive environment, client activity levels, and regulatory and legislative developments in the U.S. and other countries where the Firm does business. Each of these linked factors will affect the performance of the Firm and its lines of business. Economic and macroeconomic factors, such as market and credit trends, customer behavior, client business strategies and competition, are all expected to affect the Firm's businesses. The outlook for RFS and Card, in particular, reflects the expected effect of current economic trends in the U.S relating to high unemployment levels and the continuing stress and uncertainty in the housing markets. The Firm's wholesale businesses will be affected by market levels and volumes, which are volatile and quickly subject to change.
In the Mortgage Production and Servicing business within RFS, management expects mortgage fees and related income to be $\$ 1$ billion or less for the first quarter of 2011, given the levels of mortgage interest rates and production volumes experienced year-todate. If mortgage interest rates remain at current levels or rise in the future, loan production and margins could continue to be negatively affected resulting in lower revenue for the full year 2011. In addition, revenue could continue to be negatively affected by continued elevated levels of repurchases of mortgages previously sold, predominantly to U.S. government-sponsored entities ("GSEs"), Management estimates that realized repurchase losses could total approximately $\$ 1.2$ billion in 2011. In addition, the Firm is dedicating significant resources to address, correct and enhance its mortgage loan foreclosure procedures and is cooperating with various state and federal investigations into its procedures. As a result, the Firm expects to incur additional costs and expenses in resolving these issues.

In the Real Estate Portfolios business within RFS, management believes that, based on the current outlook for delinquencies and loss severity, it is possible that total quarterly net charge-offs could be approximately $\$ 1.2$ billion during 2011. Given current origination and production levels, combined with management's current estimate of portfolio runoff levels, the residential real estate portfolio is expected to decline by approximately $10 \%$ to $15 \%$ annually for the foreseeable future. The annual reductions in the residential real estate portfolio are expected to reduce net interest income in each period, including a reduction of approximately $\$ 700$ million in 2011 from the 2010 level; however, over time the reduction in net interest income is expected to be more than offset by an improvement in credit costs and lower expenses. As the portfolio continues to run off, management anticipates that approximately $\$ 1.0$ billion of capital may become available for

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redeployment each year, subject to the capital requirements associated with the remaining portfolio.
Also, in RFS, management expects noninterest expense in 2011 to remain modestly above 2010 levels, reflecting investments in new branch builds and sales force hires, as well as continued elevated servicing-, default- and foreclosed asset-related costs.

In Card, management expects end-of-period outstandings for the Chase credit card portfolio (excluding the Washington Mutual credit card portfolio) to continue to decline in 2011. This decline may be as much as $\$ 10$ billion in the first quarter, reflecting both continued portfolio run-off and seasonal activity. The decline in the Chase credit card portfolio is expected to bottom out in the third quarter of 2011, and by the end of 2011, outstandings in the portfolio are anticipated to be approximately $\$ 120$ billion and reflect a better mix of customers. The Washington Mutual credit card portfolio declined to approximately $\$ 14$ billion at the end of 2010 , from $\$ 20$ billion at the end of 2009. Management estimates that the Washington Mutual credit card portfolio could decline to $\$ 10$ billion by the end of 2011. The effect of such reductions in the Chase and Washington Mutual credit card portfolios is expected to reduce 2011 net interest income in Card by approximately $\$ 1.4$ billion from the 2010 level.

The net charge-off rates for both the Chase and Washington Mutual credit card portfolios are anticipated to continue to improve. If current delinquency trends continue, the net charge-off rate for the Chase portfolio (excluding the Washington Mutual portfolio) could be below 6.5\% in the first quarter of 2011.

Despite these positive economic trends, results for RFS and Card will depend on the economic environment. Although the positive economic data seen in 2010 seemed to imply that the U.S. economy was not falling back into recession, high unemployment rates and the difficult housing market have been persistent. Even as consumer lending net charge-offs and delinquencies have improved, the consumer credit portfolio remains under stress. Further declines in U.S. housing prices and increases in the unemployment rate remain possible; if this were to occur, results for both RFS and Card could be adversely affected.

In IB, TSS and AM, revenue will be affected by market levels, volumes and volatility, which will influence client flows and assets under management, supervision and custody. In addition, IB and CB results will continue to be affected by the credit environment, which will influence levels of charge-offs, repayments and provision for credit losses.
In Private Equity (within the Corporate/Private Equity segment), earnings will likely continue to be volatile and be influenced by capital markets activity, market levels, the performance of the broader economy and investment-specific issues. Corporate's net interest income levels will generally trend with the size and duration of the investment securities portfolio. Corporate net income (excluding Private Equity, and excluding merger-related items, material litigation expenses and significant nonrecurring items, if any) is anticipated to trend toward a level of approximately $\$ 300$ million per quarter.

Furthermore, continued repositioning of the investment securities portfolio in Corporate could result in modest downward pressure on the Firm's net interest margin in the first quarter of 2011.

Regarding regulatory reform, JPMorgan Chase intends to continue to work with the Firm's regulators as they proceed with the extensive rulemaking required to implement financial reform. The Firm will continue to devote substantial resources to achieving implementation of regulatory reforms in a way that preserves the value the Firm delivers to its clients.

Management and the Firm's Board of Directors continually evaluate ways to deploy the Firm's strong capital base in order to enhance shareholder value. Such alternatives could include the repurchase of common stock, increasing the common stock dividend and pursuing alternative investment opportunities. Management and the Board will continue to assess and make decisions regarding these alternatives, as appropriate, over the course of the year.

This following section provides a comparative discussion of JPMorgan Chase's Consolidated Results of Operations on a reported basis for the three-year period ended December 31, 2010. Factors that related primarily to a single business segment are discussed in more detail within that business segment. For a discussion of the Critical Accounting Estimates used by the Firm that affect the Consolidated Results of Operations, see pages 149-154 of this Annual Report.

## Revenue

|  | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: |
| Year ended December 31, (in millions) | $\mathbf{6 , 1 9 0}$ | $\$$ | 7,087 |
| Investment banking fees | $\mathbf{5}, \mathbf{5 , 5 2 6}$ |  |  |
| Principal transactions | $\mathbf{6 , 3 4 0}$ |  | 9,796 |
| Lending- and deposit-related fees |  | 7,045 | 5,089 |
| Asset management, administration and | $\mathbf{1 3 , 4 9 9}$ | 12,540 | 13,943 |
| commissions | $\mathbf{2 , 9 6 5}$ | 1,110 | 1,560 |
| Securities gains | $\mathbf{3 , 8 7 0}$ | 3,678 | 3,467 |
| Mortgage fees and related income | $\mathbf{5 , 8 9 1}$ | 7,110 | 7,419 |
| Credit card income | $\mathbf{2 , 0 4 4}$ | 916 | 2,169 |
| Other income | $\mathbf{5 1 , 6 9 3}$ | 49,282 | 28,473 |
| Noninterest revenue | $\mathbf{5 1 , 0 0 1}$ | 51,152 | 38,779 |
| Net interest income | $\mathbf{\$ 1 0 2 , 6 9 4}$ | $\mathbf{\$ 1 0 0 , 4 3 4}$ | $\$ 67,252$ |
| Total net revenue |  |  |  |

## 2010 compared with 2009

Total net revenue for 2010 was $\$ 102.7$ billion, up by $\$ 2.3$ billion, or 2\%, from 2009. Results for 2010 were driven by a higher level of securities gains and private equity gains in Corporate/Private Equity, higher asset management fees in AM and administration fees in TSS, and higher other income in several businesses, partially offset by lower credit card income.

Investment banking fees decreased from 2009 due to lower equity underwriting and advisory fees, partially offset by higher debt underwriting fees. Competitive markets combined with flat industrywide equity underwriting and completed M\&A volumes, resulted in lower equity underwriting and advisory fees; while strong industrywide loan syndication and high-yield bond volumes drove record debt underwriting fees in IB. For additional information on investment banking fees, which are primarily recorded in IB, see IB segment results on pages 69-71 of this Annual Report.

Principal transactions revenue, which consists of revenue from the Firm's trading and private equity investing activities, increased compared with 2009. This was driven by the Private Equity business, which had significant private equity gains in 2010, compared with a small loss in 2009, reflecting improvements in market conditions. Trading revenue decreased, reflecting lower results in Corporate, offset by higher revenue in IB primarily reflecting gains from the widening of the Firm's credit spread on certain structured and derivative liabilities. For additional information on principal transactions revenue, see IB and Corporate/Private Equity segment results on pages 69-71 and 89-

90, respectively, and Note 7 on pages 199-200 of this Annual Report.
Lending- and deposit-related fees decreased in 2010 from 2009 levels, reflecting lower deposit-related fees in RFS associated, in part, with newly-enacted legislation related to non-sufficient funds and overdraft fees; this was partially offset by higher lending-related service fees in IB, primarily from growth in business volume, and in CB, primarily from higher commitment and letter-of-credit fees. For additional information on lending- and deposit-related fees, which are mostly recorded in IB, RFS, CB and TSS, see segment results for IB on pages 69-71, RFS on pages 72-78, CB on pages 82-83 and TSS on pages 84-85 of this Annual Report.

Asset management, administration and commissions revenue increased from 2009. The increase largely reflected higher asset management fees in AM, driven by the effect of higher market levels, net inflows to products with higher margins and higher performance fees; and higher administration fees in TSS, reflecting the effects of higher market levels and net inflows of assets under custody. This increase was partially offset by lower brokerage commissions in IB, as a result of lower market volumes. For additional information on these fees and commissions, see the segment discussions for AM on pages 86-88 and TSS on pages 84-85 of this Annual Report.

Securities gains were significantly higher in 2010 compared with 2009, resulting primarily from the repositioning of the portfolio in response to changes in the interest rate environment and to rebalance exposure. For additional information on securities gains, which are mostly recorded in the Firm's Corporate segment, see the Corporate/Private Equity segment discussion on pages 89-90 of this Annual Report.
Mortgage fees and related income increased in 2010 compared with 2009, driven by higher mortgage production revenue, reflecting increased mortgage origination volumes in RFS and AM, and wider margins, particularly in RFS. This increase was largely offset by higher repurchase losses in RFS (recorded as contra-revenue), which were attributable to higher estimated losses related to repurchase demands, predominantly from GSEs. For additional information on mortgage fees and related income, which is recorded primarily in RFS, see RFS's Mortgage Production and Servicing discussion on pages 74-77 of this Annual Report. For additional information on repurchase losses, see the repurchase liability discussion on pages 98-101 and Note 30 on pages 275-280 of this Annual Report.
Credit card income decreased during 2010, predominantly due to the impact of the accounting guidance related to VIEs, effective January 1, 2010, that required the Firm to consolidate the assets and liabilities of its Firm-sponsored credit card securitization trusts. Adoption of the new guidance resulted in the elimination of all servicing fees received from Firm-sponsored credit card securitization trusts (which was offset by related increases in net

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interest income and the provision for credit losses, and the elimination of securitization income/(losses) in other income). Lower income from other fee-based products also contributed to the decrease in credit card income. Excluding the impact of the adoption of the new accounting guidance, credit card income increased in 2010, reflecting higher customer charge volume on credit and debit cards. For a more detailed discussion of the impact of the adoption of the new accounting guidance on the Consolidated Statements of Income, see Explanation and Reconciliation of the Firm's Use of NonGAAP Financial Measures on pages 64-66 of this Annual Report. For additional information on credit card income, see the Card and RFS segment results on pages 79-81A, and pages 72-78, respectively, of this Annual Report.

Other income increased in 2010, largely due to the write-down of securitization interests during 2009 and higher auto operating lease income in Card.
Net interest income was relatively flat in 2010 compared with 2009. The effect of lower loan balances was predominantly offset by the effect of the adoption of the new accounting guidance related to VIEs (which increased net interest income by approximately $\$ 5.8$ billion in 2010). Excluding the impact of the adoption of the new accounting guidance, net interest income decreased, driven by lower average loan balances, primarily in Card, RFS and IB, reflecting the continued runoff of the credit card balances and residential real estate loans, and net repayments and loan sales; lower yields and fees on credit card receivables, reflecting the impact of legislative changes; and lower yields on securities in Corporate resulting from investment portfolio repositioning. The Firm's average interest-earning assets were $\$ 1.7$ trillion in 2010, and the net yield on those assets, on a FTE basis, was $3.06 \%$, a decrease of 6 basis points from 2009. For a more detailed discussion of the impact of the adoption of the new accounting guidance related to VIEs on the Consolidated Statements of Income, see Explanation and Reconciliation of the Firm's Use of Non-GAAP Financial Measures on pages 64-66 of this Annual Report. For further information on the impact of the legislative changes on the Consolidated Statements of Income, see Card discussion on Credit Card Legislation on page 79 of this Annual Report.

## 2009 compared with 2008

Total net revenue was $\$ 100.4$ billion, up by $\$ 33.2$ billion, or $49 \%$, from the prior year. The increase was driven by higher principal transactions revenue, primarily related to improved performance across most fixed income and equity products, and the absence of net markdowns on legacy leveraged lending and mortgage positions in IB, as well as higher levels of trading gains and investment securities income in Corporate/Private Equity. Results also benefited from the impact of the Washington Mutual transaction, which contributed to increases in net interest income, lending- and depositrelated fees, and mortgage fees and related income. Lastly, higher investment banking fees also contributed to revenue growth. These increases in revenue were offset partially by reduced fees and commissions from the effect of lower market levels on assets under management and custody, and the absence of proceeds from the sale of Visa shares in its initial public offering in the first quarter of 2008.

Investment banking fees increased from the prior year, due to higher equity and debt underwriting fees. For a further discussion of investment banking fees, which are primarily recorded in IB, see IB segment results on pages 69-71 of this Annual Report.

Principal transactions revenue, which consists of revenue from trading and private equity investing activities, was significantly higher compared with the prior year. Trading revenue increased, driven by improved performance across most fixed income and equity products; modest net gains on legacy leveraged lending and mortgage-related positions, compared with net markdowns of $\$ 10.6$ billion in the prior year; and gains on trading positions in Corporate/Private Equity, compared with losses in the prior year of $\$ 1.1$ billion on markdowns of Federal National Mortgage Association ("Fannie Mae") and Federal Home Loan Mortgage Corporation ("Freddie Mac") preferred securities. These increases in revenue were offset partially by an aggregate loss of $\$ 2.3$ billion from the tightening of the Firm's credit spread on certain structured liabilities and derivatives, compared with gains of $\$ 2.0$ billion in the prior year from widening spreads on these liabilities and derivatives. The Firm's private equity investments produced a slight net loss in 2009, a significant improvement from a larger net loss in 2008. For a further discussion of principal transactions revenue, see IB and Corporate/Private Equity segment results on pages 69-71 and 89-90, respectively, and Note 7 on pages 199-200 of this Annual Report.

Lending- and deposit-related fees rose from the prior year, predominantly reflecting the impact of the Washington Mutual transaction and organic growth in both lending- and deposit-related fees in RFS, CB, IB and TSS. For a further discussion of lending- and deposit-related fees, which are mostly recorded in RFS, TSS and CB, see the RFS segment results on pages $72-78$, the TSS segment results on pages 84-85, and the CB segment results on pages 82-83 of this Annual Report.

The decline in asset management, administration and commissions revenue compared with the prior year was largely due to lower asset management fees in AM from the effect of lower market levels. Also contributing to the decrease were lower administration fees in TSS, driven by the effect of market depreciation on certain custody assets and lower securities lending balances; and lower brokerage commissions revenue in IB, predominantly related to lower transaction volume. For additional information on these fees and commissions, see the segment discussions for TSS and AM on pages 84-85 and pages 86-88, respectively, of this Annual Report.

Securities gains were lower in 2009 and included credit losses related to other-than-temporary impairment and lower gains on the sale of MasterCard shares totaling $\$ 241$ million in 2009, compared with $\$ 668$ million in 2008. These decreases were offset partially by higher gains from repositioning the Corporate investment securities portfolio in connection with managing the Firm's structural interest rate risk. For a further discussion of securities gains, which are mostly recorded in Corporate/Private Equity, see the Corporate/Private Equity segment discussion on pages 89-90 of this Annual Report.
Mortgage fees and related income increased slightly from the prior year, as higher net mortgage servicing revenue was largely offset by lower production revenue. The increase in net mortgage servicing revenue was driven by growth in average third-party loans serviced as a result of the Washington Mutual transaction. Mortgage production revenue declined from the prior year, reflecting an increase in estimated losses from the repurchase of previously-sold loans, offset partially by wider margins on new originations. For a discussion of mortgage fees and related income, which is recorded primarily in RFS, see RFS's Mortgage Production and Servicing discussion on pages 74-77 of this Annual Report.

Credit card income, which includes the impact of the Washington Mutual transaction, decreased slightly compared with the prior year, due to lower servicing fees earned in connection with Card securitization activities, largely as a result of higher credit losses. The decrease was partially offset by wider loan margins on securitized credit card loans; higher merchant servicing revenue related to the dissolution of the Chase Paymentech Solutions joint venture; and higher interchange income. For a further discussion of credit card income, see the Card segment results on pages 79-81A of this Annual Report.

Other income decreased from the prior year, due predominantly to the absence of $\$ 1.5$ billion in proceeds from the sale of Visa shares as part of its initial public offering in the first quarter of 2008; a $\$ 1.0$ billion gain on the dissolution of the Chase Paymentech Solutions joint venture in the fourth quarter of 2008; and lower net securitization income in Card. These items were partially offset by a $\$ 464$ million charge recognized in 2008 related to the repurchase of auction-rate securities at par; the absence of a $\$ 423$ million loss incurred in the second quarter of 2008, reflecting the Firm's 49.4\% share of Bear Stearns's losses from April 8 to May 30, 2008; and higher valuations on certain investments, including seed capital in AM.

Net interest income increased from the prior year, driven by the Washington Mutual transaction, which contributed to higher average loans and deposits. The Firm's interest-earning assets were $\$ 1.7$ trillion, and the net yield on those assets, on a fully taxable-equivalent ("FTE") basis, was $3.12 \%$, an increase of 25 basis points from 2008. Excluding the impact of the Washington Mutual transaction, the increase in net interest income in 2009 was driven by a higher level of investment securities, as well as a wider net interest margin, which reflected the overall decline in market interest rates during the year. Declining interest rates had a positive effect on the net interest margin, as rates paid on the Firm's interest-bearing liabilities decreased faster relative to the decline in rates earned on interestearning assets. These increases in net interest income were offset partially by lower loan balances, which included the effect of lower customer demand, repayments and charge-offs.

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## Provision for credit losses

| Year ended December 31, <br> (in millions) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: |
| Wholesale | $\mathbf{\$ ( 8 5 0 )}$ | $\$ 3,974$ | $\$ 3,327$ |
| Consumer, excluding credit card(a) | $\mathbf{9 , 4 5 2}$ | 16,022 | 10,610 |
| Credit card(a) | $\mathbf{8 , 0 3 7}$ | 12,019 | 7,042 |
| Total provision for credit losses | $\mathbf{\$ 1 6 , 6 3 9}$ | $\$ 32,015$ | $\$ 20,979$ |

(a) Includes adjustments to the provision for credit losses recognized in the Corporate/Private Equity segment related to the Washington Mutual transaction in 2008.

## 2010 compared with 2009

The provision for credit losses declined by $\$ 15.4$ billion compared with 2009, due to decreases in both the consumer and wholesale provisions. The decreases in the consumer provisions reflected reductions in the allowance for credit losses for mortgages and credit cards as a result of improved delinquency trends and lower estimated losses. This was partially offset by an increase in the allowance for credit losses associated with the Washington Mutual purchased credit-impaired loans portfolio, resulting from increased estimated future credit losses. The decrease in the wholesale provision in 2010 reflected a reduction in the allowance for credit losses, predominantly as a result of continued improvement in the credit quality of the commercial and industrial loan portfolio, reduced net charge-offs, and net repayments and loan sales. For a more detailed discussion of the loan portfolio and the allowance for credit losses, see the segment discussions for RFS on pages 72-78, Card on pages 79-81A, IB on pages 69-71 and CB on pages 82-83, and the Allowance for Credit Losses section on pages 139-141 of this Annual Report.

## 2009 compared with 2008

The provision for credit losses in 2009 rose by $\$ 11.0$ billion compared with the prior year, predominantly due to a significant increase in the consumer provision. The prior year included a $\$ 1.5$ billion charge to conform Washington Mutual's allowance for loan losses, which affected both the consumer and wholesale portfolios. For the purpose of the following analysis, this charge is excluded. The consumer provision reflected additions to the allowance for loan losses for the home equity, mortgage and credit card portfolios, as weak economic conditions, housing price declines and higher unemployment rates continued to drive higher estimated losses for these portfolios. Included in the 2009 addition to the allowance for loan losses was a $\$ 1.6$ billion provision related to estimated deterioration in the Washington Mutual purchased credit-impaired portfolio. The wholesale provision increased from the prior year, reflecting continued weakness in the credit environment in 2009 compared with the prior year. For a more detailed discussion of the loan portfolio and the allowance for loan losses, see the segment discussions for RFS on pages $72-78$, Card on pages $79-81 \mathrm{~A}$, IB on pages 69-71 and CB on pages 82-83, and the Allowance for Credit Losses section on pages 139-141 of this Annual Report.

## Noninterest expense

Year ended December 31,

| Year ended December 31, <br> (in millions) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: |
| Compensation expense(a) | $\mathbf{\$ 2 8 , 1 2 4}$ | $\$ 26,928$ | $\$ 22,746$ |
| Noncompensation expense: |  |  |  |
| $\quad$ Occupancy expense | $\mathbf{3 , 6 8 1}$ | 3,666 | 3,038 |
| $\quad$ Technology, communications and equipment | $\mathbf{4 , 6 8 4}$ | 4,624 | 4,315 |
| $\quad$ Professional and outside services | $\mathbf{6 , 7 6 7}$ | 6,232 | 6,053 |
| Marketing | $\mathbf{2 , 4 4 6}$ | 1,777 | 1,913 |
| Other expense(b)(c)(d) | $\mathbf{1 4 , 5 5 8}$ | 7,594 | 3,740 |
| Amortization of intangibles | $\mathbf{9 3 6}$ | 1,050 | 1,263 |
| Total noncompensation expense | $\mathbf{3 3 , 0 7 2}$ | 24,943 | 20,322 |
| Merger costs | $\mathbf{-}$ | 481 | 432 |
| Total noninterest expense | $\mathbf{\$ 6 1 , 1 9 6}$ | $\$ 52,352$ | $\$ 43,500$ |

(a) Expense for 2010 included a payroll tax expense related to the U.K. Bank Payroll Tax on certain compensation awarded from December 9, 2009, to April 5, 2010, to relevant banking employees.
(b) In 2010, 2009 and 2008, included litigation expense of $\$ 7.4$ billion, $\$ 161$ million and a net benefit of $\$ 781$ million, respectively.
(c) In 2010, 2009 and 2008, included foreclosed property expense of $\$ 1.0$ billion, $\$ 1.4$ billion and $\$ 213$ million, respectively. For additional information regarding foreclosed property, see Note 11 on page 213 of this Annual Report.
(d) Expense for 2009 included a $\$ 675$ million FDIC special assessment.

## 2010 compared with 2009

Total noninterest expense for 2010 was $\$ 61.2$ billion, up by $\$ 8.8$ billion, or $17 \%$, from 2009. The increase was driven by higher noncompensation expense, largely due to higher litigation expense, and the effect of investments in the businesses.

Compensation expense increased from the prior year, predominantly due to higher salary expense related to investments in the businesses, including additional sales staff in RFS and client advisors in AM, and the impact of the U.K. Bank Payroll Tax.
In addition to the aforementioned higher litigation expense, which was largely for mortgage-related matters in Corporate and IB, the increase in noncompensation expense was driven by higher marketing expense in Card; higher professional services expense, due to continued investments in new product platforms in the businesses, including those related to international expansion; higher defaultrelated expense, including costs associated with foreclosure affidavitrelated suspensions (recorded in other expense), for the serviced portfolio in RFS; and higher brokerage, clearing and exchange transaction processing expense in IB. Partially offsetting these increases was the absence of a $\$ 675$ million FDIC special assessment recognized in 2009. For a further discussion of litigation expense, see the Litigation reserve discussion in Note 32 pages 282289 of this Annual Report. For a discussion of amortization of intangibles, refer to Note 17 on pages 260-263 of this Annual Report.

There were no merger costs recorded in 2010, compared with merger costs of $\$ 481$ million in 2009. For additional information on merger costs, refer to Note 11 on page 213 of this Annual Report.

## 2009 compared with 2008

Total noninterest expense was $\$ 52.4$ billion, up by $\$ 8.9$ billion, or $20 \%$, from the prior year. The increase was driven by the impact of the Washington Mutual transaction, higher performance-based compensation expense, higher FDIC-related costs, and increased mortgage servicing and default-related expense. These items were offset partially by lower headcount-related expense, including salary and benefits but excluding performance-based incentives, and other noncompensation costs related to employees.
Compensation expense increased in 2009 compared with the prior year, reflecting higher performance-based incentives, as well as the impact of the Washington Mutual transaction. Excluding these two items, compensation expense decreased as a result of a reduction in headcount, particularly in the wholesale businesses and in Corporate.

Noncompensation expense increased from the prior year, due predominantly to the following: the impact of the Washington Mutual transaction; higher ongoing FDIC insurance premiums and an FDIC special assessment of $\$ 675$ million recognized in the second quarter of 2009; higher mortgage servicing and default-related expense, which included an increase in foreclosed property expense of $\$ 1.2$ billion; higher litigation costs; and the effect of the dissolution of the Chase Paymentech Solutions joint venture. These increases were partially offset by lower headcount-related expense, particularly in IB, TSS and AM; a decrease in amortization of intangibles, predominantly related to purchased credit card relationships; lower mortgage reinsurance losses; and a decrease in credit card marketing expense. For a discussion of amortization of intangibles, refer to Note 17 on pages 260-263 of this Annual Report.

For information on merger costs, refer to Note 11 on page 213 of this Annual Report.

## Income tax expense

| Year ended December 31, <br> (in millions, except rate) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | :---: | :---: | :---: |
| Income before income tax expense/ |  |  |  |
| $\quad$ (benefit) and extraordinary gain | $\mathbf{\$ 2 4 , 8 5 9}$ | $\$ 16,067$ | $\$ 2,773$ |
| Income tax expense/(benefit) | $\mathbf{7 , 4 8 9}$ | 4,415 | (926) |
| Effective tax rate | $\mathbf{3 0 . 1 \%}$ | $27.5 \%$ | $(33.4) \%$ |

## 2010 compared with 2009

The increase in the effective tax rate compared with the prior year was primarily the result of higher reported pretax book income, as well as changes in the proportion of income subject to U.S. federal and state and local taxes. These increases were partially offset by increased benefits associated with the undistributed earnings of certain non-U.S. subsidiaries that were deemed to be reinvested indefinitely, as well as tax benefits recognized upon the resolution of tax audits in 2010. For additional information on income taxes, see Critical Accounting Estimates Used by the Firm on pages 149-154 and Note 27 on pages 271-273 of this Annual Report.

## 2009 compared with 2008

The change in the effective tax rate compared with the prior year was primarily the result of higher reported pretax income and changes in the proportion of income subject to U.S. federal, state and local taxes. Benefits related to tax-exempt income, business tax credits and tax audit settlements increased in 2009 relative to 2008; however, the impact of these items on the effective tax rate was reduced by the significantly higher level of pretax income in 2009. In addition, 2008 reflected the realization of benefits of $\$ 1.1$ billion from the release of deferred tax liabilities associated with the undistributed earnings of certain non-U.S. subsidiaries that were deemed to be reinvested indefinitely.

## Extraordinary gain

On September 25, 2008, JPMorgan Chase acquired the banking operations of Washington Mutual. This transaction was accounted for under the purchase method of accounting for business combinations. The adjusted net asset value of the banking operations after purchase accounting adjustments was higher than the consideration paid by JPMorgan Chase, resulting in an extraordinary gain. The preliminary gain recognized in 2008 was $\$ 1.9$ billion. In the third quarter of 2009, the Firm recognized an additional $\$ 76$ million extraordinary gain associated with the final purchase accounting adjustments for the acquisition. For a further discussion of the Washington Mutual transaction, see Note 2 on pages 166-170 of the Firm's 2009 Annual Report.

## Management's discussion and analysis

## EXPLANATION AND RECONCILIATION OF THE FIRM'S USE OF NON-GAAP FINANCIAL MEASURES

The Firm prepares its consolidated financial statements using accounting principles generally accepted in the U.S. ("U.S. GAAP"); these financial statements appear on pages 160-163 of this Annual Report. That presentation, which is referred to as "reported basis," provides the reader with an understanding of the Firm's results that can be tracked consistently from year to year and enables a comparison of the Firm's performance with other companies' U.S. GAAP financial statements.

In addition to analyzing the Firm's results on a reported basis, management reviews the Firm's results and the results of the lines of business on a "managed" basis, which is a non-GAAP financial measure. The Firm's definition of managed basis starts with the reported U.S. GAAP results and includes certain reclassifications to present total net revenue for the Firm (and each of the business segments) on a FTE basis. Accordingly, revenue from tax-exempt securities and investments that receive tax credits is presented in the managed results on a basis comparable to taxable securities and investments. This non-GAAP financial measure allows management to assess the comparability of revenue arising from both taxable and tax-exempt sources. The corresponding income
tax impact related to these items is recorded within income tax expense. These adjustments have no impact on net income as reported by the Firm as a whole or by the lines of business.
Prior to January 1, 2010, the Firm's managed-basis presentation also included certain reclassification adjustments that assumed credit card loans securitized by Card remained on the balance sheet. Effective January 1, 2010, the Firm adopted accounting guidance that required the Firm to consolidate its Firm-sponsored credit card securitization trusts. The income, expense and credit costs associated with these securitization activities are now recorded in the 2010 Consolidated Statements of Income in the same classifications that were previously used to report such items on a managed basis. As a result of the consolidation of the credit card securitization trusts, reported and managed basis relating to credit card securitizations are equivalent for periods beginning after January 1, 2010. For additional information on the accounting guidance, see Note 16 on pages 244259 of this Annual Report.
The presentation in 2009 and 2008 of Card results on a managed basis assumed that credit card loans that had been securitized and sold in accordance with U.S. GAAP remained on the Consolidated Balance

The following summary table provides a reconciliation from the Firm's reported U.S. GAAP results to managed basis.
(Table continues on next page)

| Year ended December 31, (in millions, except per share and ratio data) | 2010 |  |  |  |  |  |  | 2009 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Reported } \\ \text { results } \\ \hline \end{gathered}$ |  | Credit card(c) | Fullytax-equivalentadjustments |  | $\begin{aligned} & \text { Managed } \\ & \text { basis } \\ & \hline \end{aligned}$ |  | Reported results |  | Credit card(c) |  | Fullytax-equivalentadjustments |  | Managedbasis |  |
| Revenue |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Investment banking fees | \$ | 6,190 | NA | \$ | - | \$ | 6,190 | \$ | 7,087 | \$ | - | \$ | - | \$ | 7,087 |
| Principal transactions |  | 10,894 | NA |  | - |  | 10,894 |  | 9,796 |  | - |  | - |  | 9,796 |
| Lending- and deposit-related fees |  | 6,340 | NA |  | - |  | 6,340 |  | 7,045 |  | - |  | - |  | 7,045 |
| Asset management, administration and commissions |  | 13,499 | NA |  | - |  | 13,499 |  | 12,540 |  | - |  | - |  | 12,540 |
| Securities gains |  | 2,965 | NA |  | - |  | 2,965 |  | 1,110 |  | - |  | - |  | 1,110 |
| Mortgage fees and related income |  | 3,870 | NA |  | - |  | 3,870 |  | 3,678 |  | - |  | - |  | 3,678 |
| Credit card income |  | 5,891 | NA |  | - |  | 5,891 |  | 7,110 |  | $(1,494)$ |  | - |  | 5,616 |
| Other income |  | 2,044 | NA |  | 1,745 |  | 3,789 |  | 916 |  | - |  | 1,440 |  | 2,356 |
| Noninterest revenue |  | 51,693 | NA |  | 1,745 |  | 53,438 |  | 49,282 |  | $(1,494)$ |  | 1,440 |  | 49,228 |
| Net interest income |  | 51,001 | NA |  | 403 |  | 51,404 |  | 51,152 |  | 7,937 |  | 330 |  | 59,419 |
| Total net revenue |  | 102,694 | NA |  | 2,148 |  | 104,842 |  | 100,434 |  | 6,443 |  | 1,770 |  | 108,647 |
| Noninterest expense |  | 61,196 | NA |  | - |  | 61,196 |  | 52,352 |  | - |  | - |  | 52,352 |
| Pre-provision profit |  | 41,498 | NA |  | 2,148 |  | 43,646 |  | 48,082 |  | 6,443 |  | 1,770 |  | 56,295 |
| Provision for credit losses |  | 16,639 | NA |  | - |  | 16,639 |  | 32,015 |  | 6,443 |  | - |  | 38,458 |
| Provision for credit losses accounting conformity ${ }^{(a)}$ |  | - | NA |  | - |  | - |  | - |  | - |  | - |  | - |
| Income before income tax expensel (benefit) and extraordinary gain |  | 24,859 | NA |  | 2,148 |  | 27,007 |  | 16,067 |  | - |  | 1,770 |  | 17,837 |
| Income tax expense/(benefit) |  | 7,489 | NA |  | 2,148 |  | 9,637 |  | 4,415 |  | - |  | 1,770 |  | 6,185 |
| Income before extraordinary gain |  | 17,370 | NA |  | - |  | 17,370 |  | 11,652 |  | - |  | - |  | 11,652 |
| Extraordinary gain |  | - | NA |  | - |  | - |  | 76 |  | - |  | - |  | 76 |
| Net income | \$ | 17,370 | NA | \$ | - | \$ | 17,370 | \$ | 11,728 | \$ | - | \$ | - | \$ | 11,728 |
| Diluted earnings per share(b) | \$ | 3.96 | NA | \$ | - | \$ | 3.96 | \$ | 2.24 | \$ | - | \$ | - | \$ | 2.24 |
| Return on assets(b) |  | 0.85\% | NA |  | NM |  | 0.85\% |  | 0.58\% |  | NM |  | NM |  | 0.55\% |
| Overhead ratio |  | 60 | NA |  | NM |  | 58 |  | 52 |  | NM |  | NM |  | 48 |
| Loans - period-end | \$ | 692,927 | NA | \$ | - |  | 692,927 | \$ | 633,458 | \$ | 84,626 | \$ | - |  | 718,084 |
| Total assets - average |  | 2,053,251 | NA |  | - |  | 2,053,251 |  | 024,201 |  | 82,233 |  | - |  | 2,106,434 |

(a) 2008 included an accounting conformity loan loss reserve provision related to the acquisition of Washington Mutual's banking operations.
(b) Based on income before extraordinary gain.
(c) See pages 79-81A of this Annual Report for a discussion of the effect of credit card securitizations on Card results.

NA: Not applicable

Sheets, and that the earnings on the securitized loans were classified in the same manner as the earnings on retained loans recorded on the Consolidated Balance Sheets. JPMorgan Chase had used this managed-basis information to evaluate the credit performance and overall financial performance of the entire managed credit card portfolio. Operations were funded and decisions were made about allocating resources, such as employees and capital, based on managed financial information. In addition, the same underwriting standards and ongoing risk monitoring are used for both loans on the Consolidated Balance Sheets and securitized loans. Although securitizations result in the sale of credit card receivables to a trust, JPMorgan Chase retains the ongoing customer relationships, as the customers may continue to use their credit cards; accordingly, the customer's credit performance affects both the securitized loans and the loans retained on the Consolidated Balance Sheets. JPMorgan Chase believed that this managed-basis information was useful to investors, as it enabled them to understand both the credit risks associated with the loans reported on the Consolidated Balance Sheets and the Firm's retained interests in securitized loans. For a reconciliation of 2009 and 2008 reported to managed basis results for Card, see Card segment results on pages 79-81A of this Annual
(Table continued from previous page)

| 2008 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reported results |  | Credit card(c) |  | Fully tax-equivalent adjustments |  | Managedbasis |  |
| \$ | $\begin{gathered} 5,526 \\ (10,699) \end{gathered}$ | \$ |  | \$ | - | \$ | $\begin{gathered} 5,526 \\ (10,699) \end{gathered}$ |
|  | 5,088 |  | - |  | - |  | 5,088 |
|  | 13,943 |  | - |  | - |  | 13,943 |
|  | 1,560 |  | - |  | - |  | 1,560 |
|  | 3,467 |  | - |  | - |  | 3,467 |
|  | 7,419 |  | $(3,333)$ |  | - |  | 4,086 |
|  | 2,169 |  | - |  | 1,329 |  | 3,498 |
|  | 28,473 |  | $(3,333)$ |  | 1,329 |  | 26,469 |
|  | 38,779 |  | 6,945 |  | 579 |  | 46,303 |
|  | 67,252 |  | 3,612 |  | 1,908 |  | 72,772 |
|  | 43,500 |  | - |  | - |  | 43,500 |
|  | 23,752 |  | 3,612 |  | 1,908 |  | 29,272 |
|  | 19,445 |  | 3,612 |  | - |  | 23,057 |
|  | 1,534 |  | - |  | - |  | 1,534 |
|  | 2,773 |  | - |  | 1,908 |  | 4,681 |
|  | (926) |  | - |  | 1,908 |  | 982 |
|  | 3,699 |  | - |  | - |  | 3,699 |
|  | 1,906 |  | - |  | - |  | 1,906 |
| \$ | 5,605 | \$ | - | \$ | - | \$ | 5,605 |
| \$ | 0.81 | \$ | - | \$ | - | \$ | 0.81 |
|  | 0.21\% |  | NM |  | NM |  | 0.20\% |
|  | 65 |  | NM |  | NM |  | 60 |
| \$ | 744,898 | \$ | 85,571 | \$ | - | \$ | 830,469 |
| 1,791,617 |  |  | 76,904 |  | - |  | 1,868,521 |

Report. For information regarding the securitization process, and loans and residual interests sold and securitized, see Note 16 on pages 244-259 of this Annual Report.
Tangible common equity ("TCE") represents common stockholders' equity (i.e., total stockholders' equity less preferred stock) less identifiable intangible assets (other than mortgage servicing rights ("MSRs")) and goodwill, net of related deferred tax liabilities. ROTCE, a non-GAAP financial ratio, measures the Firm's earnings as a percentage of TCE and is, in management's view, a meaningful measure to assess the Firm's use of equity.

Management also uses certain non-GAAP financial measures at the business-segment level, because it believes these other non-GAAP financial measures provide information to investors about the underlying operational performance and trends of the particular business segment and, therefore, facilitate a comparison of the business segment with the performance of its competitors. NonGAAP financial measures used by the Firm may not be comparable to similarly named non-GAAP financial measures used by other companies.

## Calculation of certain U.S. GAAP and non-GAAP metrics

The table below reflects the formulas used to calculate both the following U.S. GAAP and non-GAAP measures.

Return on common equity
Net income* / Average common stockholders' equity
Return on tangible common equity(d)
Net income* / Average tangible common equity

## Return on assets

Reported net income / Total average assets
Managed net income / Total average managed assets(e)
(including average securitized credit card receivables)
Overhead ratio
Total noninterest expense / Total net revenue

* Represents net income applicable to common equity
(d) The Firm uses ROTCE, a non-GAAP financial measure, to evaluate its use of equity and to facilitate comparisons with competitors. Refer to the following page for the calculation of average tangible common equity.
(e) The Firm uses return on managed assets, a non-GAAP financial measure, to evaluate the overall performance of the managed credit card portfolio, including securitized credit card loans.


## Management's discussion and analysis

## Average tangible common equity

| Year ended December 31, (in millions) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: |
| Common stockholders' equity | $\mathbf{\$ 1 6 1 , 5 2 0}$ | $\$ 145,903$ | $\$ 129,116$ |
| Less: Goodwill | $\mathbf{4 8 , 6 1 8}$ | 48,254 | 46,068 |
| Less: Certain identifiable intangible assets | $\mathbf{4 , 1 7 8}$ | 5,095 | 5,779 |
| Add: Deferred tax liabilities(a) | $\mathbf{2 , 5 8 7}$ | 2,547 | 2,369 |
| Tangible Common Equity | $\mathbf{\$ 1 1 1 , 3 1 1}$ | $\$ 95,101$ | $\$ 79,638$ |

(a) Represents deferred tax liabilities related to tax-deductible goodwill and to identifiable intangibles created in non-taxable transactions, which are netted against goodwill and other intangibles when calculating TCE.

Impact of TARP preferred stock issued to the U.S. Treasury The calculation of 2009 net income applicable to common equity included a one-time, noncash reduction of $\$ 1.1$ billion resulting from the repayment of TARP preferred capital. Excluding this reduction, ROE would have been $7 \%$ for 2009. The Firm views adjusted ROE, a non-GAAP financial measure, as meaningful because it enables the comparability to prior periods.

| Year ended December 31, 2009 <br> (in millions, except ratios) | As reported | Excluding the <br> TARP redemption |  |
| :--- | ---: | ---: | ---: |
| Return on equity | $\$ 11,728$ | $\$$ | 11,728 |
| Net income | 1,327 |  | 1,327 |
| Less: Preferred stock dividends |  |  |  |
| Less: Accelerated amortization from redemption |  |  |  |
| of preferred stock issued to the U.S. |  |  |  |

In addition, the calculated net income applicable to common equity for the year ended December 31, 2009, was also affected by the TARP repayment. The following table presents the effect on net income applicable to common stockholders and the $\$ 0.27$ reduction to diluted earnings per share ("EPS") for the year ended December 31, 2009.

| Year ended December 31, 2009 (in millions, except per share) | As reported |  | Effect of TARP redemption |  |
| :---: | :---: | :---: | :---: | :---: |
| Diluted earnings per share |  |  |  |  |
| Net income | \$ | 11,728 | \$ |  |
| Less: Preferred stock dividends |  | 1,327 |  |  |
| Less: Accelerated amortization from redemption of preferred stock issued to the U.S. |  |  |  |  |
| Treasury |  | 1,112 |  | 1,112 |
| Net income applicable to common equity |  | 9,289 |  | $(1,112)$ |
| Less: Dividends and undistributed earnings allocated to participating securities |  | 515 |  | (62) |
| Net income applicable to common stockholders |  | 8,774 |  | $(1,050)$ |
| Total weighted average diluted shares outstanding |  | 3,879.7 |  | 3,879.7 |
| Net income per share | \$ | 2.26 | \$ | (0.27) |

## Other financial measures

The Firm also discloses the allowance for loan losses to total retained loans, excluding home lending purchased credit-impaired loans and loans held by the Washington Mutual Master Trust ("WMMT"). For a further discussion of this credit metric, see Allowance for Credit Losses on pages 139-141 of this Annual Report.

The Firm is managed on a line of business basis. The business segment financial results presented reflect the current organization of JPMorgan Chase. There are six major reportable business segments: Investment Bank, Retail Financial Services, Card Services \& Auto, Commercial Banking, Treasury \& Securities Services and Asset Management, as well as a Corporate/Private Equity segment.

The business segments are determined based on the products and services provided, or the type of customer served, and reflect the manner in which financial information is currently evaluated by management. Results of these lines of business are presented on a managed basis.

## Subsequent business segment changes

Commencing July 1, 2011, the Firm's business segments have been reorganized as follows:

Auto and Student Lending transferred from the RFS segment and are reported with Card in a single segment. Retail Financial Services continues as a segment, organized in two components: Consumer \& Business Banking (formerly Retail Banking) and Mortgage Banking (including Mortgage Production and Servicing, and Real Estate Portfolios).

The business segment information associated with RFS and Card has been revised to reflect the business reorganization retroactive to January 1, 2008.


## Description of business segment reporting methodology

Results of the business segments are intended to reflect each segment as if it were essentially a stand-alone business. The management reporting process that derives business segment results allocates income and expense using market-based methodologies. Business segment reporting methodologies used by the Firm are discussed below. The Firm continues to assess the assumptions, methodologies and reporting classifications used for segment reporting, and further refinements may be implemented in future periods.

## Revenue sharing

When business segments join efforts to sell products and services to the Firm's clients, the participating business segments agree to share revenue from those transactions. The segment results reflect these revenue-sharing agreements.

## Funds transfer pricing

Funds transfer pricing is used to allocate interest income and expense to each business and transfer the primary interest rate risk exposures to the Treasury group within the Corporate/Private Equity business segment. The allocation process is unique to each business segment and considers the interest rate risk, liquidity risk and regulatory requirements of that segment's stand-alone peers. This process is overseen by senior management and reviewed by the Firm's Asset-Liability Committee ("ALCO"). Business segments may be permitted to retain certain interest rate exposures subject to management approval.

## Management's discussion and analysis

## Capital allocation

Each business segment is allocated capital by taking into consideration stand-alone peer comparisons, economic risk measures and regulatory capital requirements. The amount of capital assigned to each business is referred to as equity. Effective January 1, 2010, the Firm enhanced its line-of-business equity framework to better align equity assigned to each line of business as a result of the changes anticipated to occur in the business, and in the competitive and regulatory landscape. The lines of business are now capitalized based on the Tier 1 common standard, rather than the Tier 1 capital standard. For a further discussion of the changes, see Capital Management - Line of business equity on page 105 of this Annual Report.

## Expense allocation

Where business segments use services provided by support units within the Firm, the costs of those support units are allocated to the business segments. The expense is allocated based on their actual cost or the lower of actual cost or market, as well as upon usage of the services provided. In contrast, certain other expense related to certain corporate functions, or to certain technology and operations, are not allocated to the business segments and are retained in Corporate. Retained expense includes: parent company costs that would not be incurred if the segments were stand-alone businesses; adjustments to align certain corporate staff, technology and operations allocations with market prices; and other one-time items not aligned with a particular business segment.

## Segment results - Managed basis(a)

The following table summarizes the business segment results for the periods indicated.

| Year ended December 31, (in millions) | Total net revenue |  |  |  |  |  | Noninterest expense |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 |  | 2009 |  | 2008 |  | 2010 |  | 2009 |  | 2008 |  |
| Investment Bank(b) | \$ | 26,217 | \$ | 28,109 | \$ | 12,335 | \$ | 17,265 | \$ | 15,401 | \$ | 13,844 |
| Retail Financial Services |  | 28,447 |  | 29,797 |  | 21,155 |  | 16,483 |  | 15,512 |  | 10,877 |
| Card Services \& Auto |  | 20,472 |  | 23,199 |  | 18,839 |  | 7,178 |  | 6,617 |  | 6,340 |
| Commercial Banking |  | 6,040 |  | 5,720 |  | 4,777 |  | 2,199 |  | 2,176 |  | 1,946 |
| Treasury \& Securities Services |  | 7,381 |  | 7,344 |  | 8,134 |  | 5,604 |  | 5,278 |  | 5,223 |
| Asset Management |  | 8,984 |  | 7,965 |  | 7,584 |  | 6,112 |  | 5,473 |  | 5,298 |
| Corporate/Private Equity(b) |  | 7,301 |  | 6,513 |  | (52) |  | 6,355 |  | 1,895 |  | (28) |
| Total | \$ | 104,842 | \$ | 108,647 | \$ | 72,772 | \$ | 61,196 | \$ | 52,352 | \$ | 43,500 |
| Year ended December 31, | Pre-provision profit(d) |  |  |  |  |  | Provision for credit losses |  |  |  |  |  |
| (in millions) |  | 2010 |  | 2009 |  | 2008 |  | 2010 |  | 2009 |  | 2008 |
| Investment Bank(b) | \$ | 8,952 | \$ | 12,708 | \$ | $(1,509)$ | \$ | $(1,200)$ | \$ | 2,279 | \$ | 2,015 |
| Retail Financial Services |  | 11,964 |  | 14,285 |  | 10,278 |  | 8,919 |  | 14,754 |  | 9,033 |
| Card Services \& Auto |  | 13,294 |  | 16,582 |  | 12,499 |  | 8,570 |  | 19,648 |  | 10,931 |
| Commercial Banking |  | 3,841 |  | 3,544 |  | 2,831 |  | 297 |  | 1,454 |  | 464 |
| Treasury \& Securities Services |  | 1,777 |  | 2,066 |  | 2,911 |  | (47) |  | 55 |  | 82 |
| Asset Management |  | 2,872 |  | 2,492 |  | 2,286 |  | 86 |  | 188 |  | 85 |
| Corporate/Private Equity(b) |  | 946 |  | 4,618 |  | (24) |  | 14 |  | 80 |  | 1,981 |
| Total | \$ | 43,646 | \$ | 56,295 | \$ | 29,272 | \$ | 16,639 | \$ | 38,458 | \$ | 24,591 |
| Year ended December 31, | Net income/(loss) |  |  |  |  |  | Return on equity |  |  |  |  |  |
| (in millions) |  | 2010 |  | 2009 |  | 2008 |  | 2010 |  | 2009 |  | 2008 |
| Investment Bank(b) | \$ | 6,639 | \$ | 6,899 | \$ | $(1,175)$ |  | 17\% |  | 21\% |  | (5)\% |
| Retail Financial Services |  | 1,728 |  | (335) |  | 703 |  | 7 |  | (1) |  | 4 |
| Card Services \& Auto |  | 2,872 |  | $(1,793)$ |  | 957 |  | 16 |  | (10) |  | 6 |
| Commercial Banking |  | 2,084 |  | 1,271 |  | 1,439 |  | 26 |  | 16 |  | 20 |
| Treasury \& Securities Services |  | 1,079 |  | 1,226 |  | 1,767 |  | 17 |  | 25 |  | 47 |
| Asset Management |  | 1,710 |  | 1,430 |  | 1,357 |  | 26 |  | 20 |  | 24 |
| Corporate/Private Equity(b)(c) |  | 1,258 |  | 3,030 |  | 557 |  | NM |  | NM |  | NM |
| Total | \$ | 17,370 | \$ | 11,728 | \$ | 5,605 |  | 10\% |  | 6\% |  | 4\% |

(a) Represents reported results on a tax-equivalent basis. The managed basis also assumes that credit card loans in Firm-sponsored credit card securitization trusts remained on the balance sheet for 2009 and 2008. Firm-sponsored credit card securitizations were consolidated at their carrying values on January 1, 2010, under the accounting guidance related to VIEs.
(b) IB reports its credit reimbursement from TSS as a component of its total net revenue, whereas TSS reports its credit reimbursement to IB as a separate line item on its income statement (not part of total net revenue). Corporate/Private Equity includes an adjustment to offset IB's inclusion of the credit reimbursement in total net revenue.
(c) Net income included an extraordinary gain of $\$ 76$ million and $\$ 1.9$ billion related to the Washington Mutual transaction for 2009 and 2008, respectively.
(d) Pre-provision profit is total net revenue less noninterest expense. The Firm believes that this financial measure is useful in assessing the ability of a lending institution to generate income in excess of its provision for credit losses.


#### Abstract

J.P. Morgan is one of the world's leading investment banks, with deep client relationships and broad product capabilities. The clients of IB are corporations, financial institutions, governments and institutional investors. The Firm offers a full range of investment banking products and services in all major capital markets, including advising on corporate strategy and structure, capital-raising in equity and debt markets, sophisticated risk management, market-making in cash securities and derivative instruments, prime brokerage, and research


## Selected income statement data

| Year ended December 31, <br> (in millions, except ratios) | $\mathbf{2 0 1 0}$ | 2009 | 2008(e) |
| :--- | ---: | ---: | ---: |
| Revenue |  |  |  |
| Investment banking fees | $\mathbf{\$ 6 , 1 8 6}$ | $\$ 7,169$ | $\$ 5,907$ |
| Principal transactions(a) | $\mathbf{8 , 4 5 4}$ | 8,154 | $(7,042)$ |
| Lending- and deposit-related fees | $\mathbf{8 1 9}$ | 664 | 463 |
| Asset management, administration and |  |  |  |
| $\quad$ commissions | $\mathbf{2 , 4 1 3}$ | 2,650 | 3,064 |
| All other income(b) | $\mathbf{3 8 1}$ | $(115)$ | $(341)$ |
| Noninterest revenue | $\mathbf{1 8 , 2 5 3}$ | 18,522 | 2,051 |
| Net interest income | $\mathbf{7 , 9 6 4}$ | 9,587 | 10,284 |
| Total net revenue(c) | $\mathbf{2 6 , 2 1 7}$ | 28,109 | 12,335 |
| Provision for credit losses | $\mathbf{1 , 2 0 0}$ | 2,279 | 2,015 |
| Noninterest expense | $\mathbf{9 , 7 2 7}$ | 9,334 | 7,701 |
| Compensation expense | $\mathbf{7 , 5 3 8}$ | 6,067 | 6,143 |
| Noncompensation expense | $\mathbf{1 7 , 2 6 5}$ | 15,401 | 13,844 |
| Total noninterest expense |  |  |  |
| Incomel(loss) before income tax | $\mathbf{1 0 , 1 5 2}$ | 10,429 | $(3,524)$ |
| $\quad$ expensel(benefit) | $\mathbf{3 , 5 1 3}$ | 3,530 | $(2,349)$ |
| Income tax expense/(benefit)(d) | $\mathbf{6 , 6 3 9}$ | $\$ 6,899$ | $\$(1,175)$ |
| Net income/(loss) |  |  |  |
| Financial ratios | $\mathbf{1 7 \%}$ | $21 \%$ | $(5) \%$ |
| ROE | $\mathbf{0 . 9 1}$ | 0.99 | $(0.14)$ |
| ROA | $\mathbf{6 6}$ | 55 | 112 |
| Overhead ratio |  |  |  |
| Compensation expense as \% of total net | $\mathbf{3 7}$ | 33 | 62 |
| $\quad$ revenue(f) |  |  |  |

(a) The 2009 results reflect modest net gains on legacy leveraged lending and mortgage-related positions, compared with net markdowns of $\$ 10.6$ billion in 2008
(b) TSS was charged a credit reimbursement related to certain exposures managed within IB's credit portfolio on behalf of clients shared with TSS. IB recognizes this credit reimbursement in its credit portfolio business in all other income.
(c) Total net revenue included tax-equivalent adjustments, predominantly due to income tax credits related to affordable housing and alternative energy investments as well as tax-exempt income from municipal bond investments of $\$ 1.7$ billion, $\$ 1.4$ billion and $\$ 1.7$ billion for 2010, 2009 and 2008, respectively.
(d) The income tax benefit in 2008 includes the result of reduced deferred tax liabilities on overseas earnings.
(e) Results for 2008 include seven months of the combined Firm's (JPMorgan Chase \& Co.'s and Bear Stearns') results and five months of heritage JPMorgan Chase results.
(f) The compensation expense as a percentage of total net revenue ratio includes the impact of the U.K. Bank Payroll Tax on certain compensation awarded from December 9, 2009 to April 5, 2010 to relevant banking employees. For comparability to prior periods, IB excludes the impact of the U.K. Bank Payroll Tax expense, which results in a compensation expense as a percentage of total net revenue for 2010 of $35 \%$, which is a non-GAAP financial measure.

The following table provides IB's total net revenue by business segment.

| Year ended December 31, (in millions) | 2010 | 2009 | 2008(e) |
| :---: | :---: | :---: | :---: |
| Revenue by business |  |  |  |
| Investment banking fees: |  |  |  |
| Advisory | \$ 1,469 | \$ 1,867 | \$ 2,008 |
| Equity underwriting | 1,589 | 2,641 | 1,749 |
| Debt underwriting | 3,128 | 2,661 | 2,150 |
| Total investment banking fees | 6,186 | 7,169 | 5,907 |
| Fixed income markets(a) | 15,025 | 17,564 | 1,957 |
| Equity markets(b) | 4,763 | 4,393 | 3,611 |
| Credit portfolio(c)(d) | 243 | $(1,017)$ | 860 |
| Total net revenue | \$26,217 | \$28,109 | \$12,335 |
| Revenue by region(d) |  |  |  |
| Americas | \$15,189 | \$15,156 | \$ 2,610 |
| Europe/Middle East/Africa | 7,405 | 9,790 | 7,710 |
| Asia/Pacific | 3,623 | 3,163 | 2,015 |
| Total net revenue | \$26,217 | \$28,109 | \$12,335 |

(a) Fixed income markets primarily include revenue related to market-making across global fixed income markets, including foreign exchange, interest rate, credit and commodities markets.
(b) Equities markets primarily include revenue related to market-making across global equity products, including cash instruments, derivatives, convertibles and prime services.
(c) Credit portfolio revenue includes net interest income, fees and loan sale activity, as well as gains or losses on securities received as part of a loan restructuring, for IB's credit portfolio. Credit portfolio revenue also includes the results of risk management related to the Firm's lending and derivative activities. See pages 116-118 of the Credit Risk Management section of this Annual Report for further discussion.
(d) TSS was charged a credit reimbursement related to certain exposures managed within IB's credit portfolio on behalf of clients shared with TSS. IB recognizes this credit reimbursement in its credit portfolio business in all other income.
(e) Results for 2008 include seven months of the combined Firm's (JPMorgan Chase \& Co.'s and Bear Stearns') results and five months of heritage JPMorgan Chase \& Co. results.

## 2010 compared with 2009

Net income was $\$ 6.6$ billion, down 4\% compared with the prior year. These results primarily reflected lower net revenue as well as higher noninterest expense, largely offset by a benefit from the provision for credit losses, compared with an expense in the prior year.

Net revenue was $\$ 26.2$ billion, compared with $\$ 28.1$ billion in the prior year. Investment banking fees were $\$ 6.2$ billion, down $14 \%$ from the prior year; these consisted of record debt underwriting fees of $\$ 3.1$ billion (up 18\%), equity underwriting fees of $\$ 1.6$ billion (down $40 \%$ ), and advisory fees of $\$ 1.5$ billion (down 21\%). Fixed Income Markets revenue was $\$ 15.0$ billion, compared with $\$ 17.6$ billion in the prior year. The decrease from the prior year largely reflected lower results in rates and credit markets, partially offset by gains of $\$ 287$ million from the widening of the Firm's credit spread on certain structured liabilities, compared with losses of $\$ 1.1$ billion in the prior year. Equity Markets revenue was $\$ 4.8$ billion, compared with $\$ 4.4$ billion in the prior year, reflecting solid client revenue, as well as gains of $\$ 181$ million from the widening of the Firm's credit spread on certain structured liabilities, compared with losses of \$596 million in the prior year. Credit Portfolio revenue was $\$ 243$ million, primarily reflecting net interest income and fees on loans, partially offset by the negative impact of

## Management's discussion and analysis

credit spreads on derivative assets and mark-to-market losses on hedges of retained loans.
The provision for credit losses was a benefit of $\$ 1.2$ billion, compared with an expense of $\$ 2.3$ billion in the prior year. The current-year provision reflected a reduction in the allowance for loan losses, largely related to net repayments and loan sales. Net charge-offs were $\$ 735$ million, compared with $\$ 1.9$ billion in the prior year.

Noninterest expense was $\$ 17.3$ billion, up $\$ 1.9$ billion from the prior year, driven by higher noncompensation expense, which included increased litigation reserves, and higher compensation expense which included the impact of the U.K. Bank Payroll Tax.
Return on Equity was $17 \%$ on $\$ 40.0$ billion of average allocated capital.

## 2009 compared with 2008

Net income was $\$ 6.9$ billion, compared with a net loss of $\$ 1.2$ billion in the prior year. These results reflected significantly higher total net revenue, partially offset by higher noninterest expense and a higher provision for credit losses.

Total net revenue was $\$ 28.1$ billion, compared with $\$ 12.3$ billion in the prior year. Investment banking fees were up $21 \%$ to $\$ 7.2$ billion, consisting of debt underwriting fees of $\$ 2.7$ billion (up 24\%), equity underwriting fees of $\$ 2.6$ billion (up $51 \%$ ), and advisory fees of $\$ 1.9$ billion (down 7\%). Fixed Income Markets revenue was $\$ 17.6$ billion, compared with $\$ 2.0$ billion in the prior year, reflecting improved performance across most products and modest net gains on legacy leveraged lending and mortgage-related positions, compared with net markdowns of $\$ 10.6$ billion in the prior year. Equity Markets revenue was $\$ 4.4$ billion, up $22 \%$ from the prior year, driven by strong client revenue across products, particularly prime services, and improved trading results. Fixed Income and Equity Markets results also included losses of $\$ 1.7$ billion from the tightening of the Firm's credit spread on certain structured liabilities, compared with gains of $\$ 1.2$ billion in the prior year. Credit Portfolio revenue was a loss of $\$ 1.0$ billion versus a gain of $\$ 860$ million in the prior year, driven by mark-to-market losses on hedges of retained loans compared with gains in the prior year, partially offset by the positive net impact of credit spreads on derivative assets and liabilities.
The provision for credit losses was $\$ 2.3$ billion, compared with $\$ 2.0$ billion in the prior year, reflecting continued weakness in the credit environment. The allowance for loan losses to end-of-period loans retained was $8.25 \%$, compared with $4.83 \%$ in the prior year. Net charge-offs were $\$ 1.9$ billion, compared with $\$ 105$ million in the prior year. Total nonperforming assets were $\$ 4.2$ billion, compared with $\$ 2.5$ billion in the prior year.

Noninterest expense was $\$ 15.4$ billion, up $\$ 1.6$ billion, or $11 \%$, from the prior year, driven by higher performance-based compensation expense, partially offset by lower headcount-related expense.

Return on Equity was $21 \%$ on $\$ 33.0$ billion of average allocated capital, compared with negative $5 \%$ on $\$ 26.1$ billion of average allocated capital in the prior year.

## Selected metrics

As of or for the year ended December 31,

| (in millions, except headcount) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: |
| Selected balance sheet data (period-end) |  |  |  |
| Loans:(a) | $\mathbf{5 3 , 1 4 5}$ | $\$ 45,544$ | $\$ 71,357$ |
| $\quad$ Loans retained(b) | $\mathbf{3 , 7 4 6}$ | 3,567 | 13,660 |
| $\quad$ Loans held-for-sale and loans at fair value | $\mathbf{5 6 , 8 9 1}$ | 49,111 | 85,017 |
| Total loans | $\mathbf{4 0 , 0 0 0}$ | 33,000 | 33,000 |
| Equity |  |  |  |
| Selected balance sheet data (average) | $\mathbf{\$ 7 3 1 , 8 0 1}$ | $\$ 699,039$ | $\$ 832,729$ |
| Total assets | $\mathbf{3 0 7 , 0 6 1}$ | 273,624 | 350,812 |
| Trading assets - debt and equity instruments | $\mathbf{7 0 , 2 8 9}$ | 96,042 | 112,337 |
| Trading assets - derivative receivables |  |  |  |
| Loans: (a) | $\mathbf{5 4 , 4 0 2}$ | 62,722 | 73,108 |
| $\quad$ Loans retained(b) | $\mathbf{3 , 2 1 5}$ | 7,589 | $\mathbf{1 8 , 5 0 2}$ |
| $\quad$ Loans held-for-sale and loans at fair value | $\mathbf{5 7 , 6 1 7}$ | 70,311 | 91,610 |
| Total loans | $\mathbf{5 4 0 , 4 4 9}$ | 538,724 | 679,780 |
| Adjusted assets(c) | $\mathbf{4 0 , 0 0 0}$ | 33,000 | 26,098 |
| Equity | $\mathbf{2 6 , 3 1 4}$ | 24,654 | 27,938 |

(a) Effective January 1, 2010, the Firm adopted accounting guidance related to VIEs. Upon adoption of the guidance, the Firm consolidated its Firm-administered multiseller conduits. As a result, $\$ 15.1$ billion of related loans were recorded in loans on the Consolidated Balance Sheets.
(b) Loans retained included credit portfolio loans, leveraged leases and other accrual loans, and excluded loans held-for-sale and loans at fair value.
(c) Adjusted assets, a non-GAAP financial measure, equals total assets minus (1) securities purchased under resale agreements and securities borrowed less securities sold, not yet purchased; (2) assets of variable interest entities ("VIEs"); (3) cash and securities segregated and on deposit for regulatory and other purposes; (4) goodwill and intangibles; (5) securities received as collateral; and (6) investments purchased under the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility ("AML Facility"). The amount of adjusted assets is presented to assist the reader in comparing IB's asset and capital levels to other investment banks in the securities industry. Asset-to-equity leverage ratios are commonly used as one measure to assess a company's capital adequacy. IB believes an adjusted asset amount that excludes the assets discussed above, which were considered to have a low risk profile, provides a more meaningful measure of balance sheet leverage in the securities industry.

## Selected metrics

As of or for the year ended December 31,

| As of or for the year ended December 31, (in millions, except ratios) | 2010 | 2009 | 2008 |
| :---: | :---: | :---: | :---: |
| Credit data and quality statistics |  |  |  |
| Net charge-offs | \$ 735 | \$1,904 | \$ 105 |
| Nonperforming assets: |  |  |  |
| Nonaccrual loans: |  |  |  |
| Nonaccrual loans retained(a)(b) | 3,159 | 3,196 | 1,143 |
| Nonaccrual loans held-for-sale and loans at fair value | 460 | 308 | 32 |
| Total nonperforming loans | 3,619 | 3,504 | 1,175 |
| Derivative receivables | 34 | 529 | 1,079 |
| Assets acquired in loan satisfactions | 117 | 203 | 247 |
| Total nonperforming assets | 3,770 | 4,236 | 2,501 |
| Allowance for credit losses: |  |  |  |
| Allowance for loan losses | 1,863 | 3,756 | 3,444 |
| Allowance for lending-related commitments | 447 | 485 | 360 |
| Total allowance for credit losses | 2,310 | 4,241 | 3,804 |
| Net charge-off rate(a)(c) | 1.35\% | 3.04\% | 0.14\% |
| Allowance for loan losses to period-end loans |  |  |  |
| Allowance for loan losses to average loans retained(a)(c)(d) | 3.42 | 5.99 | 4.71(i) |
| Allowance for loan losses to nonaccrual loans |  |  | 301 |
| Nonaccrual loans to total period-end loans | 6.36 | 7.13 | 1.38 |
| Nonaccrual loans to average loans | 6.28 | 4.98 | 1.28 |
| Market risk-average trading and credit portfolio VaR - 95\% confidence level(e) |  |  |  |
| Trading activities: |  |  |  |
| Fixed income | \$ 65 | \$ 160 | \$ 162 |
| Foreign exchange | 11 | 18 | 23 |
| Equities | 22 | 47 | 47 |
| Commodities and other | 16 | 20 | 23 |
| Diversification(f) | (43) | (91) | (88) |
| Total trading VaR(g) | 71 | 154 | 167 |
| Credit portfolio VaR(h) | 26 | 52 | 45 |
| Diversification(f) | (10) | (42) | (36) |
| Total trading and credit portfolio VaR | \$ 87 | \$ 164 | \$ 176 |

(a) Loans retained included credit portfolio loans, leveraged leases and other accrual loans, and excluded loans held-for-sale and loans accounted for at fair value.
(b) Allowance for loan losses of $\$ 1.1$ billion, $\$ 1.3$ billion and $\$ 430$ million were held against these nonaccrual loans at December 31, 2010, 2009 and 2008, respectively.
(c) Loans held-for-sale and loans at fair value were excluded when calculating the allowance coverage ratio and net charge-off rate.
(d) Results for 2008 include seven months of the combined Firm's (JPMorgan Chase \& Co.'s and Bear Stearns') results and five months of heritage JPMorgan Chase \& Co.'s results only
(e) For $2008,95 \%$ VaR reflects data only for the last six months of the year as the Firm began to calculate VaR using a $95 \%$ confidence level effective in the third quarter of 2008, rather than the prior $99 \%$ confidence level.
(f) Average value-at-risk ("VaR") was less than the sum of the VaR of the components described above, which is due to portfolio diversification. The diversification effect reflects the fact that the risks were not perfectly correlated. The risk of a portfolio of positions is therefore usually less than the sum of the risks of the positions themselves.
(g) Trading VaR includes predominantly all trading activities in IB, as well as syndicated lending facilities that the Firm intends to distribute; however,
particular risk parameters of certain products are not fully captured, for example, correlation risk. Trading VaR does not include the debit valuation adjustments ("DVA") taken on derivative and structured liabilities to reflect the credit quality of the Firm. See VaR discussion on pages 142-146 and the DVA Sensitivity table on page 144 of this Annual Report for further details. Trading VaR includes the estimated credit spread sensitivity of certain mortgage products.
(h) Credit portfolio VaR includes the derivative credit valuation adjustments ("CVA"), hedges of the CVA and mark-to-market ("MTM") hedges of the retained loan portfolio, which were all reported in principal transactions revenue. This VaR does not include the retained loan portfolio.
(i) Excluding the impact of a loan originated in March 2008 to Bear Stearns, the adjusted ratio would be $4.84 \%$ for 2008. The average balance of the loan extended to Bear Stearns was $\$ 1.9$ billion for 2008.

Market shares and rankings (a)

|  | 2010 |  | 2009 |  | 2008 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year ended December 31, | Market share | Rankings | Market share | Rankings | Market share | Rankings |
| Global investment banking fees (b) | 8\% | \#1 | 9\% | \#1 | 9\% | \#2 |
| Debt, equity and equityrelated |  |  |  |  |  |  |
| Global | 7 | 1 | 9 | 1 | 8 | 2 |
| U.S. | 11 | 2 | 15 | 1 | 14 | 2 |
| Syndicated loans |  |  |  |  |  |  |
| Global | 9 | 1 | 8 | 1 | 9 | 1 |
| U.S. | 19 | 2 | 22 | 1 | 22 | 1 |
| Long-term debt (c) |  |  |  |  |  |  |
| Global | 7 | 2 | 8 | 1 | 8 | 3 |
| U.S. | 11 | 2 | 14 | 1 | 14 | 2 |
| Equity and equity- related |  |  |  |  |  |  |
| Global(d) | 7 | 3 | 12 | 1 | 12 | 2 |
| U.S. | 13 | 2 | 16 | 2 | 16 | 2 |
| Announced M\&A(e) |  |  |  |  |  |  |
| Global | 16 | 4 | 24 | 3 | 25 | 1 |
| U.S. | 23 | 3 | 36 | 2 | 31 | 2 |

(a) Source: Dealogic. Global Investment Banking fees reflects ranking of fees and market share. Remainder of rankings reflects transaction volume rank and market share. Results for 2008 are pro forma for the Bear Stearns merger.
(b) Global IB fees exclude money market, short-term debt and shelf deals.
(c) Long-term debt tables include investment-grade, high-yield, supranationals, sovereigns, agencies, covered bonds, asset-backed securities and mortgagebacked securities; and exclude money market, short-term debt, and U.S. municipa securities.
(d) Equity and equity-related rankings include rights offerings and Chinese A-Shares.
(e) Global announced M\&A is based on transaction value at announcement; all other rankings are based on transaction proceeds, with full credit to each book manager/equal if joint. Because of joint assignments, market share of all participants will add up to more than 100\%. M\&A for 2010, 2009 and 2008, reflects the removal of any withdrawn transactions. U.S. announced M\&A represents any U.S. involvement ranking.

According to Dealogic, the Firm was ranked \#1 in Global Investment Banking Fees generated during 2010, based on revenue; \#1 in Global Debt, Equity and Equity-related; \#1 in Global Syndicated Loans; \#2 in Global Long-Term Debt; \#3 in Global Equity and Equityrelated; and \#4 in Global Announced M\&A, based on volume.

## Management's discussion and analysis


#### Abstract

Retail Financial Services ("RFS") serves consumers and businesses through personal service at bank branches and through ATMs, online banking and telephone banking. Customers can use more than 5,200 bank branches (thirdlargest nationally) and 16,100 ATMs (second-largest nationally), as well as online and mobile banking around the clock. More than 28,900 branch salespeople assist customers with checking and savings accounts, mortgages, home equity and business loans, and investments across the 23-state footprint from New York and Florida to California.


Effective July 1, 2011, RFS is organized into two components:
(1) Consumer \& Business Banking (formerly Retail Banking) and
(2) Mortgage Banking (including Mortgage Production and Servicing, and Real Estate Portfolios). Consumer \& Business Banking includes branch banking and business banking activities. Mortgage Production and Servicing includes mortgage origination and servicing activities. Real Estate Portfolios comprises residential mortgages and home equity loans, including the purchased credit-impaired portfolio acquired in the Washington Mutual transaction. For a further discussion of the business segment reorganization, see Subsequent business segment changes on page 67, and Note 34 on pages 290293 of this Annual Report.

Selected income statement data

| Year ended December 31, (in millions, except ratios) | 2010 | 2009 | 2008 |
| :---: | :---: | :---: | :---: |
| Revenue |  |  |  |
| Lending- and deposit-related fees | \$ 3,061 | \$ 3,897 | \$ 2,466 |
| Asset management, administration and commissions | 1,776 | 1,665 | 1,502 |
| Mortgage fees and related income | 3,855 | 3,794 | 3,621 |
| Credit card income | 1,955 | 1,634 | 939 |
| Other income | 580 | 424 | 217 |
| Noninterest revenue | 11,227 | 11,414 | 8,745 |
| Net interest income | 17,220 | 18,383 | 12,410 |
| Total net revenue ${ }^{(a)}$ | 28,447 | 29,797 | 21,155 |
| Provision for credit losses | 8,919 | 14,754 | 9,033 |
| Noninterest expense |  |  |  |
| Compensation expense | 7,072 | 6,349 | 4,700 |
| Noncompensation expense | 9,135 | 8,834 | 5,781 |
| Amortization of intangibles | 276 | 329 | 396 |
| Total noninterest expense | 16,483 | 15,512 | 10,877 |
| Incomel (loss) before income tax expense/(benefit) | 3,045 | (469) | 1,245 |
| Income tax expense/(benefit) | 1,317 | (134) | 542 |
| Net income I (loss) | \$ 1,728 | \$ (335) | \$ 703 |
| Financial ratios |  |  |  |
| ROE | 7\% | (1)\% | 4\% |
| Overhead ratio | 58 | 52 | 51 |
| Overhead ratio excluding |  |  |  |
| core deposit intangibles(b) | 57 | 51 | 50 |

(a) Total net revenue included tax-equivalent adjustments associated with tax-exempt loans to municipalities and other qualified entities of $\$ 8$ million, $\$ 9$ million and $\$ 6$ million for the years ended December 31, 2010, 2009 and 2008, respectively.
(b) RFS uses the overhead ratio (excluding the amortization of core deposit intangibles ("CDI")), a non-GAAP financial measure, to evaluate the underlying expense trends of the business. Including CDI amortization expense in the overhead ratio calculation would result in a higher overhead ratio in the earlier years and a lower overhead ratio in later years. This method would therefore result in an improving overhead ratio over time, all things remaining equal. The non-GAAP ratio excludes Consumer \& Business Banking's CDI amortization expense related to prior business combination transactions of \$276 million, \$328 million and \$394 million for the years ended December 31, 2010, 2009 and 2008, respectively.

## 2010 compared with 2009

Net income was $\$ 1.7$ billion, compared with a net loss of $\$ 335$ million in the prior year.
Net revenue was $\$ 28.4$ billion, a decrease of $\$ 1.4$ billion, or $5 \%$, compared with the prior year. Net interest income was $\$ 17.2$ billion, down by $\$ 1.2$ billion, or $6 \%$, reflecting the impact of lower loan and deposit balances and narrower loan spreads, partially offset by a shift to wider-spread deposit products. Noninterest revenue was $\$ 11.2$ billion, a decrease of $\$ 187$ million, or $2 \%$, compared with the prior year, as lower deposit-related fees were partially offset by higher debit card income.
The provision for credit losses was $\$ 8.9$ billion, compared with $\$ 14.8$ billion in the prior year. The current-year provision reflected an addition to the allowance for loan losses of $\$ 3.4$ billion for the purchased credit-impaired ("PCl") portfolio and a reduction in the allowance for loan losses of $\$ 1.7$ billion, predominantly for the mortgage loan portfolios. In comparison, the prior-year provision reflected an addition to the allowance for loan losses of $\$ 5.5$ billion, predominantly for the home equity and mortgage portfolios, but which also included an addition of $\$ 1.6$ billion for the PCI portfolio. While delinquency trends and net charge-offs improved compared with the prior year, the provision continued to reflect elevated losses for the mortgage and home equity portfolios. See page 130 of this Annual Report for the net charge-off amounts and rates. To date, no chargeoffs have been recorded on PCI loans.
Noninterest expense was $\$ 16.5$ billion, an increase of $\$ 971$ million, or $6 \%$, from the prior year, reflecting higher default-related expense.

## 2009 compared with 2008

The following discussion of RFS's financial results reflects the acquisition of Washington Mutual's retail bank network and mortgage banking activities as a result of the Washington Mutual transaction on September 25, 2008. See Note 2 on pages 166-170 of this Annual Report for more information concerning this transaction.
RFS reported a net loss of $\$ 335$ million, a decrease of $\$ 1.0$ billion from the prior year, as the increase in provision for credit losses more than offset the positive impact of the Washington Mutual transaction.

Net revenue was $\$ 29.8$ billion, an increase of $\$ 8.6$ billion, or $41 \%$, from the prior year. Net interest income was $\$ 18.4$ billion, up by $\$ 6.0$ billion, or $48 \%$, reflecting the impact of the Washington Mutual transaction, and wider loan and deposit spreads.

Noninterest revenue was $\$ 11.4$ billion, up by $\$ 2.7$ billion, or $31 \%$, driven by the impact of the Washington Mutual transaction, wider margins on mortgage originations and higher net mortgage servicing revenue, partially offset by $\$ 1.6$ billion in estimated losses related to the repurchase of previously sold loans.
The provision for credit losses was $\$ 14.8$ billion, an increase of $\$ 5.7$ billion from the prior year. Weak economic conditions and housing price declines continued to drive higher estimated losses for the home equity and mortgage loan portfolios. The provision included an addition of $\$ 5.5$ billion to the allowance for loan losses, compared with an addition of $\$ 4.8$ billion in the prior year. Included in the 2009 addition to the allowance for loan losses was a $\$ 1.6$ billion increase related to estimated deterioration in the Washington Mutual PCI portfolio. See page 130 of this Annual Report for the net charge-off amounts and rates. To date, no charge-offs have been recorded on PCl loans.

Noninterest expense was $\$ 15.5$ billion, an increase of $\$ 4.6$ billion, or $43 \%$. The increase reflected the impact of the Washington Mutual transaction and higher servicing and default-related expense.

## Selected metrics

As of or for the year ended December 31,
(in millions, except headcount and

| ratios) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: |
| Selected balance sheet data <br> (period-end) |  |  |  |
| Assets | $\mathbf{\$ 2 9 9 , 9 5 0}$ | $\$ 322,185$ | $\$ 358,132$ |
| Loans: |  |  |  |
| $\quad$ Loans retained | $\mathbf{2 5 3 , 9 0 4}$ | 280,246 | 312,063 |
| $\quad$ Loans held-for-sale and loans at fair value(a) | $\mathbf{1 4 , 8 6 3}$ | 12,920 | 8,174 |
| Total loans | $\mathbf{2 6 8 , 7 6 7}$ | 293,166 | 320,237 |
| Deposits | $\mathbf{3 6 9 , 9 2 5}$ | 356,614 | 359,823 |
| Equity | $\mathbf{2 4 , 6 0 0}$ | 22,457 | 22,457 |
|  |  |  |  |
| Selected balance sheet data (average) | $\mathbf{\$ 3 1 4 , 0 4 6}$ | $\$ 344,727$ | $\$ 243,792$ |
| Assets |  |  |  |
| Loans: | $\mathbf{2 6 8 , 9 0 2}$ | 296,959 | 202,208 |
| $\quad$ Loans retained | $\mathbf{1 5 , 3 9 5}$ | 16,236 | 14,560 |
| Loans held-for-sale and loans at fair value(a) | $\mathbf{2 8 4 , 2 9 7}$ | 313,195 | 216,768 |
| Total loans | $\mathbf{3 6 1 , 5 2 5}$ | 366,996 | 257,784 |
| Deposits | $\mathbf{2 4 , 6 0 0}$ | 22,457 | 16,070 |
| Equity |  |  |  |
|  | $\mathbf{1 1 6 , 8 8 2}$ | 103,733 | 96,954 |


| As of or for the year ended December 31, (in millions, except headcount and ratios) | 2010 | 2009 | 2008 |
| :---: | :---: | :---: | :---: |
| Credit data and quality statistics |  |  |  |
| Net charge-offs | \$ 7,221 | \$ 9,233 | \$4,263 |
| Nonaccrual loans: |  |  |  |
| Nonaccrual loans retained | 8,568 | 10,373 | 6,400 |
| Nonaccrual loans held-for- sale and loans at fair value | 145 | 234 | 236 |
| Total nonaccrual loans(b)(c)(d) | 8,713 | 10,607 | 6,636 |
| Nonperforming assets(b)(c)(d) | 9,999 | 11,761 | 8,819 |
| Allowance for loan losses | 15,554 | 13,734 | 8,177 |
| Net charge-off rate(e) | 2.69\% | 3.11\% | 2.11\% |
| Net charge-off rate excluding PCI loans(e)(f) | 3.76 | 4.36 | 2.37 |
| Allowance for loan losses to ending loans retained(e) | 6.13 | 4.90 | 2.62 |
| Allowance for loan losses to ending loans excluding PCl loans(e)(f) | 5.86 | 6.11 | 3.66 |
| Allowance for loan losses to nonaccrual loans retained(b)(e)(f) | 124 | 117 | 128 |
| Nonaccrual loans to total loans | 3.24 | 3.62 | 2.07 |
| Nonaccrual loans to total loans excluding PCI loans(b) | 4.45 | 5.01 | 2.87 |

(a) Loans at fair value consist of prime mortgages originated with the intent to sell that are accounted for at fair value and classified as trading assets on the Consolidated Balance Sheets. These loans totaled $\$ 14.7$ billion, $\$ 12.5$ billion and $\$ 8.0$ billion at December 31, 2010, 2009 and 2008, respectively. Average balances of these loans totaled $\$ 15.2$ billion, $\$ 15.8$ billion and $\$ 14.2$ billion for the years ended December 31, 2010, 2009 and 2008, respectively.
(b) Excludes PCl loans that were acquired as part of the Washington Mutual transaction, which are accounted for on a pool basis. Since each pool is accounted for as a single asset with a single composite interest rate and an aggregate expectation of cash flows, the past-due status of the pools, or that of the individual loans within the pools, is not meaningful. Because the Firm is recognizing interest income on each pool of loans, they are all considered to be performing.
(c) Certain of these loans are classified as trading assets on the Consolidated Balance Sheets.
(d) At December 31, 2010, 2009 and 2008, nonperforming assets excluded: (1) mortgage loans insured by U.S. government agencies of $\$ 10.5$ billion, $\$ 9.0$ billion and $\$ 3.0$ billion, respectively, that are 90 days past due and accruing at the guaranteed reimbursement rate; and (2) real estate owned insured by U.S. government agencies of $\$ 1.9$ billion, $\$ 579$ million and $\$ 364$ million, respectively. These amounts are excluded as reimbursement of insured amounts is proceeding normally.
(e) Loans held-for-sale and loans accounted for at fair value were excluded when calculating the allowance coverage ratio and the net charge-off rate.
(f) Excludes the impact of PCI loans that were acquired as part of the Washington Mutual transaction. These loans were accounted for at fair value on the acquisition date, which incorporated management's estimate, as of that date, of credit losses over the remaining life of the portfolio. An allowance for loan losses of $\$ 4.9$ billion and $\$ 1.6$ billion was recorded for these loans at December 31, 2010 and 2009, respectively, which has also been excluded from the applicable ratios. No allowance for loan losses was recorded for these loans at December 31, 2008. To date, no charge-offs have been recorded for these loans.

## Consumer \& Business Banking

## Selected income statement data

| Year ended December 31, |  |  |  |
| :--- | ---: | ---: | ---: |
| (in millions, except ratios) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| Noninterest revenue | $\mathbf{\$ 6 , 8 4 4}$ | $\$ 7,204$ | $\$ 5,001$ |
| Net interest income | $\mathbf{1 0 , 8 8 4}$ | 10,864 | 7,704 |
| Total net revenue | $\mathbf{1 7 , 7 2 8}$ | 18,068 | 12,705 |
| Provision for credit losses | $\mathbf{6 3 0}$ | 1,176 | 466 |
| Noninterest expense | $\mathbf{1 0 , 7 7 1}$ | 10,421 | 7,307 |
| Income before income tax expense | $\mathbf{6 , 3 8 1}$ | 6,471 | 4,932 |
| Net income | $\mathbf{\$ 3 , 6 5 2}$ | $\$ 3,915$ | $\$ 2,971$ |
| Overhead ratio | $\mathbf{6 0 \%}$ | $58 \%$ | $58 \%$ |
| Overhead ratio excluding core deposit <br> intangibles(a) | $\mathbf{5 9}$ | 56 | 54 |

(a) Consumer \& Business Banking uses the overhead ratio (excluding the amortization of CDI), a non-GAAP financial measure, to evaluate the underlying expense trends of the business. Including CDI amortization expense in the overhead ratio calculation would result in a higher overhead ratio in the earlier years and a lower overhead ratio in later years; this method would therefore result in an improving overhead ratio over time, all things remaining equal. The non-GAAP ratio excludes Consumer \& Business Banking's CDI amortization expense related to prior business combination transactions of $\$ 276$ million, $\$ 328$ million and $\$ 394$ million for the years ended December 31, 2010, 2009 and 2008, respectively.

## Selected metrics

As of or for the year ended December 31,
(in billions, except ratios and
where otherwise noted) $2010 \quad 2009 \quad 2008$

| Business metrics |  |  |  |
| :---: | :---: | :---: | :---: |
| Business banking origination volume (in millions) | \$4,688 | \$2,299 | \$5,531 |
| End-of-period loans owned | 16.8 | 17.0 | 18.7 |
| End-of-period deposits: |  |  |  |
| Checking | \$131.7 | \$123.2 | \$115.0 |
| Savings | 170.6 | 156.1 | 142.1 |
| Time and other | 46.0 | 58.2 | 89.3 |
| Total end-of-period deposits | 348.3 | 337.5 | 346.4 |
| Average loans owned | \$ 16.9 | \$ 18.0 | \$ 16.9 |
| Average deposits: |  |  |  |
| Checking | \$123.5 | \$116.6 | \$ 79.3 |
| Savings | 166.1 | 151.9 | 113.1 |
| Time and other | 51.2 | 76.5 | 53.4 |
| Total average deposits | 340.8 | 345.0 | 245.8 |
| Deposit margin | 3.00\% | 2.92\% | 2.87\% |
| Average assets | \$ 29.3 | \$ 29.8 | \$ 27.1 |
| Credit data and quality statistics (in millions, except ratios) |  |  |  |
| Net charge-offs | \$ 730 | \$ 876 | \$ 364 |
| Net charge-off rate | 4.32\% | 4.87\% | 2.15\% |
| Nonperforming assets | \$ 846 | \$ 839 | \$ 424 |

## Retail branch business metrics

| Year ended December 31, | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: |
| Investment sales volume (in millions) | $\mathbf{\$ 2 3 , 5 7 9}$ | $\$ 21,784$ | $\$ 17,640$ |
|  |  |  |  |
| Number of: | $\mathbf{5 , 2 6 8}$ | 5,154 | 5,474 |
| $\quad$ Branches | $\mathbf{1 6 , 1 4 5}$ | 15,406 | 14,568 |
| ATMs | $\mathbf{2 1 , 7 1 5}$ | 17,991 | 15,825 |
| Personal bankers | $\mathbf{7 , 1 9 6}$ | 5,912 | 5,661 |
| Sales specialists | $\mathbf{1 7 , 7 4 4}$ | 15,424 | 11,710 |
| Active online customers |  |  |  |
| $\quad$ (in thousands) | $\mathbf{2 7 , 2 5 2}$ | 25,712 | $\mathbf{2 4 , 4 9 9}$ |
| Checking accounts |  |  |  |

## 2010 compared with 2009

Consumer \& Business Banking reported net income of $\$ 3.7$ billion, a decrease of $\$ 263$ million, or $7 \%$, compared with the prior year. Total net revenue was $\$ 17.7$ billion, down $2 \%$ compared with the prior year. The decrease was driven by lower deposit-related fees, largely offset by higher debit card income and a shift to wider-spread deposit products. The provision for credit losses was $\$ 630$ million, down $\$ 546$ million compared with the prior year. The current-year provision reflected lower net charge-offs and a reduction of $\$ 100$ million to the allowance for loan losses due to lower estimated losses, compared with a $\$ 300$ million addition to the allowance for loan losses in the prior year. Consumer \& Business Banking net charge-offs were $\$ 730$ million, compared with $\$ 876$ million in the prior year. Noninterest expense was $\$ 10.7$ billion, up $3 \%$ compared with the prior year, resulting from sales force increases in Business Banking and bank branches.

## 2009 compared with 2008

Consumer \& Business Banking reported net income of $\$ 3.9$ billion, up by $\$ 944$ million, or $32 \%$, from the prior year. Total net revenue was $\$ 18.1$ billion, up by $\$ 5.4$ billion, or $42 \%$, from the prior year. The increase reflected the impact of the Washington Mutual transaction, wider deposit spreads, higher average deposit balances and higher debit card income. The provision for credit losses was $\$ 1.2$ billion, compared with $\$ 466$ million in the prior year, reflecting higher estimated losses in the Business Banking portfolio. Noninterest expense was $\$ 10.4$ billion, up by $\$ 3.1$ billion, or $43 \%$. The increase reflected the impact of the Washington Mutual transaction, higher FDIC insurance premiums and higher headcount-related expense.
Mortgage Production and Servicing

## Selected income statement data

Year ended December 31,

|  | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: |
| (in millions, except ratios) | $\mathbf{\$ 4 , 2 6 8}$ | $\$ 4,236$ | $\$ 4,029$ |
| Noninterest revenue | $\mathbf{9 0 4}$ | 973 | 479 |
| Net interest income | $\mathbf{5 , 1 7 2}$ | 5,209 | 4,508 |
| Total net revenue | $\mathbf{5 8}$ | 15 | 6 |
| Provision for credit losses | $\mathbf{4 , 1 3 9}$ | 3,244 | 2,681 |
| Noninterest expense | $\mathbf{9 7 5}$ | 1,950 | 1,821 |
| Income before income tax expense | $\mathbf{\$ 5 6 9}$ | $\$ 1,199$ | $\$ 1,120$ |
| Net income | $\mathbf{8 0} \%$ | $62 \%$ | $59 \%$ |
| Overhead ratio |  |  |  |

## 2010 compared with 2009

Mortgage Production and Servicing reported net income of $\$ 569$ million, a decrease of $\$ 630$ million, or $53 \%$, from the prior year.
Net revenue was $\$ 5.2$ billion, flat compared with the prior year, and included $\$ 904$ million of net interest income, $\$ 3.9$ billion of mortgage fees and related income,
and $\$ 413$ million of other noninterest revenue. Mortgage fees and related revenue comprised $\$ 528$ million of net production revenue, $\$ 2.2$ billion of servicing operating revenue and $\$ 1.1$ billion of MSR risk management revenue. Production revenue, excluding repurchase losses, was $\$ 3.4$ billion, an increase of $\$ 1.3$ billion, reflecting wider mortgage margins and higher origination volumes. Total production revenue was reduced by $\$ 2.9$ billion of repurchase losses, compared with $\$ 1.6$ billion in the prior year, and included a $\$ 1.6$ billion increase in the repurchase reserve during the current year, reflecting higher estimated future repurchase demands. Servicing operating revenue was $\$ 2.2$ billion, an increase of $\$ 528$ million, reflecting an improvement in other changes in the MSR asset fair value driven by lower runoff of the MSR asset due to time decay, partially offset by lower loan servicing revenue as a result of lower third-party loans serviced. MSR risk management revenue was $\$ 1.1$ billion, a decrease of $\$ 492$ million.

Noninterest expense was $\$ 4.1$ billion, up by $\$ 895$ million, or $28 \%$, from the prior year, driven by an increase in default-related expense for the serviced portfolio, including costs associated with foreclosure affidavit-related suspensions.

## 2009 compared with 2008

Mortgage Production and Servicing reported net income of $\$ 1.2$ billion, an increase of $\$ 79$ million, or $7 \%$, from the prior year.
Net revenue was $\$ 5.2$ billion, up by $\$ 701$ million from the prior year, and included $\$ 973$ million of net interest income, $\$ 3.8$ billion of mortgage fees and related income, and $\$ 442$ million of other noninterest revenue. Mortgage fees and related income comprised $\$ 503$ million of net production revenue, $\$ 1.7$ billion of servicing operating revenue and $\$ 1.6$ billion of MSR risk management revenue. Production revenue, excluding repurchase losses, was $\$ 2.1$ billion, an increase of $\$ 965$ million, reflecting wider margins on new originations. Total production revenue was reduced by $\$ 1.6$ billion of repurchase losses, compared with repurchase losses of $\$ 252$ million in the prior year. Servicing operating revenue was $\$ 1.7$ billion, an increase of $\$ 457$ million, reflecting growth in average third-party loans serviced as a result of the Washington Mutual transaction. MSR risk management revenue was $\$ 1.6$ billion, an increase of $\$ 111$ million, reflecting the positive impact of a decrease in estimated future prepayments during 2009.

Noninterest expense was $\$ 3.2$ billion, up by $\$ 563$ million, or $21 \%$, from the prior year, driven by higher servicing and default-related expense and the impact of the Washington Mutual transaction.

## Selected metrics



| Origination volume: |  |  |  |
| :--- | ---: | ---: | ---: |
| $\quad$ Mortgage origination volume by channel: |  |  |  |
| $\quad$ Retail | $\mathbf{\$ 8 . 8}$ | $\$ 53.9$ | $\$ 41.1$ |
| Wholesale(e) | $\mathbf{1 . 3}$ | 3.6 | 26.7 |
| Correspondent(e) | $\mathbf{7 5 . 3}$ | 81.0 | 58.2 |
| $\quad$ CNT (negotiated transactions) | $\mathbf{1 0 . 2}$ | 12.2 | 43.0 |
| Total mortgage origination volume | $\mathbf{\$ 1 5 5 . 6}$ | $\$ 150.7$ | $\$ 169.0$ |

## Management's discussion and analysis

## Selected metrics

As of or for the year ended
December 31,

| (in billions, except ratios) |  | 2010 |  | 2009 |  | 2008 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Application volume: |  |  |  |  |  |  |
| Mortgage application volume by channel: |  |  |  |  |  |  |
| Retail | \$ | 115.1 | \$ | 90.9 |  | 89.1 |
| Wholesale(e) |  | 2.4 |  | 4.9 |  | 58.6 |
| Correspondent(e) |  | 97.3 |  | 110.8 |  | 86.9 |
| Total mortgage application volume | \$ | 214.8 | \$ | 206.6 | \$ | 234.6 |
| Average mortgage loans held-for-sale and loans |  |  |  |  |  |  |
| Average assets |  | 57.8 |  | 51.3 |  | 37.4 |
| Repurchase reserve (ending) |  | 3.0 |  | 1.4 |  | 1.0 |
| Third-party mortgage loans serviced (ending) |  | 967.5 |  | 1,082.1 |  | 1,172.6 |
| Third-party mortgage loans serviced (average) |  | 1,037.6 |  | 1,119.1 |  | 774.9 |
| MSR net carrying value (ending) |  | 13.6 |  | 15.5 |  | 9.3 |
| Ratio of MSR net carrying value (ending) to |  |  |  |  |  |  |
| Ratio of annualized loan servicing revenue to third-party mortgage loans serviced |  |  |  |  |  | 0.42 |
| MSR revenue multiple(g) |  | 3.20x |  | 3.25x |  | 1.88x |


| Supplemental mortgage fees and related income details |  |  |  |
| :---: | :---: | :---: | :---: |
| As of or for the year ended |  |  |  |
| December 31, (in millions) | 2010 | 2009 | 2008 |
| Net production revenue: |  |  |  |
| Production revenue | \$ 3,440 | \$ 2,115 | \$ 1,150 |
| Repurchase losses | $(2,912)$ | $(1,612)$ | (252) |
| Net production revenue | 528 | 503 | 898 |
| Net mortgage servicing revenue: |  |  |  |
| Operating revenue: |  |  |  |
| Loan servicing revenue | 4,575 | 4,942 | 3,258 |
| Other changes in MSR asset fair value | $(2,384)$ | $(3,279)$ | $(2,052)$ |
| Total operating revenue | 2,191 | 1,663 | 1,206 |
| Risk management: |  |  |  |
| Changes in MSR asset fair value due to inputs or assumptions in model | $(2,268)$ | 5,804 | $(6,849)$ |
| Derivative valuation adjustments and other | 3,404 | $(4,176)$ | 8,366 |
| Total risk management | 1,136 | 1,628 | 1,517 |
| Total net mortgage servicing revenue | 3,327 | 3,291 | 2,723 |
| Mortgage fees and related income | \$ 3,855 | \$ 3,794 | \$ 3,621 |

(a) Predominantly represents prime loans repurchased from Government National Mortgage Association ("Ginnie Mae") pools, which are insured by U.S. government agencies. See further discussion of loans repurchased from Ginnie Mae pools in Repurchase liability on pages 98-101 of this Annual Report.
(b) Average loans owned include loans held-for-sale of $\$ 204$ million, $\$ 388$ million and $\$ 352$ million for the years ended December 31, 2010, 2009 and 2008, respectively. These amounts are excluded when calculating the net charge-off rate.
(c) Excludes mortgage loans that are insured by U.S. government agencies of $\$ 11.4$ billion, $\$ 9.7$ billion and $\$ 3.5$ billion at December 31, 2010, 2009 and 2008, respectively. These amounts are excluded as reimbursement of insured amounts is proceeding normally.
(d) At December 31, 2010, 2009 and 2008, nonperforming assets excluded: (1) mortgage loans insured by U.S. government agencies of $\$ 10.5$ billion, $\$ 9.0$ billion and $\$ 3.0$ billion, respectively, that are 90 days past due and accruing at the guaranteed reimbursement rate; and (2) real estate owned insured by U.S. government agencies of $\$ 1.9$ billion, $\$ 579$ million and $\$ 364$ million, respectively. These amounts are excluded as reimbursement of insured amounts is proceeding normally.
(e) Includes rural housing loans sourced through brokers and correspondents, which are underwritten under U.S. Department of Agriculture guidelines. Prior period amounts have been revised to conform with the current period presentation.
(f) Loans at fair value consist of prime mortgages originated with the intent to sell that are accounted for at fair value and classified as trading assets on the Consolidated Balance Sheets. Average balances of these loans totaled $\$ 15.2$ billion, $\$ 15.8$ billion and $\$ 14.2$ billion for the years ended December 31, 2010, 2009 and 2008, respectively.
(g) Represents the ratio of MSR net carrying value (ending) to third-party mortgage loans serviced (ending) divided by the ratio of annualized loan servicing revenue to third-party mortgage loans serviced (average).

## Mortgage origination channels comprise the following:

Retail - Borrowers who are buying or refinancing a home through direct contact with a mortgage banker employed by the Firm using a branch office, the Internet or by phone. Borrowers are frequently referred to a mortgage banker by a banker in a Chase branch, real estate brokers, home builders or other third parties.
Wholesale - A third-party mortgage broker refers loan applications to a mortgage banker at the Firm. Brokers are independent loan originators that specialize in finding and counseling borrowers but do not provide funding for loans. The Firm exited the broker channel during 2008.

Correspondent - Banks, thrifts, other mortgage banks and other financial institutions that sell closed loans to the Firm.
Correspondent negotiated transactions ("CNTs") - These transactions occur when mid- to large-sized mortgage lenders, banks and bank-owned mortgage companies sell servicing to the Firm, on an as-originated basis, and exclude purchased bulk servicing transactions. These transactions supplement traditional production channels and provide growth opportunities in the servicing portfolio in stable and periods of rising interest rates.

Net production revenue - Includes net gains or losses on originations and sales of prime and subprime mortgage loans, other production-related fees and losses related to the repurchase of previously-sold loans.

Net mortgage servicing revenue includes the following components:
(a) Operating revenue comprises:

- all gross income earned from servicing third-party mortgage loans including stated service fees, excess service fees, late fees and other ancillary fees; and
- modeled servicing portfolio runoff (or time decay).
(b) Risk management comprises:
- changes in MSR asset fair value due to market-based inputs such as interest rates and volatility, as well as updates to assumptions used in the MSR valuation model.
- derivative valuation adjustments and other, which represents changes in the fair value of derivative instruments used to offset the impact of changes in the market-based inputs to the MSR valuation model.


## Real Estate Portfolios

## Selected income statement data

| Year ended December 31, |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| (in millions, except ratios) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |  |
| Noninterest revenue | $\mathbf{\$ 1 1 5}$ | $\$$ | $(26)$ | $\$(285)$ |
| Net interest income | $\mathbf{5 , 4 3 2}$ | 6,546 | 4,227 |  |
| Total net revenue | $\mathbf{5 , 5 4 7}$ | 6,520 | 3,942 |  |
| Provision for credit losses | $\mathbf{8 , 2 3 1}$ | 13,563 | 8,561 |  |
| Noninterest expense | $\mathbf{1 , 6 2 7}$ | 1,847 | 889 |  |
| Incomel(loss) before income tax |  |  |  |  |
| $\quad$ expensel(benefit) | $\mathbf{( 4 , 3 1 1 )}$ | $(8,890)$ | $(5,508)$ |  |
| Net income/(loss) | $\mathbf{\$ ( 2 , 4 9 3 )}$ | $\$(5,449)$ | $\$(3,388)$ |  |
| Overhead ratio | $\mathbf{2 9 \%}$ | $28 \%$ | $23 \%$ |  |

## 2010 compared with 2009

Real Estate Portfolios reported a net loss of $\$ 2.5$ billion, compared with a net loss of $\$ 5.4$ billion in the prior year. The improvement was driven by a lower provision for credit losses, partially offset by lower net interest income.

Net revenue was $\$ 5.5$ billion, down by $\$ 973$ million, or $15 \%$, from the prior year. The decrease was driven by a decline in net interest income as a result of lower loan balances, reflecting net portfolio runoff.

The provision for credit losses was $\$ 8.2$ billion, compared with $\$ 13.6$ billion in the prior year. The current-year provision reflected a $\$ 1.9$ billion reduction in net charge-offs and a $\$ 1.6$ billion reduction in the allowance for the mortgage loan portfolios. This reduction in the allowance for loan losses included the effect of $\$ 632$ million of charge-offs related to an adjustment of the estimated net realizable value of the collateral underlying delinquent residential home loans. For additional information, refer to Portfolio analysis on page 131 of this Annual Report. The remaining reduction of the allowance of approximately $\$ 950$ million was a result of an improvement in delinquencies and lower estimated losses, compared with prior year additions of $\$ 3.6$ billion for the home equity and mortgage portfolios. Additionally, the current-year provision reflected an addition to the allowance for loan losses of $\$ 3.4$ billion for the PCI portfolio,
compared with a prior year addition of $\$ 1.6$ billion for this portfolio. (For further detail, see the RFS discussion of the provision for credit losses on page 72 of this Annual Report.)
Noninterest expense was $\$ 1.6$ billion, down by $\$ 220$ million, or $12 \%$, from the prior year, reflecting lower default-related expense.
2009 compared with 2008
Real Estate Portfolios reported a net loss of $\$ 5.4$ billion, compared with a net loss of $\$ 3.4$ billion in the prior year.

Net revenue was $\$ 6.5$ billion, up by $\$ 2.6$ billion, or $65 \%$, from the prior year. The increase was driven by the impact of the Washington Mutual transaction and wider loan spreads, partially offset by lower heritage Chase loan balances.
The provision for credit losses was $\$ 13.6$ billion, compared with $\$ 8.6$ billion in the prior year. The provision reflected weakness in the home equity and mortgage portfolios. (For further detail, see the RFS discussion of the provision for credit losses for further detail) on pages 72-73 of this Annual Report.

Noninterest expense was $\$ 1.8$ billion, compared with $\$ 889$ million in the prior year, reflecting higher default-related expense.

Included within Real Estate Portfolios are PCI loans that the Firm acquired in the Washington Mutual transaction. For PCI loans, the excess of the undiscounted gross cash flows expected to be collected over the carrying value of the loans ("the accretable yield") is accreted into interest income at a level rate of return over the expected life of the loans.

The net spread between the PCI loans and the related liabilities are expected to be relatively constant over time, except for any basis risk or other residual interest rate risk that remains and for certain changes in the accretable yield percentage (e.g. from extended loan liquidation periods and from prepayments). As of December 31, 2010, the remaining weighted-average life of the PCI loan portfolio is expected to be 7.0 years. For further information, see Note 14, PCI loans, on pages 233-236 of this Annual Report. The loan balances are expected to decline more rapidly in the earlier years as the most troubled loans are liquidated, and more slowly thereafter as the remaining troubled borrowers have limited refinancing opportunities. Similarly, default and servicing expense are expected to be higher in the earlier years and decline over time as liquidations slow down.
To date the impact of the PCI loans on Real Estate Portfolios' net income has been modestly negative. This is due to the current net spread of the portfolio, the provision for loan losses recognized subsequent to its acquisition, and the higher level of default and servicing expense associated with the portfolio. Over time, the Firm expects that this portfolio will contribute positively to net income.

## Management's discussion and analysis

## Selected metrics

| (in billions) | 2010 | 2009 | 2008 |
| :---: | :---: | :---: | :---: |
| Loans excluding PCI loans(a) |  |  |  |
| End-of-period loans owned: |  |  |  |
| Home equity | \$ 88.4 | \$101.4 | \$114.3 |
| Prime mortgage | 41.7 | 47.5 | 58.7 |
| Subprime mortgage | 11.3 | 12.5 | 15.3 |
| Option ARMs | 8.1 | 8.5 | 9.0 |
| Other | 0.8 | 0.7 | 0.9 |
| Total end-of-period loans owned | \$150.3 | \$170.6 | \$198.2 |
| Average loans owned: |  |  |  |
| Home equity | \$ 94.8 | \$108.3 | \$ 99.9 |
| Prime mortgage | 44.9 | 53.4 | 40.7 |
| Subprime mortgage | 12.7 | 13.9 | 15.3 |
| Option ARMs | 8.5 | 8.9 | 2.3 |
| Other | 1.0 | 0.8 | 0.9 |
| Total average loans owned | \$161.9 | \$185.3 | \$159.1 |
| PCI loans(a) |  |  |  |
| End-of-period loans owned: |  |  |  |
| Home equity | \$ 24.5 | \$ 26.5 | \$ 28.6 |
| Prime mortgage | 17.3 | 19.7 | 21.8 |
| Subprime mortgage | 5.4 | 6.0 | 6.8 |
| Option ARMs | 25.6 | 29.0 | 31.6 |
| Total end-of-period loans owned | \$ 72.8 | \$ 81.2 | \$ 88.8 |
| Average loans owned: |  |  |  |
| Home equity | \$ 25.5 | \$ 27.6 | \$ 7.1 |
| Prime mortgage | 18.5 | 20.8 | 5.4 |
| Subprime mortgage | 5.7 | 6.3 | 1.7 |
| Option ARMs | 27.2 | 30.5 | 8.0 |
| Total average loans owned | \$ 76.9 | \$ 85.2 | \$ 22.2 |
| Total Real Estate Portfolios |  |  |  |
| End-of-period loans owned: |  |  |  |
| Home equity | \$112.9 | \$127.9 | \$142.9 |
| Prime mortgage | 59.0 | 67.2 | 80.5 |
| Subprime mortgage | 16.7 | 18.5 | 22.1 |
| Option ARMs | 33.7 | 37.5 | 40.6 |
| Other | 0.8 | 0.7 | 0.9 |
| Total end-of-period loans owned | \$223.1 | \$251.8 | \$287.0 |
| Average loans owned: |  |  |  |
| Home equity | \$120.3 | \$135.9 | \$107.0 |
| Prime mortgage | 63.4 | 74.2 | 46.1 |
| Subprime mortgage | 18.4 | 20.2 | 17.0 |
| Option ARMs | 35.7 | 39.4 | 10.3 |
| Other | 1.0 | 0.8 | 0.9 |
| Total average loans owned | \$238.8 | \$270.5 | \$181.3 |
| Average assets | \$227.0 | \$263.6 | \$179.3 |
| Home equity origination volume | 1.2 | 2.4 | 16.3 |

(a) PCI loans represent loans acquired in the Washington Mutual transaction for which a deterioration in credit quality occurred between the origination date and JPMorgan Chase's acquisition date. These loans were initially recorded at fair value and accrete interest income over the estimated lives of the loans as long as cash flows are reasonably estimable, even if the underlying loans are contractually past due.

## Credit data and quality statistics

| As of or for the year ended December 31, (in millions, except ratios) | 2010 | 2009 | 2008 |
| :---: | :---: | :---: | :---: |
| Net charge-offs excluding PCI loans(a): |  |  |  |
| Home equity | \$ 3,444 | \$ 4,682 | \$2,391 |
| Prime mortgage | 1,475 | 1,872 | 521 |
| Subprime mortgage | 1,374 | 1,648 | 933 |
| Option ARMs | 98 | 63 | - |
| Other | 59 | 78 | 49 |
| Total net charge-offs | \$ 6,450 | \$ 8,343 | \$3,894 |
| Net charge-off rate excluding PCI loans(a): |  |  |  |
| Home equity | 3.63\% | 4.32\% | 2.39\% |
| Prime mortgage | 3.29 | 3.51 | 1.28 |
| Subprime mortgage | 10.82 | 11.86 | 6.10 |
| Option ARMs | 1.15 | 0.71 | - |
| Other | 5.90 | 9.75 | 5.44 |
| Total net charge-off rate excluding PCI loans | 3.98 | 4.50 | 2.45 |
| Net charge-off rate - reported: |  |  |  |
| Home equity | 2.86\% | 3.45\% | 2.23\% |
| Prime mortgage | 2.33 | 2.52 | 1.13 |
| Subprime mortgage | 7.47 | 8.16 | 5.49 |
| Option ARMs | 0.27 | 0.16 | - |
| Other | 5.90 | 9.75 | 5.44 |
| Total net charge-off rate - reported | 2.70 | 3.08 | 2.15 |
| $30+$ day delinquency rate excluding PCI |  |  |  |
| Allowance for loan losses | \$14,659 | \$12,752 | \$7,510 |
| Nonperforming assets(c) | 8,424 | 10,347 | 7,787 |
| Allowance for loan losses to ending loans retained | 6.57\% | 5.06\% | 2.62\% |
| Allowance for loan losses to ending loans retained excluding PCl loans $(\mathrm{a})$ | 6.47 | 6.55 | 3.79 |

(a) Excludes the impact of PCI loans that were acquired as part of the Washington Mutual transaction. These loans were accounted for at fair value on the acquisition date, which incorporated management's estimate, as of that date, of credit losses over the remaining life of the portfolio. An allowance for loan losses of $\$ 4.9$ billion and $\$ 1.6$ billion was recorded for these loans at December 31, 2010 and 2009, respectively, which has also been excluded from the applicable ratios. No allowance for loan losses was recorded for these loans at December 31, 2008. To date, no charge-offs have been recorded for these loans.
(b) The delinquency rate for PCl loans was $28.20 \%, 27.62 \%$ and $17.89 \%$ at December 31, 2010, 2009 and 2008, respectively.
(c) Excludes PCl loans that were acquired as part of the Washington Mutual transaction, which are accounted for on a pool basis. Since each pool is accounted for as a single asset with a single composite interest rate and an aggregate expectation of cash flows, the past-due status of the pools, or that of the individual loans within the pools, is not meaningful. Because the Firm is recognizing interest income on each pool of loans, they are all considered to be performing.


#### Abstract

Card Services \& Auto is one of the nation's largest credit card issuers, with over $\$ 137$ billion in credit card loans and over 90 million open credit card accounts. Customers used Chase credit cards to meet $\$ 313$ billion of their spending needs in 2010. Consumers also can obtain loans through more than 16,200 auto dealerships and 2,200 schools and universities nationwide. Chase continues to innovate, despite a very difficult business environment, offering products and services such as Blueprint, Chase Freedom, Ultimate Rewards, Chase Sapphire and Ink from Chase, and earning a market leadership position in building loyalty and rewards programs. Through its merchant services business, Chase Paymentech Solutions, Card is a global leader in payment processing and merchant acquiring.


Effective July 1, 2011, Card includes Auto and Student lending. For a further discussion of the business segment reorganization, see Subsequent business segment changes on page 67, and Note 34 on pages 290-293 of this Annual Report.
Selected income statement data - managed basis(a)
Year ended December 31,

| (in millions, except ratios) | 2010 | 2009 |  | 2008 |
| :---: | :---: | :---: | :---: | :---: |
| Revenue |  |  |  |  |
| Credit card income | \$ 3,514 | \$ 3,613 | \$ | 2,768 |
| All other income(b) | 764 | 93 |  | 561 |
| Noninterest revenue | 4,278 | 3,706 |  | 3,329 |
| Net interest income | 16,194 | 19,493 |  | 15,510 |
| Total net revenue (c) | 20,472 | 23,199 |  | 18,839 |
| Provision for credit losses | 8,570 | 19,648 |  | 10,931 |
| Noninterest expense |  |  |  |  |
| Compensation expense | 1,651 | 1,739 |  | 1,495 |
| Noncompensation expense | 5,060 | 4,362 |  | 4,187 |
| Amortization of intangibles | 467 | 516 |  | 658 |
| Total noninterest expense | 7,178 | 6,617 |  | 6,340 |
| Income/(loss) before income tax |  |  |  | 1,568 |
| Income tax expense/(benefit) | 1,852 | $(1,273)$ |  | 611 |
| Net income/(loss) | \$ 2,872 | \$ $(1,793)$ | \$ | 957 |
| Memo: Net securitization income/(loss) | NA | \$ (474) | \$ | (183) |
| Financial ratios |  |  |  |  |
| ROE | 16\% | (10)\% |  | 6\% |


| ROE | $16 \%$ | $(10) \%$ | $6 \%$ |
| :--- | :--- | :---: | :---: |
| Overhead ratio | 35 | 29 | 34 |

(a) Effective January 1, 2010, the Firm adopted accounting guidance related to VIEs. As a result of the consolidation of the securitization trusts, reported and managed basis are equivalent for periods beginning after January 1, 2010. See Explanation and Reconciliation of the Firm's Use of Non-GAAP Financial Measures on pages 64-66 of this Annual Report for additional information. Also, for further details regarding the Firm's application and impact of the VIE guidance, see Note 16 on pages 244-259 of this Annual Report.
(b) Includes the impact of revenue sharing agreements with other JPMorgan Chase business segments. For periods prior to January 1, 2010, also includes net securitization income/(loss)
(c) Total net revenue included tax-equivalent adjustments associated with tax-exempt loans to certain qualified entities of $\$ 7$ million, $\$ 13$ million and $\$ 17$ million for the years ended December 31, 2010, 2009 and 2008, respectively.
NA: Not applicable

## 2010 compared with 2009

Net income was $\$ 2.9$ billion, compared with a net loss of $\$ 1.8$ billion in the prior year. The improved results were driven by a
lower provision for credit losses, partially offset by lower net revenue.
End-of-period loans were $\$ 200.5$ billion, a decrease of $\$ 24.7$ billion, or $11 \%$, from the prior year. Average loans were $\$ 207.9$ billion, a decrease of $\$ 24.2$ billion, or $10 \%$, from the prior year. The declines in both end-of-period and average loans were predominantly due to a decline in Credit Card in lower-yielding promotional balances and the Washington Mutual portfolio runoff.

Net revenue was $\$ 20.5$ billion, a decrease of $\$ 2.7$ billion, or $12 \%$, from the prior year. Net interest income was $\$ 16.2$ billion, down by $\$ 3.3$ billion, or $17 \%$. The decrease in net interest income was driven by lower average loan balances, the impact of legislative changes, and a decreased level of fees. These decreases were offset partially by lower revenue reversals associated with lower charge-offs. Noninterest revenue was $\$ 4.3$ billion, an increase of $\$ 572$ million, or $15 \%$, driven by the prior-year write-down of securitization interests and higher auto operating lease income, offset partially by lower revenue from fee-based products.

The provision for credit losses was $\$ 8.6$ billion, compared with $\$ 19.6$ billion in the prior year. The current-year provision reflected lower net charge-offs and a reduction of $\$ 6.2$ billion to the allowance for loan losses due to lower estimated losses. The prior-year provision included an addition of $\$ 2.7$ billion to the allowance for loan losses. The net charge-off rate was $7.12 \%$, down from $7.37 \%$ in the prior year; and the 30+ day delinquency rate was $3.23 \%$, down from $5.02 \%$ in the prior year. Card Services', excluding the Washington Mutual portfolio, net charge-off rate was $8.72 \%$, including loans held for sale, up from $8.45 \%$ in the prior year; and the 30+ day delinquency rate was $3.66 \%$, down from $5.52 \%$ in the prior year. The auto loan net charge-off rate was $0.63 \%$, down from $1.44 \%$ in the prior year. The student loan net charge-off rate was $2.61 \%$, up from $1.77 \%$ in the prior year.

Noninterest expense was $\$ 7.2$ billion, an increase of $\$ 561$ million, or $8 \%$, due to higher marketing expense and higher auto operating lease depreciation expense.

## Credit Card Legislation

In May 2009, the CARD Act was enacted. Management estimates that the total reduction in net income resulting from the CARD Act is approximately $\$ 750$ million annually. The run-rate impact of this reduction in net income is reflected in results as of the end of the fourth quarter of 2010. The full year impact on 2010 net income was approximately $\$ 300$ million.
The most significant effects of the CARD Act include: (a) the inability to change the pricing of existing balances; (b) the allocation of customer payments above the minimum payment to the existing balance with the highest annual percentage rate ("APR"); (c) the requirement that customers opt-in in order to receive, for a fee, overlimit protection that permits an

## Management's discussion and analysis

authorized transaction over their credit limit; (d) the requirement that statements must be mailed or delivered not later than 21 days before the payment due date; (e) the limiting of the amount of penalty fees that can be assessed; and (f) the requirement to review customer accounts for potential interest rate reductions in certain circumstances.
As a result of the CARD Act, Card has implemented certain changes to its business practices to manage its inability to price loans to customers at rates that are commensurate with their risk over time. These changes include: (a) selectively increasing pricing;
(b) reducing the volume and duration of low-rate promotional pricing offered to customers; and (c) reducing the amount of credit that is granted to certain new and existing customers.

## 2009 compared with 2008

The following discussion of Card's financial results reflects the acquisition of Washington Mutual's credit cards operations as a result of the Washington Mutual transaction on September 25, 2008, and the dissolution of the Chase Paymentech Solutions joint venture on November 1, 2008. See Note 2 on pages 166-170 of this Annual Report for more information concerning these transactions.
Card reported a net loss of $\$ 1.8$ billion, compared with net income of $\$ 957$ million in the prior year. The decrease was driven by a higher provision for credit losses, partially offset by higher total net revenue.
End-of-period managed loans were $\$ 225.2$ billion, a decrease of $\$ 23.7$ billion, or 10\%, from the prior year, reflecting lower charge volume and a higher level of charge-offs in credit card. Average managed loans were $\$ 232.1$ billion, an increase of $\$ 11.8$ billion, or $5 \%$, from the prior year, primarily due to the impact of the Washington Mutual transaction. Excluding the impact of the Washington Mutual transaction, end-of-period and average managed loans for 2009 were $\$ 205.5$ billion and $\$ 208.4$ billion, respectively.
Managed total net revenue was $\$ 23.2$ billion, an increase of $\$ 4.4$ billion, or $23 \%$, from the prior year. Net interest income was $\$ 19.5$ billion, up by $\$ 4.0$ billion, or $26 \%$, from the prior year, driven by wider loan spreads and the impact of the Washington Mutual transaction. These benefits were offset partially by higher revenue reversals associated with higher charge-offs, a decreased level of fees, lower average managed loan balances, and the impact of legislative changes. Noninterest revenue was $\$ 3.7$ billion, an increase of $\$ 377$ million, or $11 \%$, from the prior year. The increase was driven by higher merchant servicing revenue related to the dissolution of the Chase Paymentech Solutions joint venture and the impact of the Washington Mutual transaction, partially offset by a larger write-down of securitization interests.

The managed provision for credit losses was $\$ 19.6$ billion, an increase of $\$ 8.7$ billion from the prior year, reflecting a higher level of charge-offs and an addition of $\$ 2.7$ billion to the allowance for loan losses, reflecting continued weakness in the credit environment. The managed net charge-off rate was $7.37 \%$, up from $4.03 \%$ in the prior year. The 30 -day managed delinquency rate was $5.02 \%$, up from $4.26 \%$ in the prior year. Card Services', excluding the Washington Mutual portfolio, net charge-off rate was $8.45 \%$, up from $4.92 \%$ in the prior year; and the 30+ day delinquency rate was $5.52 \%$, up from $4.36 \%$ in the prior year. The auto loan net charge-off rate was $1.44 \%$, up from $1.30 \%$ in the prior year. The student loan net charge-off rate was $1.77 \%$, up from $0.41 \%$ in the prior year.

Noninterest expense was $\$ 6.6$ billion, an increase of $\$ 277$ million, or $4 \%$, predominantly due to the dissolution of the Chase Paymentech Solutions joint venture and the impact of the Washington Mutual transaction, partially offset by lower marketing expense.

## Selected metrics

| As of or for the year ended December 31, |  |  |  |
| :--- | ---: | ---: | ---: |
| (in millions, except headcount, ratio data and <br> where otherwise noted) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| Selected balance sheet data |  |  |  |
| (period-end) |  |  |  |
| Loans: | $\mathbf{\$ 1 3 7 , 6 7 6}$ | $\$ 78,786$ | $\$ 104,746$ |
| Credit card | $\mathbf{4 8 , 3 6 7}$ | 46,031 | 4,603 |
| Auto | $\mathbf{1 4 , 4 5 4}$ | 15,747 | 15,942 |
| Student | $\mathbf{2 0 0 , 4 9 7}$ | 140,564 | 163,291 |
| Total loans on balance sheets | $\mathbf{N A}$ | 84,626 | 85,571 |
| Securitized credit card loans(a) | $\mathbf{2 0 0 , 4 9 7}$ | 225,190 | 248,862 |
| Total loans(b) | $\mathbf{1 8 , 4 0 0}$ | 17,543 | 17,543 |
| Equity |  |  |  |
| Selected balance sheet data (average) | $\mathbf{\$ 2 1 3 , 0 4 1}$ | $\$ 255,519$ | $\$ 234,361$ |
| Managed assets |  |  |  |
| Loans: | $\mathbf{1 4 4 , 3 6 7}$ | 87,029 | 83,293 |
| Credit card | $\mathbf{4 7 , 6 0 3}$ | 43,558 | 43,757 |
| Auto | $\mathbf{1 5 , 9 4 5}$ | 16,108 | 13,614 |
| Student | $\mathbf{2 0 7 , 9 1 5}$ | 146,695 | 140,664 |
| Total average loans on balance sheets | $\mathbf{N A}$ | 85,378 | 79,566 |
| Securitized credit card loans(a) | $\mathbf{2 0 7 , 9 1 5}$ | 232,073 | 220,230 |
| Total average loans(c) | $\mathbf{1 8 , 4 0 0}$ | $\$ 17,543$ | $\$ 17,267$ |


| Headcount | $\mathbf{2 5 , 7 3 3}$ | 27,914 | 29,078 |
| :--- | :--- | :--- | :--- | :--- |

## Selected metrics

As of or for the year ended December 31,
(in millions, except headcount, ratio data and

| where otherwise noted) | 2010 |  | 2009 |  | 2008 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Credit data and quality statistics(a) |  |  |  |  |  |  |
| Net charge-offs |  |  |  |  |  |  |
| Credit card | \$ | 14,037 |  | 16,077 | \$ | 8,159 |
| Auto |  | 298 |  | 627 |  | 568 |
| Student |  | 387 |  | 253 |  | 46 |
| Total net charge-offs | \$ | 14,722 | \$ | 16,957 | \$ | 8,773 |
| Net charge-off rate ${ }^{(d)}$ |  |  |  |  |  |  |
| Credit card(e) |  | 9.73\% |  | 9.33\% |  | 5.01\% |
| Auto |  | 0.63 |  | 1.44 |  | 1.30 |
| Student ${ }^{(f)}$ |  | 2.61 |  | 1.77 |  | 0.41 |
| Total net charge-off rate |  | 7.12 |  | 7.37 |  | 4.03 |
| Delinquency rates(d) |  |  |  |  |  |  |
| $30+$ day delinquency rate |  |  |  |  |  |  |
| Credit card(g) |  | 4.14 |  | 6.28 |  | 4.97 |
| Auto |  | 1.22 |  | 1.63 |  | 2.26 |
| Student(h)(i) |  | 1.53 |  | 1.50 |  | 0.63 |
| Total 30+ day delinquency rate |  | 3.23 |  | 5.02 |  | 4.26 |
| $90+$ day delinquency rate |  |  |  |  |  |  |
| Credit card(g) |  | 2.25 |  | 3.59 |  | 2.34 |
| Nonperforming assets(i) | \$ | 269 | \$ | 340 | \$ | 262 |
| Allowance for loan losses |  |  |  |  |  |  |
| Credit card(k) | \$ | 11,034 | \$ | 9,672 | \$ | 7,692 |
| Auto and student |  | 899 |  | 1,042 |  | 741 |
| Total allowance for loan losses | \$ | 11,933 | \$ | 10,714 | \$ | 8,433 |
| Allowance for loan losses to period-end loans |  |  |  |  |  |  |
| Credit card(g)(k)(I) |  | 8.14\% |  | 12.28\% |  | 7.34\% |
| Auto and student(h) |  | 1.43 |  | 1.73 |  | 1.31 |
| Total allowance for loan losses to period-end loans |  | 6.02 |  | 7.72 |  | 5.22 |

## Business metrics

## Credit Card

Sales volume (in billions) $\quad \$ 313.0$ \$ $294.1 \quad \$$

New accounts opened
Open accounts
Merchant Services $(m)$
Bank card volume (in billions)
Total transactions (in billions)
Origination volume (in billions)
Auto
Stude
Student

## Key stats

## Washington Mutual only ${ }^{(n)}$

Loans
Average loans
Net interest income(o)
Risk adjusted margin(o)(p)
Net charge-off rate(q)
30+ day delinquency rate(q)
$90+$ day delinquency rate(q)

## Key stats

## Card Services, excluding

Washington Mutual portfolio

## Loans

Average loans
Net interest income(o)
Risk adjusted margin(o)(p)
Net charge-off rate
30+ day delinquency rate
90+ day delinquency rate

| $\mathbf{\$ 1 2 3 , 9 4 3}$ | $\$ 143,759$ | $\$ 162,067$ |
| :---: | :---: | :---: |
| $\mathbf{1 2 8 , 3 1 2}$ | 148,765 | 155,895 |
| $\mathbf{8 . 8 6 \%}$ | $8.97 \%$ | $8.16 \%$ |
| $\mathbf{5 . 8 1}$ | 1.39 | 3.93 |
| $\mathbf{8 . 7 2}$ | 8.45 | 4.92 |
| $\mathbf{3 . 6 6}$ | 5.52 | 4.36 |
| $\mathbf{1 . 9 8}$ | 3.13 | 2.09 |

(a) Effective January 1, 2010, the Firm adopted accounting guidance related to VIEs. As a result of the consolidation of the credit card securitization trusts, reported and managed basis relating to credit card securitizations are equivalent for periods beginning after January 1, 2010. For further details regarding the Firm's application and impact of the guidance, see Note 16 on pages 244-259 of this Annual Report.
(b) Total period-end loans include loans held-for-sale of $\$ 2.2$ billion, $\$ 1.7$ billion and $\$ 1.8$ billion at December 31, 2010, 2009 and 2008, respectively. No allowance for loan losses was recorded for these loans. Loans held-for-sale are excluded when calculating the allowance for loan losses to period-end loans and delinquency rates.
(c) Total average loans include loans held-for-sale of $\$ 1.3$ billion, $\$ 1.8$ billion and $\$ 2.5$ billion for the years ended 2010, 2009, and 2008, respectively. These amounts are excluded when calculating the net charge-off rate.
(d) Results reflect the impact of purchase accounting adjustments related to the Washington Mutual transaction and the consolidation of the WMMT in the second quarter of 2009. The delinquency rates as of December 31, 2010, were not affected.
(e) Average loans included loans held-for-sale of $\$ 148$ million for full year 2010. There were no loans held-for-sale for all other periods. These amounts are excluded when calculating the net charge-off rate. The net charge-off rate including loans held-for-sale, which is a non-GAAP financial measure, was $9.72 \%$ for full year 2010.
(f) Average loans included loans held-for-sale of $\$ 1.1$ billion, $\$ 1.8$ billion and $\$ 2.5$ billion for full year 2010, 2009, and 2008, respectively. These amounts are excluded when calculating the net charge-off rate.
(g) Period-end loans included loans held-for-sale of $\$ 2.2$ billion at December 31, 2010. No allowance for loan losses was recorded for these loans. Loans held-for-sale are excluded when calculating the allowance for loan losses to period-end loans and delinquency rates.
(h) Period-end loans included loans held-for-sale of $\$ 1.7$ billion and $\$ 1.8$ billion at December 31, 2009 and December 31, 2008, respectively. These amounts are excluded when calculating the allowance for loan losses to period-end loans and the 30+ day delinquency rate.
(i) Excludes student loans insured by U.S. government agencies under the Federal Family Education Loan Program ("FFELP") of $\$ 1.1$ billion, $\$ 942$ million and $\$ 824$ million at December 31, 2010, 2009 and 2008, respectively, that are 30 or more days past due. These amounts are excluded as reimbursement of insured amounts is proceeding normally.
(j) At December 31, 2010, 2009 and 2008, nonperforming assets excluded student loans insured by U.S. government agencies under the FFELP of $\$ 625$ million, $\$ 542$ million and $\$ 437$ million, respectively, that are 90 or more days past due. These amounts are excluded as reimbursement of insured amounts is proceeding normally.
(k) Based on loans on the Consolidated Balance Sheets.
(I) Includes $\$ 1.0$ billion of loans at December 31, 2009, held by the WMMT, which were consolidated onto the Card balance sheet at fair value during the second quarter of 2009. No allowance for loan losses was recorded for these loans as of December 31, 2009. Excluding these loans, the allowance for loan losses to period-end loans was $12.43 \%$ as of December 31, 2009.
(m) The Chase Paymentech Solutions joint venture was dissolved effective November 1, 2008. JPMorgan Chase retained approximately 51\% of the business and operates the business under the name Chase Paymentech Solutions. For the period January 1 through October 31, 2008, the data presented represents activity for the Chase Paymentech Solutions joint venture, and for the period November 1, 2008 through December 31, 2010, the data presented represents activity for Chase Paymentech Solutions.
(n) Statistics are only presented for periods after September 25, 2008, the date of the Washington Mutual transaction.
(o) As a percentage of average managed outstandings.
(p) Represents total net revenue less provision for credit losses.
(q) Excludes the impact of purchase accounting adjustments related to the Washington Mutual transaction and the consolidation of the WMMT in the second quarter of 2009.
NA: Not applicable

## Reconciliation from reported basis to managed basis

The financial information presented in the following table reconciles reported basis and managed basis to disclose the effect of securitizations reported by Card Services \& Auto in 2009 and 2008. Effective January 1, 2010, the Firm adopted accounting guidance related to VIEs. As a result of the consolidation of the credit card securitization trusts, reported and managed basis relating to credit card securitizations are equivalent for periods beginning after January 1, 2010. For further details regarding the Firm's application and impact of the guidance, see Note 16 on pages 244-259 of this Annual Report.

| Year ended December 31, (in millions, except ratio data) |  | 2010 |  | 2009 |  | 2008 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Income statement data |  |  |  |  |  |  |
| Credit card income |  |  |  |  |  |  |
| Reported | \$ | 3,514 | \$ | 5,107 | \$ | 6,082 |
| Securitization adjustments |  | NA |  | $(1,494)$ |  | $(3,314)$ |
| Managed credit card income | \$ | 3,514 | \$ | 3,613 | \$ | 2,768 |
| Net interest income |  |  |  |  |  |  |
| Reported | \$ | 16,187 | \$ | 11,543 | \$ | 8,576 |
| Securitization adjustments |  | NA |  | 7,937 |  | 6,917 |
| Fully tax-equivalent adjustments |  | 7 |  | 13 |  | 17 |
| Managed net interest income | \$ | 16,194 |  | 19,493 | \$ | 15,510 |
| Total net revenue |  |  |  |  |  |  |
| Reported | \$ | 20,465 | \$ | 16,743 | \$ | 15,219 |
| Securitization adjustments |  | NA |  | 6,443 |  | 3,603 |
| Fully tax-equivalent adjustments |  | 7 |  | 13 |  | 17 |
| Managed total net revenue | \$ | 20,472 | \$ | 23,199 | \$ | 18,839 |
| Provision for credit losses |  |  |  |  |  |  |
| Reported | \$ | 8,570 | \$ | 13,205 | \$ | 7,328 |
| Securitization adjustments |  | NA |  | 6,443 |  | 3,603 |
| Managed provision for credit losses | \$ | 8,570 | \$ | 19,648 | \$ | 10,931 |
| Income tax expense/(benefit) |  |  |  |  |  |  |
| Reported | \$ | 1,845 | \$ | $(1,286)$ | \$ | 594 |
| Fully tax-equivalent adjustments |  | 7 |  | 13 |  | 17 |
| Managed income tax expense/(benefit) | Managed income tax |  |  | $(1,273)$ |  | 611 |
| Balance sheet - average balances |  |  |  |  |  |  |
| Total average assets |  |  |  |  |  |  |
| Reported |  | 213,041 |  | 173,286 |  | 57,457 |
| Securitization adjustments |  | NA |  | 82,233 |  | 76,904 |
| Managed average assets |  | 213,041 |  | 255,519 |  | 34,361 |
| Credit quality statistics |  |  |  |  |  |  |
| Net charge-offs |  |  |  |  |  |  |
| Reported | \$ | 14,722 | \$ | 10,514 | \$ | 5,170 |
| Securitization adjustments |  | NA |  | 6,443 |  | 3,603 |
| Managed net charge-offs | \$ | 14,722 | \$ | 16,957 | \$ | 8,773 |
| Net charge-off rates |  |  |  |  |  |  |
| Reported |  | 7.12\% |  | 7.26\% |  | 3.74\% |
| Securitized |  | NA |  | 7.55 |  | 4.53 |
| Managed net charge-off rate |  | 7.12 |  | 7.37 |  | 4.03 |

NA: Not applicable

## The following are brief descriptions of selected business metrics within Card Services \& Auto.

- Sales volume - Dollar amount of cardmember purchases, net of returns.
- Open accounts - Cardmember accounts with charging privileges.
- Merchant services business - A business that processes bank card transactions for merchants.
- Bank card volume - Dollar amount of transactions processed for merchants.
- Total transactions - Number of transactions and authorizations processed for merchants.
- Auto origination volume - Dollar amount of loans and leases originated.


## Management's discussion and analysis

COMMERCIAL BANKING

## Commercial Banking delivers extensive industry knowledge, local expertise and dedicated service to nearly 24,000 clients nationally, including corporations, municipalities, financial institutions and not-for-profit entities with annual revenue generally ranging from $\$ 10$ million to $\$ 2$ billion, and nearly 35,000 real estate investors/owners. CB partners with the Firm's other businesses to provide comprehensive solutions, including lending, treasury services, investment banking and asset management to meet its clients' domestic and international financial needs.

Commercial Banking is divided into four primary client segments: Middle Market Banking, Commercial Term Lending, Mid-Corporate Banking, and Real Estate Banking. Middle Market Banking covers corporate, municipal, financial institution and not-for-profit clients, with annual revenue generally ranging between $\$ 10$ million and $\$ 500$ million. Mid-Corporate Banking covers clients with annual revenue generally ranging between $\$ 500$ million and $\$ 2$ billion and focuses on clients that have broader investment banking needs. Commercial Term Lending primarily provides term financing to real estate investors/ owners for multi-family properties as well as financing office, retail and industrial properties. Real Estate Banking provides full-service banking to investors and developers of institutional-grade real estate properties.

## Selected income statement data

| Year ended December 31, <br> (in millions) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: |
| Revenue |  |  |  |
| Lending- and deposit-related fees |  |  |  |
| Asset management, administration and | $\mathbf{\$ 1 , 0 9 9}$ | $\$ 1,081$ | $\$ 854$ |
| $\quad$ commissions |  |  |  |
| All other income | (a) | $\mathbf{9 5 7}$ | 140 |
| Noninterest revenue | $\mathbf{2 , 2 0 0}$ | 1,896 | 513 |
| Net interest income | $\mathbf{3 , 8 4 0}$ | 3,903 | 1,481 |
| Total net revenue(b) | $\mathbf{6 , 0 4 0}$ | 5,720 | 4,777 |
| Provision for credit losses | $\mathbf{2 9 7}$ | 1,454 | 464 |
| Noninterest expense |  |  |  |
| Compensation expense | $\mathbf{8 2 0}$ | 776 | 692 |
| Noncompensation expense | $\mathbf{1 , 3 4 4}$ | 1,359 | 1,206 |
| Amortization of intangibles | $\mathbf{3 5}$ | 41 | 48 |
| Total noninterest expense | $\mathbf{2 , 1 9 9}$ | 2,176 | 1,946 |
| Income before income tax expense | $\mathbf{3 , 5 4 4}$ | 2,090 | 2,367 |
| Income tax expense | $\mathbf{1 , 4 6 0}$ | 819 | 928 |
| Net income | $\mathbf{\$ 2 , 0 8 4}$ | $\$ 1,271$ | $\$ 1,439$ |
| Revenue by product: |  |  |  |
| Lending | $\mathbf{\$ 2 , 7 4 9}$ | $\$ 2,663$ | $\$ 1,743$ |
| Treasury services | $\mathbf{2 , 6 3 2}$ | 2,642 | 2,648 |
| Investment banking | $\mathbf{4 6 6}$ | 394 | 334 |
| Other(c) | $\mathbf{1 9 3}$ | 21 | 52 |
| Total Commercial Banking revenue | $\mathbf{\$ 6 , 0 4 0}$ | $\$ 5,720$ | $\$ 4,777$ |

## Selected income statement data

Year ended December 31,

| (in millions, except ratios) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: |
| IB revenue, gross(d) | $\mathbf{\$ 1 , 3 3 5}$ | $\$ 1,163$ | $\$ 966$ |
| Revenue by client segment: |  |  |  |
| Middle Market Banking | $\mathbf{\$ 3 , 0 6 0}$ | $\$ 3,055$ | $\$ 2,939$ |
| Commercial Term Lending(e) | $\mathbf{1 , 0 2 3}$ | 875 | 243 |
| Mid-Corporate Banking | $\mathbf{1 , 1 5 4}$ | 1,102 | 921 |
| Real Estate Banking(e) | $\mathbf{4 6 0}$ | 461 | 413 |
| Other(e)(f) | $\mathbf{3 4 3}$ | 227 | 261 |
| Total Commercial Banking revenue | $\mathbf{\$ 6 , 0 4 0}$ | $\$ 5,720$ | $\$ 4,777$ |

Financial ratios
ROE
Overhead ratio

| $\mathbf{2 6 \%}$ | $16 \%$ | $20 \%$ |
| :--- | :--- | :--- |
| 36 | 38 | 41 |

(a) CB client revenue from investment banking products and commercial card transactions is included in all other income.
(b) Total net revenue included tax-equivalent adjustments from income tax credits related to equity investments in designated community development entities that provide loans to qualified businesses in low-income communities as well as taxexempt income from municipal bond activity of $\$ 238$ million, $\$ 170$ million and $\$ 125$ million for the years ended December 31, 2010, 2009 and 2008, respectively.
(c) Other product revenue primarily includes tax-equivalent adjustments generated from Community Development Banking segment activity and certain income derived from principal transactions.
(d) Represents the total revenue related to investment banking products sold to CB clients.
(e) 2008 results reflect the partial year impact of the Washington Mutual transaction.
(f) Other primarily includes revenue related to the Community Development Banking and Chase Capital segments.

## 2010 compared with 2009

Record net income was $\$ 2.1$ billion, an increase of $\$ 813$ million, or $64 \%$, from the prior year. The increase was driven by a reduction in the provision for credit losses and higher net revenue.
Net revenue was a record $\$ 6.0$ billion, up by $\$ 320$ million, or $6 \%$, compared with the prior year. Net interest income was $\$ 3.8$ billion, down by $\$ 63$ million, or $2 \%$, driven by spread compression on liability products and lower loan balances, predominantly offset by growth in liability balances and wider loan spreads. Noninterest revenue was $\$ 2.2$ billion, an increase of $\$ 383$ million, or 21\%, from the prior year, reflecting higher net gains from asset sales, higher lending-related fees, an improvement in the market conditions impacting the value of investments held at fair value, higher investment banking fees and increased community development investment-related revenue.
On a client segment basis, revenue from Middle Market Banking was $\$ 3.1$ billion, flat compared with the prior year. Revenue from Commercial Term Lending was $\$ 1.0$ billion, an increase of $\$ 148$ million, or 17\%, and includes the impact of the purchase of a $\$ 3.5$ billion loan portfolio during the third quarter of 2010 and higher net gains from asset sales. Mid-Corporate Banking revenue was $\$ 1.2$ billion, an increase of $\$ 52$ million, or $5 \%$, compared with the prior year due to wider loan spreads, higher lending-related fees and higher investment banking fees offset partially by reduced loan balances. Real Estate Banking revenue was $\$ 460$ million, flat compared with the prior year.

The provision for credit losses was $\$ 297$ million, compared with $\$ 1.5$ billion in the prior year. The decline was mainly due to stabilization in the credit quality of the loan portfolio and refinements to credit loss estimates. Net charge-offs were $\$ 909$ million ( $0.94 \%$ net charge-off rate), compared with $\$ 1.1$ billion ( $1.02 \%$ net charge-off rate) in the prior year. The allowance for loan losses to period-end loans retained was $2.61 \%$, down from $3.12 \%$ in the prior year. Nonaccrual loans were $\$ 2.0$ billion, a decrease of $\$ 801$ million, or $29 \%$, from the prior year.
Noninterest expense was $\$ 2.2$ billion, an increase of $\$ 23$ million, or $1 \%$, compared with the prior year reflecting higher headcount-related expense partially offset by lower volume-related expense.

## 2009 compared with 2008

The following discussion of CB's results reflects the September 25, 2008 acquisition of the commercial banking operations of Washington Mutual from the FDIC. The Washington Mutual transaction added approximately $\$ 44.5$ billion in loans to the Commercial Term Lending, Real Estate Banking, and Other client segments in Commercial Banking.

Net income was $\$ 1.3$ billion, a decrease of $\$ 168$ million, or $12 \%$, from the prior year, as higher provision for credit losses and noninterest expense was partially offset by higher net revenue, reflecting the impact of the Washington Mutual transaction.

Record net revenue of $\$ 5.7$ billion increased $\$ 943$ million, or 20\%, from the prior year. Net interest income of $\$ 3.9$ billion increased $\$ 607$ million, or $18 \%$, driven by the impact of the Washington Mutual transaction. Noninterest revenue was $\$ 1.8$ billion, an increase of $\$ 336$ million, or 23\%, from the prior year, reflecting higher lendingand deposit-related fees and higher investment banking fees and other income.
On a client segment basis, revenue from Middle Market Banking was $\$ 3.1$ billion, an increase of $\$ 116$ million, or $4 \%$, from the prior year due to higher liability balances, a shift to higher-spread liability products, wider loan spreads, higher lending- and deposit-related fees, and higher other income, partially offset by a narrowing of spreads on liability products and reduced loan balances. Revenue from Commercial Term Lending (a new client segment acquired in the Washington Mutual transaction encompassing multi-family and commercial mortgage loans) was $\$ 875$ million, an increase of $\$ 632$ million. Mid-Corporate Banking revenue was $\$ 1.1$ billion, an increase of $\$ 181$ million, or $20 \%$, driven by higher investment banking fees, increased loan spreads, and higher lending- and deposit-related fees. Real Estate Banking revenue was $\$ 461$ million, an increase of $\$ 48$ million, or $12 \%$, due to the impact of the Washington Mutual transaction.

The provision for credit losses was $\$ 1.5$ billion, compared with $\$ 464$ million in the prior year, reflecting continued weakness in the credit environment, predominantly in real estate-related segments. Net charge-offs were $\$ 1.1$ billion (1.02\% net charge-off rate), compared with $\$ 288$ million ( $0.35 \%$ net charge-off rate) in the prior year. The allowance for loan losses to end-of-period loans retained was $3.12 \%$, up from $2.45 \%$ in the prior year. Nonperforming loans were $\$ 2.8$ billion, an increase of $\$ 1.8$ billion from the prior year.

Noninterest expense was $\$ 2.2$ billion, an increase of $\$ 230$ million, or $12 \%$, from the prior year, due to the impact of the Washington Mutual transaction and higher FDIC insurance premiums.

## Selected metrics

Year ended December 31, (in millions,
except headcount and ratio data) $2010 \quad 2009 \quad 2008$

Selected balance sheet data
(period-end):

| Loans: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Loans retained | \$ | 97,900 |  | 97,108 | \$115,130 |
| Loans held-for-sale and loans at fair value |  | 1,018 |  | 324 | 295 |
| Total loans | \$ | 98,918 | \$ | 97,432 | \$115,425 |
| Equity |  | 8,000 |  | 8,000 | 8,000 |
| Selected balance sheet data (average): |  |  |  |  |  |
| Total assets |  | 133,654 |  | 135,408 | \$114,299 |
| Loans: |  |  |  |  |  |
| Loans retained | \$ | 96,584 |  | 106,421 | \$ 81,931 |
| Loans held-for-sale and loans at fair value |  | 422 |  | 317 | 406 |
| Total loans |  | 97,006 |  | 106,738 | \$ 82,337 |
| Liability balances(a) |  | 138,862 |  | 113,152 | 103,121 |
| Equity |  | 8,000 |  | 8,000 | 7,251 |
| Average loans by client segment: |  |  |  |  |  |
| Middle Market Banking | \$ | 35,059 |  | 37,459 | \$ 42,193 |
| Commercial Term Lending(b) |  | 36,978 |  | 36,806 | 9,310 |
| Mid-Corporate Banking |  | 11,926 |  | 15,951 | 16,297 |
| Real Estate Banking(b) |  | 9,344 |  | 12,066 | 9,008 |
| Other(b)(c) |  | 3,699 |  | 4,456 | 5,529 |
| Total Commercial Banking loans | \$ | 97,006 |  | 106,738 | \$ 82,337 |
| Headcount |  | 4,881 |  | 4,151 | 5,206 |
| Credit data and quality statistics: |  |  |  |  |  |
| Net charge-offs | \$ | 909 | \$ | 1,089 | \$ 288 |
| Nonaccrual loans: |  |  |  |  |  |
| Nonaccrual loans retained(d) |  | 1,964 |  | 2,764 | 1,026 |
| Nonaccrual loans held-for-sale and loans held at fair value |  | 36 |  | 37 | - |
| Total nonaccrual loans |  | 2,000 |  | 2,801 | 1,026 |
| Assets acquired in loan satisfactions |  | 197 |  | 188 | 116 |
| Total nonperforming assets |  | 2,197 |  | 2,989 | 1,142 |
| Allowance for credit losses: |  |  |  |  |  |
| Allowance for loan losses |  | 2,552 |  | 3,025 | 2,826 |
| Allowance for lending-related |  |  |  |  |  |
| Total allowance for credit losses |  | 2,761 |  | 3,374 | 3,032 |
| Net charge-off rate |  | 0.94\% |  | 1.02\% | 0.35\% |
| Allowance for loan losses to period-end loans retained |  | 2.61 |  | 3.12 | 2.45 |
| Allowance for loan losses to average loans retained |  | 2.64 |  | 2.84 | 3.04(e) |
| Allowance for loan losses to nonaccrual loans retained |  | 130 |  | 109 | 275 |
| Nonaccrual loans to total period-end loans |  | 2.02 |  | 2.87 | 0.89 |
| Nonaccrual loans to total average loans |  | 2.06 |  | 2.62 | 1.10(e) |

(a) Liability balances include deposits, as well as deposits that are swept to onbalance sheet liabilities (e.g., commercial paper, federal funds purchased, time deposits and securities loaned or sold under repurchase agreements) as part of customer cash management programs.
(b) 2008 results reflect the partial year impact of the Washington Mutual transaction.
(c) Other primarily includes lending activity within the Community Development Banking and Chase Capital segments.
(d) Allowance for loan losses of $\$ 340$ million, $\$ 581$ million and $\$ 208$ million were held against nonaccrual loans retained for the periods ended December 31, 2010, 2009, and 2008, respectively.
(e) Average loans in the calculation of this ratio were adjusted to include $\$ 44.5$ billion of loans acquired in the Washington Mutual transaction as if the transaction occurred on July 1, 2008. Excluding this adjustment, the unadjusted allowance for loan losses to average loans retained and nonaccrual loans to total average loans ratios would have been $3.45 \%$ and $1.25 \%$, respectively, for the period ended December 31, 2008.

## Management's discussion and analysis

> Treasury \& Securities Services is a global leader in transaction, investment and information services. TSS is one of the world's largest cash management providers and a leading global custodian. Treasury Services provides cash management, trade, wholesale card and liquidity products and services to small- and mid-sized companies, multinational corporations, financial institutions and government entities. TS partners with IB, CB, RFS and AM businesses to serve clients firmwide. Certain TS revenue is included in other segments' results. Worldwide Securities Services holds, values, clears and services securities, cash and alternative investments for investors and brokerdealers, and manages depositary receipt programs globally.

## Selected income statement data

Year ended December 31,

| (in millions, except ratio data) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: |
| Revenue <br> Lending- and deposit-related fees |  |  |  |
| Asset management, administration and | $\mathbf{\$ 1 , 2 5 6}$ | $\$ 1,285$ | $\$ 1,146$ |
| commissions | $\mathbf{2 , 6 9 7}$ | 2,631 | 3,133 |
| All other income | $\mathbf{8 0 4}$ | 831 | 917 |
| Noninterest revenue | $\mathbf{4 , 7 5 7}$ | 4,747 | 5,196 |
| Net interest income | $\mathbf{2 , 6 2 4}$ | 2,597 | 2,938 |
| Total net revenue | $\mathbf{7 , 3 8 1}$ | 7,344 | 8,134 |
| Provision for credit losses | $\mathbf{( 4 7 )}$ | 55 | 82 |
| Credit reimbursement to IB(a) | $\mathbf{( 1 2 1 )}$ | $(121)$ | $(121)$ |
| Noninterest expense |  |  |  |
| Compensation expense | $\mathbf{2 , 7 3 4}$ | 2,544 | 2,602 |
| Noncompensation expense | $\mathbf{2 , 7 9 0}$ | 2,658 | 2,556 |
| Amortization of intangibles | $\mathbf{8 0}$ | 76 | 65 |
| Total noninterest expense | $\mathbf{5 , 6 0 4}$ | 5,278 | 5,223 |
| Income before income tax expense | $\mathbf{1 , 7 0 3}$ | 1,890 | 2,708 |
| Income tax expense | $\mathbf{6 2 4}$ | 664 | 941 |
| Net income | $\mathbf{\$ 1 , 0 7 9}$ | $\$ 1,226$ | $\$ 1,767$ |
| Revenue by business |  |  |  |
| Treasury Services | $\mathbf{\$ 3 , 6 9 8}$ | $\$ 3,702$ | $\$ 3,779$ |
| Worldwide Securities Services | $\mathbf{3 , 6 8 3}$ | 3,642 | 4,355 |
| Total net revenue | $\mathbf{\$ 7 , 3 8 1}$ | $\$ 7,344$ | $\$ 8,134$ |
| Financial ratios |  |  |  |
| ROE | $\mathbf{1 7 \%}$ | $25 \%$ | $47 \%$ |
| Overhead ratio | $\mathbf{7 6}$ | 72 | 64 |
| Pretax margin ratio | $\mathbf{2 3}$ | 26 | 33 |

As of or for the year ended December 31,
(in millions, except headcount)
Loans(b)
Equity
Selected balance sheet data (average)
Total assets
Loans(b)
Liability balances
Equity
Headcount

| $\mathbf{2 9 , 0 7 3}$ | 26,609 |
| :--- | :--- | 27,070

(a) IB credit portfolio group manages certain exposures on behalf of clients shared with TSS. TSS reimburses IB for a portion of the total cost of managing the credit portfolio. IB recognizes this credit reimbursement as a component of noninterest revenue.
(b) Loan balances include wholesale overdrafts, commercial card and trade finance loans.

## 2010 compared with 2009

Net income was $\$ 1.1$ billion, a decrease of $\$ 147$ million, or $12 \%$, from the prior year. These results reflected higher noninterest expense partially offset by the benefit from the provision for credit losses and higher net revenue.

Net revenue was $\$ 7.4$ billion, an increase of $\$ 37$ million, or $1 \%$, from the prior year. Treasury Services net revenue was $\$ 3.7$ billion, relatively flat compared with the prior year as lower spreads on liability products were offset by higher trade loan and card product volumes. Worldwide Securities Services net revenue was $\$ 3.7$ billion, relatively flat compared with the prior year as higher market levels and net inflows of assets under custody were offset by lower spreads in securities lending, lower volatility on foreign exchange, and lower balances on liability products.
TSS generated firmwide net revenue of $\$ 10.3$ billion, including $\$ 6.6$ billion by Treasury Services; of that amount, $\$ 3.7$ billion was recorded in Treasury Services, $\$ 2.6$ billion in Commercial Banking and $\$ 247$ million in other lines of business. The remaining $\$ 3.7$ billion of firmwide net revenue was recorded in Worldwide Securities Services.

The provision for credit losses was a benefit of $\$ 47$ million, compared with an expense of $\$ 55$ million in the prior year. The decrease in the provision expense was primarily due to an improvement in credit quality.

Noninterest expense was $\$ 5.6$ billion, up $\$ 326$ million, or $6 \%$, from the prior year. The increase was driven by continued investment in new product platforms, primarily related to international expansion and higher performance-based compensation.

## 2009 compared with 2008

Net income was $\$ 1.2$ billion, a decrease of $\$ 541$ million, or $31 \%$, from the prior year, driven by lower net revenue.
Net revenue was $\$ 7.3$ billion, a decrease of $\$ 790$ million, or $10 \%$, from the prior year. Worldwide Securities Services net revenue was $\$ 3.6$ billion, a decrease of $\$ 713$ million, or $16 \%$. The decrease was driven by lower securities lending balances, primarily as a result of declines in asset valuations and demand, lower balances and spreads on liability products, and the effect of market depreciation on certain custody assets. Treasury Services net revenue was $\$ 3.7$ billion, a decrease of $\$ 77$ million, or $2 \%$, reflecting spread compression on deposit products, offset by higher trade revenue driven by wider spreads and growth across cash management and card product volumes.

TSS generated firmwide net revenue of $\$ 10.2$ billion, including $\$ 6.6$ billion of net revenue in Treasury Services; of that amount, $\$ 3.7$ billion was recorded in the Treasury Services business, $\$ 2.6$ billion was recorded in the Commercial Banking business, and $\$ 245$ million was recorded in other lines of business. The remaining $\$ 3.6$ billion of net revenue was recorded in Worldwide Securities Services.
The provision for credit losses was $\$ 55$ million, a decrease of $\$ 27$ million from the prior year.
Noninterest expense was $\$ 5.3$ billion, an increase of $\$ 55$ million from the prior year. The increase was driven by higher FDIC insurance premiums, predominantly offset by lower headcount-related expense.

## Selected metrics

| Year ended December 31, (in millions, except ratio data) |  | 2010 |  | 2009 |  | 2008 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TSS firmwide disclosures |  |  |  |  |  |  |
| Treasury Services revenue - reported | \$ | 3,698 | \$ | 3,702 | \$ | 3,779 |
| Treasury Services revenue reported in CB |  | 2,632 |  | 2,642 |  | 2,648 |
| Treasury Services revenue reported in other lines of business |  | 247 |  | 245 |  | 299 |
| Treasury Services firmwide revenue(a) |  |  |  |  |  |  |
| Worldwide Securities Services revenue |  | 3,683 |  | 3,642 |  | 4,355 |
| Treasury \& Securities Services firmwide <br> revenue ${ }^{(a)}$$\quad$ \$ 10,260 $\quad$ \$ 10,231 $\quad$ \$ 11,081 |  |  |  |  |  |  |
| Treasury Services firmwide liability balances <br> (average)(b)$\quad \$ 308,028 \quad \$ 274,472 \quad \$ 264,195$ |  |  |  |  |  |  |
| Treasury \& Securities Services firmwide <br> liability balances (average)(b) $\mathbf{3 8 7 , 3 1 3}$ 361,247 382,947 |  |  |  |  |  |  |
| TSS firmwide financial ratios |  |  |  |  |  |  |
| Treasury Services firmwide overhead ratio(c) |  | 55\% |  | 53\% |  | 50\% |
| Treasury \& Securities Services firmwide overhead ratio(c) |  | 65 |  | 62 |  | 57 |

## Selected metrics

As of or for the year ended
December 31,

| (in millions, except ratio data and where otherwise noted) | 2010 | 2009 | 2008 |
| :---: | :---: | :---: | :---: |
| Firmwide business metrics |  |  |  |
| Assets under custody (in billions) | \$ 16,120 | \$ 14,885 | \$ 13,205 |
| Number of: |  |  |  |
| U.S.\$ ACH transactions originated | 3,892 | 3,896 | 4,000 |
| Total U.S.\$ clearing volume (in thousands) | 122,123 | 113,476 | 115,742 |
| International electronic funds transfer volume (in thousands)(d) | 232,453 | 193,348 | 171,036 |
| Wholesale check volume | 2,060 | 2,184 | 2,408 |
| Wholesale cards issued (in thousands)(e) | 29,785 | 27,138 | 22,784 |
| Credit data and quality statistics |  |  |  |
| Net charge-offs/(recoveries) | \$ 1 | \$ 19 | \$ (2) |
| Nonaccrual loans | 12 | 14 | 30 |
| Allowance for credit losses: |  |  |  |
| Allowance for loan losses | 65 | 88 | 74 |
| Allowance for lending-related |  |  |  |
| Total allowance for credit losses | 116 | 172 | 137 |
| Net charge-off/(recovery) rate | -\% | 0.10\% | (0.01)\% |
| Allowance for loan losses to period-end loans | 0.24 | 0.46 | 0.30 |
| Allowance for loan losses to average loans | 0.28 | 0.48 | 0.28 |
| Allowance for loan losses to nonaccrual loans | NM | NM | 247 |
| Nonaccrual loans to period-end loans | 0.04 | 0.07 | 0.12 |
| Nonaccrual loans to average loans | 0.05 | 0.08 | 0.11 |

(a) TSS firmwide revenue includes foreign exchange ("FX") revenue recorded in TSS and FX revenue associated with TSS customers who are FX customers of IB. However, some of the FX revenue associated with TSS customers who are FX customers of IB is not included in TS and TSS firmwide revenue. The total FX revenue generated was $\$ 636$ million, $\$ 661$ million and $\$ 880$ million, for the years ended December 31, 2010, 2009 and 2008, respectively.
(b) Firmwide liability balances include liability balances recorded in CB.
(c) Overhead ratios have been calculated based on firmwide revenue and TSS and TS expense, respectively, including those allocated to certain other lines of business. FX revenue and expense recorded in IB for TSS-related FX activity are not included in this ratio.
(d) International electronic funds transfer includes non-U.S. dollar Automated Clearing House ("ACH") and clearing volume.
(e) Wholesale cards issued and outstanding include U.S. domestic commercial, stored value, prepaid and government electronic benefit card products.

## Management's discussion and analysis

## ASSET MANAGEMENT

## Asset Management, with assets under supervision of \$1.8

 trillion, is a global leader in investment and wealth management. AM clients include institutions, retail investors and high-networth individuals in every major market throughout the world. AM offers global investment management in equities, fixed income, real estate, hedge funds, private equity and liquidity, including money market instruments and bank deposits. AM also provides trust and estate, banking and brokerage services to high-net-worth clients, and retirement services for corporations and individuals. The majority of AM's client assets are in actively managed portfolios.
## Selected income statement data

| Year ended December 31, <br> (in millions, except ratios) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: |
| Revenue |  |  |  |
| Asset management, administration and | $\mathbf{N 6 , 3 7 4}$ | $\$ 5,621$ | $\$ 6,004$ |
| $\quad$ commissions | $\mathbf{1 , 1 1 1}$ | 751 | 62 |
| All other income | $\mathbf{7 , 4 8 5}$ | 6,372 | 6,066 |
| Noninterest revenue | $\mathbf{1 , 4 9 9}$ | 1,593 | 1,518 |
| Net interest income | $\mathbf{8 , 9 8 4}$ | 7,965 | 7,584 |
| Total net revenue | $\mathbf{8 6}$ | 188 | 85 |
| Provision for credit losses |  |  |  |
| Noninterest expense | $\mathbf{3 , 7 6 3}$ | 3,375 | 3,216 |
| Compensation expense | $\mathbf{2 , 2 7 7}$ | 2,021 | 2,000 |
| Noncompensation expense | $\mathbf{7 2}$ | 77 | 82 |
| Amortization of intangibles | $\mathbf{6 , 1 1 2}$ | 5,473 | 5,298 |
| Total noninterest expense | $\mathbf{2 , 7 8 6}$ | 2,304 | 2,201 |
| Income before income tax expense | $\mathbf{1 , 0 7 6}$ | 874 | 844 |
| Income tax expense | $\mathbf{\$ 1 , 7 1 0}$ | $\$ 1,430$ | $\$ 1,357$ |
| Net income | $\mathbf{\$ 4 , 8 6 0}$ | $\$ 4,320$ | $\$ 4,189$ |
| Revenue by client segment | $\mathbf{2 , 1 8 0}$ | 2,065 | 1,775 |
| Private Banking(a) | $\mathbf{1 , 9 4 4}$ | 1,580 | 1,620 |
| Institutional | $\mathbf{\$ 8 , 9 8 4}$ | $\$ 7,965$ | $\$ 7,584$ |
| Retail |  |  |  |

## Financial ratios

| ROE | $\mathbf{2 6 \%}$ | $20 \%$ | $24 \%$ |
| :--- | :--- | :--- | :--- |
| Overhead ratio | $\mathbf{6 8}$ | 69 | 70 |
| Pretax margin ratio | $\mathbf{3 1}$ | 29 | 29 |

(a) Private Banking is a combination of the previously disclosed client segments: Private Bank, Private Wealth Management and JPMorgan Securities.

## 2010 compared with 2009

Net income was $\$ 1.7$ billion, an increase of $\$ 280$ million, or $20 \%$, from the prior year, due to higher net revenue and a lower provision for credit losses, largely offset by higher noninterest expense.
Net revenue was a record $\$ 9.0$ billion, an increase of $\$ 1.0$ billion, or $13 \%$, from the prior year. Noninterest revenue was $\$ 7.5$ billion, an increase of $\$ 1.1$ billion, or $17 \%$, due to the effect of higher
market levels, net inflows to products with higher margins, higher loan originations, and higher performance fees. Net interest income was $\$ 1.5$ billion, down by $\$ 94$ million, or $6 \%$, from the prior year, due to narrower deposit spreads, largely offset by higher deposit and loan balances.
Revenue from Private Banking was $\$ 4.9$ billion, up $13 \%$ from the prior year due to higher loan originations, higher deposit and loan balances, the effect of higher market levels and net inflows to products with higher margins, partially offset by narrower deposit spreads. Revenue from Institutional was $\$ 2.2$ billion, up $6 \%$ due to the effect of higher market levels, partially offset by liquidity outflows. Revenue from Retail was $\$ 1.9$ billion, up $23 \%$ due to the effect of higher market levels and net inflows to products with higher margins, partially offset by lower valuations of seed capital investments.

The provision for credit losses was $\$ 86$ million, compared with \$188 million in the prior year, reflecting an improving credit environment.

Noninterest expense was $\$ 6.1$ billion, an increase of $\$ 639$ million, or $12 \%$, from the prior year, resulting from increased headcount and higher performance-based compensation.

## 2009 compared with 2008

Net income was $\$ 1.4$ billion, an increase of $\$ 73$ million, or $5 \%$, from the prior year, due to higher total net revenue, offset largely by higher noninterest expense and provision for credit losses.
Total net revenue was $\$ 8.0$ billion, an increase of $\$ 381$ million, or $5 \%$, from the prior year. Noninterest revenue was $\$ 6.4$ billion, an increase of $\$ 306$ million, or $5 \%$, due to higher valuations of seed capital investments and net inflows, offset largely by lower market levels. Net interest income was $\$ 1.6$ billion, up by $\$ 75$ million, or $5 \%$, from the prior year, due to wider loan spreads and higher deposit balances, offset partially by narrower deposit spreads.

Revenue from Private Banking was $\$ 4.3$ billion, up $3 \%$ from the prior year due to wider loan spreads and higher deposit balances, offset largely by the effect of lower market levels. Revenue from Institutional was $\$ 2.1$ billion, up $16 \%$ due to higher valuations of seed capital investments and net inflows, offset partially by the effect of lower market levels. Revenue from Retail was $\$ 1.6$ billion, down $2 \%$ due to the effect of lower market levels, offset largely by higher valuations of seed capital investments.

The provision for credit losses was $\$ 188$ million, an increase of $\$ 103$ million from the prior year, reflecting continued weakness in the credit environment.

Noninterest expense was $\$ 5.5$ billion, an increase of $\$ 175$ million, or $3 \%$, from the prior year due to the effect of the Bear Stearns merger, higher performance-based compensation and higher FDIC insurance premiums, offset largely by lower headcount-related expense.

## Selected metrics

As of or for the year ended December 31,
(in millions, except headcount, ranking

| otherwise noted) | 2010 | 2009 | 2008 |
| :---: | :---: | :---: | :---: |
| Business metrics |  |  |  |
| Number of: |  |  |  |
| Client advisors | 2,245 | 1,934 | 1,840 |
| Retirement planning services participants (in thousands) | 1,580 | 1,628 | 1,531 |
| JPMorgan Securities brokers(a) | 415 | 376 | 324 |
| \% of customer assets in 4 \& 5 Star Funds(b) | 49\% | 42\% | 42\% |
| \% of AUM in $1^{\text {st }}$ and $2^{\text {nd }}$ quartiles:(c) |  |  |  |
| 1 year | 67\% | 57\% | 54\% |
| 3 years | 72\% | 62\% | 65\% |
| 5 years | 80\% | 74\% | 76\% |
| Selected balance sheet data (period-end) |  |  |  |
| Loans | \$44,084 | \$37,755 | \$36,188 |
| Equity | 6,500 | 7,000 | 7,000 |
| Selected balance sheet data (average) |  |  |  |
| Total assets | \$65,056 | \$60,249 | \$65,550 |
| Loans | 38,948 | 34,963 | 38,124 |
| Deposits | 86,096 | 77,005 | 70,179 |
| Equity | 6,500 | 7,000 | 5,645 |
| Headcount | 16,918 | 15,136 | 15,339 |
| Credit data and quality statistics |  |  |  |
| Net charge-offs | \$ 76 | \$ 117 | \$ 11 |
| Nonaccrual loans | 375 | 580 | 147 |
| Allowance for credit losses: |  |  |  |
| Allowance for loan losses | 267 | 269 | 191 |
| Allowance for lending- related commitments | 4 | 9 | 5 |
| Total allowance for credit losses | \$ 271 | \$ 278 | \$ 196 |
| Net charge-off rate | 0.20\% | 0.33\% | 0.03\% |
| Allowance for loan losses to period-end loans | 0.61 | 0.71 | 0.53 |
| Allowance for loan losses to average loans | 0.69 | 0.77 | 0.50 |
| Allowance for loan losses to nonaccrual loans | 71 | 46 | 130 |
| Nonaccrual loans to period-end loans | 0.85 | 1.54 | 0.41 |
| Nonaccrual loans to average loans | 0.96 | 1.66 | 0.39 |

(a) JPMorgan Securities was formerly known as Bear Stearns Private Client Services prior to January 1, 2010.
(b) Derived from Morningstar for the U.S., the U.K., Luxembourg, France, Hong Kong and Taiwan; and Nomura for Japan.
(c) Quartile ranking sourced from: Lipper for the U.S. and Taiwan; Morningstar for the U.K., Luxembourg, France and Hong Kong; and Nomura for Japan.

## AM's client segments comprise the following:

Private Banking offers investment advice and wealth management services to high- and ultra-high-net-worth individuals, families, money managers, business owners and small corporations worldwide, including investment management, capital markets and risk management, tax and estate planning, banking, capital raising and specialty-wealth advisory services.
Institutional brings comprehensive global investment services including asset management, pension analytics, asset-liability management and active risk-budgeting strategies - to corporate and public institutions, endowments, foundations, not-for-profit organizations and governments worldwide.

Retail provides worldwide investment management services and retirement planning and administration, through third-party and direct distribution of a full range of investment vehicles.
J.P. Morgan Asset Management has two high-level measures of its overall fund performance.

- Percentage of assets under management in funds rated 4 and 5 stars (three year). Mutual fund rating services rank funds based on their risk-adjusted performance over various periods. A 5 star rating is the best and represents the top $10 \%$ of industry wide ranked funds. A 4 star rating represents the next 22\% of industry wide ranked funds. The worst rating is a 1 star rating.
- Percentage of assets under management in first- or secondquartile funds (one, three and five years). Mutual fund rating services rank funds according to a peer-based performance system, which measures returns according to specific time and fund classification (small-, mid-, multi- and large-cap).


## Management's discussion and analysis

## Assets under supervision

## 2010 compared with 2009

Assets under supervision were $\$ 1.8$ trillion at December 31, 2010, an increase of $\$ 139$ billion, or $8 \%$, from the prior year. Assets under management were $\$ 1.3$ trillion, an increase of $\$ 49$ billion, or $4 \%$, due to the effect of higher market levels and net inflows in long-term products, largely offset by net outflows in liquidity products. Custody, brokerage, administration and deposit balances were $\$ 542$ billion, up by $\$ 90$ billion, or $20 \%$, due to custody and brokerage inflows and the effect of higher market levels. The Firm also has a $41 \%$ interest in American Century Companies, Inc., whose AUM totaled $\$ 103$ billion and $\$ 86$ billion at December 31, 2010 and 2009, respectively; these are excluded from the AUM above.

## 2009 compared with 2008

Assets under supervision were $\$ 1.7$ trillion at December 31, 2009, an increase of $\$ 205$ billion, or $14 \%$, from the prior year. Assets under management were $\$ 1.2$ trillion, an increase of $\$ 116$ billion, or $10 \%$, from the prior year. The increases were due to the effect of higher market valuations and inflows in fixed income and equity products offset partially by outflows in cash products. Custody, brokerage, administration and deposit balances were $\$ 452$ billion, up by $\$ 89$ billion, due to the effect of higher market levels on custody and brokerage balances, and brokerage inflows in Private Banking. The Firm also had a $42 \%$ interest in American Century Companies, Inc. at December 31, 2009, whose AUM totaled $\$ 86$ billion and $\$ 70$ billion at December 31, 2009 and 2008, respectively; these are excluded from the AUM above.

| Assets under supervision(a) |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| As of or for the year ended |  |  |  |  |
| December 31, (in billions) |  |  |  |  |
| Assets by asset class | $\mathbf{2 0 1 0}$ | 2009 | 2008 |  |
| Liquidity | $\mathbf{\$ ~ 4 9 7}$ | $\$ 591$ | $\$ 613$ |  |
| Fixed income | $\mathbf{2 8 9}$ | 226 | 180 |  |
| Equities and multi-asset | $\mathbf{4 0 4}$ | 339 | 240 |  |
| Alternatives | $\mathbf{1 0 8}$ | 93 | 100 |  |
| Total assets under management | $\mathbf{1 , 2 9 8}$ | 1,249 | 1,133 |  |
| Custody/brokerage/administration/ deposits | $\mathbf{5 4 2}$ | 452 | 363 |  |
| Total assets under supervision | $\mathbf{\$ 1 , 8 4 0}$ | $\$ 1,701$ | $\$ 1,496$ |  |
| Assets by client segment |  |  |  |  |
| Private Banking(b) | $\mathbf{\$ 2 8 4}$ | $\$ 270$ | $\$ 258$ |  |
| Institutional | $\mathbf{6 8 6}$ | 709 | 681 |  |
| Retail | $\mathbf{3 2 8}$ | 270 | 194 |  |
| Total assets under management | $\mathbf{\$ 1 , 2 9 8}$ | $\$ 1,249$ | $\$ 1,133$ |  |
| Private Banking(b) | $\mathbf{7 3 1}$ | $\$ 636$ | $\$ 552$ |  |
| Institutional | $\mathbf{6 8 7}$ | 710 | 682 |  |
| Retail | $\mathbf{4 2 2}$ | 355 | 262 |  |
| Total assets under supervision | $\mathbf{\$ 1 , 8 4 0}$ | $\$ 1,701$ | $\$ 1,496$ |  |

Assets by geographic region

| December 31, (in billions) | 2010 | 2009 | 2008 |
| :---: | :---: | :---: | :---: |
| U.S./Canada | \$ 862 | \$ 837 | \$ 798 |
| International | 436 | 412 | 335 |
| Total assets under management | \$1,298 | \$1,249 | \$1,133 |
| U.S./Canada | \$1,271 | \$1,182 | \$1,084 |
| International | 569 | 519 | 412 |
| Total assets under supervision | \$1,840 | \$1,701 | \$1,496 |
| Mutual fund assets by asset class |  |  |  |
| Liquidity | \$ 446 | \$ 539 | \$ 553 |
| Fixed income | 92 | 67 | 41 |
| Equities and multi-asset | 169 | 143 | 92 |
| Alternatives | 7 | 9 | 7 |
| Total mutual fund assets | \$ 714 | \$ 758 | \$ 693 |
| Assets under management rollforward <br> Year ended December 31, (in billions) 201020092008 |  |  |  |
| Beginning balance, January 1 | \$1,249 | \$1,133 | \$1,193 |
| Net asset flows: |  |  |  |
| Liquidity | (89) | (23) | 210 |
| Fixed income | 50 | 34 | (12) |
| Equities, multi-asset and alternatives | 19 | 17 | (47) |
| Market/performance/other impacts(c) | 69 | 88 | (211) |
| Ending balance, December 31 | \$1,298 | \$1,249 | \$1,133 |
| Assets under supervision rollforward |  |  |  |
| Beginning balance, January 1 | \$1,701 | \$1,496 | \$1,572 |
| Net asset flows | 28 | 50 | 181 |
| Market/performance/other impacts(c) | 111 | 155 | (257) |
| Ending balance, December 31 | \$1,840 | \$1,701 | \$1,496 |

(a) Excludes assets under management of American Century Companies, Inc., in which the Firm had a 41\%, 42\% and 43\% ownership at December 31, 2010, 2009 and 2008, respectively.
(b) Private Banking is a combination of the previously disclosed client segments: Private Bank, Private Wealth Management and JPMorgan Securities.
(c) Includes $\$ 15$ billion for assets under management and $\$ 68$ billion for assets under supervision, which were acquired in the Bear Stearns merger in the second quarter of 2008.

The Corporate/Private Equity sector comprises Private Equity, Treasury, the Chief Investment Office, corporate staff units and expense that is centrally managed. Treasury and the Chief Investment Office manage capital, liquidity and structural risks of the Firm. The corporate staff units include Central Technology and Operations, Internal Audit, Executive Office, Finance, Human Resources, Marketing \& Communications, Legal \& Compliance, Corporate Real Estate and General Services, Risk Management, Corporate Responsibility and Strategy \& Development. Other centrally managed expense includes the Firm's occupancy and pension-related expense, net of allocations to the business.

| Selected income statement data <br> Year ended December 31, <br> (in millions, except headcount) | 2010 | 2009 | 2008 |
| :---: | :---: | :---: | :---: |
| Revenue |  |  |  |
| Principal transactions(a) | \$ 2,208 | \$ 1,574 | \$ $(3,588)$ |
| Securities gains(b) | 2,898 | 1,139 | 1,637 |
| All other income(c) | 253 | 58 | 1,673 |
| Noninterest revenue | 5,359 | 2,771 | (278) |
| Net interest income | 2,063 | 3,863 | 347 |
| Total net revenue(d) | 7,422 | 6,634 | 69 |
| Provision for credit losses | 14 | 80 | 447() |
| Provision for credit losses - accounting conformity(e) | - | - | 1,534 |
| Noninterest expense |  |  |  |
| Compensation expense | 2,357 | 2,811 | 2,340 |
| Noncompensation expense(f) | 8,788 | 3,597 | 1,841 |
| Merger costs | - | 481 | 432 |
| Subtotal | 11,145 | 6,889 | 4,613 |
| Net expense allocated to other businesses | $(4,790)$ | $(4,994)$ | $(4,641)$ |
| Total noninterest expense | 6,355 | 1,895 | (28) |
| Income/(loss) before income tax expense/(benefit) and extraordinary gain | 1,053 | 4,659 | $(1,884)$ |
| Income tax expense/(benefit)(g) | (205) | 1,705 | (535) |
| Income/(loss) before extraordinary gain | 1,258 | 2,954 | $(1,349)$ |
| Extraordinary gain(h) | - | 76 | 1,906 |
| Net income | \$ 1,258 | \$ 3,030 | \$ 557 |
| Total net revenue |  |  |  |
| Private equity | \$ 1,239 | \$ 18 | \$ (963) |
| Corporate | 6,183 | 6,616 | 1,032 |
| Total net revenue | \$ 7,422 | \$ 6,634 | \$ 69 |
| Net income/(loss) |  |  |  |
| Private equity | \$ 588 | \$ (78) | \$ (690) |
| Corporate(i) | 670 | 3,108 | 1,247 |
| Total net income | \$ 1,258 | \$ 3,030 | \$ 557 |
| Headcount | 20,030 | 20,119 | 23,376 |

(a) Included losses on preferred equity interests in Fannie Mae and Freddie Mac in 2008.
(b) Included gain on sale of MasterCard shares in 2008.
(c) Included a gain from the dissolution of the Chase Paymentech Solutions joint venture and proceeds from the sale of Visa shares in its initial public offering in 2008.
(d) Total net revenue included tax-equivalent adjustments, predominantly due to taxexempt income from municipal bond investments of \$226 million, \$151 million and $\$ 57$ million for 2010, 2009 and 2008, respectively.
(e) Represents an accounting conformity credit loss reserve provision related to the acquisition of Washington Mutual Bank's banking operations.
(f) Includes litigation expense of $\$ 5.7$ billion for 2010, compared with net benefits of $\$ 0.3$ billion and $\$ 1.0$ billion for 2009 and 2008, respectively. Included in the net benefits were a release of credit card litigation reserves in 2008 and insurance recoveries related to settlement of the Enron and WorldCom class action litigations. Also included a $\$ 675$ million FDIC special assessment during 2009
(g) Includes tax benefits recognized upon the resolution of tax audits.
(h) On September 25, 2008, JPMorgan Chase acquired the banking operations of Washington Mutual Bank. The acquisition resulted in negative goodwill, and accordingly, the Firm recognized an extraordinary gain. A preliminary gain of $\$ 1.9$ billion was recognized at December 31, 2008. The final total extraordinary gain that resulted from the Washington Mutual transaction was $\$ 2.0$ billion.
(i) 2009 and 2008 included merger costs and the extraordinary gain related to the Washington Mutual transaction, as well as items related to the Bear Stearns merger, including merger costs, asset management liquidation costs and JPMorgan Securities broker retention expense.
(j) In November 2008, the Firm transferred $\$ 5.8$ billion of higher quality credit card loans from the legacy Chase portfolio to a securitization trust previously established by Washington Mutual ("the Trust"). As a result of converting higher credit quality Chase-originated on-book receivables to the Trust's seller's interest which had a higher overall loss rate reflective of the total assets within the Trust, approximately $\$ 400$ million of incremental provision expense was recorded during the fourth quarter of 2008. This incremental provision expense was recorded in the Corporate segment as the action related to the acquisition of Washington Mutual's banking operations. For further discussion of credit card securitizations, see Note 16 on pages 244-259 of this Annual Report.

## 2010 compared with 2009

Net income was $\$ 1.3$ billion compared with $\$ 3.0$ billion in the prior year. The decrease was driven by higher litigation expense, partially offset by higher net revenue.

Net income for Private Equity was $\$ 588$ million, compared with a net loss of $\$ 78$ million in the prior year, reflecting the impact of improved market conditions on certain investments in the portfolio. Net revenue was $\$ 1.2$ billion compared with $\$ 18$ million in the prior year, reflecting private equity gains of $\$ 1.3$ billion compared with losses of $\$ 54$ million. Noninterest expense was $\$ 323$ million, an increase of $\$ 182$ million, driven by higher compensation expense.
Net income for Corporate was $\$ 670$ million, compared with $\$ 3.1$ billion in the prior year. Current year results reflect after-tax litigation expense of $\$ 3.5$ billion, lower net interest income and trading gains, partially offset by a higher level of securities gains, primarily driven by repositioning of the portfolio in response to changes in the interest rate environment and to rebalance exposure. The prior year included merger-related net loss of $\$ 635$ million and a $\$ 419$ million FDIC assessment.

## Management's discussion and analysis

## 2009 compared with 2008

Net income was $\$ 3.0$ billion compared with $\$ 557$ million in the prior year. The increase was driven by higher net revenue, partially offset by higher litigation expense.
Net loss for Private Equity was $\$ 78$ million compared with a net loss of $\$ 690$ million in the prior year. Net revenue was $\$ 18$ million, an increase of $\$ 981$ million, reflecting private equity losses of $\$ 54$ million compared with losses of $\$ 894$ million. Noninterest expense was $\$ 141$ million, an increase of $\$ 21$ million.

Net income for Corporate, including merger-related items, was $\$ 3.1$ billion, compared with $\$ 1.2$ billion in the prior year. Results in 2009 reflected higher levels of trading gains, net interest income and an after-tax gain of $\$ 150$ million from the sale of MasterCard shares, partially offset by $\$ 635$ million merger-related losses, a $\$ 419$ million FDIC special assessment, lower securities gains and the absence of the $\$ 1.9$ billion extraordinary gain related to the Washington Mutual merger in 2008. Trading gains and net interest income increased due to the Chief Investment Office's ("CIO") significant purchases of mortgage-backed securities guaranteed by U.S. government agencies, corporate debt securities, U.S. Treasury and government agency securities and other asset-backed securities. These investments were generally associated with the management of interest rate risk and investment of cash resulting from the excess funding the Firm continued to experience during 2009. The increase in securities was partially offset by sales of higher-coupon instruments (part of repositioning the investment portfolio) as well as prepayments and maturities.

After-tax results in 2008 included $\$ 955$ million in proceeds from the sale of Visa shares in its initial public offering and $\$ 627$ million from the dissolution of the Chase Paymentech Solutions joint venture. These items were partially offset by losses of $\$ 642$ million on preferred securities of Fannie Mae and Freddie Mac, a $\$ 248$ million charge related to the offer to repurchase auction-rate securities and $\$ 211$ million net merger costs.

## Treasury and CIO

## Selected income statement and balance sheet data

As of or for the year ended December 31,

| (in millions) | $\mathbf{2 0 1 0}$ | 2009 | $\mathbf{2 0 0 8}$ |
| :--- | ---: | ---: | ---: |
| Securities gains(a) | $\mathbf{\$}$ | $\mathbf{2 , 8 9 7}$ | $\$ 1,147$ |
| Investment securities portfolio (average) | $\mathbf{3 2 3 , 6 7 3}$ | $\mathbf{3 2 4 , 0 3 7}$ | 11,652 |
| Investment securities portfolio (ending) | $\mathbf{3 1 0 , 8 0 1}$ | 340,163 | $\mathbf{1 9 2 , 5 6 4}$ |
| Mortgage loans (average) | $\mathbf{9 , 0 0 4}$ | 7,427 | 7,059 |
| Mortgage loans (ending) | $\mathbf{1 0 , 7 3 9}$ | $\mathbf{8 , 0 2 3}$ | $\mathbf{7 , 2 9 2}$ |

(a) Results for 2008 included a gain on the sale of MasterCard shares. All periods reflect repositioning of the Corporate investment securities portfolio.
For further information on the investment securities portfolio, see Note 3 and Note 12 on pages 170-187 and 214-218, respectively, of this Annual Report. For further information on CIO VaR and the Firm's earnings-at-risk, see the Market Risk Management section on pages 142-146 of this Annual Report.

## Private Equity Portfolio

Selected income statement and balance sheet data

| As of or for the year ended December 31, (in millions) | 2010 | 2009 | 2008 |
| :---: | :---: | :---: | :---: |
| Private equity gains/(losses) |  |  |  |
| Realized gains | \$ 1,409 | \$ 109 | \$ 1,717 |
| Unrealized gains/(losses)(a) | (302) | (81) | $(2,480)$ |
| Total direct investments | 1,107 | 28 | (763) |
| Third-party fund investments | 241 | (82) | (131) |
| Total private equity gains/(losses)(b) | \$ 1,348 | \$ (54) | \$ (894) |
| Private equity portfolio information(c) |  |  |  |
| Direct investments |  |  |  |
| Publicly held securities |  |  |  |
| Carrying value | \$ 875 | \$ 762 | \$ 483 |
| Cost | 732 | 743 | 792 |
| Quoted public value | 935 | 791 | 543 |
| Privately held direct securities |  |  |  |
| Carrying value | 5,882 | 5,104 | 5,564 |
| Cost | 6,887 | 5,959 | 6,296 |
| Third-party fund investments(d) |  |  |  |
| Carrying value | 1,980 | 1,459 | 805 |
| Cost | 2,404 | 2,079 | 1,169 |
| Total private equity portfolio |  |  |  |
| Carrying value | \$ 8,737 | \$7,325 | \$ 6,852 |
| Cost | \$10,023 | \$8,781 | \$ 8,257 |

(a) Unrealized gains/(losses) contain reversals of unrealized gains and losses that were recognized in prior periods and have now been realized.
(b) Included in principal transactions revenue in the Consolidated Statements of Income.
(c) For more information on the Firm's policies regarding the valuation of the private equity portfolio, see Note 3 on pages 170-187 of this Annual Report.
(d) Unfunded commitments to third-party equity funds were $\$ 1.0$ billion, $\$ 1.5$ billion and $\$ 1.4$ billion at December 31, 2010, 2009 and 2008, respectively.

## 2010 compared with 2009

The carrying value of the private equity portfolio at December 31, 2010, was $\$ 8.7$ billion, up from $\$ 7.3$ billion at December 31, 2009. The portfolio increase was primarily due to incremental follow-on investments. The portfolio represented 6.9\% of the Firm's stockholders' equity less goodwill at December 31, 2010, up from $6.3 \%$ at December 31, 2009.

## 2009 compared with 2008

The carrying value of the private equity portfolio at December 31, 2009, was $\$ 7.3$ billion, up from $\$ 6.9$ billion at December 31, 2008. The portfolio increase was primarily driven by additional follow-on investments and net unrealized gains on the existing portfolio, partially offset by sales during 2009. The portfolio represented 6.3\% of the Firm's stockholders' equity less goodwill at December 31, 2009, up from $5.8 \%$ at December 31, 2008.

In 2010, the Firm reported approximately $\$ 22.2$ billion of revenue involving clients, customers and counterparties residing outside of the United States. Of that amount, approximately $64 \%$ was derived from Europe/Middle East/Africa ("EMEA"), approximately 26\% from Asia Pacific, approximately 8\% from Latin America/Caribbean, and the balance from other geographies outside the United States.

The Firm is committed to further expanding its wholesale businesses (IB, AM and TSS) outside the United States and intends to add additional client-serving bankers, as well as product and sales support personnel, to address the needs of the Firm's clients located in these regions.

With a comprehensive and coordinated international business strategy and growth plan, efforts and investments for growth will be accelerated and prioritized.

Set forth below are certain key metrics related to the Firm's wholesale international operations including, for each of EMEA, Latin America/Caribbean and Asia Pacific, the number of countries in each such region in which it operates, front office headcount, number of clients and selected revenue and balance sheet data. For additional information regarding international operations, see Note 33 on page 290 of this Annual Report.

| Asia Pacific |
| :--- |
| - 2010 revenue of $\$ 5.8$ billion |
| - $2005-2010$ CAGR: $15 \%$ |
| Operating in 16 countries in the |
| region |
| - $\quad 6$ new offices opened in 2010 |
| Headcount of $15,419(a)$ |
| - 4,366 front office |
| $450+$ significant clients(b) |
| $\$ 49.1$ billion in deposits(c) |
| $\$ 20.6$ billion in loans outstanding(d) |
| $\$ 118$ billion in AUM |



| EMEA <br> 2010 revenue of $\$ 14.1$ billion <br> - 2005-2010 CAGR: $13 \%$ <br> Operating in 33 countries in the region <br> - 5 new offices opened in 2010 <br> Headcount of 16,312(a) <br> - 6,192 front office <br> 940+ significant clients(b) <br> $\$ 135.8$ billion in deposits(c) <br> $\$ 27.9$ billion in loans outstanding(d) <br> $\$ 281$ billion in AUM |
| :---: |
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(a) Total headcount includes employees and, in certain cases, contractors whose functions are considered integral to the operations of the business. Employees in offshore service centers supporting line of business operations in each region are also included.
(b) Significant clients defined as a company with over $\$ 1$ million in international revenue in the region (excludes private banking clients).
(c) Deposits reflect average balances and are based on booking location.
(d) Loans outstanding reflect period-end balances, are based on client domicile, and exclude loans held-for-sale and loans carried at fair value.

The following graphs provide the wholesale international revenue and net income for the periods indicated.

(a) Based on wholesale international operations (RFS and Card are excluded from this analysis).

BALANCE SHEET ANALYSIS

## Selected Consolidated Balance Sheets data

| December 31, (in millions) | 2010 | 2009 |
| :---: | :---: | :---: |
| Assets |  |  |
| Cash and due from banks | \$ 27,567 | \$ 26,206 |
| Deposits with banks | 21,673 | 63,230 |
| Federal funds sold and securities purchased under |  |  |
| Securities borrowed | 123,587 | 119,630 |
| Trading assets: |  |  |
| Debt and equity instruments | 409,411 | 330,918 |
| Derivative receivables | 80,481 | 80,210 |
| Securities | 316,336 | 360,390 |
| Loans | 692,927 | 633,458 |
| Allowance for loan losses | $(32,266)$ | $(31,602)$ |
| Loans, net of allowance for loan losses | 660,661 | 601,856 |
| Accrued interest and accounts receivable | 70,147 | 67,427 |
| Premises and equipment | 13,355 | 11,118 |
| Goodwill | 48,854 | 48,357 |
| Mortgage servicing rights | 13,649 | 15,531 |
| Other intangible assets | 4,039 | 4,621 |
| Other assets | 105,291 | 107,091 |
| Total assets | \$2,117,605 | \$2,031,989 |
| Liabilities |  |  |
| Deposits | \$ 930,369 | \$ 938,367 |
| Federal funds purchased and securities loaned or sold under repurchase agreements | 276,644 | 261,413 |
| Commercial paper | 35,363 | 41,794 |
| Other borrowed funds | 57,309 | 55,740 |
| Trading liabilities: |  |  |
| Debt and equity instruments | 76,947 | 64,946 |
| Derivative payables | 69,219 | 60,125 |
| Accounts payable and other liabilities | 170,330 | 162,696 |
| Beneficial interests issued by consolidated VIEs | 77,649 | 15,225 |
| Long-term debt | 247,669 | 266,318 |
| Total liabilities | 1,941,499 | 1,866,624 |
| Stockholders' equity | 176,106 | 165,365 |
| Total liabilities and stockholders' equity | \$2,117,605 | \$2,031,989 |

## Consolidated Balance Sheets overview

Total assets were $\$ 2.1$ trillion, up by $\$ 85.6$ billion from December 31, 2009. The increase was primarily a result of higher trading assets debt and equity instruments, principally due to improved market activity; higher loans, largely due to the January 1, 2010, adoption of accounting guidance related to VIEs; and higher federal funds sold and securities purchased under resale agreements, predominantly due to higher financing volume in IB. These increases were partially offset by a reduction in deposits with banks, as market stress eased from the end of 2009.

Total liabilities were $\$ 1.9$ trillion, up by $\$ 74.9$ billion. The increase was predominantly a result of higher beneficial interests issued by consolidated VIEs, due to the adoption of the accounting guidance related to VIEs.

Stockholders' equity was $\$ 176.1$ billion, up by $\$ 10.7$ billion. The increase was driven predominantly by net income, partially offset by the cumulative effect of changes in accounting principles as a result of the adoption of the accounting guidance related to the consolidation of VIEs.

The following is a discussion of the significant changes in the specific line captions of the Consolidated Balance Sheets from December 31, 2009.

Deposits with banks; federal funds sold and securities purchased under resale agreements; and securities borrowed
The Firm uses these instruments as part of its liquidity management activities; to manage its cash positions and risk-based capital requirements; and to support its trading and risk management activities. In particular, securities purchased under resale agreements and securities borrowed are used to provide funding or liquidity to clients by purchasing and borrowing their securities for the short term. The decrease in deposits with banks was largely due to lower deposits with the Federal Reserve Banks and lower interbank lending, as market stress eased from the end of 2009. Securities purchased under resale agreements increased, predominantly due to higher financing volume in IB. For additional information on the Firm's Liquidity Risk Management, see pages 110-115 of this Annual Report.

Trading assets and liabilities - debt and equity instruments Debt and equity trading instruments are used primarily for marketmaking activity. These instruments consist predominantly of fixedincome securities, including government and corporate debt; equity securities, including convertible securities; loans, including prime mortgage and other loans warehoused by RFS and IB for sale or securitization purposes and accounted for at fair value; and physical commodities inventories carried at the lower of cost or fair value. Trading assets - debt and equity instruments increased, principally due to improved market activity, primarily in equity securities, foreign debt and physical commodities. Trading liabilities - debt and equity instruments increased, largely due to higher levels of positions to facilitate customer trading. For additional information, refer to Note 3 on pages 170-187 of this Annual Report.

## Trading assets and liabilities - derivative receivables and payables

The Firm uses derivative instruments predominantly for marketmaking activity. Derivatives enable customers and the Firm to manage their exposures to fluctuations in interest rates, currencies and other markets. The Firm also uses derivative instruments to manage its credit exposure. Derivative receivables were flat compared with the prior year. Derivative payables increased, reflecting tighter credit spreads, appreciation of the U.S. dollar and higher commodity derivatives balances (driven by increasing commodity prices and the RBS Sempra acquisition). For additional information, refer to Derivative contracts on pages 125-128, and

Note 3 and Note 6 on pages 170-187 and 191-199, respectively, of this Annual Report.

## Securities

Substantially all of the securities portfolio is classified as available-forsale ("AFS") and used primarily to manage the Firm's exposure to interest rate movements and to invest cash resulting from excess funding positions. Securities decreased, largely due to repositioning of the portfolio in Corporate, in response to changes in the interest rate environment and to rebalance exposures. The repositioning reduced U.S. government agency securities and increased non-U.S. mortgage-backed securities. The adoption of the new accounting guidance related to VIEs, which resulted in the elimination of retained AFS securities issued by Firm-sponsored credit card securitization trusts, also contributed to the decrease. For information related to securities, refer to the Corporate/Private Equity segment on pages 89-90, and Note 3 and Note 12 on pages 170-187 and 214-218, respectively, of this Annual Report.

## Loans and allowance for loan losses

The Firm provides loans to a variety of customers, from large corporate and institutional clients to individual consumers. Loans and the allowance for loan losses increased as a result of the Firm's adoption of accounting guidance related to VIEs at January 1, 2010. Excluding the impact of the adoption of the new accounting guidance, loans decreased due to the continued runoff of the residential real estate loans and credit card balances. The decrease was partially offset by an increase in wholesale loans, mainly in TSS and AM.

The allowance for loan losses, excluding the impact of this adoption, decreased primarily due to a decline in the credit card and wholesale allowance. The decrease was offset partially by an increase in the consumer (excluding credit card) allowance.

For a more detailed discussion of the loan portfolio and the allowance for loan losses, refer to Credit Risk Management on pages 116-141, and Notes 3, 4, 14 and 15 on pages 170-187, 187-189, 220-238 and 239-243, respectively, of this Annual Report.

## Accrued interest and accounts receivable

This line caption consists of accrued interest receivables from interest-earning assets; receivables from customers (primarily from activities related to IB's Prime Services business); receivables from brokers, dealers and clearing organizations; and receivables from failed securities sales. Accrued interest and accounts receivable increased, reflecting higher customer receivables in IB's Prime Services business due to increased client activity. The increase was offset partially by the elimination of retained securitization interests upon the adoption of the new accounting guidance that resulted in the consolidation of Firm-sponsored credit card securitization trusts. For a more detailed discussion of the adoption, see Note 1 and Note 16 on pages 164-165 and 244-259, respectively, of this Annual Report.

## Premises and equipment

The Firm's premises and equipment consist of land, buildings, leasehold improvements, furniture and fixtures, hardware and software, and other equipment. The increase in premises and equipment was primarily due to the purchase of two buildings, one in New York and one in London; investments in hardware, software and other equipment also contributed to the increase. The increase was partially offset by the related depreciation and amortization of these assets.

## Goodwill

Goodwill arises from business combinations and represents the excess of the purchase price of an acquired entity or business over the fair values assigned to assets acquired and liabilities assumed. The increase in goodwill was largely due to the acquisition of RBS Sempra Commodities' global oil, global metal, and European power and gas businesses by IB; and the purchase of a majority interest in Gávea Investimentos, a leading alternative asset management company in Brazil, by AM. For additional information on goodwill, see Note 17 on pages 260-263 of this Annual Report.

## Mortgage servicing rights

MSRs represent the fair value of future cash flows for performing specified mortgage-servicing activities (predominantly related to residential mortgages) for others. MSRs are either purchased from third parties or retained upon the sale or securitization of mortgage loans. Servicing activities include collecting principal, interest and escrow payments from borrowers; making tax and insurance payments on behalf of borrowers; monitoring delinquencies and executing foreclosure proceedings; and accounting for and remitting principal and interest payments to the related investors of the mortgage-backed securities. MSRs decreased, predominantly due to a significant decline in market interest rates during 2010, as well as from servicing portfolio runoff and dispositions of MSRs. These decreases were partially offset by increases related to sales in RFS of originated loans for which servicing rights were retained. For additional information on MSRs, see Note 3 and Note 17 on pages 170-187 and 260-263, respectively, of this Annual Report

## Other intangible assets

Other intangible assets consist of purchased credit card relationships, other credit card-related intangibles, core deposit intangibles and other intangibles. The decrease in other intangible assets was predominately due to amortization, partially offset by an increase resulting from the aforementioned Gávea Investimentos transaction. For additional information on other intangible assets, see Note 17 on pages 260-263 of this Annual Report.

## Other assets

Other assets consist of private equity and other investments, cash collateral pledged, corporate and bank-owned life insurance policies, assets acquired in loan satisfactions (including real estate owned) and all other assets. At December 31, 2010, other assets were relatively flat compared with December 31, 2009.

## Management's discussion and analysis

## Deposits

Deposits represent a liability to customers, both retail and wholesale, related to non-brokerage funds held on their behalf. Deposits are classified by location (U.S. and non-U.S.), whether they are interestor noninterest-bearing, and by type (i.e., demand, money-market, savings, time or negotiable order of withdrawal accounts). Deposits provide a stable and consistent source of funding for the Firm. Deposits decreased, reflecting a decline in wholesale funding due to the Firm's lower funding needs, and lower deposit levels in TSS. These factors were offset partially by net inflows from existing customers and new business in CB, RFS and AM. For more information on deposits, refer to the RFS and AM segment discussions on pages 72-78 and 86-88, respectively; the Liquidity Risk Management discussion on pages 110-115; and Note 3 and Note 19 on pages 170-187 and 263-264, respectively, of this Annual Report. For more information on wholesale liability balances, which includes deposits, refer to the CB and TSS segment discussions on pages 82-83 and 84-85, respectively, of this Annual Report.
Federal funds purchased and securities loaned or sold under repurchase agreements
The Firm uses these instruments as part of its liquidity management activities and to support its trading and risk management activities. In particular, federal funds purchased and securities loaned or sold under repurchase agreements are used as short-term funding sources and to make securities available to clients for their short-term liquidity purposes. Securities sold under repurchase agreements increased, largely due to increased levels of activity in IB, partially offset by a decrease in CIO repositioning activities. For additional information on the Firm's Liquidity Risk Management, see pages 110-115 of this Annual Report.

## Commercial paper and other borrowed funds

The Firm uses commercial paper and other borrowed funds in its liquidity management activities to meet short-term funding needs, and in connection with a TSS liquidity management product, whereby excess client funds are transferred into commercial paper overnight sweep accounts. Commercial paper and other borrowed funds, which includes advances from Federal Home Loan Banks ("FHLBs"), decreased due to lower funding requirements. For additional information on the Firm's Liquidity Risk Management and other borrowed funds, see pages $110-115$, and Note 20 on page 264 of this Annual Report.

## Accounts payable and other liabilities

Accounts payable and other liabilities consist of payables to customers (primarily from activities related to IB's Prime Services business); payables to brokers, dealers and clearing organizations; payables from failed securities purchases; accrued expense, including interest-bearing liabilities; and all other liabilities, including litigation reserves and obligations to return securities received as collateral. Accounts payable and other liabilities increased due to additional litigation reserves, largely for mortgage-related matters.

## Beneficial interests issued by consolidated VIEs

Beneficial interests issued by consolidated VIEs represent interestbearing beneficial-interest liabilities, which increased, predominantly due to the Firm's adoption of accounting guidance related to VIEs, partially offset by maturities of $\$ 24.9$ billion related to Firm-sponsored credit card securitization trusts. For additional information on Firmsponsored VIEs and loan securitization trusts, see Off-Balance Sheet Arrangements and Contractual Cash Obligations below, and Note 16 and Note 22 on pages 244-259 and 265-266, respectively, of this Annual Report.

## Long-term debt

The Firm uses long-term debt (including trust-preferred capital debt securities) to provide cost-effective and diversified sources of funds and as critical components of the Firm's liquidity and capital management activities. Long-term debt decreased, due to lower funding requirements. Maturities and redemptions totaled $\$ 53.4$ billion during 2010 and were partially offset by new issuances of $\$ 36.0$ billion. For additional information on the Firm's long-term debt activities, see the Liquidity Risk Management discussion on pages 110-115, and Note 22 on pages 265-266 of this Annual Report.

## Stockholders' equity

Total stockholders' equity increased, predominantly due to net income, and net issuances and commitments to issue under the Firm's employee stock-based compensation plans. The increase was partially offset by the impact of the adoption of the new accounting guidance related to VIEs, which resulted in a reduction of $\$ 4.5$ billion, driven by the establishment of an allowance for loan losses of $\$ 7.5$ billion (pretax) related to receivables predominantly held in credit card securitization trusts that were consolidated at the adoption date. Also partially offsetting the increase were stock repurchases; the purchase of the remaining interest in a consolidated subsidiary from noncontrolling shareholders; and the declaration of cash dividends on common and preferred stock. For a more detailed discussion of the adoption of new consolidated guidance related to VIEs, see Notes 1 and 16 on pages 164-165 and 244-259, respectively, of this Annual Report.

JPMorgan Chase is involved with several types of off-balance sheet arrangements, including through unconsolidated special-purpose entities ("SPEs"), which are a type of VIE, and through lendingrelated financial instruments (e.g., commitments and guarantees).

## Special-purpose entities

SPEs are the most common type of VIE, used in securitization transactions to isolate certain assets and distribute related cash flows to investors. The basic SPE structure involves a company selling assets to the SPE. The SPE funds the purchase of those assets by issuing securities to investors in the form of commercial paper, shortterm asset-backed notes, medium-term notes and other forms of interest. SPEs are generally structured to insulate investors from claims on the SPE's assets by creditors of other entities, including the creditors of the seller of the assets.
As a result of new accounting guidance, certain VIEs were consolidated on the Firm's Consolidated Balance Sheets effective January 1, 2010. Nevertheless, SPEs continue to be an important part of the financial markets, as they provide market liquidity by facilitating investors' access to specific portfolios of assets and risks. These arrangements are integral to the markets for mortgage-backed securities, commercial paper and other asset-backed securities.

JPMorgan Chase uses SPEs as a source of liquidity for itself and its clients by securitizing financial assets, and by creating investment products for clients. The Firm is involved with SPEs through multiseller conduits, investor intermediation activities, and loan securitizations. See Note 16 on pages 244-259 for further information on these types of SPEs.

The Firm holds capital, as deemed appropriate, against all SPErelated transactions and related exposures, such as derivative transactions and lending-related commitments and guarantees.
The Firm has no commitments to issue its own stock to support any SPE transaction, and its policies require that transactions with SPEs be conducted at arm's length and reflect market pricing. Consistent with this policy, no JPMorgan Chase employee is permitted to invest in SPEs with which the Firm is involved where such investment would violate the Firm's Code of Conduct. These rules prohibit employees from self-dealing and acting on behalf of the Firm in transactions with which they or their family have any significant financial interest.
Implications of a credit rating downgrade to JPMorgan Chase Bank, N.A.

For certain liquidity commitments to SPEs, the Firm could be required to provide funding if the short-term credit rating of JPMorgan Chase Bank, N.A., were downgraded below specific levels, primarily "P-1", "A-1" and "F1" for Moody's, Standard \& Poor's and Fitch, respectively. The aggregate amount of these liquidity commitments, to both consolidated and nonconsolidated SPEs, were $\$ 34.2$ billion at both December 31, 2010 and 2009. Alternatively, if JPMorgan Chase Bank, N.A., were downgraded, the Firm could be replaced by another liquidity provider in lieu of
providing funding under the liquidity commitment or, in certain circumstances, the Firm could facilitate the sale or refinancing of the assets in the SPE in order to provide liquidity.

Special-purpose entities revenue
The following table summarizes certain revenue information related to consolidated and nonconsolidated VIEs with which the Firm has significant involvement. The revenue reported in the table below primarily represents contractual servicing and credit fee income (i.e., fee income from acting as administrator, structurer or liquidity provider). It does not include gains and losses from changes in the fair value of trading positions (such as derivative transactions) entered into with VIEs. Those gains and losses are recorded in principal transactions revenue.

Revenue from VIEs and Securitization Entities(a)
Year ended December 31,

| (in millions) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: | ---: |
| Multi-seller conduits | $\mathbf{2 4 0}$ | $\$ 460$ | $\$ 314$ |
| Investor intermediation | 49 | 34 | 22 |
| Other securitization entities(b) | $\mathbf{2 , 0 0 5}$ | 2,510 | 1,742 |
| Total | $\$ 2,294$ | $\$ 3,004$ | $\$ 2,078$ |

(a) Includes revenue associated with both consolidated VIEs and significant nonconsolidated VIEs.
(b) Excludes servicing revenue from loans sold to and securitized by third parties.

## Loan modifications

The Firm modifies certain loans that it services, and that were sold to off-balance sheet SPEs, pursuant to the U.S. Treasury's Making Home Affordable ("MHA") programs and the Firm's other loss mitigation programs. See Consumer Credit Portfolio on pages 129138 of this Annual Report for more details on these loan modifications.

## Off-balance sheet lending-related financial instruments and other guarantees

JPMorgan Chase uses lending-related financial instruments (e.g., commitments and guarantees) to meet the financing needs of its customers. The contractual amount of these financial instruments represents the Firm's maximum possible credit risk should the counterparty draw upon the commitment or the Firm be required to fulfill its obligation under the guarantee, and should the counterparty subsequently fail to perform according to the terms of the contract. Most of these commitments and guarantees expire without being drawn or a default occurring. As a result, the total contractual amount of these instruments is not, in the Firm's view, representative of its actual future credit exposure or funding requirements. For further discussion of lending-related commitments and guarantees and the Firm's accounting for them, see Lending-related commitments on page 128 and Note 30 on pages 275-280 of this Annual Report.

The accompanying table presents, as of December 31, 2010, the amounts by contractual maturity of off-balance sheet lending-related financial instruments and other guarantees. The amounts in the table for credit card and home equity lending-related commitments represent the total available credit for these products.

## Management's discussion and analysis

The Firm has not experienced, and does not anticipate, that all available lines of credit for these products would be utilized at the same time. The Firm can reduce or cancel credit card lines of credit by providing the borrower prior notice or, in some cases, without notice as permitted by law. The Firm may reduce or close home equity lines of credit when there are significant decreases in the value of the underlying property or when there has been a
demonstrable decline in the creditworthiness of the borrower. The accompanying table excludes certain guarantees that do not have a contractual maturity date (e.g., loan sale and securitization-related indemnification obligations). For further discussion, see discussion of Loan sale and securitization-related indemnification obligations in Note 30 on pages 275-280 of this Annual Report.

## Off-balance sheet lending-related financial instruments and other guarantees

| By remaining maturity at December 31, (in millions) | 2010 |  |  |  |  |  |  |  |  |  | $\begin{aligned} & 2009 \\ & \text { Total } \\ & \hline \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2011 | 2012-2013 |  | 2014-2015 |  | After 2015 |  | Total |  |  |  |
| Lending-related |  |  |  |  |  |  |  |  |  |  |  |  |
| Consumer, excluding credit card: |  |  |  |  |  |  |  |  |  |  |  |  |
| Home equity - senior lien | \$ | 617 | \$ | 3,100 | \$ | 5,936 | \$ | 6,407 |  | 16,060 |  | 19,246 |
| Home equity - junior lien |  | 1,125 |  | 7,169 |  | 10,742 |  | 9,645 |  | 28,681 |  | 37,231 |
| Prime mortgage |  | 1,266 |  | - |  | - |  | - |  | 1,266 |  | 1,654 |
| Subprime mortgage |  | - |  | - |  | - |  | - |  | - |  | - |
| Auto |  | 5,095 |  | 144 |  | 6 |  | 1 |  | 5,246 |  | 5,467 |
| Business banking |  | 9,116 |  | 264 |  | 85 |  | 237 |  | 9,702 |  | 9,040 |
| Student and other |  | 76 |  | 6 |  | - |  | 497 |  | 579 |  | 2,189 |
| Total consumer, excluding credit card |  | 17,295 |  | 10,683 |  | 16,769 |  | 16,787 |  | 61,534 |  | 74,827 |
| Credit card |  | 547,227 |  | - |  | - |  | - |  | 547,227 |  | 569,113 |
| Total consumer |  | 564,522 |  | 10,683 |  | 16,769 |  | 16,787 |  | 608,761 |  | 643,940 |
| Wholesale: |  |  |  |  |  |  |  |  |  |  |  |  |
| Other unfunded commitments to extend credit(a)(b)(c) |  | 62,786 |  | 99,698 |  | 32,177 |  | 5,198 |  | 199,859 |  | 192,145 |
| Asset purchase agreements(b) |  | - |  | - |  | - |  | - |  | - |  | 22,685 |
| Standby letters of credit and other financial guarantees(a)(c)(d)(e) |  | 25,346 |  | 48,408 |  | 16,729 |  | 4,354 |  | 94,837 |  | 91,485 |
| Unused advised lines of credit |  | 34,354 |  | 9,154 |  | 373 |  | 839 |  | 44,720 |  | 35,673 |
| Other letters of credit(a)(e) |  | 3,903 |  | 2,304 |  | 456 |  | - |  | 6,663 |  | 5,167 |
| Total wholesale |  | 126,389 |  | 159,564 |  | 49,735 |  | 10,391 |  | 346,079 |  | 347,155 |
| Total lending-related | \$ | 690,911 | \$ | 170,247 | \$ | 66,504 | \$ | 27,178 |  | 954,840 |  | 991,095 |
| Other guarantees |  |  |  |  |  |  |  |  |  |  |  |  |
| Securities lending indemnifications ${ }^{(f)}$ | \$ | 181,717 | \$ | - | \$ | - | \$ | - |  | 181,717 |  | 170,777 |
| Derivatives qualifying as guarantees(g) |  | 3,140 |  | 585 |  | 48,308 |  | 35,735 |  | 87,768 |  | 98,052(i) |
| Other guarantees and commitments(h) |  | 90 |  | 226 |  | 288 |  | 3,162 |  | 3,766 |  | 3,671 |

(a) At December 31, 2010 and 2009, represents the contractual amount net of risk participations totaling $\$ 542$ million and $\$ 643$ million, respectively, for other unfunded commitments to extend credit; $\$ 22.4$ billion and $\$ 24.6$ billion, respectively, for standby letters of credit and other financial guarantees; and $\$ 1.1$ billion and $\$ 690$ million, respectively, for other letters of credit. In regulatory filings with the Federal Reserve these commitments are shown gross of risk participations.
(b) Upon the adoption of the accounting guidance related to VIEs, $\$ 24.2$ billion of lending-related commitments between the Firm and Firm-administered multi-seller conduits were eliminated upon consolidation. The decrease in lending-related commitments was partially offset by the addition of $\$ 6.5$ billion of unfunded commitments directly between the multi-seller conduits and clients; these unfunded commitments of the consolidated conduits are now included as off-balance sheet lending-related commitments of the Firm.
(c) Includes credit enhancements and bond and commercial paper liquidity commitments to U.S. states and municipalities, hospitals and other not-for-profit entities of $\$ 43.4$ billion and $\$ 44.1$ billion, at December 31, 2010 and 2009, respectively.
(d) At December 31, 2010 and 2009, includes unissued standby letters of credit commitments of $\$ 41.6$ billion and $\$ 38.4$ billion, respectively.
(e) At December 31, 2010 and 2009, JPMorgan Chase held collateral relating to $\$ 37.8$ billion and $\$ 31.5$ billion, respectively, of standby letters of credit; and $\$ 2.1$ billion and $\$ 1.3$ billion, respectively, of other letters of credit.
(f) At December 31, 2010 and 2009, collateral held by the Firm in support of securities lending indemnification agreements totaled $\$ 185.0$ billion and $\$ 173.2$ billion, respectively. Securities lending collateral comprises primarily cash, and securities issued by governments that are members of the Organisation for Economic Co-operation and Development ("OECD") and U.S. government agencies.
(g) Represents the notional amounts of derivative contracts qualifying as guarantees. For further discussion of guarantees, see Note 6 on pages 191-199 and Note 30 on pages 275-280 of this Annual Report.
(h) Amounts include letters of credit hedged by derivative transactions and managed on a market risk basis.

The prior period has been revised to conform with current presentation.

## Contractual cash obligations

In the normal course of business, the Firm enters into various contractual obligations that may require future cash payments. Onbalance sheet obligations include deposits; secured and unsecured borrowings (both short- and long-term); beneficial interests issued by consolidated VIEs; current income taxes payable; accrued interest payments and certain employee benefit-related obligations. In addition, JPMorgan Chase has certain off-balance-sheet contractual obligations that may require future cash payments; these include unsettled reverse repurchase and securities borrowing agreements, future interest payments, noncancelable operating leases, capital expenditures related to real estate (including building purchase commitments) and equipment; equity investment commitments; and contracts to purchase future services.

The accompanying table summarizes, by remaining maturity, JPMorgan Chase's significant contractual cash obligations at December 31, 2010. The contractual cash obligations included in the table below reflect the minimum contractual obligation under legally enforceable contracts with terms that are both fixed and determinable. The carrying amount of on-balance sheet obligations on the Consolidated Balance Sheets may differ from the amounts of the obligations reported below. Excluded are contingent payments associated with certain acquisitions, and loan repurchase liabilities. For a discussion of loan repurchase liabilities, see Repurchase liability on pages 98-101 of this Annual Report. For further discussion of other obligations, see the Notes to Consolidated Financial Statements in this Annual Report.

## Contractual cash obligations

| By remaining maturity at December 31, (in millions) | 2010 |  |  |  |  |  |  |  | $\frac{2009}{\text { Total }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2011 | 2012-2013 | 2014-2015 |  | After 2015 |  | Total |  |  |  |
| On-balance sheet obligations |  |  | \$ | 4,139 | \$ | \$ 657 | \$ | 927,682 | \$ | 935,265 |
| Deposits(a) | \$ 910,802 | \$ 12,084 |  |  |  |  |  |  |  |  |
| Federal funds purchased and securities loaned or |  |  |  |  |  |  |  |  |  |  |
| Commercial paper | 35,363 | - |  | - |  | - |  | 35,363 |  | 41,794 |
| Other borrowed funds(a) | 33,758 | 8,833 |  | 4,030 |  | 915 |  | 47,536 |  | 50,398 |
| Beneficial interests issued by consolidated VIEs | 38,989 | 24,310 |  | 4,708 |  | 9,642 |  | 77,649 |  | 15,225 |
| Long-term debt(a) | 41,290 | 64,544 |  | 38,272 |  | 82,403 |  | 226,509 |  | 242,465 |
| Current income taxes payable(b) | - | - |  | - |  | - |  | - |  | 457 |
| Other(c) | 2,450 | 1,141 |  | 961 |  | 2,777 |  | 7,329 |  | 7,438 |
| Total on-balance sheet obligations | 1,335,254 | 113,079 |  | 53,169 |  | 97,210 |  | 1,598,712 |  | 1,554,455 |
| Off-balance sheet obligations |  |  |  |  |  |  |  |  |  |  |
| Unsettled reverse repurchase and securities |  |  |  |  |  |  |  |  |  |  |
| Contractual interest payments(e) | 12,887 | 13,089 |  | 9,297 |  | 43,181 |  | 78,454 |  | 77,015 |
| Operating leases(f) | 1,884 | 3,478 |  | 2,860 |  | 7,778 |  | 16,000 |  | 15,952 |
| Building purchase commitments(g) | 258 | - |  | - |  | - |  | 258 |  | 670 |
| Equity investment commitments(h) | 1,296 | 9 |  | 23 |  | 1,140 |  | 2,468 |  | 2,374 |
| Contractual purchases and capital expenditures | 1,384 | 701 |  | 335 |  | 402 |  | 2,822 |  | 3,104 |
| Obligations under affinity and co-brand programs | 990 | 2,002 |  | 1,475 |  | 1,334 |  | 5,801 |  | 6,898 |
| Other | 142 | 120 |  | 32 |  | 15 |  | 309 |  | 15 |
| Total off-balance sheet obligations | 58,768 | 19,399 |  | 14,022 |  | 53,850 |  | 146,039 |  | 154,215 |
| Total contractual cash obligations | \$ 1,394,022 | \$ 132,478 | \$ | 67,191 | \$ | 151,060 |  | 1,744,751 |  | 1,708,670 |

 performance of the structured notes.
(b) 2011 excludes the expected benefit of net prepayments of income taxes as of December 31, 2010.
(c) Primarily includes deferred annuity contracts, pension and postretirement obligations and insurance liabilities.
(d) For further information, refer to Unsettled reverse repurchase and securities borrowing agreements in Note 30 on page 278 of this Annual Report.
(e) Includes accrued interest and future contractual interest obligations. Excludes interest related to structured notes where the Firm's payment obligation is based on the performance of certain benchmarks.
 benefit of noncancelable sublease rentals of $\$ 1.8$ billion at both December 31, 2010 and 2009.
(g) For further information, refer to Building purchase commitments in Note 30 on page 278 of this Annual Report.
 at net asset value as discussed in Note 3 on pages 170-187 of this Annual Report; and $\$ 1.4$ billion and $\$ 897$ million, respectively, to other equity investments.

## Management's discussion and analysis

## Repurchase liability

In connection with the Firm's loan sale and securitization activities with Fannie Mae and Freddie Mac (the "GSEs") and other loan sale and private-label securitization transactions, the Firm has made representations and warranties that the loans sold meet certain requirements. For transactions with the GSEs, these representations relate to type of collateral, underwriting standards, validity of certain borrower representations in connection with the loan, primary mortgage insurance being in force for any mortgage loan with a loan-to-value ratio ("LTV") greater than 80\%, and the use of the GSEs' standard legal documentation. The Firm may be, and has been, required to repurchase loans and/or indemnify the GSEs and other investors for losses due to material breaches of these representations and warranties; however, predominantly all of the repurchase demands received by the Firm and the Firm's losses realized to date are related to loans sold to the GSEs.

To date, the repurchase demands the Firm has received from the GSEs primarily relate to loans originated from 2005 to 2008. Demands against the pre-2005 and post-2008 vintages have not been significant; the Firm attributes this to the comparatively favorable credit performance of these vintages and to the enhanced underwriting and loan qualification standards implemented progressively during 2007 and 2008. From 2005 to 2008, excluding Washington Mutual, loans sold to the GSEs subject to representations and warranties for which the Firm may be liable were approximately $\$ 380$ billion; this amount represents the principal amount of loans sold throughout 2005 to 2008 and has not been adjusted for subsequent activity, such as borrower repayments of principal or repurchases completed to date. See the discussion below for information concerning the process the Firm uses to evaluate repurchase demands for breaches of representations and warranties, and the Firm's estimate of probable losses related to such exposure.

From 2005 to 2008, Washington Mutual sold approximately $\$ 150$ billion of loans to the GSEs subject to certain representations and warranties. Subsequent to the Firm's acquisition of certain assets and liabilities of Washington Mutual from the FDIC in
September 2008, the Firm resolved and/or limited certain current and future repurchase demands for loans sold to the GSEs by Washington Mutual, although it remains the Firm's position that such obligations remain with the FDIC receivership. Nevertheless, certain payments have been made with respect to certain of the then current and future repurchase demands, and the Firm will continue to evaluate and may pay certain future repurchase demands related to individual loans. In addition to the payments already made, the Firm estimates it has a remaining repurchase liability of approximately $\$ 190$ million as of December 31, 2010, relating to unresolved and future demands on loans sold to the GSEs by Washington Mutual. After consideration of this repurchase liability, the Firm believes that the remaining GSE repurchase exposure related to Washington Mutual presents minimal future risk to the Firm's financial results.

The Firm also sells loans in securitization transactions with Ginnie Mae; these loans are typically insured by the Federal Housing Administration ("FHA") or the Rural Housing Administration ("RHA") and/or guaranteed by the U.S. Department of Veterans Affairs ("VA"). The Firm, in its role as servicer, may elect to repurchase delinquent loans securitized by Ginnie Mae in accordance with guidelines prescribed by Ginnie Mae, FHA, RHA and VA. Amounts due under the terms of these loans continue to be insured and the reimbursement of insured amounts is proceeding normally. Accordingly, the Firm has not recorded any repurchase liability related to these loans.

From 2005 to 2008, the Firm and certain acquired entities sold or deposited approximately $\$ 450$ billion of residential mortgage loans to securitization trusts in private-label securitizations they sponsored. In connection therewith certain representations and warranties were made related to these loans. With respect to the $\$ 165$ billion of private-label securitizations originated by Washington Mutual, it is the Firm's position that repurchase obligations remain with the FDIC receivership.

While the terms of the securitization transactions vary, they generally differ from loan sales to GSEs in that, among other things: (i) in order to direct the trustee to investigate loan files, the security holders must make a formal request for the trustee to do so, and typically, this requires agreement of the holders of a specified percentage of the outstanding securities; (ii) generally, the mortgage loans are not required to meet all GSE eligibility criteria; and (iii) in many cases, the party demanding repurchase is required to demonstrate that a loanlevel breach of a representation or warranty has materially and adversely affected the value of the loan. Of the $\$ 450$ billion originally sold or deposited (including $\$ 165$ billion by Washington Mutual, as to which the Firm maintains the repurchase obligations remain with the FDIC receivership), approximately $\$ 180$ billion of principal has been repaid. Approximately $\$ 80$ billion of loans have been liquidated, with an average loss severity of $57 \%$. The remaining outstanding principal balance of these loans as of December 31, 2010, was approximately $\$ 190$ billion.
To date, loan-level repurchase demands in private-label securitizations have been limited. As a result, the Firm's repurchase reserve primarily relates to loan sales to the GSEs and is predominantly derived from repurchase activity with the GSEs. While it is possible that the volume of repurchase demands in private-label securitizations will increase in the future, the Firm cannot offer a reasonable estimate of those future demands based on historical experience to date. Thus far, claims related to private-label securitizations (including from insurers that have guaranteed certain obligations of the securitization trusts) have generally manifested themselves through securities-related litigation. The Firm separately evaluates its exposure to such litigation in establishing its litigation reserves. For additional information regarding litigation, see Note 32 on pages 282-289 of this Annual Report.

Repurchase Demand Process
The Firm first becomes aware that a GSE is evaluating a particular loan for repurchase when the Firm receives a request from the GSE to review the underlying loan file ("file request"). Upon completing its review, the GSE may submit a repurchase demand to the Firm; historically, most file requests have not resulted in repurchase demands.

The primary reasons for repurchase demands from the GSEs relate to alleged misrepresentations primarily arising from: (i) credit quality and/or undisclosed debt of the borrower; (ii) income level and/or employment status of the borrower; and (iii) appraised value of collateral. Ineligibility of the borrower for the particular product, mortgage insurance rescissions and missing documentation are other reasons for repurchase demands. Beginning in 2009, mortgage insurers more frequently rescinded mortgage insurance coverage. The successful rescission of mortgage insurance typically results in a violation of representations and warranties made to the GSEs and, therefore, has been a significant cause of repurchase demands from the GSEs. The Firm actively reviews all rescission notices from mortgage insurers and contests them when appropriate.

As soon as practicable after receiving a repurchase demand from a GSE, the Firm evaluates the request and takes appropriate actions based on the nature of the repurchase demand. Loan-level appeals with the GSEs are typical and the Firm seeks to provide a final response to a repurchase demand within three to four months of the date of receipt. In many cases, the Firm ultimately is not required to repurchase a loan because it is able to resolve the purported defect. Although repurchase demands may be made for
as long as the loan is outstanding, most repurchase demands from the GSEs historically have related to loans that became delinquent in the first 24 months following origination.
When the Firm accepts a repurchase demand from one of the GSEs, the Firm may either a) repurchase the loan or the underlying collateral from the GSE at the unpaid principal balance of the loan plus accrued interest, or b) reimburse the GSE for its realized loss on a liquidated property (a "make-whole" payment).

## Estimated Repurchase Liability

To estimate the Firm's repurchase liability arising from breaches of representations and warranties, the Firm considers:
(i) the level of current unresolved repurchase demands and mortgage insurance rescission notices,
(ii) estimated probable future repurchase demands considering historical experience,
(iii) the potential ability of the Firm to cure the defects identified in the repurchase demands ("cure rate"),
(iv) the estimated severity of loss upon repurchase of the loan or collateral, make-whole settlement, or indemnification,
(v) the Firm's potential ability to recover its losses from third-party originators, and
(vi) the terms of agreements with certain mortgage insurers and other parties.

Based on these factors, the Firm has recognized a repurchase
liability of $\$ 3.3$ billion and $\$ 1.7$ billion, including the Washington
Mutual liability described above, as of December 31, 2010, and 2009, respectively.

The following table provides information about outstanding repurchase demands and mortgage insurance rescission notices, excluding those related to Washington Mutual, at each of the five most recent quarter-end dates. Due to the rate at which developments have occurred in this area, management does not believe that it would be useful or meaningful to report quarterly information for periods prior to the quarter ended December 31, 2009; the most meaningful trends are those which are more recent.

## Outstanding repurchase demands and mortgage insurance rescission notices by counterparty type

| (in millions) | $\begin{gathered} \text { December 31, } \\ 2010 \\ \hline \end{gathered}$ | $\begin{gathered} \text { September 30, } \\ 2010 \\ \hline \end{gathered}$ | $\begin{gathered} \text { June } 30, \\ 2010 \\ \hline \end{gathered}$ | $\begin{gathered} \text { March 31, } \\ 2010 \\ \hline \end{gathered}$ | $\begin{gathered} \text { December 31, } \\ 2009 \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| GSEs and other | \$ 1,071 | \$ 1,063 | \$ 1,331 | \$ 1,358 | \$ 1,339 |
| Mortgage insurers | 624 | 556 | 998 | 1,090 | 865 |
| Overlapping population(a) | (63) | (69) | (220) | (232) | (169) |
| Total | \$ 1,632 | \$ 1,550 | \$ 2,109 | \$ 2,216 | \$ 2,035 |

(a) Because the GSEs may make repurchase demands based on mortgage insurance rescission notices that remain unresolved, certain loans may be subject to both an unresolved mortgage insurance rescission notice and an unresolved repurchase demand.

Probable future repurchase demands are generally estimated based on loans that are or ever have been 90 days past due. The Firm estimates probable future repurchase demands by considering the unpaid principal balance of these delinquent loans and expected repurchase demand rates based on historical experience and data, including the age of the loan when it first became delinquent. Through the first three quarters of 2010, the Firm experienced a sustained trend of increased file requests and repurchase demands from the GSEs across most vintages, including the 2005-2008 vintages, in spite of improved delinquency statistics and the aging of the 20052008 vintages. File requests from the GSEs, excluding those
related to Washington Mutual, and private investors decreased by $29 \%$ between the second and third quarters of 2009 and remained relatively stable through the fourth quarter of 2009. After this period of decline and relative stability, file requests from the GSEs and private investors then experienced quarter over quarter increases of $5 \%$, $18 \%$ and $15 \%$ in the first, second and third quarters of 2010, respectively. The number of file requests received from the GSEs and private investors decreased in the fourth quarter of 2010, but the level of file requests continues to be elevated and volatile.

The Firm expects that the change in GSE behavior that it began to observe earlier in 2010 will alter the historical relationship between

## Management's discussion and analysis

delinquencies and repurchase demands. In response to these changing trends, in the third quarter of 2010, the Firm refined its estimate of probable future repurchase demands by separately forecasting near-term repurchase demands (using outstanding file requests) and longer-term repurchase demands (considering delinquent loans for which no file request has been received). The Firm believes that this refined estimation process produces a better estimate of probable future repurchase demands since it directly incorporates the Firm's recent file request experience. The Firm also believes that the refined estimation process will better
reflect emerging trends in file requests as well as the relationship between file requests and ultimate repurchase demands. This refinement in the Firm's estimation process resulted in a higher estimated amount of probable future demands from the GSEs, and this revised future repurchase demand assumption, along with an overall increase in repurchase demands from the GSEs during 2010, were the primary drivers of the $\$ 1.6$ billion increase in the Firm's repurchase liability during 2010.

The following tables show the trend in repurchase demands and mortgage insurance rescission notices received by loan origination vintage, excluding those related to Washington Mutual, for the five most recent quarters. Due to the rate at which developments have occurred in this area, management does not believe that it would be useful or meaningful to report quarterly information for periods prior to the quarter ended December 31, 2009; the most meaningful trends are those which are more recent.

## Quarterly repurchase demands received by loan origination vintage

| (in millions) | $\begin{gathered} \text { December 31, } \\ 2010 \\ \hline \end{gathered}$ | $\begin{gathered} \text { September 30, } \\ 2010 \\ \hline \end{gathered}$ | June 30 , 2010 | $\begin{gathered} \text { March 31, } \\ 2010 \\ \hline \end{gathered}$ | $\begin{gathered} \text { December 31, } \\ 2009 \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Pre-2005 | \$ 38 | \$ 31 | \$ 35 | \$ 16 | \$ 12 |
| 2005 | 72 | 67 | 94 | 50 | 40 |
| 2006 | 195 | 185 | 234 | 189 | 166 |
| 2007 | 537 | 498 | 521 | 403 | 425 |
| 2008 | 254 | 191 | 186 | 98 | 157 |
| Post-2008 | 65 | 46 | 53 | 20 | 26 |
| Total repurchase demands received | \$ 1,161 | \$ 1,018 | \$ 1,123 | \$ 776 | \$ 826 |

Quarterly mortgage insurance rescission notices received by loan origination vintage

| (in millions) | $\begin{gathered} \text { December 31, } \\ 2010 \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { September 30, } \\ 2010 \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { June 30, } \\ 2010 \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { March 31, } \\ 2010 \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { December 31, } \\ 2009 \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pre-2005 | \$ | 3 | \$ | 4 | \$ | 4 | \$ | 2 | \$ | 3 |
| 2005 |  | 7 |  | 5 |  | 7 |  | 18 |  | 22 |
| 2006 |  | 40 |  | 39 |  | 39 |  | 57 |  | 50 |
| 2007 |  | 113 |  | 105 |  | 155 |  | 203 |  | 221 |
| 2008 |  | 49 |  | 44 |  | 52 |  | 60 |  | 69 |
| Post-2008 |  | 1 |  | - |  | - |  | - |  | - |
| Total mortgage insurance rescissions received(a) | \$ | 213 | \$ | 197 | \$ | 257 | \$ | 340 | \$ | 365 |

 GSEs have also issued a repurchase demand.

Because the Firm has demonstrated an ability to cure certain types of defects more frequently than others (e.g., missing documents), trends in the types of defects identified as well as the Firm's historical data are considered in estimating the future cure rate. During 2010, the Firm's overall cure rate, excluding Washington Mutual loans, has been approximately $50 \%$. While the actual cure rate may vary from quarter to quarter, the Firm expects that the overall cure rate will remain in the $40-50 \%$ range for the foreseeable future.

The Firm has not observed a direct relationship between the type of defect that causes the breach of representations and warranties and the severity of the realized loss. Therefore, the loss severity assumption is estimated using the Firm's historical experience and projections regarding home price appreciation. Actual loss severities on finalized repurchases and "make-whole" settlements, excluding any related to Washington Mutual loans, currently average approximately $50 \%$, but may vary from quarter to quarter based on the characteristics of the underlying loans and changes in home prices.

When a loan was originated by a third-party correspondent, the Firm typically has the right to seek a recovery of related repurchase losses from the correspondent originator. Correspondent-originated loans comprise approximately 40 percent of loans underlying outstanding repurchase demands, excluding those related to Washington Mutual. The Firm experienced a decrease in third-party recoveries from late 2009 into 2010. However, the actual third-party recovery rate may vary from quarter to quarter based upon the underlying mix of correspondents (e.g., active, inactive, out-of-business) from which recoveries are being sought.

The Firm is engaged in discussions with various mortgage insurers on their rights and practices of rescinding mortgage insurance coverage. The Firm has entered into agreements with two mortgage insurers to resolve their claims on certain portfolios for which the Firm is a servicer. The impact of these agreements is reflected in the repurchase liability and the disclosed outstanding mortgage insurance rescission notices as of December 31, 2010.
Substantially all of the estimates and assumptions underlying the Firm's methodology for computing its recorded repurchase liabilityincluding factors such as the amount of probable future demands from purchasers (which is in part based on historical experience), the ability of the Firm to cure identified defects, the severity of loss upon repurchase or foreclosure and recoveries from third parties-require application of a significant level of management judgment. Estimating the repurchase liability is further complicated by limited and rapidly changing historical data and uncertainty surrounding numerous external factors, including: (i) economic factors (e.g., further declines in home prices and changes in borrower behavior may lead to increases in the number of defaults, the severity of losses, or both), and (ii) the level of future demands, which is dependent, in part, on actions taken by third parties, such as the GSEs and mortgage insurers. While the Firm uses the best information available to it in estimating its repurchase liability, the estimation process is inherently uncertain, imprecise and potentially volatile as additional information is obtained and external factors continue to evolve.

The following table summarizes the change in the repurchase liability for each of the periods presented.

## Summary of changes in repurchase liability

Year ended December 31,

| (in millions) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | :---: | :---: | :---: |
| Repurchase liability at beginning of period | $\mathbf{\$ 1 , 7 0 5}$ | $\$ 1,093$ | $\$ 15$ |
| Realized losses(a) | $\mathbf{( 1 , 4 2 3 )}$ | $(1,253)(\mathrm{c})$ | $(155)$ |
| Provision for repurchase losses | $\mathbf{3 , 0 0 3}$ | 1,865 | $1,233(\mathrm{~d})$ |
| Repurchase liability at end of period | $\mathbf{\$ 3 , 2 8 5 ( b )}$ | $\$ 1,705$ | $\$ 1,093$ |

(a) Includes principal losses and accrued interest on repurchased loans, "make-whole" settlements, settlements with claimants, and certain related expense. For the years ended December 31, 2010, 2009 and 2008, make-whole settlements were $\$ 632$ million, $\$ 277$ million and $\$ 34$ million, respectively.
(b) Includes $\$ 190$ million at December 31, 2010, related to future demands on loans sold by Washington Mutual to the GSEs.
(c) Includes the Firm's resolution of certain current and future repurchase demands for certain loans sold by Washington Mutual. The unpaid principal balance of loans related to this resolution is not included in the table below, which summarizes the unpaid principal balance of repurchased loans.
(d) Includes a repurchase liability assumed for certain loans sold by Washington Mutual; this assumed liability was reported as a reduction of the extraordinary gain rather than as a charge to the provision for repurchase losses.
The following table summarizes the total unpaid principal balance of repurchases during the periods indicated.
Unpaid principal balance of loan repurchases(a)

| Year ended December 31, (in millions) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: |
| Ginnie Mae(b) | $\mathbf{\$ 8 , 7 1 7}$ | $\$ 6,966$ | $\$ 4,452$ |
| GSEs and other(c)(d) | $\mathbf{1 , 7 9 0}$ | 1,019 | 587 |
| Total | $\mathbf{\$ 1 0 , 5 0 7}$ | $\$ 7,985$ | $\$ 5,039$ |

(a) Excludes mortgage insurers. While the rescission of mortgage insurance may ultimately trigger a repurchase demand, the mortgage insurers themselves do not present repurchase demands to the Firm.
(b) In substantially all cases, these repurchases represent the Firm's voluntary repurchase of certain delinquent loans from loan pools or packages as permitted by Ginnie Mae guidelines (i.e., they do not result from repurchase demands due to breaches of representations and warranties). In certain cases, the Firm repurchases these delinquent loans as it continues to service them and/or manage the foreclosure process in accordance with applicable requirements of Ginnie Mae, the FHA, RHA and/or the VA.
(c) Predominantly all of the repurchases related to the GSEs.
(d) Nonaccrual loans held-for-investment included $\$ 354$ million and $\$ 218$ million at December 31, 2010 and 2009, respectively, of loans repurchased as a result of breaches of representations and warranties.

## Management's discussion and analysis

## CAPITAL MANAGEMENT

A strong capital position is essential to the Firm's business strategy and competitive position. The Firm's capital strategy focuses on longterm stability, which enables it to build and invest in market-leading businesses, even in a highly stressed environment. Senior management considers the implications on the Firm's capital strength prior to making any decision on future business activities. Capital and earnings are inextricably linked, as earnings directly affect capital generation for the Firm. In addition to considering the Firm's earnings outlook, senior management evaluates all sources and uses of capital and makes decisions to vary sources or uses to preserve the Firm's capital strength.
The Firm's capital management objectives are to hold capital sufficient to:

- Cover all material risks underlying the Firm's business activities;
- Maintain "well-capitalized" status under regulatory requirements;
- Achieve debt rating targets;
- Remain flexible to take advantage of future opportunities; and
- Build and invest in businesses, even in a highly stressed environment.
To meet these objectives, the Firm maintains a robust and disciplined capital adequacy assessment process, which is performed quarterly, and which is intended to enable the Firm to remain well-capitalized and fund ongoing operations under adverse conditions. The process assesses the potential impact of alternative economic and business scenarios on earnings and capital for the Firm's businesses individually and in the aggregate over a rolling three-year period. Economic scenarios, and the parameters underlying those scenarios, are defined centrally and applied uniformly across the businesses. These scenarios are articulated in terms of macroeconomic factors, which are key drivers of business results; global market shocks, which generate short-term but severe trading losses; and operational risk events, which generate significant one-time losses. However, even when defining a broad range of scenarios, realized events can always be worse. Accordingly, management considers additional stresses outside these scenarios as necessary. The Firm utilized this capital adequacy process in completing the Federal Reserve Comprehensive Capital Plan. The assessment of capital adequacy is also evaluated together with the Firm's Liquidity Risk Management processes. For further information on the Firm's liquidity risk management, see pages 110-115 of this Annual Report.

The quality and composition of capital are key factors in senior management's evaluation of the Firm's capital adequacy. Accordingly, the Firm holds a significant amount of its capital in the form of common equity. The Firm uses three capital disciplines:

- Regulatory capital - The capital required according to standards stipulated by U.S. bank regulatory agencies.
- Economic risk capital - A bottom-up assessment of the underlying risks of the Firm's business activities, utilizing internal riskassessment methodologies.
- Line of business equity - The amount of equity the Firm believes each business segment would require if it were operating independently, which incorporates sufficient capital to address economic risk measures, regulatory capital requirements and capital levels for similarly rated peers.


## Regulatory capital

The Federal Reserve establishes capital requirements, including wellcapitalized standards, for the consolidated financial holding company. The Office of the Comptroller of the Currency ("OCC") establishes similar capital requirements and standards for the Firm's national banks, including JPMorgan Chase Bank, N.A. and Chase Bank USA, N.A.

In connection with the U.S. Government's Supervisory Capital Assessment Program in 2009, U.S. banking regulators developed a new measure of capital, Tier 1 common, which is defined as Tier 1 capital less elements of Tier 1 capital not in the form of common equity - such as perpetual preferred stock, noncontrolling interests in subsidiaries and trust preferred capital debt securities. Tier 1 common, a non-GAAP financial measure, is used by banking regulators, investors and analysts to assess and compare the quality and composition of the Firm's capital with the capital of other financial services companies. The Firm uses Tier 1 common along with the other capital measures to assess and monitor its capital position.
At December 31, 2010 and 2009, JPMorgan Chase maintained Tier 1 and Total capital ratios in excess of the well-capitalized standards established by the Federal Reserve, as indicated in the tables below. In addition, the Firm's Tier 1 common ratio was significantly above the $4 \%$ well-capitalized standard established at the time of the Supervisory Capital Assessment Program. For more information, see Note 29 on pages 273-274 of this Annual Report.

## Risk-based capital ratios

| December 31, | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 0 9}$ |
| :--- | :---: | :---: |
| Tier 1 capital(a) | $\mathbf{1 2 . 1 \%}$ | $11.1 \%$ |
| Total capital | $\mathbf{1 5 . 5}$ | 14.8 |
| Tier 1 leverage | $\mathbf{7 . 0}$ | 6.9 |
| Tier 1 common | $\mathbf{9 . 8}$ | 8.8 |

(a) On January 1, 2010, the Firm adopted accounting standards which required the consolidation of the Firm's credit card securitization trusts, Firm-administered multiseller conduits, and certain mortgage and other consumer securitization entities. Refer to Note 16 on pages 244-259 of this Annual Report for additional information about the impact to the Firm of the new guidance.
A reconciliation of Total stockholders' equity to Tier 1 common capital, Tier 1 capital and Total qualifying capital is presented in the table below.

Risk-based capital components and assets

| December 31, (in millions) | 2010 | 2009 |
| :---: | :---: | :---: |
| Tier 1 capital |  |  |
| Tier 1 common: |  |  |
| Total stockholders' equity | \$ 176,106 | \$ 165,365 |
| Less: Preferred stock | 7,800 | 8,152 |
| Common stockholders' equity | 168,306 | 157,213 |
| Effect of certain items in accumulated other comprehensive income/(loss) excluded from Tier 1 common equity | (748) | 75 |
| Less: Goodwill(a) | 46,915 | 46,630 |
| Fair value DVA on derivative and structured note |  |  |
| liabilities related to the Firm's credit quality | 1,261 | 912 |
| Investments in certain subsidiaries and other | 1,032 | 802 |
| Other intangible assets(a) | 3,587 | 3,660 |
| Tier 1 common | 114,763 | 105,284 |
| Preferred stock | 7,800 | 8,152 |
| Qualifying hybrid securities and noncontrolling interests(b) | 19,887 | 19,535 |
| Total Tier 1 capital | 142,450 | 132,971 |
| Tier 2 capital |  |  |
| Long-term debt and other instruments qualifying as Tier $2$ | 25,018 | 28,977 |
| Qualifying allowance for credit losses | 14,959 | 15,296 |
| Adjustment for investments in certain subsidiaries and other | (211) | (171) |
| Total Tier 2 capital | 39,766 | 44,102 |
| Total qualifying capital | \$ 182,216 | \$ 177,073 |
| Risk-weighted assets(c)(d) | \$1,174,978 | \$1,198,006 |
| Total adjusted average assets(e) | \$2,024,515 | \$1,933,767 |

(a) Goodwill and other intangible assets are net of any associated deferred tax liabilities.
(b) Primarily includes trust preferred capital debt securities of certain business trusts.
(c) Risk-weighted assets consist of on- and off-balance sheet assets that are assigned to one of several broad risk categories and weighted by factors representing their risk and potential for default. On-balance sheet assets are riskweighted based on the perceived credit risk associated with the obligor or counterparty, the nature of any collateral, and the guarantor, if any. Off-balance sheet assets - such as lending-related commitments, guarantees, derivatives and other applicable off-balance sheet positions - are risk-weighted by multiplying the contractual amount by the appropriate credit conversion factor to determine the onbalance sheet credit-equivalent amount, which is then risk-weighted based on the same factors used for on-balance sheet assets. Risk-weighted assets also incorporate a measure for the market risk related to applicable trading assets-debt and equity instruments, and foreign exchange and commodity derivatives. The resulting risk-weighted values for each of the risk categories are then aggregated to determine total risk-weighted assets.
d) Includes off-balance sheet risk-weighted assets at December 31, 2010 and 2009, of $\$ 282.9$ billion and $\$ 367.4$ billion, respectively. Risk-weighted assets are calculated in accordance with U.S. federal regulatory capital standards.
(e) Adjusted average assets, for purposes of calculating the leverage ratio, include total average assets adjusted for unrealized gains/(losses) on securities, less deductions for disallowed goodwill and other intangible assets, investments in certain subsidiaries, and the total adjusted carrying value of nonfinancial equity investments that are subject to deductions from Tier 1 capital.
The Firm's Tier 1 common capital was $\$ 114.8$ billion at December 31, 2010, compared with $\$ 105.3$ billion at December 31, 2009, an increase of $\$ 9.5$ billion. The increase was predominantly due to net income (adjusted for DVA) of $\$ 17.0$ billion and net issuances and commitments to issue common stock under the Firm's employee stock-based compensation plans of $\$ 2.8$ billion. The increase was partially offset by $\$ 4.4$ billion of cumulative effect adjustments to retained earnings that predominantly resulted from the adoption of new accounting guidance related to VIEs; $\$ 3.0$ billion of common stock repurchases; $\$ 1.5$ billion of dividends on common and preferred stock; and a $\$ 1.3$ billion reduction related to the purchase of the remaining interest in a consolidated subsidiary from noncontrolling shareholders. The Firm's Tier 1 capital was $\$ 142.5$ billion at December 31, 2010, compared with $\$ 133.0$ billion at December 31, 2009, an increase of $\$ 9.5$ billion. The increase in Tier 1 capital reflected the increase in Tier 1 common and a net issuance of trust preferred capital debt securities, offset by the redemption of preferred stock.

For additional information regarding federal regulatory capital requirements and capital ratios of the Firm and the Firm's significant banking subsidiaries at December 31, 2010 and 2009, see Note 29 on pages 273-274 of this Annual Report.

## Basel II

The minimum risk-based capital requirements adopted by the U.S. federal banking agencies follow the Capital Accord of the Basel Committee on Banking Supervision ("Basel I"). In 2004, the Basel Committee published a revision to the Accord ("Basel II"). The goal of the Basel II Framework is to provide more risk-sensitive regulatory capital calculations and promote enhanced risk management practices among large, internationally active banking organizations. U.S. banking regulators published a final Basel II rule in December 2007, which requires JPMorgan Chase to implement Basel II at the holding company level, as well as at certain of its key U.S. bank subsidiaries.

Prior to full implementation of the new Basel II Framework, JPMorgan Chase is required to complete a qualification period of four consecutive quarters during which it needs to demonstrate that it meets the requirements of the rule to the satisfaction of its primary U.S. banking regulators. The U.S. implementation timetable consists of the qualification period, starting no later than April 1, 2010, followed by a minimum transition period of three years. During the transition period, Basel II risk-based capital requirements cannot fall below certain floors based on current Basel I regulations. JPMorgan Chase is currently in the qualification period and expects to be in compliance with all relevant Basel II rules within the established timelines. In addition, the Firm has adopted, and will con-

## Management's discussion and analysis

tinue to adopt, based on various established timelines, Basel II rules in certain non-U.S. jurisdictions, as required.

## Basel III

In addition to the Basel II Framework, on December 16, 2010, the Basel Committee issued the final version of the Capital Accord, called "Basel III", which included narrowing the definition of capital, increasing capital requirements for specific exposures, introducing short-term liquidity coverage and term funding standards, and establishing an international leverage ratio. The Basel Committee also announced higher capital ratio requirements under Basel III which provide that the common equity requirement will be increased to $7 \%$, comprised of a minimum of $4.5 \%$ plus a $2.5 \%$ capital conservation buffer.

In addition, the U.S. federal banking agencies have published for public comment proposed risk-based capital floors pursuant to the requirements of the Dodd-Frank Act to establish a permanent Basel I floor under Basel II / Basel III capital calculations.

The Firm fully expects to be in compliance with the higher Basel III capital standards when they become effective on January 1, 2019, as well as additional Dodd-Frank Act capital requirements when they are implemented. The Firm estimates that its Tier 1 common ratio under Basel III rules (including the changes for calculating capital on trading assets and securitizations) would be 7\% as of December 31, 2010. This estimate reflects the Firm's current understanding of the Basel III rules and their application to its businesses as currently conducted; accordingly, this estimate will evolve over time as the Firm's businesses change and as a result of further rule-making on Basel III implementation from U.S. federal banking agencies. The Firm also believes it may need to modify the current liquidity profile of its assets and liabilities in response to the short-term liquidity coverage and term funding standards contained in Basel III. The Basel III revisions governing liquidity and capital requirements are subject to prolonged observation and transition periods. The observation period for the liquidity coverage ratio and term funding standards begins in 2011, with implementation in 2015 and 2018, respectively. The transition period for banks to meet the revised common equity requirement will begin in 2013, with implementation on January 1, 2019. The Firm will continue to monitor the ongoing rule-making process to assess both the timing and the impact of Basel III on its businesses and financial condition.

## Broker-dealer regulatory capital

JPMorgan Chase's principal U.S. broker-dealer subsidiaries are J.P. Morgan Securities LLC ("JPMorgan Securities"; formerly J.P. Morgan Securities Inc.), and J.P. Morgan Clearing Corp. ("JPMorgan Clearing"). JPMorgan Securities became a limited liability company on September 1, 2010. JPMorgan Clearing is a subsidiary of JPMorgan Securities and provides clearing and settlement services. JPMorgan Securities and JPMorgan Clearing are each subject to Rule 15c3-1 under the Securities Exchange Act of 1934 (the "Net Capital Rule"). JPMorgan Securities and JPMorgan Clearing are also registered as futures commission
merchants and subject to Rule 1.17 of the Commodity Futures Trading Commission ("CFTC").
JPMorgan Securities and JPMorgan Clearing have elected to compute their minimum net capital requirements in accordance with the "Alternative Net Capital Requirements" of the Net Capital Rule. At December 31, 2010, JPMorgan Securities' net capital, as defined by the Net Capital Rule, was $\$ 6.9$ billion, exceeding the minimum requirement by $\$ 6.3$ billion, and JPMorgan Clearing's net capital was $\$ 5.7$ billion, exceeding the minimum requirement by $\$ 3.9$ billion.

In addition to its minimum net capital requirement, JPMorgan Securities is required to hold tentative net capital in excess of $\$ 1.0$ billion and is also required to notify the Securities and Exchange Commission ("SEC") in the event that tentative net capital is less than $\$ 5.0$ billion, in accordance with the market and credit risk standards of Appendix E of the Net Capital Rule. As of December 31, 2010, JPMorgan Securities had tentative net capital in excess of the minimum and notification requirements.

## Economic risk capital

JPMorgan Chase assesses its capital adequacy relative to the risks underlying its business activities, using internal risk-assessment methodologies. The Firm measures economic capital primarily based on four risk factors: credit, market, operational and private equity risk.

| Economic risk capital | Yearly Average |  |
| :--- | ---: | ---: |
| Year ended December 31, (in billions) | $\mathbf{2 0 1 0}$ | 2009 |
| Credit risk | $\mathbf{\$ 4 9 . 7}$ | $\$ 51.3$ |
| Market risk | $\mathbf{1 5 . 1}$ | 15.4 |
| Operational risk | $\mathbf{7 . 4}$ | 8.5 |
| Private equity risk | $\mathbf{6 . 2}$ | 4.7 |
| Economic risk capital | $\mathbf{7 8 . 4}$ | 79.9 |
| Goodwill | $\mathbf{4 8 . 6}$ | 48.3 |
| Other(a) | $\mathbf{3 4 . 5}$ | 17.7 |
| Total common stockholders' equity | $\mathbf{\$ 1 6 1 . 5}$ | $\mathbf{\$ 1 4 5 . 9}$ |

(a) Reflects additional capital required, in the Firm's view, to meet its regulatory and debt rating objectives.

## Credit risk capital

Credit risk capital is estimated separately for the wholesale businesses (IB, CB, TSS and AM) and consumer businesses (RFS and Card).

Credit risk capital for the overall wholesale credit portfolio is defined in terms of unexpected credit losses, both from defaults and from declines in the portfolio value due to credit deterioration measured over a one-year period at a confidence level consistent with an "AA" credit rating standard. Unexpected losses are losses in excess of those for which allowances for credit losses are maintained. The capital methodology is based on several principal drivers of credit risk: exposure at default (or loan-equivalent amount), default likelihood, credit spreads, loss severity and portfolio correlation.

Credit risk capital for the consumer portfolio is based on product and other relevant risk segmentation. Actual segment-level default and severity experience are used to estimate unexpected losses for a one-year horizon at a confidence level consistent with an "AA" credit rating standard. See Credit Risk Management on pages 116-118 of this Annual Report for more information about these credit risk measures.

## Market risk capital

The Firm calculates market risk capital guided by the principle that capital should reflect the risk of loss in the value of portfolios and financial instruments caused by adverse movements in market variables, such as interest and foreign exchange rates, credit spreads, and securities and commodities prices, taking into account the liquidity of the financial instruments. Results from daily VaR, biweekly stress-tests, issuer credit spreads and default risk calculations, as well as other factors, are used to determine appropriate capital levels. Market risk capital is allocated to each business segment based on its risk assessment. See Market Risk Management on pages 142-146 of this Annual Report for more information about these market risk measures.

## Operational risk capital

Capital is allocated to the lines of business for operational risk using a risk-based capital allocation methodology which estimates operational risk on a bottom-up basis. The operational risk capital model is based on actual losses and potential scenario-based stress losses, with adjustments to the capital calculation to reflect changes in the quality of the control environment or the use of risk-transfer products. The Firm believes its model is consistent with the Basel II Framework. See Operational Risk Management on pages 147-148 of this Annual Report for more information about operational risk.

## Private equity risk capital

Capital is allocated to privately- and publicly-held securities, thirdparty fund investments, and commitments in the private equity portfolio to cover the potential loss associated with a decline in equity markets and related asset devaluations. In addition to negative market fluctuations, potential losses in private equity investment portfolios can be magnified by liquidity risk. Capital allocation for the private equity portfolio is based on measurement of the loss experience suffered by the Firm and other market participants over a prolonged period of adverse equity market conditions.

## Line of business equity

The Firm's framework for allocating capital is based on the following objectives:

- Integrate firmwide capital management activities with capital management activities within each of the lines of business;
- Measure performance consistently across all lines of business; and
- Provide comparability with peer firms for each of the lines of business

Equity for a line of business represents the amount the Firm believes the business would require if it were operating independently, incorporating sufficient capital to address economic risk measures, regulatory capital requirements and capital levels for similarly rated peers. Capital is also allocated to each line of business for, among other things, goodwill and other intangibles associated with acquisitions effected by the line of business. Return on common equity is measured and internal targets for expected returns are established as key measures of a business segment's performance.

## Line of business equity

| December 31, (in billions) | $\mathbf{2 0 1 0}$ | 2009 |
| :--- | ---: | ---: |
| Investment Bank | $\mathbf{\$ 4 0 . 0}$ | $\$ 33.0$ |
| Retail Financial Services | $\mathbf{2 4 . 6}$ | 22.5 |
| Card Services \& Auto | $\mathbf{1 8 . 4}$ | 17.5 |
| Commercial Banking | $\mathbf{8 . 0}$ | 8.0 |
| Treasury \& Securities Services | $\mathbf{6 . 5}$ | 5.0 |
| Asset Management | $\mathbf{6 . 5}$ | 7.0 |
| Corporate/Private Equity | $\mathbf{6 4 . 3}$ | 64.2 |
| Total common stockholders' equity | $\mathbf{\$ 1 6 8 . 3}$ | $\$ 157.2$ |


| Line of business equity <br> (in billions) | Yearly Average |  |  |
| :--- | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| Investment Bank | $\mathbf{\$ 4 0 . 0}$ | $\$ 33.0$ | $\$ 26.1$ |
| Retail Financial Services | $\mathbf{2 4 . 6}$ | 22.5 | 16.1 |
| Card Services \& Auto | $\mathbf{1 8 . 4}$ | 17.5 | 17.3 |
| Commercial Banking | $\mathbf{8 . 0}$ | 8.0 | 7.3 |
| Treasury \& Securities Services | $\mathbf{6 . 5}$ | 5.0 | 3.8 |
| Asset Management | 6.5 | 7.0 | 5.6 |
| Corporate/Private Equity | $\mathbf{5 7 . 5}$ | 52.9 | 52.9 |
| Total common stockholders' equity | $\mathbf{\$ 1 6 1 . 5}$ | $\$ 145.9$ | $\$ 129.1$ |

Effective January 1, 2010, the Firm enhanced its line of business equity framework to better align equity assigned to the lines of business with changes anticipated to occur in each line of business, and to reflect the competitive and regulatory landscape. The lines of business are now capitalized based on the Tier 1 common standard, rather than the Tier 1 capital standard. In 2011, the Firm will further evaluate its line-of-business equity framework as appropriate to reflect future Basel III Tier 1 common capital requirements.

## Management's discussion and analysis

## Capital actions

## Dividends

On February 23, 2009, the Board of Directors reduced the Firm's quarterly common stock dividend from $\$ 0.38$ to $\$ 0.05$ per share, effective with the dividend paid on April 30, 2009, to shareholders of record on April 6, 2009. The action enabled the Firm to retain approximately $\$ 5.5$ billion in common equity in each of 2010 and 2009, and was taken to ensure the Firm had sufficient capital strength in the event the very weak economic conditions that existed at the beginning of 2009 deteriorated further. JPMorgan Chase declared quarterly cash dividends on its common stock in the amount of $\$ 0.05$ per share for each quarter of 2010 and 2009.

For information regarding dividend restrictions, see Note 23 and Note 28 on pages 267-268 and 273, respectively, of this Annual Report.
The following table shows the common dividend payout ratio based on reported net income.

| Year ended December 31, | 2010 | 2009 | 2008 |
| :--- | :---: | ---: | :---: |
| Common dividend payout ratio | $\mathbf{5 \%}$ | $\mathbf{9 \%}$ | $\mathbf{1 1 4 \%}$ |

## Issuance

On June 5, 2009, the Firm issued $\$ 5.8$ billion, or 163 million shares, of common stock at $\$ 35.25$ per share. On September 30, 2008, the Firm issued $\$ 11.5$ billion, or 284 million shares, of common stock at $\$ 40.50$ per share. The proceeds from these issuances were used for general corporate purposes. For additional information regarding common stock, see Note 24 on page 268 of this Annual Report.

## Capital Purchase Program

Pursuant to the U.S. Treasury's Capital Purchase Program, on October 28, 2008, the Firm issued to the U.S. Treasury, for total proceeds of $\$ 25.0$ billion, (i) 2.5 million shares of Series K Preferred Stock, and (ii) a Warrant to purchase up to 88,401,697 shares of the Firm's common stock, at an exercise price of $\$ 42.42$ per share, subject to certain antidilution and other adjustments. On June 17, 2009, the Firm redeemed all of the outstanding shares of Series K Preferred Stock and repaid the full $\$ 25.0$ billion principal amount together with accrued dividends. The U.S. Treasury exchanged the Warrant for 88,401,697 warrants, each of which is a warrant to purchase a share of the Firm's common stock at an exercise price of $\$ 42.42$ per share, and, on December 11, 2009, sold the warrants in a secondary public offering for $\$ 950$ million. The Firm did not purchase any of the warrants sold by the U.S. Treasury.

## Stock repurchases

Under the stock repurchase program authorized by the Firm's Board of Directors, the Firm is authorized to repurchase up to $\$ 10.0$ billion of the Firm's common stock plus the 88 million warrants sold by the U.S. Treasury in 2009. During 2009, the Firm did not repurchase any shares of its common stock or warrants. In the second quarter of 2010, the Firm resumed common stock repurchases, and during the year repurchased an aggregate of 78 million shares for $\$ 3.0$ billion at an average price per share of $\$ 38.49$. The Firm's share repurchase activities in 2010 were intended to offset sharecount increases resulting from employee stock-based incentive awards and were consistent with the Firm's goal of maintaining an appropriate sharecount. The Firm did not repurchase any of the warrants during 2010. As of December 31, 2010, $\$ 3.2$ billion of authorized repurchase capacity remained with respect to the common stock, and all of the authorized repurchase capacity remained with respect to the warrants.

The Firm may, from time to time, enter into written trading plans under Rule 10b5-1 of the Securities Exchange Act of 1934 to facilitate the repurchase of common stock and warrants in accordance with the repurchase program. A Rule 10b5-1 repurchase plan allows the Firm to repurchase its equity during periods when it would not otherwise be repurchasing common stock - for example, during internal trading "black-out periods." All purchases under a Rule 10b5-1 plan must be made according to a predefined plan established when the Firm is not aware of material nonpublic information.
The authorization to repurchase common stock and warrants will be utilized at management's discretion, and the timing of purchases and the exact number of shares and warrants purchased is subject to various factors, including market conditions; legal considerations affecting the amount and timing of repurchase activity; the Firm's capital position (taking into account goodwill and intangibles); internal capital generation; and alternative potential investment opportunities. The repurchase program does not include specific price targets or timetables; may be executed through open market purchases or privately negotiated transactions, including through the use of Rule 10b5-1 programs; and may be suspended at any time.

For additional information regarding repurchases of the Firm's equity securities, see Part II, Item 5, Market for registrant's common equity, related stockholder matters and issuer purchases of equity securities, on pages 13-14 of JPMorgan Chase's 2010 Form 10-K.

Risk is an inherent part of JPMorgan Chase's business activities. The Firm's risk management framework and governance structure are intended to provide comprehensive controls and ongoing management of the major risks taken in its business activities. The Firm employs a holistic approach to risk management to ensure the broad spectrum of risk types are considered in managing its business activities. The Firm's risk management framework is intended to create a culture of risk awareness and personal responsibility throughout the Firm where collaboration, discussion, escalation and sharing of information is encouraged.
The Firm's overall risk appetite is established in the context of the Firm's capital, earnings power, and diversified business model. The Firm employs a formal risk appetite framework to clearly link risk appetite and return targets, controls and capital management. The Firm's CEO is responsible for setting the overall risk appetite of the Firm and the LOB CEOs are responsible for setting the risk appetite for their respective lines of business. The Risk Policy Committee of the Firm's Board of Directors approves the risk appetite policy on behalf of the entire Board of Directors.

## Risk governance

The Firm's risk governance structure is based on the principle that each line of business is responsible for managing the risk inherent in its business, albeit with appropriate Corporate oversight. Each line of business risk committee is responsible for decisions regarding the business' risk strategy, policies and controls.

Overlaying line of business risk management are four corporate functions with risk management-related responsibilities: Risk Management, the Chief Investment Office, Corporate Treasury, and Legal and Compliance.

Risk Management operates independently to provide oversight of firmwide risk management and controls, and is viewed as a partner in achieving appropriate business objectives. Risk Management coordinates and communicates with each line of business through the line of business risk committees and chief risk officers to manage risk. The Risk Management function is headed by the Firm's Chief Risk Officer, who is a member of the Firm's Operating Committee and who reports to the Chief Executive Officer and the Board of Directors, primarily through the Board's Risk Policy Committee. The Chief Risk Officer is also a member of the line of business risk committees. Within the Firm's Risk Management function are units responsible for credit risk, market risk, operational risk and private equity risk, as well as risk reporting, risk policy and risk technology and operations. Risk technology and operations is responsible for building the information technology infrastructure used to monitor and manage risk.

The Chief Investment Office and Corporate Treasury are responsible for measuring, monitoring, reporting and managing the Firm's liquidity, interest rate and foreign exchange risk, and other structural risks.

Legal and Compliance has oversight for legal and fiduciary risk.
In addition to the risk committees of the lines of business and the above-referenced risk management functions, the Firm also has an Investment Committee, an Asset-Liability Committee and three other risk-related committees - the Risk Working Group, the Global Counterparty Committee and the Markets Committee. All of these committees are accountable to the Operating Committee. The membership of these committees are composed of senior management of the Firm, including representatives of lines of business, Risk Management, Finance and other senior executives. The committees meet frequently to discuss a broad range of topics including, for example, current market conditions and other external events, risk exposures, and risk concentrations to ensure that the impact of risk factors are considered broadly across the Firm's businesses.

## Management's discussion and analysis



The Asset-Liability Committee, chaired by the Corporate Treasurer monitors the Firm's overall interest rate risk and liquidity risk. ALCO is responsible for reviewing and approving the Firm's liquidity policy and contingency funding plan. ALCO also reviews the Firm's funds transfer pricing policy (through which lines of business "transfer" interest rate and foreign exchange risk to Corporate Treasury in the Corporate/Private Equity segment), earnings at risk, overall interest rate position, funding requirements and strategy, and the Firm's securitization programs (and any required liquidity support by the Firm of such programs).

The Investment Committee, chaired by the Firm's Chief Financial Officer, oversees global merger and acquisition activities undertaken by JPMorgan Chase for its own account that fall outside the scope of the Firm's private equity and other principal finance activities.

The Risk Working Group, chaired by the Firm's Chief Risk Officer, meets monthly to review issues that cross lines of business such as risk policy, risk methodology, risk concentrations, regulatory capital and other regulatory issues, and such other topics referred to it by line of business risk committees.

The Markets Committee, chaired by the Firm's Chief Risk Officer, meets weekly to review, monitor and discuss significant risk matters, which may include credit, market and operational risk issues; market moving events; large transactions; hedging strategies; reputation risk; conflicts of interest; and other issues.

The Global Counterparty Committee, chaired by the Firm's Chief Risk Officer, reviews exposures to counterparties when such exposure levels are above portfolio-established thresholds. The Committee meets quarterly to review total exposures with these counterparties, with particular focus on counterparty trading exposures to ensure that such exposures are deemed appropriate to support the Firm's trading activities, and to direct changes in exposure levels as needed.
The Board of Directors exercises its oversight of risk management, principally through the Board's Risk Policy Committee and Audit Committee. The Risk Policy Committee oversees senior management risk-related responsibilities, including reviewing management policies and performance against these policies and related benchmarks. The Audit Committee is responsible for oversight of guidelines and policies that govern the process by which risk assessment and management is undertaken. In addition, the Audit Committee reviews with management the system of internal controls that is relied upon to provide reasonable assurance of compliance with the Firm's operational risk management processes.

## Risk monitoring and control

The Firm's ability to properly identify, measure, monitor and report risk is critical to both its soundness and profitability.

- Risk identification: The Firm's exposure to risk through its daily business dealings, including lending and capital markets activities, is identified and aggregated through the Firm's risk management infrastructure. In addition, individuals who manage risk positions, particularly those that are complex, are responsible for identifying and estimating potential losses that could arise from specific or unusual events that may not be captured in other models, and for communicating those risks to senior management.
- Risk measurement: The Firm measures risk using a variety of methodologies, including calculating probable loss, unexpected loss and value-at-risk, and by conducting stress tests and making comparisons to external benchmarks. Measurement models and related assumptions are routinely subject to internal model review,
empirical validation and benchmarking with the goal of ensuring that the Firm's risk estimates are reasonable and reflective of the risk of the underlying positions.
- Risk monitoring/control: The Firm's risk management policies and procedures incorporate risk mitigation strategies and include approval limits by customer, product, industry, country and business. These limits are monitored on a daily, weekly and monthly basis, as appropriate.
- Risk reporting: The Firm reports risk exposures on both a line of business and a consolidated basis. This information is reported to management on a daily, weekly and monthly basis, as appropriate. There are eight major risk types identified in the business activities of the Firm: liquidity risk, credit risk, market risk, interest rate risk, private equity risk, operational risk, legal and fiduciary risk, and reputation risk.


## Management's discussion and analysis

## LIQUIDITY RISK MANAGEMENT

The ability to maintain surplus levels of liquidity through economic cycles is crucial to financial services companies, particularly during periods of adverse conditions. The Firm's funding strategy is intended to ensure liquidity and diversity of funding sources to meet actual and contingent liabilities through both normal and stress periods.
JPMorgan Chase's primary sources of liquidity include a diversified deposit base, which was $\$ 930.4$ billion at December 31, 2010, and access to the equity capital markets and long-term unsecured and secured funding sources, including asset securitizations and borrowings from FHLBs. Additionally, JPMorgan Chase maintains large pools of highly-liquid unencumbered assets. The Firm actively monitors the availability of funding in the wholesale markets across various geographic regions and in various currencies. The Firm's ability to generate funding from a broad range of sources in a variety of geographic locations and in a range of tenors is intended to enhance financial flexibility and limit funding concentration risk.

Management considers the Firm's liquidity position to be strong, based on its liquidity metrics as of December 31, 2010, and believes that the Firm's unsecured and secured funding capacity is sufficient to meet its on- and off-balance sheet obligations. The Firm was able to access the funding markets as needed during 2010 and throughout the recent financial crisis.

## Governance

The Firm's governance process is designed to ensure that its liquidity position remains strong. The Asset-Liability Committee reviews and approves the Firm's liquidity policy and contingency funding plan. Corporate Treasury formulates and is responsible for executing the Firm's liquidity policy and contingency funding plan as well as measuring, monitoring, reporting and managing the Firm's liquidity risk profile. JPMorgan Chase centralizes the management of global funding and liquidity risk within Corporate Treasury to maximize liquidity access, minimize funding costs and enhance global identification and coordination of liquidity risk. This centralized approach involves frequent communication with the business segments, disciplined management of liquidity at the parent holding company, comprehensive market-based pricing of all assets and liabilities, continuous balance sheet monitoring, frequent stress testing of liquidity sources, and frequent reporting to and communication with senior management and the Board of Directors regarding the Firm's liquidity position.

## Liquidity monitoring

The Firm employs a variety of metrics to monitor and manage liquidity. One set of analyses used by the Firm relates to the timing of liquidity sources versus liquidity uses (e.g., funding gap analysis and parent holding company funding, which is discussed below). A second set of analyses focuses on ratios of funding and liquid collateral (e.g., measurements of the Firm's reliance on short-term unsecured funding as a percentage of total liabilities, as well as analyses of the relationship of short-term unsecured funding to highly-liquid assets, the deposits-to-loans ratio and other balance sheet measures).
The Firm performs regular liquidity stress tests as part of its liquidity monitoring. The purpose of the liquidity stress tests is intended to ensure sufficient liquidity for the Firm under both idiosyncratic and systemic market stress conditions. These scenarios evaluate the Firm's liquidity position across a full year horizon by analyzing the net funding gaps resulting from contractual and contingent cash and collateral outflows versus by the Firm's ability to generate additional liquidity by pledging or selling excess collateral and issuing unsecured debt. The scenarios are produced for the parent holding company and major bank subsidiaries as well as the Firm's major U.S. broker-dealer subsidiaries.

The idiosyncratic stress scenario employed by the Firm is a JPMorgan Chase-specific event that evaluates the Firm's net funding gap after a short-term ratings downgrade from the current level of A-1+/P-1 to A-2/P-2. The systemic market stress scenario evaluates the Firm's net funding gap during a period of severe market stress similar to market conditions in 2008 and assumes the Firm is not uniquely stressed versus its peers. The Firm's liquidity position is strong under the Firm-defined stress scenarios outlined above.

## Parent holding company

Liquidity monitoring on the parent holding company takes into consideration regulatory restrictions that limit the extent to which bank subsidiaries may extend credit to the parent holding company and other nonbank subsidiaries. Excess cash generated by parent holding company issuance activity is placed with both bank and nonbank subsidiaries in the form of deposits and advances to satisfy a portion of subsidiary funding requirements. The remainder of the excess cash is used to purchase liquid collateral through reverse repurchase agreements. As discussed below, the Firm's liquidity management activities are also intended to ensure that its subsidiaries have the ability to generate replacement funding in the event the parent holding company requires repayment of the aforementioned deposits and advances.

The Firm closely monitors the ability of the parent holding company to meet all of its obligations with liquid sources of cash or cash equivalents for an extended period of time without access to the unsecured funding markets. The Firm targets pre-funding of parent holding company obligations for at least 12 months; however, due to conservative liquidity management actions taken by the Firm in the current environment, the current pre-funding of such obligations is significantly greater than target.

## Global Liquidity Reserve

In addition to the parent holding company, the Firm maintains a significant amount of liquidity - primarily at its bank subsidiaries, but also at its nonbank subsidiaries. The Global Liquidity Reserve represents consolidated sources of available liquidity to the Firm, including cash on deposit at central banks, and cash proceeds reasonably expected to be received in secured financings of highly liquid, unencumbered securities - such as government-issued debt, government- and FDIC-guaranteed corporate debt, U.S. government agency debt and agency mortgage-backed securities ("MBS"). The liquidity amount anticipated to be realized from secured financings is based on management's current judgment and assessment of the Firm's ability to quickly raise secured financings. The Global Liquidity Reserve also includes the Firm's borrowing capacity at various FHLBs, the Federal Reserve Bank discount window and various other central banks from collateral pledged by the Firm to such banks. Although considered as a source of available liquidity, the Firm does not view borrowing capacity at the Federal Reserve Bank discount window and various other central banks as a primary source of funding. As of December 31, 2010, the Global Liquidity Reserve was approximately $\$ 262$ billion.

In addition to the Global Liquidity Reserve, the Firm has significant amounts of other high-quality, marketable securities available to raise liquidity, such as corporate debt and equity securities.

## Basel III

On December 16, 2010, the Basel Committee published the final Basel III rules pertaining to capital and liquidity requirements, including minimum standards for short-term liquidity coverage - the liquidity coverage ratio (the "LCR") - and term funding - the net stable funding ratio (the "NSFR"). These minimum standards will be phased in over time. The observation period for both the LCR and the NSFR commences in 2011, with implementation in 2015 and 2018, respectively. For more information, see the discussion on Basel III on page 104 of this Annual Report.

## Funding

## Sources of funds

A key strength of the Firm is its diversified deposit franchise, through the RFS, CB, TSS and AM lines of business, which provides a stable source of funding and decreases reliance on the wholesale markets. As of December 31, 2010, total deposits for the Firm were $\$ 930.4$ billion, compared with $\$ 938.4$ billion at December 31, 2009. Average total deposits for the Firm were $\$ 881.1$ billion during 2010, compared with $\$ 882.0$ billion during 2009. The Firm typically experiences higher deposit balances at period ends driven by higher seasonal customer deposit inflows. A significant portion of the Firm's deposits are retail deposits ( $40 \%$ and $38 \%$ at December 31, 2010 and 2009, respectively), which are considered particularly stable as they are less sensitive to interest rate changes or market volatility. A significant portion of the Firm's wholesale deposits are also considered stable sources of funding due to the nature of the relationships from which they are generated, particularly customers' operating service relationships with the Firm. As of December 31, 2010, the Firm's deposits-to-loans ratio was 134\%, compared with $148 \%$ at December 31, 2009. The decline in the Firm's deposits-toloans ratio was predominately due to an increase in loans resulting from the January 1, 2010, implementation of new accounting guidance related to VIEs. The impact of the new accounting guidance on the deposits-to-loans ratio was partially offset by continued attrition of the heritage Washington Mutual residential loan and credit card loan portfolios. For further discussions of deposit and liability balance trends, see the discussion of the results for the Firm's business segments and the Balance Sheet Analysis on pages 69-88 and 92-94, respectively, of this Annual Report. For a more detailed discussion of the adoption of the new accounting guidance, see Note 1 on pages 164-165 of this Annual Report.

Additional sources of funding include a variety of unsecured and secured short-term and long-term instruments. Short-term unsecured funding sources include federal funds and Eurodollars purchased, certificates of deposit, time deposits, commercial paper and bank notes. Long-term unsecured funding sources include long-term debt, trust preferred capital debt securities, preferred stock and common stock.

## Management's discussion and analysis

The Firm's short-term secured sources of funding consist of securities loaned or sold under agreements to repurchase and borrowings from the Chicago, Pittsburgh and San Francisco FHLBs. Secured longterm funding sources include asset-backed securitizations, and borrowings from the Chicago, Pittsburgh and San Francisco FHLBs.

Funding markets are evaluated on an ongoing basis to achieve an appropriate global balance of unsecured and secured funding at favorable rates.

## Short-term funding

The Firm's reliance on short-term unsecured funding sources such as federal funds and Eurodollars purchased, certificates of deposit, time deposits, commercial paper and bank notes is limited.

Total commercial paper liabilities for the Firm were $\$ 35.4$ billion as of December 31, 2010, compared with $\$ 41.8$ billion as of December 31, 2009. However, of those totals, $\$ 29.2$ billion and $\$ 28.7$ billion as of December 31, 2010 and 2009, respectively, originated from deposits that customers chose to sweep into commercial paper liabilities as a cash management product offered by the Firm. Therefore, commercial paper liabilities sourced from wholesale funding markets were $\$ 6.2$ billion as of December 31, 2010, compared with $\$ 13.1$ billion as of December 31, 2009. There were no material differences between the average and year-end balances of commercial paper outstanding for the year ended and as of December 31, 2010.

Securities loaned or sold under agreements to repurchase are secured predominantly by high quality securities collateral, including government-issued debt, agency debt and agency MBS. The balances of securities loaned or sold under agreements to repurchase, which constitute a significant portion of the federal funds purchased and securities loaned or sold under repurchase agreements, was $\$ 273.3$ billion as of December 31, 2010, compared with $\$ 253.5$ billion as of December 31, 2009. There were no material differences between the average and year-end balances of securities loaned or sold under agreements to repurchase for the year ended and as of December 31, 2010. The balances associated with securities loaned or sold under agreements to repurchase fluctuate over time due to customers' investment and financing activities; the Firm's demand for financing; the Firm's matched book activity; the ongoing management of the mix of the Firm's liabilities, including its secured and unsecured financing (for both the investment and trading portfolios); and other market and portfolio factors. For additional information, see the Balance Sheet Analysis on pages 92-94, Note 13 on page 219 and Note 20 on page 264 of this Annual Report.

The short-term portion of total other borrowed funds for the Firm was $\$ 34.3$ billion as of December 31, 2010, compared with $\$ 32.9$ billion as of December 31, 2009. There were no material differences between the average and year-end balances of other borrowed funds for the year ended and as of December 31, 2010.

For additional information, see the table for Short-term and other borrowed funds on page 299 of this Annual Report.

## Long-term funding and issuance

During 2010, the Firm issued $\$ 36.1$ billion of long-term debt, including $\$ 17.1$ billion of senior notes issued in the U.S. market, $\$ 2.9$ billion of senior notes issued in the non-U.S. markets, $\$ 1.5$ billion of trust preferred capital debt securities, and $\$ 14.6$ billion of IB structured notes. In addition, in January 2011, the Firm issued $\$ 4.3$ billion of long-term debt, including $\$ 3.5$ billion of senior notes in the U.S. market and $\$ 800$ million of senior notes issued in non-U.S. markets. During 2009, the Firm issued $\$ 19.7$ billion of FDIC-guaranteed longterm debt under the Temporary Liquidity Guarantee Program. During 2009, the Firm also issued non-FDIC-guaranteed debt of $\$ 16.1$ billion (including $\$ 11.0$ billion of senior notes and $\$ 2.5$ billion of trust preferred capital debt securities issued in the U.S. market, and $\$ 2.6$ billion of senior notes issued in non-U.S. markets) and $\$ 15.5$ billion of IB structured notes. During 2010, $\$ 53.4$ billion of longterm debt matured or were redeemed, including $\$ 907$ million of trust preferred capital debt securities redeemed on December 28, 2010, through a tender offer, and $\$ 22.8$ billion of IB structured notes. During 2009, $\$ 55.7$ billion of long-term debt (including trust preferred capital debt securities) matured or were redeemed, including $\$ 27.2$ billion of IB structured notes.
In addition to the unsecured long-term funding and issuances discussed above, the Firm securitizes consumer credit card loans, residential mortgages, auto loans and student loans for funding purposes. Loans securitized by the Firm's wholesale businesses are related to client-driven transactions and are not considered to be a source of funding for the Firm. Effective January 1, 2010, certain Firm-sponsored credit card loan, student loan and auto loan securitization trusts were consolidated as a result of the accounting guidance related to VIEs. As a result of consolidating these securitization trusts, the maturities or redemptions of the beneficial interests issued by the securitization trusts are reported as a component of the Firm's cash flows from financing activities. During 2010, the Firm did not securitize any credit card loans, residential mortgage loans, auto loans or student loans through consolidated or nonconsolidated securitization trusts. During 2009, the Firm securitized $\$ 26.5$ billion of credit card loans via nonconsolidated securitization trusts. During 2010, $\$ 25.8$ billion of loan securitizations matured or were redeemed, including $\$ 24.9$ billion of credit card loan securitizations, $\$ 210$ million of auto loan securitizations, $\$ 294$ million of residential mortgage loan securitizations and $\$ 326$ million of student loan securitizations. For further discussion of loan securitizations, see Note 16 on pages 244-259 in this Annual Report.

During 2010, the Firm borrowed $\$ 18.7$ billion of new long-term advances from the FHLBs, which were offset by $\$ 18.6$ billion of maturities. During 2009, the Firm did not access the FHLBs for any new long-term advances and maturities were $\$ 9.5$ billion during the period.

## Termination of replacement capital covenants

In connection with the issuance of certain of its trust preferred capital debt securities and its noncumulative perpetual preferred stock, the Firm had entered into Replacement Capital Covenants ("RCCs"). These RCCs granted certain rights to the holders of "covered debt," as defined in the RCCs, that prohibited the repayment, redemption or purchase of such trust preferred capital debt securities and noncumulative perpetual preferred stock except, with limited exceptions, to the extent that JPMorgan Chase had received, in each such case, specified amounts of proceeds from the sale of certain qualifying securities. On December 10, 2010, the Firm received consents from the holders of a majority in liquidation amount of the covered debt to the termination of the RCCs, and the Firm terminated the RCCs pursuant to their terms.

## Cash flows

For the years ended December 31, 2010, 2009 and 2008, cash and due from banks increased $\$ 1.4$ billion, and decreased $\$ 689$ million and $\$ 13.2$ billion, respectively. The following discussion highlights the major activities and transactions that affected JPMorgan Chase's cash flows during 2010, 2009 and 2008.

## Cash flows from operating activities

JPMorgan Chase's operating assets and liabilities support the Firm's capital markets and lending activities, including the origination or purchase of loans initially designated as held-for-sale. Operating assets and liabilities can vary significantly in the normal course of business due to the amount and timing of cash flows, which are affected by client-driven activities, market conditions and trading strategies. Management believes cash flows from operations, available cash balances and the Firm's ability to generate cash through short- and long-term borrowings are sufficient to fund the Firm's operating liquidity needs.

For the year ended December 31, 2010, net cash used by operating activities was $\$ 3.8$ billion, mainly driven by an increase primarily in trading assets-debt and equity instruments; principally due to improved market activity primarily in equity securities, foreign debt and physical commodities, partially offset by an increase in trading liabilities due to higher levels of positions taken to facilitate customer driven trading. Net cash was provided by net income and from adjustments for non-cash items such as the provision for credit losses, depreciation and amortization and stock-based compensation. Additionally, proceeds from sales and paydowns of loans originated or purchased with an initial intent to sell were higher than cash used to acquire such loans.

For the years ended December 31, 2009 and 2008, net cash provided by operating activities was $\$ 122.8$ billion and $\$ 23.9$ billion, respectively. In 2009, the net decline in trading assets and liabilities was affected by the impact of the challenging capital markets environment that existed in 2008, and continued into the first half of 2009. In 2009 and 2008, net cash generated from operating activities was higher than net income, largely as a result of adjustments for non-cash items such as the provision for credit losses. In addition, for 2009 and 2008 proceeds from sales, securitizations and paydowns of loans originated or purchased with an initial intent to sell were higher than cash used to acquire such loans, but the cash flows from these loan activities remained at reduced levels as a result of the lower activity in these markets.

## Cash flows from investing activities

The Firm's investing activities predominantly include loans originated to be held for investment, the AFS securities portfolio and other shortterm interest-earning assets. For the year ended December 31, 2010, net cash of $\$ 54.0$ billion was provided by investing activities. This resulted from a decrease in deposits with banks largely due to a decline in deposits placed with the Federal Reserve Bank and lower interbank lending as market stress eased since the end of 2009; net sales and maturities of AFS securities used in the Firm's interest rate risk management activities largely due to repositioning of the portfolio in Corporate, in response to changes in the interest rate environment and to rebalance exposures; and a net decrease in the loan portfolio, driven by the expected runoff of the Washington Mutual credit card portfolio, a decline in lower-yielding promotional credit card balances, continued runoff of the residential real estate portfolios, and repayments and loan sales in IB and CB; the decrease was partially offset by higher originations across the wholesale and consumer businesses. Partially offsetting these cash proceeds was an increase in securities purchased under resale agreements, predominantly due to higher financing volume in IB; and cash used for business acquisitions, primarily RBS Sempra.
For the year ended December 31, 2009, net cash of $\$ 29.4$ billion was provided by investing activities, primarily from a decrease in deposits with banks reflecting lower demand for inter-bank lending and lower deposits with the Federal Reserve Bank relative to the elevated levels at the end of 2008; a net decrease in the loan portfolio across most businesses, driven by continued lower customer demand and loan sales in the wholesale businesses, lower charge volume on credit cards, slightly higher credit card securitizations, and paydowns; and the maturity of all asset-backed commercial paper issued by money market mutual funds in connection with the AML facility of the Federal Reserve Bank of Boston. Largely offsetting these cash proceeds were net purchases of AFS securities associated with the Firm's management of interest rate risk and investment of cash resulting from an excess funding position.

## Management's discussion and analysis

For the year ended December 31, 2008, net cash of $\$ 283.7$ billion was used in investing activities, primarily for: increased deposits with banks as the result of the availability of excess cash for short-term investment opportunities through interbank lending, and reserve balances held by the Federal Reserve (which became an investing activity in 2008, reflecting a policy change of the Federal Reserve to pay interest to depository institutions on reserve balances); net purchases of investment securities in the AFS portfolio to manage the Firm's exposure to interest rate movements; net additions to the wholesale loan portfolio from organic growth in CB; additions to the consumer prime mortgage portfolio as a result of the decision to retain, rather than sell, new originations of nonconforming prime mortgage loans; an increase in securities purchased under resale agreements reflecting growth in demand from clients for liquidity; and net purchases of asset-backed commercial paper from money market mutual funds in connection with the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility ("AML facility") of the Federal Reserve Bank of Boston. Partially offsetting these uses of cash were proceeds from loan sales and securitization activities as well as net cash received from acquisitions and the sale of an investment. Additionally, in June 2008, in connection with the Bear Stearns merger, the Firm sold assets acquired from Bear Stearns to the FRBNY and received cash proceeds of $\$ 28.85$ billion.

## Cash flows from financing activities

The Firm's financing activities primarily reflect cash flows related to raising customer deposits, and issuing long-term debt (including trust preferred capital debt securities) as well as preferred and common stock. In 2010, net cash used in financing activities was $\$ 49.2$ billion. This resulted from net payments of long-term borrowings and trust preferred capital debt securities as new issuances were more than offset by payments primarily reflecting a decline in beneficial interests issued by consolidated VIEs due to maturities related to Firmsponsored credit card securitization trusts; a decline in deposits associated with wholesale funding activities due to the Firm's lower funding needs; lower deposit levels in TSS, offset partially by net inflows from existing customers and new business in AM, CB and RFS; a decline in commercial paper and other borrowed funds due to lower funding requirements; payments of cash dividends; and repurchases of common stock. Cash was generated as a result of an increase in securities sold under repurchase agreements largely as a result of an increase in activity levels in IB partially offset by a decrease in CIO reflecting repositioning activities.

In 2009, net cash used in financing activities was $\$ 153.1$ billion; this reflected a decline in wholesale deposits, predominantly in TSS, driven by the continued normalization of wholesale deposit levels resulting from the mitigation of credit concerns, compared with the heightened market volatility and credit concerns in the latter part of 2008; a decline in other borrowings, due to the absence of borrowings from the Federal Reserve under the Term Auction Facility program; net repayments of short-term advances from FHLBs and the maturity of the nonrecourse advances under the Federal Reserve Bank of Boston AML Facility; the June 17, 2009, repayment in full of the $\$ 25.0$ billion principal amount of Series K Preferred Stock issued to the U.S. Treasury; and the payment of cash dividends on common and preferred stock. Cash was also used for the net payment of longterm borrowings and trust preferred capital debt securities, as issuances of FDIC-guaranteed debt and non-FDIC guaranteed debt in both the U.S. and European markets were more than offset by repayments including long-term advances from FHLBs. Cash proceeds resulted from an increase in securities loaned or sold under repurchase agreements, partly attributable to favorable pricing and to financing the increased size of the Firm's AFS securities portfolio; and the issuance of $\$ 5.8$ billion of common stock. There were no repurchases in the open market of common stock or the warrants during 2009.
In 2008, net cash provided by financing activities was $\$ 247.0$ billion due to growth in wholesale deposits, in particular, interest- and noninterest-bearing deposits in TSS (driven by both new and existing clients, and due to the deposit inflows related to the heightened volatility and credit concerns affecting the global markets that began in the third quarter of 2008), as well as increases in AM and CB (due to organic growth); proceeds of $\$ 25.0$ billion from the issuance of preferred stock and the Warrant to the U.S. Treasury under the Capital Purchase Program; additional issuances of common stock and preferred stock used for general corporate purposes; an increase in other borrowings due to nonrecourse secured advances under the Federal Reserve Bank of Boston AML Facility to fund the purchase of asset-backed commercial paper from money market mutual funds; increases in federal funds purchased and securities loaned or sold under repurchase agreements in connection with higher client demand for liquidity and to finance growth in the Firm's AFS securities portfolio; and a net increase in long-term borrowings due to a combination of non-FDIC guaranteed debt and trust preferred capital debt securities issued prior to December 4, 2008, and the issuance of $\$ 20.8$ billion of FDIC-guaranteed long-term debt issued during the fourth quarter of 2008. The fourth-quarter FDICguaranteed debt issuance was offset partially by maturities of nonFDIC guaranteed long-term debt during the same period. The increase in long-term borrowings and trust preferred capital debt securities was used primarily to fund certain illiquid assets held by the parent holding company and to build liquidity. Cash was also used to pay dividends on common and preferred stock. The Firm did not repurchase any shares of its common stock during 2008.

## Credit ratings

The cost and availability of financing are influenced by credit ratings. Reductions in these ratings could have an adverse effect on the Firm's access to liquidity sources, increase the cost of funds, trigger additional collateral or funding requirements and decrease the number of investors and counterparties willing to lend to the Firm. Additionally, the Firm's funding requirements for VIEs and other thirdparty commitments may be adversely affected by a decline in credit ratings. For additional information on the impact of a credit ratings downgrade
on the funding requirements for VIEs, and on derivatives and collateral agreements, see Special-purpose entities on page 95 and Ratings profile of derivative receivables MTM on page 124, and Note 6 on pages 191-199, respectively, of this Annual Report.

Critical factors in maintaining high credit ratings include a stable and diverse earnings stream, strong capital ratios, strong credit quality and risk management controls, diverse funding sources, and disciplined liquidity monitoring procedures.

The credit ratings of the parent holding company and each of the Firm's significant banking subsidiaries as of December 31, 2010, were as follows.

|  | Short-term debt |  |  | Senior long-term debt |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Moody's | S\&P | Fitch | Moody's | S\&P | Fitch |
| JPMorgan Chase \& Co. | P-1 | A-1 | F1+ | Aa3 | A+ | AA- |
| JPMorgan Chase Bank, N.A. | P-1 | A-1+ | F1+ | Aa1 | AA- | AA- |
| Chase Bank USA, N.A. | P-1 | A-1+ | F1+ | Aa1 | AA- | AA- |

The senior unsecured ratings from Moody's, S\&P and Fitch on JPMorgan Chase and its principal bank subsidiaries remained unchanged at December 31, 2010, from December 31, 2009. At December 31, 2010, Moody's and S\&P's outlook remained negative, while Fitch's outlook remained stable.

Following the Firm's earnings release on January 14, 2011, S\&P and Moody's announced that their ratings on the Firm remained unchanged.
If the Firm's senior long-term debt ratings were downgraded by one notch, the Firm believes the incremental cost of funds or loss of funding would be manageable, within the context of current market conditions and the Firm's liquidity resources. JPMorgan Chase's
unsecured debt does not contain requirements that would call for an acceleration of payments, maturities or changes in the structure of the existing debt, provide any limitations on future borrowings or require additional collateral, based on unfavorable changes in the Firm's credit ratings, financial ratios, earnings, or stock price.

Several rating agencies have announced that they will be evaluating the effects of the financial regulatory reform legislation in order to determine the extent, if any, to which financial institutions, including the Firm, may be negatively impacted. There is no assurance the Firm's credit ratings will not be downgraded in the future as a result of any such reviews.

## Management's discussion and analysis

## CREDIT RISK MANAGEMENT

Credit risk is the risk of loss from obligor or counterparty default. The Firm provides credit (for example, through loans, lending-related commitments, guarantees and derivatives) to a variety of customers, from large corporate and institutional clients to the individual consumer. Loans originated or acquired by the Firm's wholesale businesses are generally retained on the balance sheet. Credit risk management actively monitors the wholesale portfolio to ensure that it is well diversified across industry, geography, risk rating, maturity and individual client categories. Portfolio management for wholesale loans includes, for the Firm's syndicated loan business, distributing originations into the market place, targeting exposure held in the retained wholesale portfolio at less than $10 \%$ of the customer facility. With regard to the consumer credit market, the Firm focuses on creating a portfolio that is diversified from a product, industry and geographic perspective. Loss mitigation strategies are being employed for all home lending portfolios. These strategies include rate reductions, forbearance and other actions intended to minimize economic loss and avoid foreclosure. In the mortgage business, originated loans are either retained in the mortgage portfolio or securitized and sold to U.S. government agencies and U.S. government-sponsored enterprises.

## Credit risk organization

Credit risk management is overseen by the Chief Risk Officer and implemented within the lines of business. The Firm's credit risk management governance consists of the following functions:

- Establishing a comprehensive credit risk policy framework
- Monitoring and managing credit risk across all portfolio segments, including transaction and line approval
- Assigning and managing credit authorities in connection with the approval of all credit exposure
- Managing criticized exposures and delinquent loans
- Determining the allowance for credit losses and ensuring appropriate credit risk-based capital management


## Risk identification

The Firm is exposed to credit risk through lending and capital markets activities. Credit Risk Management works in partnership with the business segments in identifying and aggregating exposures across all lines of business.

## Risk measurement

To measure credit risk, the Firm employs several methodologies for estimating the likelihood of obligor or counterparty default. Methodologies for measuring credit risk vary depending on several factors, including type of asset (e.g., consumer versus wholesale), risk measurement parameters (e.g., delinquency status and borrower's credit score versus wholesale risk-rating) and risk management and collection processes (e.g., retail collection center versus centrally managed workout groups). Credit risk measurement is based on the amount of exposure should the obligor or the counterparty default, the probability of default and the loss severity given a default event. Based on these factors and related marketbased inputs, the Firm estimates both probable and unexpected losses for the wholesale and consumer portfolios as follows:

- Probable losses are based primarily upon statistical estimates of credit losses as a result of obligor or counterparty default. However, probable losses are not the sole indicators of risk.
- Unexpected losses, reflected in the allocation of credit risk capital, represent the potential volatility of actual losses relative to the probable level of losses.

Risk measurement for the wholesale portfolio is assessed primarily on a risk-rated basis; for the consumer portfolio, it is assessed primarily on a credit-scored basis.

## Risk-rated exposure

Risk ratings are assigned to differentiate risk within the portfolio and are reviewed on an ongoing basis by Credit Risk Management and revised, if needed, to reflect the borrowers' current financial positions, risk profiles and the related collateral. For portfolios that are riskrated, probable and unexpected loss calculations are based on estimates of probability of default and loss severity given a default. These risk-rated portfolios are generally held in IB, CB, TSS and AM; they also include approximately $\$ 18$ billion of certain business banking and auto loans in RFS and Card that are risk-rated because they have characteristics similar to commercial loans. Probability of default is the likelihood that a loan will not be repaid and will default. Probability of default is calculated for each client who has a risk-rated loan (wholesale and certain risk-rated consumer loans). Loss given default is an estimate of losses given a default event and takes into consideration collateral and structural support for each credit facility. Calculations and assumptions are based on management information systems and methodologies which are under continual review.

## Credit-scored exposure

For credit-scored portfolios (generally held in RFS and Card), probable loss is based on a statistical analysis of inherent losses expected to emerge over discrete periods of time for each portfolio. The credit-scored portfolio includes mortgage, home equity, certain business banking and auto loans, student loans, as well as credit card loans. Probable losses inherent in the portfolio are estimated using sophisticated portfolio modeling, credit scoring and decisionsupport tools, which take into account factors such as delinquency, geography, LTV ratios and credit scores. These analyses are applied to the Firm's current portfolios in order to estimate the severity of losses, which determines the amount of probable losses. Other risk characteristics utilized to evaluate probable losses include recent loss experience in the portfolios, changes in origination sources, portfolio seasoning, potential borrower behavior and the macroeconomic environment. These factors and analyses are updated at least on a quarterly basis or more frequently as market conditions dictate.

## Risk monitoring and control

The Firm has developed policies and practices that are designed to preserve the independence and integrity of the approval and decision-making process of extending credit and to ensure credit risks are assessed accurately, approved properly, monitored regularly and managed actively at both the transaction and portfolio levels. The policy framework establishes credit approval authorities, concentration limits, risk-rating methodologies, portfolio review parameters and guidelines for management of distressed exposure.

For consumer credit risk, delinquency and other trends, including any concentrations at the portfolio level, are monitored for potential problems, as certain of these trends can be ameliorated through changes in underwriting policies and portfolio guidelines. Consumer Credit Risk Management evaluates delinquency and other trends against business expectations, current and forecasted economic conditions, and industry benchmarks. All of these historical and forecasted trends are incorporated into the modeling of estimated consumer credit losses and are part of the monitoring of the credit risk profile of the portfolio.

Wholesale credit risk is monitored regularly at an aggregate portfolio, industry and individual counterparty basis with established concentration limits that are reviewed and revised, as deemed appropriate by management, on an annual basis. Industry and counterparty limits, as measured in terms of exposure and economic credit risk capital, are subject to stress-based loss constraints for the aggregate portfolio.

Management of the Firm's wholesale exposure is accomplished through a number of means including:

- Loan syndication and participations
- Loan sales and securitizations
- Credit derivatives
- Use of master netting agreements
- Collateral and other risk-reduction techniques

In addition to Risk Management, the Firm's Audit department provides periodic reviews, as well as continuous monitoring, where appropriate, of the Firm's consumer and wholesale portfolios.
In the Firm's wholesale and certain risk-rated consumer credit portfolios, a credit review group within the Audit department is responsible for:

- Independently assessing and validating the changing risk grades assigned to exposures; and
- Evaluating the effectiveness of business units' risk rating, including the accuracy and consistency of risk grades, the timeliness of risk grade changes and the justification of risk grades in credit memoranda
In the Firm's consumer credit portfolio, the Audit department periodically tests the internal controls around the modeling process including the integrity of the data utilized. In addition, the risk inherent in the Firm's consumer based loans is evaluated using models whose construction, assumptions and on-going performance relative to expectations are reviewed by an independent risk management group that is separate from the lines of business. For further discussion on consumer loans, see Note 14 on pages 220-238 of this Annual Report.


## Risk reporting

To enable monitoring of credit risk and decision-making, aggregate credit exposure, credit quality forecasts, concentration levels and risk profile changes are reported regularly to senior Credit Risk Management. Detailed portfolio reporting of industry, customer, product and geographic concentrations occurs monthly, and the appropriateness of the allowance for credit losses is reviewed by senior management at least on a quarterly basis. Through the risk reporting and governance structure, credit risk trends and limit exceptions are provided regularly to, and discussed with, senior management. For further discussion of risk monitoring and control, see page 109 of this Annual Report.

## Management's discussion and analysis

## 2010 Credit risk overview

During 2010, the credit environment improved compared with 2009, resulting in decreased downgrade, default and charge-off activity and improved delinquency trends. Despite challenging macroeconomic conditions, particularly in the first half of 2010, the Firm continued to actively manage its underperforming and nonaccrual loans and reduce such exposures through repayments, loan sales and workouts. These efforts resulted in an improvement in the credit quality of the portfolio compared with 2009 and contributed to the Firm's reduction in the allowance for credit losses, particularly in Card and IB. During the year and particularly in the second half of 2010, customer demand for credit improved, loan origination activity and market liquidity improved and credit spreads tightened from 2009.

In the wholesale portfolio, criticized assets, nonperforming assets and charge-offs decreased from peak loss levels experienced in 2009, reflecting general improvement in the portfolio, partially offset by continued weakness in commercial real estate ("CRE"). Toward the end of 2010, CRE exposure showed some positive signs of stabilization as property values improved somewhat from the declines witnessed over the prior two years. The wholesale portfolio continues to be actively managed, in part by conducting ongoing, in-depth reviews of credit quality and of industry, product and client concentrations. Underwriting guidelines across all areas of lending have remained in focus, consistent with evolving market conditions and the Firm's risk management activities. Reflecting the improvement
in credit quality of the wholesale portfolio throughout the year, the wholesale allowance for loan loss coverage ratio was $2.14 \%$, compared with $3.57 \%$ at the end of 2009 . For further discussion of the wholesale credit environment and wholesale loans, see Wholesale Credit Portfolio on pages 120-129 and Note 14 on pages 220-238 of this Annual Report.
The consumer portfolio credit performance improved from 2009 with lower delinquent loans, nonperforming assets and charge-offs. However, credit performance continued to be negatively affected by the economic environment. High unemployment and weak overall economic conditions continued to have a negative impact in the number of loans charged off, while continued weak housing prices have resulted in an elevated severity of loss recognized on defaulted real estate loans. The Firm has taken proactive action to assist homeowners most in need of financial assistance throughout the economic downturn. The Firm is participating in the U.S. Treasury's MHA programs and continuing its other loss-mitigation efforts for financially distressed borrowers who do not qualify for the U.S. Treasury's programs. In addition, over the past several years, the Firm has taken actions to reduce risk exposure to consumer loans by tightening both underwriting and loan qualification standards, as well as eliminating certain products and loan origination channels. For further discussion of the consumer credit environment and consumer loans, see Consumer Credit Portfolio on pages 129-138 and Note 14 on pages 220-238 of this Annual Report.

## CREDIT PORTFOLIO

The following table presents JPMorgan Chase's credit portfolio as of December 31, 2010 and 2009. Total credit exposure of $\$ 1.8$ trillion at December 31, 2010, decreased by $\$ 46.9$ billion from December 31, 2009, reflecting a decrease of $\$ 83.8$ billion in the consumer portfolio, partly offset by an increase of $\$ 36.9$ billion in the wholesale portfolio. During 2010, lending-related commitments decreased by $\$ 36.3$ billion, loans decreased by $\$ 25.2$ billion and receivables from customers increased by $\$ 16.8$ billion. The overall decrease in total loans was primarily related to
repayments, low customer demand and loan sales, partially offset by the adoption of the accounting guidance related to VIEs, predominantly in the wholesale portfolio.

While overall portfolio exposure declined, the Firm provided and raised nearly $\$ 1.4$ trillion in new and renewed credit and capital for consumers, corporations, small businesses, municipalities and not-for-profit organizations during 2010.

In the table below, reported loans include loans retained; loans held-for-sale (which are carried at the lower of cost or fair value, with changes in value recorded in noninterest revenue); and loans accounted for at fair value. For additional information on the Firm's loans and derivative receivables, including the Firm's accounting policies, see Notes 14 and 6 on pages 220-238 and 191-199, respectively, of this Annual Report. Average retained loan balances are used for the net charge-off rate calculations.

## Total credit portfolio

| As of or for the year ended December 31, (in millions, except ratios) | Credit exposure |  |  |  | Nonperforming(h)(i) |  |  |  | Net charge-offs |  |  |  | Average annual net charge-off ratio(j)(k) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2010 |  | 2009 |  | 2010 |  | 2009 |  | 2010 |  | 2009 | 2010 | 2009 |
| Total credit portfolio |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Loans retained(a) | \$ | 685,498 | \$ | 627,218 | \$ | 14,345 | \$ | 17,219 | \$ | 23,673 | \$ | 22,965 | 3.39\% | 3.42\% |
| Loans held-for-sale |  | 5,453 |  | 4,876 |  | 341 |  | 234 |  | - |  | - | - | - |
| Loans at fair value |  | 1,976 |  | 1,364 |  | 155 |  | 111 |  | - |  | - | - | - |
| Loans - reported(a) |  | 692,927 |  | 633,458 |  | 14,841 |  | 17,564 |  | 23,673 |  | 22,965 | 3.39 | 3.42 |
| Loans - securitized(a)(b) |  | NA |  | 84,626 |  | NA |  | - |  | NA |  | 6,443 | NA | 7.55 |
| Total loans(a) |  | 692,927 |  | 718,084 |  | 14,841 |  | 17,564 |  | 23,673 |  | 29,408 | 3.39 | 3.88 |
| Derivative receivables |  | 80,481 |  | 80,210 |  | 34 |  | 529 |  | NA |  | NA | NA | NA |
| Receivables from customers(c) |  | 32,541 |  | 15,745 |  | - |  | - |  | - |  | - | - | - |
| Interests in purchased receivables(a)(d) |  | 391 |  | 2,927 |  | - |  | - |  | - |  | - | - | - |
| Total credit-related assets(a) |  | 806,340 |  | 816,966 |  | 14,875 |  | 18,093 |  | 23,673 |  | 29,408 | 3.39 | 3.88 |
| Lending-related commitments(a)(e) |  | 954,840 |  | 991,095 |  | 1,005 |  | 1,577 |  | - |  | - | - | - |
| Assets acquired in loan satisfactions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Real estate owned |  | NA |  | NA |  | 1,610 |  | 1,548 |  | NA |  | NA | NA | NA |
| Other |  | NA |  | NA |  | 72 |  | 100 |  | NA |  | NA | NA | NA |
| Total assets acquired in loan satisfactions |  | NA |  | NA |  | 1,682 |  | 1,648 |  | NA |  | NA | NA | NA |
| Total credit portfolio |  | ,761,180 |  | ,808,061 | \$ | 17,562 | \$ | 21,318 | \$ | 23,673 | \$ | 29,408 | 3.39\% | 3.88\% |
| Net credit derivative hedges notional(f) | \$ | $(23,108)$ | \$ | $(48,376)$ | \$ | (55) | \$ | (139) |  | NA |  | NA | NA | NA |
| Liquid securities and other cash collateral held against derivatives(g) |  | $(16,486)$ |  | $(15,519)$ |  | NA |  | NA |  | NA |  | NA | NA | NA |

(a) Effective January 1, 2010, the Firm adopted accounting guidance related to VIEs. Upon the adoption of the guidance, the Firm consolidated its Firm-sponsored credit card securitization trusts, its Firm-administered multi-seller conduits and certain other consumer loan securitization entities, primarily mortgage-related. As a result, related assets are now primarily recorded in loans or other assets on the Consolidated Balance Sheet. As a result of the consolidation of the credit card securitization trusts, reported and managed basis are equivalent for periods beginning after January 1, 2010. For further discussion, see Note 16 on pages 244-259 of this Annual Report.
(b) Loans securitized are defined as loans that were sold to nonconsolidated securitization trusts and were not included in reported loans. For further discussion of credit card securitizations, see Note 16 on pages 244-259 of this Annual Report.
(c) Represents primarily margin loans to prime and retail brokerage customers, which are included in accrued interest and accounts receivable on the Consolidated Balance Sheets.
(d) Represents an ownership interest in cash flows of a pool of receivables transferred by a third-party seller into a bankruptcy-remote entity, generally a trust.
(e) The amounts in nonperforming represent unfunded commitments that are risk rated as nonaccrual.
(f) Represents the net notional amount of protection purchased and sold of single-name and portfolio credit derivatives used to manage both performing and non-performing credit exposures; these derivatives do not qualify for hedge accounting under U.S. GAAP. For additional information, see Credit derivatives on pages $126-128$ and Note 6 on pages 191-199 of this Annual Report.
(g) Represents other liquid securities collateral and other cash collateral held by the Firm.
(h) At December 31, 2010 and 2009, nonperforming assets excluded: (1) mortgage loans insured by U.S. government agencies of $\$ 10.5$ billion and $\$ 9.0$ billion, respectively, that are 90 days past due and accruing at the guaranteed reimbursement rate; (2) real estate owned insured by U.S. government agencies of $\$ 1.9$ billion and $\$ 579$ million, respectively; and (3) student loans that are 90 days past due and still accruing, which are insured by U.S. government agencies under the FFELP, of $\$ 625$ million and $\$ 542$ million, respectively. These amounts are excluded as reimbursement of insured amounts is proceeding normally. In addition, the Firm's policy is generally to exempt credit card loans from being placed on nonaccrual status as permitted by regulatory guidance issued by the Federal Financial Institutions Examination Council ("FFIEC"). Credit card loans are charged off by the end of the month in which the account becomes 180 days past due or within 60 days from receiving notification about a specified event (e.g., bankruptcy of the borrower), whichever is earlier.
(i) Excludes PCI loans acquired as part of the Washington Mutual transaction, which are accounted for on a pool basis. Since each pool is accounted for as a single asset with a single composite interest rate and an aggregate expectation of cash flows, the past due status of the pools, or that of individual loans within the pools, is not meaningful. Because the Firm is recognizing interest income on each pool of loans, they are all considered to be performing.
(j) For the year ended December 31, 2010, net charge-off ratios were calculated using average retained loans of $\$ 698.2$ billion; and for the year ended December 31, 2009, average retained loans of $\$ 672.3$ billion and average securitized loans of $\$ 85.4$ billion.
(k) For the years ended December 31, 2010 and 2009, firmwide net charge-off ratios were calculated including average PCI loans of $\$ 77.0$ billion and $\$ 85.4$ billion, respectively. Excluding the impact of PCl loans, the total Firm's managed net charge-off rate would have been $3.81 \%$ and $4.37 \%$ respectively.

## Management's discussion and analysis

## WHOLESALE CREDIT PORTFOLIO

As of December 31, 2010, wholesale exposure (IB, CB, TSS and AM) increased by $\$ 36.9$ billion from December 31, 2009. The overall increase was primarily driven by increases of $\$ 23.5$ billion in loans and $\$ 16.8$ billion of receivables from customers, partially offset by decreases in interests in purchase receivables and lending-related commitments of $\$ 2.5$ billion and $\$ 1.1$ billion, respectively. The decrease in lending-related commitments and the increase in loans were primarily related to the January 1, 2010, adoption of the accounting guidance related to VIEs, which resulted in the elimination of a net $\$ 17.7$ billion of lending-related commitments between the Firm and
its administrated multi-seller conduits upon consolidation. Assets of the consolidated conduits included $\$ 15.1$ billion of wholesale loans at January 1, 2010. Excluding the effect of the accounting guidance, lending-related commitments and loans would have increased by $\$ 16.6$ billion and $\$ 8.4$ billion, respectively, mainly related to increased client activity. The increase in loans also included the purchase of a $\$ 3.5$ billion loan portfolio in CB during the third quarter of 2010. The increase of $\$ 16.8$ billion in receivables from customers was due to increased client activity, predominantly in Prime Services.

## Wholesale

| December 31, (in millions) | Credit exposure |  |  |  | Nonperforming ${ }^{(f)}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 |  | 2009 |  | 2010 |  | 2009 |  |
| Loans retained | \$ | 222,510 | \$ | 200,077 | \$ | 5,510 | \$ | 6,559 |
| Loans held-for-sale |  | 3,147 |  | 2,734 |  | 341 |  | 234 |
| Loans at fair value |  | 1,976 |  | 1,364 |  | 155 |  | 111 |
| Loans - reported |  | 227,633 |  | 204,175 |  | 6,006 |  | 6,904 |
| Derivative receivables |  | 80,481 |  | 80,210 |  | 34 |  | 529 |
| Receivables from customers(a) |  | 32,541 |  | 15,745 |  | - |  | - |
| Interests in purchased receivables(b) |  | 391 |  | 2,927 |  | - |  | - |
| Total wholesale credit-related assets |  | 341,046 |  | 303,057 |  | 6,040 |  | 7,433 |
| Lending-related commitments(c) |  | 346,079 |  | 347,155 |  | 1,005 |  | 1,577 |
| Total wholesale credit exposure | \$ | 687,125 | \$ | 650,212 | \$ | 7,045 | \$ | 9,010 |
| Net credit derivative hedges notional(d) | \$ | $(23,108)$ | \$ | $(48,376)$ | \$ | (55) | \$ | (139) |
| Liquid securities and other cash collateral held against derivatives(e) |  | $(16,486)$ |  | $(15,519)$ |  | NA |  | NA |

(a) Represents primarily margin loans to prime and retail brokerage customers, which are included in accrued interest and accounts receivable on the Consolidated Balance Sheets.
(b) Represents an ownership interest in cash flows of a pool of receivables transferred by a third-party seller into a bankruptcy-remote entity, generally a trust.
(c) The amounts in nonperforming represent unfunded commitments that are risk rated as nonaccrual.
(d) Represents the net notional amount of protection purchased and sold of single-name and portfolio credit derivatives used to manage both performing and nonperforming credit exposures; these derivatives do not qualify for hedge accounting under U.S. GAAP. For additional information, see Credit derivatives on pages 126-128, and Note 6 on pages 191-199 of this Annual Report.
(e) Represents other liquid securities collateral and other cash collateral held by the Firm.
(f) Excludes assets acquired in loan satisfactions.

The following table presents summaries of the maturity and ratings profiles of the wholesale portfolio as of December 31, 2010 and 2009. The ratings scale is based on the Firm's internal risk ratings, which generally correspond to the ratings as defined by S\&P and Moody's. Also included in this table is the notional value of net credit derivative hedges; the counterparties to these hedges are predominantly investment grade banks and finance companies.

## Wholesale credit exposure - maturity and ratings profile

|  | Maturity profile(e) |  |  |  | Ratings profile |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| December 31, 2010 (in millions, except ratios) | Due in 1 year or less | Due after 1 year through 5 years | Due after 5 years | Total | $\begin{aligned} & \hline \text { Investment-grade ("IG") } \\ & \text { AAA/Aaa to BBB-/Baa3 } \end{aligned}$ | $\frac{\text { Noninvestment-grade }}{\text { BB+/Ba1 \& below }}$ | Total | Total \% of IG |
| Loans | \$ 78,017 | \$ 85,987 | \$58,506 | \$222,510 | \$146,047 | \$ 76,463 | \$222,510 | 66\% |
| Derivative receivables(a) |  |  |  | 80,481 |  |  | 80,481 |  |
| Less: Liquid securities and other cash collateral held against derivatives |  |  |  | $(16,486)$ |  |  | $(16,486)$ |  |
| Total derivative receivables, net of all collateral <br> Lending-related commitments | $\begin{array}{r} 11,499 \\ 126,389 \end{array}$ | $\begin{array}{r} 24,415 \\ 209,299 \end{array}$ | $\begin{aligned} & 28,081 \\ & 10,391 \end{aligned}$ | $\begin{array}{r} 63,995 \\ 346,079 \end{array}$ | $\begin{array}{r} 47,557 \\ 276,298 \\ \hline \end{array}$ | $\begin{aligned} & 16,438 \\ & 69,781 \end{aligned}$ | $\begin{array}{r} 63,995 \\ 346,079 \end{array}$ | $\begin{aligned} & 74 \\ & 80 \end{aligned}$ |
| Subtotal | 215,905 | 319,701 | 96,978 | 632,584 | 469,902 | 162,682 | 632,584 | 74 |
| Loans held-for-sale and loans at fair value(b)(c) <br> Receivables from customers(c) |  |  |  | $\begin{array}{r} 5,123 \\ 32,541 \end{array}$ |  |  | $\begin{array}{r} 5,123 \\ 32,541 \end{array}$ |  |
| Interests in purchased receivables(c) |  |  |  | 391 |  |  | 391 |  |


| Total exposure - excluding liquid securities and other cash collateral held against derivatives |  |  |  | \$670,639 |  |  | \$670,639 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net credit derivative hedges notional(d) | \$ $(1,228)$ | \$ $(16,415)$ | \$ $(5,465)$ | \$ $(23,108)$ | \$ $(23,159)$ | \$ 51 | \$ $(23,108)$ | 100\% |
|  |  | Maturity p |  |  |  | Ratings profile |  |  |
| December 31, 2009 <br> (in millions, except ratios) | $\begin{gathered} \text { Due in } 1 \\ \text { year or less } \\ \hline \end{gathered}$ | Due after 1 year through 5 years | Due after 5 years | Total | Investment-grade ("IG") AAA/Aaa to BBB-/Baa3 | $\begin{gathered} \hline \text { Noninvestment-grade } \\ \hline \mathrm{BB}+/ \mathrm{Ba1} \text { \& below } \\ \hline \end{gathered}$ | Total | Total \% of IG |
| Loans | \$ 57,381 | \$ 79,636 | \$ 63,060 | \$200,077 | \$118,531 | \$ 81,546 | \$200,077 | 59\% |
| Derivative receivables(a) |  |  |  | 80,210 |  |  | 80,210 |  |
| Less: Liquid securities and other cash collateral held against derivatives |  |  |  | $(15,519)$ |  |  | $(15,519)$ |  |
| Total derivative receivables, net of all collateral | 7,535 | 27,123 | 30,033 | 64,691 | 47,305 | 17,386 | 64,691 | 73 |
| Lending-related commitments | 141,621 | 198,215 | 7,319 | 347,155 | 280,811 | 66,344 | 347,155 | 81 |
| Subtotal | 206,537 | 304,974 | 100,412 | 611,923 | 446,647 | 165,276 | 611,923 | 73 |
| Loans held-for-sale and loans at fair value(b)(c) |  |  |  | 4,098 |  |  | 4,098 |  |
| Receivables from customers(c) |  |  |  | 15,745 |  |  | 15,745 |  |
| Interests in purchased receivables(c) |  |  |  | 2,927 |  |  | 2,927 |  |


| Total exposure - excluding liquid securities and other cash collateral held against derivatives |  |  |  | \$634,693 |  |  |  | \$634,693 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net credit derivative hedges notional(d) | \$ $(23,568)$ | \$ $(20,322)$ | \$ $(4,486)$ | \$ $(48,376)$ | \$ $(48,110)$ | \$ | (266) | \$ $(48,376)$ | 99\% |

(a) Represents the fair value of derivative receivables as reported on the Consolidated Balance Sheets
(b) Loans held-for-sale and loans at fair value relate primarily to syndicated loans and loans transferred from the retained portfolio.
c) From a credit risk perspective maturity and ratings profiles are not meaningful
 accounting under U.S. GAAP
 exposure. For further discussion of average exposure, see Derivative receivables marked to market on pages 125-126 of this Annual Report.

Customer receivables representing primarily margin loans to prime and retail brokerage clients of $\$ 32.5$ billion and $\$ 15.7$ billion at December 31, 2010 and 2009, respectively, are included in the table. These margin loans are generally over-collateralized through a pledge of assets maintained in clients' brokerage accounts and are subject to daily minimum collateral requirements. In the event that the collateral value decreases, a maintenance margin call is made to the client to provide additional collateral into the account. If additional collateral is not provided by the client, the client's positions may be liquidated by the Firm to meet the minimum collateral requirements.

Wholesale credit exposure - selected industry exposures
The Firm focuses on the management and diversification of its industry exposures, with particular attention paid to industries with actual or potential credit concerns. Exposures deemed criticized generally represent a ratings profile similar to a rating of "CCC+"/"Caa1" and lower, as defined by S\&P and Moody's. The total criticized component of the portfolio, excluding loans held-for-sale and loans at fair value, decreased to $\$ 22.4$ billion at December 31, 2010, from $\$ 33.2$ billion at year-end 2009. The decrease was primarily related to net repayments and loan sales.

## Management's discussion and analysis

Below are summaries of the top 25 industry exposures as of December 31, 2010 and 2009. For additional information on industry concentrations, see Note 5 on pages 189-190 of this Annual Report.
Wholesale credit exposure - selected industry exposures

| As of or for the year ended December 31, 2010 (in millions) | $\begin{gathered} \text { Credit } \\ \text { exposure(c) } \end{gathered}$ |  | Investmentgrade |  | Noninvestment grade |  |  |  |  |  | 30 days or more past due and accruing loans |  | Year-to-date net charge-offs/ (recoveries) |  | Credit derivative hedges(d) | Liquid securities <br> and other <br> cash collateral <br> held against <br> derivative <br> receivables |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Noncriticized | Criticized performing |  | Criticized nonperforming |  |  |  |  |  |  |  |  |
| Top 25 industries(a) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Banks and finance companies | \$ | 65,867 |  |  | \$ | 54,839 | \$ | 10,428 | \$ | 467 | \$ | 133 | \$ | 26 | \$ | 69 | \$ $(3,456)$ | \$ | $(9,216)$ |
| Real estate |  | 64,351 |  | 34,440 |  | 20,569 |  | 6,404 |  | 2,938 |  | 399 |  | 862 | (76) |  | (57) |
| Healthcare |  | 41,093 |  | 33,752 |  | 7,019 |  | 291 |  | 31 |  | 85 |  | 4 | (768) |  | (161) |
| State and municipal governments |  | 35,808 |  | 34,641 |  | 912 |  | 231 |  | 24 |  | 34 |  | 3 | (186) |  | (233) |
| Asset managers |  | 29,364 |  | 25,533 |  | 3,401 |  | 427 |  | 3 |  | 7 |  | - | (186) |  | $(2,948)$ |
| Consumer products |  | 27,508 |  | 16,747 |  | 10,379 |  | 371 |  | 11 |  | 217 |  | 1 | (752) |  | (2) |
| Oil and gas |  | 26,459 |  | 18,465 |  | 7,850 |  | 143 |  | 1 |  | 24 |  | - | (87) |  | (50) |
| Utilities |  | 25,911 |  | 20,951 |  | 4,101 |  | 498 |  | 361 |  | 3 |  | 49 | (355) |  | (230) |
| Retail and consumer services |  | 20,882 |  | 12,021 |  | 8,316 |  | 338 |  | 207 |  | 8 |  | 23 | (623) |  | (3) |
| Technology |  | 14,348 |  | 9,355 |  | 4,534 |  | 399 |  | 60 |  | 47 |  | 50 | (158) |  |  |
| Machinery and equipment manufacturing |  | 13,311 |  | 7,690 |  | 5,372 |  | 244 |  | 5 |  | 8 |  | 2 | (74) |  | (2) |
| Building materials/construction |  | 12,808 |  | 6,557 |  | 5,065 |  | 1,129 |  | 57 |  | 9 |  | 6 | (308) |  | - |
| Chemicals/plastics |  | 12,312 |  | 8,375 |  | 3,656 |  | 274 |  | 7 |  | - |  | 2 | (70) |  | - |
| Metals/mining |  | 11,426 |  | 5,260 |  | 5,748 |  | 362 |  | 56 |  | 7 |  | 35 | (296) |  |  |
| Business services |  | 11,247 |  | 6,351 |  | 4,735 |  | 115 |  | 46 |  | 11 |  | 15 | (5) |  | - |
| Central government |  | 11,173 |  | 10,677 |  | 496 |  | - |  | - |  | - |  | - | $(6,897)$ |  | (42) |
| Media |  | 10,967 |  | 5,808 |  | 3,945 |  | 672 |  | 542 |  | 2 |  | 92 | (212) |  | (3) |
| Insurance |  | 10,918 |  | 7,908 |  | 2,690 |  | 320 |  | - |  | - |  | (1) | (805) |  | (567) |
| Telecom services |  | 10,709 |  | 7,582 |  | 2,295 |  | 821 |  | 11 |  | 3 |  | (8) | (820) |  | - |
| Holding companies |  | 10,504 |  | 8,375 |  | 2,091 |  | 38 |  | - |  | 33 |  | 5 |  |  | (362) |
| Transportation Securities firms and |  | 9,652 |  | 6,630 |  | 2,739 |  | 245 |  | 38 |  | - |  | (16) | (132) |  | - |
| Securities firms and exchanges |  | 9,415 |  | 7,678 |  | 1,700 |  | 37 |  | - |  | - |  | 5 | (38) |  | $(2,358)$ |
| Automotive |  | 9,011 |  | 3,915 |  | 4,822 |  | 269 |  | 5 |  | - |  | 52 | (758) |  | - |
| Agriculture/paper manufacturing |  | 7,368 |  | 4,510 |  | 2,614 |  | 242 |  | 2 |  | 8 |  | 7 | (44) |  | (2) |
| Aerospace |  | 5,732 |  | 4,903 |  | 732 |  | 97 |  | - |  | - |  | - | (321) |  | - |
| All other(b) |  | 140,926 |  | 122,594 |  | 14,924 |  | 2,402 |  | 1,006 |  | 921 |  | 470 | $(5,867)$ |  | (250) |
| Subtotal | \$ | 649,070 | \$ | 485,557 | \$ | 141,133 | \$ | 16,836 | \$ | 5,544 | \$ | 1,852 | \$ | 1,727 | \$ $(23,108)$ | \$ | $(16,486)$ |
| Loans held-for-sale and loans at fair value |  | 5,123 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Receivables from customers |  | 32,541 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Interest in purchased receivables |  | 391 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | \$ | 687,125 | \$ | 485,557 | \$ | 141,133 | \$ | 16,836 | \$ | 5,544 | \$ | 1,852 | \$ | 1,727 | \$ $(23,108)$ | \$ | $(16,486)$ |

Presented below is a discussion of several industries to which the Firm has significant exposure, as well as industries the Firm continues to monitor because of actual or potential credit concerns. For additional information, refer to the tables above and on the preceding page.

- Banks and finance companies: Exposure to this industry increased by $22 \%$ or $\$ 11.8$ billion, and criticized exposure decreased $71 \%$, compared with 2009. This portfolio experienced improvement in credit quality as a result of growth in investment-grade lending, as well as upgrades in risk ratings to financial counterparties.
- Real estate: Real estate loans decreased by $6 \%$ or $\$ 3.6$ billion from 2009, including a $19 \%$ decline in the criticized portion of the portfolio, mainly as a result of repayments and loans sales. While this sector continued to be challenged throughout 2010, the portfolio experienced stabilization toward the end of the year. The ratio of nonaccrual loans to total loans increased due to a downgrade of a loan to nonaccrual in the fourth quarter
of 2010. Excluding this downgrade, the ratio would have improved in line with the broader real estate portfolio. For further discussion on commercial real estate loans, see Note 14 on pages 220-238 of this Annual Report.
- State and municipal governments: Exposure to this segment increased by $\$ 1.1$ billion or $3 \%$ in 2010 to $\$ 35.8$ billion. Lendingrelated commitments comprise approximately $70 \%$ of exposure to this sector, mainly bond liquidity and standby letter of credit commitments. Credit quality of the portfolio remains high as $97 \%$ of the portfolio was rated investment grade, up from $93 \%$ in 2009. Criticized exposure was less than $1 \%$ of this industry's exposure. The Firm continues to actively monitor and manage this exposure in light of the challenging environment faced by state and municipal governments. For further discussion of commitments for bond liquidity and standby letters of credit, see Note 30 on pages 275-280 of this Annual Report.

(a) All industry rankings are based on exposure at December 31, 2010. The industry rankings presented in the 2009 table are based on the industry rankings of the corresponding exposures at December 31, 2010, not actual rankings of such exposures at December 31, 2009.
(b) For more information on exposures to SPEs included in all other, see Note 16 on pages 244-259 of this Annual Report.
(c) Credit exposure is net of risk participations and excludes the benefit of credit derivative hedges and collateral held against derivative receivables or loans.
(d) Represents the net notional amounts of protection purchased and sold of single-name and portfolio credit derivatives used to manage the credit exposures; these derivatives do not qualify for hedge accounting under U.S. GAAP.
- Media: Exposure to this industry decreased by $11 \%$ in 2010 to $\$ 11.0$ billion. Credit quality in this portfolio stabilized somewhat in 2010 as a result of repayments and loan sales. Criticized exposure also decreased by $28 \%$ from 2009 to $\$ 1.2$ billion, but remains elevated relative to total industry exposure due to continued pressure on the traditional media business model from expanding digital and online technology.
- All other: All other at December 31, 2010 (excluding loans held-forsale and loans at fair value), included $\$ 140.9$ billion of credit exposure to eight industry segments. Exposures related to: (1) Individuals, Private Education \& Civic Organizations were 47\% and (2) SPEs were $39 \%$ of this category. SPEs provide secured financing (generally backed by receivables, loans or bonds with a diverse group of obligors). For further discussion of SPEs, see Note 1 on pages 164-165 of this Annual Report. The remaining all other exposure is well-diversified across industries and none comprise more than $6 \%$ of total exposure.


## Management's discussion and analysis

The following table presents the geographic distribution of wholesale credit, nonperforming assets and past due loans as of December 31, 2010 and 2009. The geographic distribution of the wholesale portfolio is determined based predominantly on the domicile of the borrower.

| December 31, 2010 (in millions) | Credit exposure |  |  |  |  | Total credit exposure |  | Nonperforming |  |  |  |  |  | Total nonperforming(b) |  | Assets acquired in loan satisfactions |  | 30 days or more past due and accruing loans |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Loans |  | g-related itments | Derivative receivables |  |  |  | Loans(a) |  | Derivatives |  | Lending-related commitments |  |  |  |  |  |  |  |
| Europe/Middle East and Africa | \$ 27,934 | \$ | 58,418 | \$ | 35,196 | \$ | 121,548 | \$ | 153 | \$ | 1 | \$ | 23 | \$ | 177 | \$ | - | \$ | 127 |
| Asia and Pacific | 20,552 |  | 15,002 |  | 10,991 |  | 46,545 |  | 579 |  | 21 |  | - |  | 600 |  | - |  | 74 |
| Latin America and the Caribbean | 16,480 |  | 12,170 |  | 5,634 |  | 34,284 |  | 649 |  | - |  | 13 |  | 662 |  | 1 |  | 131 |
| Other | 1,185 |  | 6,149 |  | 2,039 |  | 9,373 |  | 6 |  | - |  | 5 |  | 11 |  | - |  | - |
| Total non-U.S. | 66,151 |  | 91,739 |  | 53,860 |  | 211,750 |  | 1,387 |  | 22 |  | 41 |  | 1,450 |  | 1 |  | 332 |
| Total U.S. | 156,359 |  | 254,340 |  | 26,621 |  | 437,320 |  | 4,123 |  | 12 |  | 964 |  | 5,099 |  | 320 |  | 1,520 |
| Loans held-for-sale and loans at fair value | 5,123 |  | - |  | - |  | 5,123 |  | 496 |  | NA |  | - |  | 496 |  | NA |  | - |
| Receivables from customers | - |  | - |  | - |  | 32,541 |  | NA |  | NA |  | NA |  | NA |  | NA |  | - |
| Interests in purchased receivables | - |  | - |  | - |  | 391 |  | NA |  | NA |  | NA |  | NA |  | NA |  | - |
| Total | \$ 227,633 | \$ | 346,079 | \$ | 80,481 | \$ | 687,125 | \$ | 6,006 | \$ | 34 | \$ | 1,005 | \$ | 7,045 | \$ | 321 | \$ | 1,852 |
|  | Credit exposure |  |  |  |  | Total credit exposure |  | Nonperforming |  |  |  |  |  | Total nonperforming(b) |  | Assets acquired in loan satisfactions |  | 30 days or more past due and accruing loans |  |
| December 31, 2009 (in millions) | Loans | Lending-related commitments |  | Derivative receivables |  |  |  | Loans(a) |  | Derivatives |  | Lending-related commitments |  |  |  |  |  |  |  |
| Europe/Middle East and Africa | \$ 26,688 | \$ | 56,106 | \$ | 37,411 | \$ | 120,205 | \$ | $\begin{aligned} & 269 \\ & 357 \end{aligned}$ | \$ |  | \$ | 22 | \$ | 291 | \$ | - | \$ | \$ 103 |
| Asia and Pacific | $11,612$ |  | 13,450 |  | 8,784 |  | $33,846$ |  |  |  | 2 |  | 1 |  | 360 |  | - |  | - |
| Latin America and the Caribbean | 13,350 |  | 10,249 |  | 6,948 |  | 30,547 |  | 272 |  | 3 |  | 6 |  | 281 |  | 52 |  | 134 |
| Other | 1,967 |  | 5,895 |  | 1,467 |  | 9,329 |  | 81 |  | - |  | - |  | 81 |  | - |  | 54 |
| Total non-U.S. | 53,617 |  | 85,700 |  | 54,610 |  | 193,927 |  | 979 |  | 5 |  | 29 |  | 1,013 |  | 52 |  | 291 |
| Total U.S. | 146,460 |  | 261,455 |  | 25,600 |  | 433,515 |  | 5,580 |  | 524 |  | 1,548 |  | 7,652 |  | 341 |  | 1,735 |
| Loans held-for-sale and loans at fair value | 4,098 |  | - |  | - | 4,098 |  | 345 |  | NA |  | - |  | 345 |  | NA |  | - |  |
| Receivables from customers | - |  | - |  | - |  | 15,745 | NA |  | NA |  | NA |  | NA |  | NA |  | - |  |
| Interests in purchased receivables | - |  | - |  | - |  | 2,927 | NA |  | NA |  | NA |  | NA |  | NA |  | - |  |
| Total | \$204,175 | \$ | 347,155 | \$ | 80,210 | \$ | 650,212 | \$ | 6,904 | \$ | 529 | \$ | 1,577 | \$ | 9,010 | \$ | 393 | \$ | 2,026 |

(a) The Firm held allowance for loan losses of $\$ 1.6$ billion and $\$ 2.0$ billion related to nonaccrual retained loans resulting in allowance coverage ratios of $29 \%$ and $31 \%$ at December 31, 2010 and 2009, respectively. Wholesale nonaccrual loans represent $2.64 \%$ and $3.38 \%$ of total wholesale loans at December 31, 2010 and 2009 , respectively. (b) Total nonperforming include nonaccrual loans, nonperforming derivatives and nonperforming lending-related commitments.

## Loans

In the normal course of business, the Firm provides loans to a variety of wholesale customers, from large corporate and institutional clients to high-net-worth individuals. For further discussion on loans, including information on credit quality indicators, see Note 14 on pages 220-238 of this Annual Report.

Retained wholesale loans were $\$ 222.5$ billion at December 31, 2010, compared with $\$ 200.1$ billion at December 31, 2009. The $\$ 22.4$ billion increase was primarily related to the January 1, 2010, adoption of accounting guidance related to VIEs. Excluding the effect of the adoption of the accounting guidance, loans increased by $\$ 7.4$ billion. Loans held-for-sale and loans at fair value relate primarily to syndicated loans and loans transferred from the retained portfolio.

The Firm actively manages wholesale credit exposure through sales of loans and lending-related commitments. During 2010 the Firm sold $\$ 7.7$ billion of loans and commitments, recognizing revenue gains of $\$ 98.9$ million. In 2009, the Firm sold $\$ 3.9$ billion of loans and commitments, recognizing net losses of $\$ 38$ million. These results included gains or losses on sales of nonaccrual loans, if any, as discussed below. These activities are not related to the Firm's securitization activities. For further discussion of securitization activity, see Liquidity Risk Management and Note 16 on pages 110115 and 244-259 respectively, of this Annual Report.

The following table presents the change in the nonaccrual loan portfolio for the years ended December 31, 2010 and 2009.

## Wholesale nonaccrual loan activity(a)

| Year ended December 31, (in millions) | $\mathbf{2 0 1 0}$ | 2009 |
| :--- | ---: | ---: |
| Beginning balance | $\mathbf{\$ 6 , 9 0 4}$ | $\$ 2,382$ |
| Additions | $\mathbf{9 , 2 4 9}$ | 13,591 |
| Reductions: |  |  |
| $\quad$ Paydowns and other | $\mathbf{5 , 5 4 0}$ | 4,964 |
| Gross charge-offs | $\mathbf{1 , 8 5 4}$ | 2,974 |
| Returned to performing | $\mathbf{3 6 4}$ | 341 |
| Sales | $\mathbf{2 , 3 8 9}$ | 790 |
| Total reductions | $\mathbf{1 0 , 1 4 7}$ | 9,069 |
| Net additions/(reductions) | $\mathbf{( 8 9 8})$ | 4,522 |
| Ending balance | $\mathbf{6 , 0 0 6}$ | $\$ 6,904$ |

(a) This table includes total wholesale loans - reported.

Nonaccrual wholesale loans decreased by $\$ 898$ million from December 31, 2009, reflecting primarily net repayments and loan sales.

The following table presents net charge-offs, which are defined as gross charge-offs less recoveries, for the years ended December 31, 2010 and 2009. The amounts in the table below do not include revenue gains from sales of nonaccrual loans.

## Wholesale net charge-offs

| Year ended December 31, <br> (in millions, except ratios) | $\mathbf{2 0 1 0}$ | 2009 |
| :--- | :---: | ---: |
| Loans - reported |  |  |
| Average loans retained | $\mathbf{\$ 2 1 3 , 6 0 9}$ | $\$ 223,047$ |
| Net charge-offs | $\mathbf{1 , 7 2 7}$ | 3,132 |
| Average annual net charge-off ratio | $\mathbf{0 . 8 1 \%}$ | $1.40 \%$ |

## Derivative contracts

In the normal course of business, the Firm uses derivative instruments predominantly for market-making activity. Derivatives enable customers and the Firm to manage exposures to fluctuations in interest rates, currencies and other markets. The Firm also uses derivative instruments to manage its credit exposure. For further discussion of derivative contracts, see Note 5 and Note 6 on pages 189-190 and 191-199, respectively, of this Annual Report.

The following tables summarize the net derivative receivables MTM for the periods presented.

## Derivative receivables MTM

| December 31, | Derivative receivables MTM |  |
| :--- | ---: | ---: |
| (in millions) | $\mathbf{2 0 1 0}$ | 2009 |
| Interest rate(a) | $\mathbf{\$ 2 , 5 5 5}$ | $\$ 33,733$ |
| Credit derivatives(a) | $\mathbf{7 , 7 2 5}$ | 11,859 |
| Foreign exchange | $\mathbf{2 5 , 8 5 8}$ | 21,984 |
| Equity | $\mathbf{4 , 2 0 4}$ | 6,635 |
| Commodity | $\mathbf{1 0 , 1 3 9}$ | 5,999 |
| Total, net of cash collateral | $\mathbf{8 0 , 4 8 1}$ | 80,210 |
| Liquid securities and other cash collateral held against | $\mathbf{( 1 6 , 4 8 6 )}$ | $(15,519)$ |
| derivative receivables | $\mathbf{\$ 6 3 , 9 9 5}$ | $\$ 64,691$ |
| Total, net of all collateral |  |  |

(a) In 2010, the reporting of cash collateral netting was enhanced to reflect a refined allocation by product. Prior periods have been revised to conform to the current presentation. The refinement resulted in an increase to interest rate derivative receivables, and an offsetting decrease to credit derivative receivables, of $\$ 7.0$ billion as of December 31, 2009.
Derivative receivables reported on the Consolidated Balance Sheets were $\$ 80.5$ billion and $\$ 80.2$ billion at December 31, 2010 and 2009, respectively. These represent the fair value (e.g. MTM) of the derivative contracts after giving effect to legally enforceable master netting agreements, cash collateral held by the Firm and the credit valuation adjustment ("CVA"). These amounts reported on the Consolidated Balance Sheets represent the cost to the Firm to replace the contracts at current market rates should the counterparty default. However, in management's view, the appropriate measure of current credit risk should also reflect additional liquid securities and other cash collateral held by the Firm of $\$ 16.5$ billion and $\$ 15.5$ billion at December 31, 2010 and 2009, respectively, resulting in total exposure, net of all collateral, of $\$ 64.0$ billion and $\$ 64.7$ billion at December 31, 2010 and 2009, respectively.
The Firm also holds additional collateral delivered by clients at the initiation of transactions, as well as collateral related to contracts that have a non-daily call frequency and collateral that the Firm has agreed to return but has not yet settled as of the reporting date. Though this collateral does not reduce the balances noted in the table above, it is available as security against potential exposure that could arise should the MTM of the client's derivative transactions move in the Firm's favor. As of December 31, 2010 and 2009, the Firm held $\$ 18.0$ billion and $\$ 16.9$ billion, respectively, of this additional collateral. The derivative receivables MTM, net of all collateral, also do not include other credit enhancements, such as letters of credit.

## Management's discussion and analysis

While useful as a current view of credit exposure, the net MTM value of the derivative receivables does not capture the potential future variability of that credit exposure. To capture the potential future variability of credit exposure, the Firm calculates, on a client-by-client basis, three measures of potential derivatives-related credit loss: Peak, Derivative Risk Equivalent ("DRE"), and Average exposure ("AVG"). These measures all incorporate netting and collateral benefits, where applicable.
Peak exposure to a counterparty is an extreme measure of exposure calculated at a $97.5 \%$ confidence level. DRE exposure is a measure that expresses the risk of derivative exposure on a basis intended to be equivalent to the risk of loan exposures. The measurement is done by equating the unexpected loss in a derivative counterparty exposure (which takes into consideration both the loss volatility and the credit rating of the counterparty) with the unexpected loss in a loan exposure (which takes into consideration only the credit rating of the counterparty). DRE is a less extreme measure of potential credit loss than Peak and is the primary measure used by the Firm for credit approval of derivative transactions.

Finally, AVG is a measure of the expected MTM value of the Firm's derivative receivables at future time periods, including the benefit of collateral. AVG exposure over the total life of the derivative contract is used as the primary metric for pricing purposes and is used to calculate credit capital and the CVA, as further described below. AVG exposure was $\$ 45.3$ billion and $\$ 49.0$ billion at December 31, 2010 and 2009, respectively, compared with derivative receivables MTM, net of all collateral, of $\$ 64.0$ billion and $\$ 64.7$ billion at December 31, 2010 and 2009, respectively.

The MTM value of the Firm's derivative receivables incorporates an adjustment, the CVA, to reflect the credit quality of counterparties. The CVA is based on the Firm's AVG to a counterparty and the counterparty's credit spread in the credit derivatives market. The primary components of changes in CVA are credit spreads, new deal activity or unwinds, and changes in the underlying market environment. The Firm believes that active risk management is essential to controlling the dynamic credit risk in the derivatives portfolio. In addition, the Firm's credit approval process takes into consideration the potential for correlation between the Firm's AVG to a counterparty and the counterparty's credit quality. The Firm risk manages exposure to changes in CVA by entering into credit derivative transactions, as well as interest rate, foreign exchange, equity and commodity derivative transactions.
The accompanying graph shows exposure profiles to derivatives over the next 10 years as calculated by the DRE and AVG metrics. The two measures generally show declining exposure after the first year, if no new trades were added to the portfolio.

## Exposure profile of derivatives measures



The following table summarizes the ratings profile of the Firm's derivative receivables MTM, net of other liquid securities collateral, for the dates indicated.

## Ratings profile of derivative receivables MTM

| Rating equivalent | 2010 |  |  | 2009 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| December 31, (in millions, except ratios) | Exposure net of of all collateral |  | \% of exposure net of all collateral |  | e net of llateral | \% of exposure net of all collateral |
| AAA/Aaa to AA-/Aa3 | \$ | 23,342 | 36\% | \$ | 25,530 | 40\% |
| A+/A1 to A-/A3 |  | 15,812 | 25 |  | 12,432 | 19 |
| BBB+/Baa1 to BBB-/Baa3 |  | 8,403 | 13 |  | 9,343 | 14 |
| BB+/Ba1 to B-/B3 |  | 13,716 | 22 |  | 14,571 | 23 |
| CCC+/Caa1 and below |  | 2,722 | 4 |  | 2,815 | 4 |
| Total | \$ | 63,995 | 100\% | \$ | 64,691 | 100\% |

As noted above, the Firm uses collateral agreements to mitigate counterparty credit risk in derivatives. The percentage of the Firm's derivatives transactions subject to collateral agreements - excluding foreign exchange spot trades, which are not typically covered by collateral agreements due to their short maturity - was $88 \%$ as of December 31, 2010, largely unchanged from 89\% at December 31, 2009. The Firm posted $\$ 58.3$ billion and $\$ 56.7$ billion of collateral at December 31, 2010 and 2009, respectively.

## Credit derivatives

For risk management purposes, the Firm is primarily a purchaser of credit protection. As a purchaser of credit protection, the Firm has risk that the counterparty providing the credit protection will default. As a seller of credit protection, the Firm has risk that the underlying instrument referenced in the contract will be subject to a credit event.
The Firm uses credit derivatives for two primary purposes: first, in its capacity as a market-maker in the dealer/client business to meet the needs of customers; and second, in order to mitigate the Firm's own credit risk associated with its overall derivative receivables and traditional commercial credit lending exposures (loans and unfunded commitments).

Of the Firm's $\$ 80.5$ billion of total derivative receivables MTM at December 31, 2010, $\$ 7.7$ billion, or $10 \%$, was associated with credit derivatives, before the benefit of liquid securities collateral.
One type of credit derivatives the Firm enters into with counterparties are credit default swaps ("CDS"). The large majority of CDS are subject to collateral arrangements to protect the Firm from counterparty credit risk. The use of collateral to settle against defaulting counterparties generally performed as
designed in significantly mitigating the Firm's exposure to these counterparties. In 2010, the frequency and size of defaults related to the underlying debt referenced in credit derivatives was lower than 2009. For further discussion of derivatives, see Note 6 on pages 191199 of this Annual Report.
The following table presents the Firm's notional amounts of credit derivatives protection purchased and sold as of December 31, 2010 and 2009, distinguishing between dealer/client activity and credit portfolio activity.

| December 31, (in millions) | 2010 |  |  |  |  |  |  |  | 2009 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dealer/client |  |  | Credit portfolio |  |  |  | Total | Dealer/client |  |  | Credit portfolio |  |  |  | Total |
|  |  | Protection urchased(b) | $\begin{aligned} & \text { Protection } \\ & \text { sold } \end{aligned}$ | Protection purchased(c) |  | $\begin{gathered} \hline \text { Protection } \\ \text { sold } \end{gathered}$ |  |  |  | rotection rchased(b) | Protection sold |  | ection hased(c) |  |  |  |
| Credit default swaps | \$ | 2,661,657 | \$2,658,825 | \$ | 23,523 | \$ | 415 | \$5,344,420 | \$ | 2,957,277 | \$2,936,987 | \$ | 48,831 | \$ | 455 | \$5,943,550 |
| Other credit derivatives(a) |  | 34,250 | 93,776 |  | - |  | - | 128,026 |  | 39,763 | 10,575 |  | - |  | - | 50,338 |
| Total | \$ | 2,695,907 | \$ 2,752,601 | \$ | 23,523 | \$ | 415 | \$ 5,472,446 | \$ | 2,997,040 | \$2,947,562 | \$ | 48,831 | \$ | 455 | \$5,993,888 |

(a) Primarily consists of total return swaps and credit default swap options.
(b) Included $\$ 2,662$ billion and $\$ 2,987$ billion at December 31, 2010 and 2009, respectively, of notional exposure where the Firm has sold protection on the identical underlying reference instruments.
(c) Included zero and $\$ 19.7$ billion at December 31, 2010 and 2009, respectively, that represented the notional amount for structured portfolio protection; the Firm retains the first risk of loss on this portfolio.

## Dealer/client business

Within the dealer/client business, the Firm actively manages credit derivatives by buying and selling credit protection, predominantly on corporate debt obligations, according to client demand. For further information, see Note 6 on pages 191-199 of this Annual Report.

At December 31, 2010, the total notional amount of protection purchased and sold decreased by $\$ 496.1$ billion from year-end 2009. The decrease was primarily due to the impact of industry efforts to reduce offsetting trade activity.

## Credit portfolio activities

Management of the Firm's wholesale exposure is accomplished through a number of means including loan syndication and participations, loan sales, securitizations, credit derivatives, use of master netting agreements, and collateral and other risk-reduction techniques. The Firm also manages its wholesale credit exposure by purchasing protection through single-name and portfolio credit derivatives to manage the credit risk associated with loans, lendingrelated commitments and derivative receivables. Changes in credit risk on the credit derivatives are expected to offset changes in credit risk on the loans, lending-related commitments or derivative receivables. This activity does not reduce the reported level of assets on the balance sheet or the level of reported off-balance sheet commitments, although it does provide the Firm with credit risk protection. The Firm also diversifies its exposures by selling credit protection, which increases exposure to industries or clients where the Firm has little or no client-related exposure; however, this activity is not material to the Firm's overall credit exposure.

## Use of single-name and portfolio credit derivatives

| December 31, (in millions) | Notional amount of protection purchased and sold |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2010 |  | 2009 |  |
| Credit derivatives used to manage |  |  |  |  |
| Loans and lending-related commitments | \$ | 6,698 | \$ | 36,873 |
| Derivative receivables |  | 16,825 |  | 11,958 |
| Total protection purchased(a) |  | 23,523 |  | 48,831 |
| Total protection sold |  | 415 |  | 455 |
| Credit derivatives hedges notional, net | \$ | 23,108 | \$ | 48,376 |

(a) Included zero and $\$ 19.7$ billion at December 31, 2010 and 2009, respectively, that represented the notional amount for structured portfolio protection; the Firm retains the first risk of loss on this portfolio.

The credit derivatives used by JPMorgan Chase for credit portfolio management activities do not qualify for hedge accounting under U.S. GAAP; these derivatives are reported at fair value, with gains and losses recognized in principal transactions revenue. In contrast, the loans and lending-related commitments being risk-managed are accounted for on an accrual basis. This asymmetry in accounting treatment, between loans and lending-related commitments and the credit derivatives used in credit portfolio management activities, causes earnings volatility that is not representative, in the Firm's view, of the true changes in value of the Firm's overall credit exposure. The MTM value related to the Firm's credit derivatives used for managing credit exposure, as well as the MTM value related to the CVA (which reflects the credit quality of derivatives counterparty exposure) are included in the gains and losses realized on credit derivatives disclosed in the table below. These results can vary from period to period due to market conditions that affect specific positions in the portfolio.

## Management's discussion and analysis

| Year ended December 31, <br> (in millions) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: |
| Hedges of lending-related commitments(a) | $\mathbf{\$ ( 2 7 9 )}$ | $\$(3,258)$ | $\$ 2,216$ |
| CVA and hedges of CVA(a) | $(\mathbf{4 0 3 )}$ | 1,920 | $(2,359)$ |
| Net gains/(losses) | $\mathbf{\$ ( 6 8 2 )}$ | $\$(1,338)$ | $\$(143)$ |

(a) These hedges do not qualify for hedge accounting under U.S. GAAP.

## Lending-related commitments

JPMorgan Chase uses lending-related financial instruments, such as commitments and guarantees, to meet the financing needs of its customers. The contractual amount of these financial instruments represents the maximum possible credit risk should the counterparties draw down on these commitments or the Firm fulfills its obligation under these guarantees, and should the counterparties subsequently fail to perform according to the terms of these contracts.

Wholesale lending-related commitments were $\$ 346.1$ billion at December 31, 2010, compared with $\$ 347.2$ billion at December 31 2009. The decrease reflected the January 1, 2010, adoption of accounting guidance related to VIEs. Excluding the effect of the accounting guidance, lending-related commitments would have increased by $\$ 16.6$ billion.

In the Firm's view, the total contractual amount of these wholesale lending-related commitments is not representative of the Firm's actual credit risk exposure or funding requirements. In determining the amount of credit risk exposure the Firm has to wholesale lendingrelated commitments, which is used as the basis for allocating credit risk capital to these commitments, the Firm has established a "loanequivalent" amount for each commitment; this amount represents the portion of the unused commitment or other contingent exposure that is expected, based on average portfolio historical experience, to become drawn upon in an event of a default by an obligor. The loanequivalent amounts of the Firm's lending-related commitments were $\$ 189.9$ billion and $\$ 179.8$ billion as of December 31, 2010 and 2009, respectively.

## Country exposure

The Firm's wholesale portfolio includes country risk exposures to both developed and emerging markets. The Firm seeks to diversify its country exposures, including its credit-related lending, trading and investment activities, whether cross-border or locally funded.

Country exposure under the Firm's internal risk management approach is reported based on the country where the assets of the obligor, counterparty or guarantor are located. Exposure amounts, including resale agreements, are adjusted for collateral and for credit enhancements (e.g., guarantees and letters of credit) provided by third parties; outstandings supported by a guarantor located outside the country or backed by collateral held outside the country are assigned to the country of the enhancement provider. In addition, the effect of credit derivative hedges and other short credit or equity trading positions are taken into consideration. Total exposure measures include activity with both government and private-sector entities in a country.

The Firm also reports country exposure for regulatory purposes following FFIEC guidelines, which are different from the Firm's internal risk management approach for measuring country exposure. For additional information on the FFIEC exposures, see Cross-border outstandings on page 314 of this Annual Report.

Several European countries, including Greece, Portugal, Spain, Italy and Ireland, have been subject to credit deterioration due to weaknesses in their economic and fiscal situations. The Firm is closely monitoring its exposures to these five countries. Aggregate net exposures to these five countries as measured under the Firm's internal approach was less than $\$ 15.0$ billion at December 31, 2010, with no country representing a majority of the exposure. Sovereign exposure in all five countries represented less than half the aggregate net exposure. The Firm currently believes its exposure to these five countries is modest relative to the Firm's overall risk exposures and is manageable given the size and types of exposures to each of the countries and the diversification of the aggregate exposure. The Firm continues to conduct business and support client activity in these countries and, therefore, the Firm's aggregate net exposures may vary over time. In addition, the net exposures may be impacted by changes in market conditions, and the effects of interest rates and credit spreads on market valuations.

As part of its ongoing country risk management process, the Firm monitors exposure to emerging market countries, and utilizes country stress tests to measure and manage the risk of extreme loss associated with a sovereign crisis. There is no common definition of emerging markets, but the Firm generally includes in its definition those countries whose sovereign debt ratings are equivalent to "A+" or lower. The table below presents the Firm's exposure to its top 10 emerging markets countries based on its internal measurement approach. The selection of countries is based solely on the Firm's largest total exposures by country and does not represent its view of any actual or potentially adverse credit conditions.

## Top 10 emerging markets country exposure

| At December 31, 2010(in billions) | Cross-border |  |  |  |  |  |  |  | Local(d) |  | Total exposure |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Lending(a) |  | Trading(b) |  | Other(c) |  | Total |  |  |  |  |  |
| Brazil | \$ | 3.0 | \$ | 1.8 | \$ | 1.1 | \$ | 5.9 | \$ | 3.9 | 9.8 |  |
| South Korea |  | 3.0 |  | 1.4 |  | 1.5 |  | 5.9 |  | 3.1 |  | 9.0 |
| India |  | 4.2 |  | 2.1 |  | 1.4 |  | 7.7 |  | 1.1 |  | 8.8 |
| China |  | 3.6 |  | 1.1 |  | 1.0 |  | 5.7 |  | 1.2 |  | 6.9 |
| Hong Kong |  | 2.5 |  | 1.5 |  | 1.2 |  | 5.2 |  | - |  | 5.2 |
| Mexico |  | 2.1 |  | 2.3 |  | 0.5 |  | 4.9 |  | - |  | 4.9 |
| Malaysia |  | 0.6 |  | 2.0 |  | 0.3 |  | 2.9 |  | 0.4 |  | 3.3 |
| Taiwan |  | 0.3 |  | 0.6 |  | 0.4 |  | 1.3 |  | 1.9 |  | 3.2 |
| Thailand |  | 0.3 |  | 1.1 |  | 0.4 |  | 1.8 |  | 0.9 |  | 2.7 |
| Russia |  | 1.2 |  | 1.0 |  | 0.3 |  | 2.5 |  | - |  | 2.5 |
| At December 31, 2009 (in billions) | Cross-border |  |  |  |  |  |  |  | Local(d) |  | Total exposure |  |
|  | Lending(a) |  | Trading(b) |  | Other(c) |  | Total |  |  |  |  |  |
| South Korea | \$ | 2.7 | \$ | 1.7 | \$ | 1.3 | \$ | 5.7 | \$ | 3.3 | \$ | 9.0 |
| India |  | 1.5 |  | 2.7 |  | 1.1 |  | 5.3 |  | 0.3 |  | 5.6 |
| Brazil |  | 1.8 |  | (0.5) |  | 1.0 |  | 2.3 |  | 2.2 |  | 4.5 |
| China |  | 1.8 |  | 0.4 |  | 0.8 |  | 3.0 |  | - |  | 3.0 |
| Taiwan |  | 0.1 |  | 0.8 |  | 0.3 |  | 1.2 |  | 1.8 |  | 3.0 |
| Hong Kong |  | 1.1 |  | 0.2 |  | 1.3 |  | 2.6 |  | - |  | 2.6 |
| Mexico |  | 1.2 |  | 0.8 |  | 0.4 |  | 2.4 |  | - |  | 2.4 |
| Chile |  | 0.8 |  | 0.6 |  | 0.5 |  | 1.9 |  | - |  | 1.9 |
| Malaysia |  | 0.1 |  | 1.3 |  | 0.3 |  | 1.7 |  | 0.2 |  | 1.9 |
| South Africa |  | 0.4 |  | 0.8 |  | 0.5 |  | 1.7 |  | - |  | 1.7 |

(a) Lending includes loans and accrued interest receivable, interest-earning deposits with banks, acceptances, other monetary assets, issued letters of credit net of participations, and undrawn commitments to extend credit.
(b) Trading includes: (1) issuer exposure on cross-border debt and equity instruments, held both in trading and investment accounts and adjusted for the impact of issuer hedges, including credit derivatives; and (2) counterparty exposure on derivative and foreign exchange contracts as well as securities financing trades (resale agreements and securities borrowed).
c) Other represents mainly local exposure funded cross-border, including capital investments in local entities
(d) Local exposure is defined as exposure to a country denominated in local currency and booked locally. Any exposure not meeting these criteria is defined as cross-border exposure.

## CONSUMER CREDIT PORTFOLIO

JPMorgan Chase's consumer portfolio consists primarily of residential mortgages, home equity loans, credit cards, auto loans, student loans and business banking loans. The Firm's primary focus is on serving the prime consumer credit market. For further information on the consumer loans, see Note 14 on pages 220-238 of this Annual Report.

A substantial portion of the consumer loans acquired in the Washington Mutual transaction were identified as purchased creditimpaired based on an analysis of high-risk characteristics, including product type, LTV ratios, FICO scores and delinquency status. These PCI loans are accounted for on a pool basis, and the pools are considered to be performing. See pages 132-134 of this Annual Report for further information on the purchased credit-impaired loans.
The credit performance of the consumer portfolio across the entire product spectrum has stabilized but high unemployment and weak overall economic conditions continue to put pressure on the number of loans charged off, and weak housing prices continue to negatively affect the severity of loss recognized on real estate loans that default. Delinquencies and nonaccrual loans remain elevated but have improved. The delinquency trend exhibited improvement in the first half of 2010; early-stage delinquencies (30-89 days delinquent) then flattened across most RFS products early in the second half of the year, before once again showing improvement at the end of the year. Late-stage residential real estate delinquencies (150+ days delinquent) remain
elevated. The elevated level of these credit quality metrics is due, in part, to loss-mitigation activities currently being undertaken and elongated foreclosure processing timelines. Losses related to these loans continued to be recognized in accordance with the Firm's standard charge-off practices, but some delinquent loans that would have otherwise been foreclosed upon remain in the mortgage and home equity loan portfolios.
Since mid-2007, the Firm has taken actions to reduce risk exposure to consumer loans by tightening both underwriting and loan qualification standards, as well as eliminating certain products and loan origination channels for residential real estate lending. The tightening of underwriting criteria for auto loans has resulted in the reduction of both extended-term and high LTV financing. In addition, new originations of private student loans are limited to school-certified loans, the majority of which include a qualified co-borrower.
As a further action to reduce risk associated with lending-related commitments, the Firm has reduced or canceled certain lines of credit as permitted by law. For example, the Firm may reduce or close home equity lines of credit when there are significant decreases in the value of the underlying property or when there has been a demonstrable decline in the creditworthiness of the borrower. Also, the Firm typically closes credit card lines when the borrower is 60 days or more past due. Finally, certain inactive credit card lines have been closed, and a number of active credit card lines have been reduced.

## Management's discussion and analysis

The following table presents managed consumer credit-related information (including RFS, Card and residential real estate loans reported in the Corporate/Private Equity segment) for the dates indicated. For further information about the Firm's nonaccrual and charge-off accounting policies, see Note 14 on pages 220-238 of this Annual Report.

## Consumer

| As of or for the year ended December 31, (in millions, except ratios) | Credit exposure |  |  |  | Nonaccrual loans(k)(l) |  |  |  | Net charge-off |  |  |  | Net charge-offs rate(m)(n) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2010 |  | 2009 |  | 2010 |  | 2009 |  | 2010 |  | 2009 | 2010 | 2009 |
| Consumer, excluding credit card Loans, excluding PCI loans and loans held-for-sale |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Home equity - senior lien(a) |  | \$ 24,376 | \$ | 27,376 | \$ | 479 | \$ | 477 | \$ | 262 | \$ | 234 | 1.00\% | 0.80\% |
| Home equity - junior lien(b) |  | 64,009 |  | 74,049 |  | 784 |  | 1,188 |  | 3,182 |  | 4,448 | 4.63 | 5.62 |
| Prime mortgage, including option ARMs(c) |  | 74,539 |  | 75,428 |  | 4,320 |  | 4,667 |  | 1,627 |  | 1,957 | 2.15 | 2.51 |
| Subprime mortgage(c) |  | 11,287 |  | 12,526 |  | 2,210 |  | 3,248 |  | 1,374 |  | 1,648 | 10.82 | 11.86 |
| Auto(c)(d) |  | 48,367 |  | 46,031 |  | 141 |  | 177 |  | 298 |  | 627 | 0.63 | 1.44 |
| Business banking |  | 16,812 |  | 16,974 |  | 832 |  | 826 |  | 707 |  | 842 | 4.23 | 4.73 |
| Student and other(c) |  | 15,311 |  | 14,726 |  | 67 |  | 74 |  | 459 |  | 443 | 2.85 | 2.90 |
| Total loans, excluding PCI loans and <br> loans held-for-sale 254,701 267,110 $\mathbf{8 , 8 3 3}$ 10,657 $\mathbf{7 , 9 0 9}$ 10,199 $\mathbf{3 . 0 0}$ 3.68 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Loans - PCI(e) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Home equity |  | 24,459 |  | 26,520 |  | NA |  | NA |  | NA |  | NA | NA | NA |
| Prime mortgage |  | 17,322 |  | 19,693 |  | NA |  | NA |  | NA |  | NA | NA | NA |
| Subprime mortgage |  | 5,398 |  | 5,993 |  | NA |  | NA |  | NA |  | NA | NA | NA |
| Option ARMs |  | 25,584 |  | 29,039 |  | NA |  | NA |  | NA |  | NA | NA | NA |
| Total loans - PCI |  | 72,763 |  | 81,245 |  | NA |  | NA |  | NA |  | NA | NA | NA |
| Total loans - retained |  | 327,464 |  | 348,355 |  | 8,833 |  | 10,657 |  | 7,909 |  | 10,199 | 2.32 | 2.82 |
| Loans held-for-sale(f) |  | 154 |  | 2,142 |  | - |  | - |  | - |  | - | - | - |
| Total loans - reported |  | 327,618 |  | 350,497 |  | 8,833 |  | 10,657 |  | 7,909 |  | 10,199 | 2.32 | 2.82 |
| Lending-related commitments |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Home equity - senior lien(a)(g) |  | 16,060 |  | 19,246 |  |  |  |  |  |  |  |  |  |  |
| Home equity - junior lien(b)(g) |  | 28,681 |  | 37,231 |  |  |  |  |  |  |  |  |  |  |
| Prime mortgage |  | 1,266 |  | 1,654 |  |  |  |  |  |  |  |  |  |  |
| Subprime mortgage |  | - |  | - |  |  |  |  |  |  |  |  |  |  |
| Auto |  | 5,246 |  | 5,467 |  |  |  |  |  |  |  |  |  |  |
| Business banking |  | 9,702 |  | 9,040 |  |  |  |  |  |  |  |  |  |  |
| Student and other |  | 579 |  | 2,189 |  |  |  |  |  |  |  |  |  |  |
| Total lending-related commitments |  | 61,534 |  | 74,827 |  |  |  |  |  |  |  |  |  |  |
| Total consumer exposure, excluding credit <br> card $\mathbf{3 8 9 , 1 5 2}$ 425,324 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Credit Card |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Loans retained(c)(h)(i) |  | 135,524 |  | 78,786 |  | 2 |  | 3 |  | 14,037 |  | 9,634 | 9.73 | 11.07 |
| Loans held-for-sale |  | 2,152 |  | - |  | - |  | - |  | - |  | - | - | - |
| Total loans - reported |  | 137,676 |  | 78,786 |  | 2 |  | 3 |  | 14,037 |  | 9,634 | 9.73 | 11.07 |
| Securitized(c)(i) |  | NA |  | 84,626 |  | NA |  | - |  | NA |  | 6,443 | NA | 7.55 |
| Total loans - managed(c) |  | 137,676 |  | 163,412 |  | 2 |  | 3 |  | 14,037 |  | 16,077 | 9.73 | 9.33 |
| Lending-related commitments(g) |  | 547,227 |  | 569,113 |  |  |  |  |  |  |  |  |  |  |
| Total credit card exposure |  | 684,903 |  | 732,525 |  |  |  |  |  |  |  |  |  |  |
| Total consumer credit portfolio - reported |  | 1,074,055 |  | 1,073,223 |  | 8,835 |  | 10,660 |  | 21,946 |  | 19,833 | 4.53\% | 4.41\% |
| Total consumer credit portfolio - managed(c) |  | \$ 1,074,055 |  | 1,157,849 | \$ | 8,835 | \$ | 10,660 | \$ | 21,946 | \$ | 26,276 | 4.53\% | 4.91\% |

(a) Represents loans where JPMorgan Chase holds the first security interest on the property.
b) Represents loans where JPMorgan Chase holds a security interest that is subordinate in rank to other liens.
(c) Effective January 1, 2010, the Firm adopted accounting guidance related to VIEs. Upon the adoption of the guidance, the Firm consolidated its Firm-sponsored credit card securitization trusts and certain other consumer loan securitization entities, primarily mortgage-related. As a result, related receivables are now recorded as loans on the Consolidated Balance Sheet. As a result of the consolidation of the securitization trusts, reported and managed basis are equivalent for periods beginning after January 1 , 2010. For further discussion, see Explanation and Reconciliation of the Firm's Use of Non-GAAP Financial Measures on pages 64-66 of this Form 10-K.
(d) Excluded operating lease-related assets of $\$ 3.7$ billion and $\$ 2.9$ billion at December 31, 2010 and 2009, respectively.
(e) Charge-offs are not recorded on PCI loans until actual losses exceed estimated losses that were recorded as purchase accounting adjustments at the time of acquisition. To date, no charge-offs have been recorded for these loans.
(f) At December 31, 2010 and 2009, loans held-for-sale included prime mortgages of $\$ 154$ million and $\$ 450$ million, respectively, and student loans of zero and $\$ 1.7$ billion, respectively.
(g) The credit card and home equity lending-related commitments represent the total available lines of credit for these products. The Firm has not experienced, and does not anticipate, that all available lines of credit would be used at the same time. For credit card commitments and home equity commitments (if certain conditions are met), the Firm can reduce or cancel these lines of credit by providing the borrower prior notice or, in some cases, without notice as permitted by law.
 loans had been fully repaid or charged off as of December 31, 2010. See Note 16 on pages 244-259 this Annual Report.
(i) Included billed finance charges and fees net of an allowance for uncollectible amounts.
(j) Loans securitized are defined as loans that were sold to nonconsolidated securitization trusts and not included in reported loans. For a further discussion of credit card securitizations, see Card on pages 79-81A of this Annual Report.
 90 days past due and accruing at the guaranteed reimbursement rate; and (2) student loans that are 90 days past due and still accruing, which are insured by U.S. government agencies under the FFELP, of $\$ 625$ million and $\$ 542$ million, respectively. These amounts are excluded as reimbursement of insured amounts is proceeding normally. In addition, the Firm's policy is generally to exempt credit card loans from being placed on nonaccrual status as permitted by regulatory guidance. Under guidance issued by the FFIEC, credit card loans are charged off by the end of the month in which the account becomes 180 days past due or within 60 days from receiving notification about a specified event (e.g., bankruptcy of the borrower), whichever is earlier.
 asset with a single composite interest rate and an aggregate expectation of cash flows, the past-due status of the pools, or that of individual loans within the pools, is not meaningful. Because the Firm is recognizing interest income on each pool of loans, they are all considered to be performing.
 were excluded when calculating net charge-off rates.
 the collateral underlying the loans at the charge-off date. Absent this adjustment, net charge-off rates would have been $0.92 \%, 4.57 \%, 1.73 \%$ and $8.87 \%$ for home equity senior lien; home equity - junior lien; prime mortgage (including option ARMs); and subprime mortgage, respectively. Total consumer, excluding credit card and PCI loans, and total consumer, excluding credit card net charge-off rates would have been $2.76 \%$ and $2.14 \%$, respectively, excluding this adjustment.

Effective January 1, 2010, the Firm adopted accounting guidance related to VIEs. Upon adoption of this guidance, the Firm consolidated its Firm-sponsored credit card securitization trusts and certain other consumer loan securitization entities. The following table summarizes the impact on consumer loans at adoption.

## Reported loans

January 1, 2010 (in millions)
Consumer, excluding credit card
Prime mortgage, including option ARMs \$ 1,858
Subprime mortgage 1,758
Auto
1,758
$\begin{array}{ll}\text { Student } & 1,008\end{array}$

| Total consumer, excluding credit card | 4,842 |
| :--- | ---: |


| Credit card | 84,663 |
| :--- | ---: |


| Total increase in consumer loans | $\$ 89,505$ |
| :--- | ---: |

## Consumer, excluding credit card

## Portfolio analysis

The following discussion relates to the specific loan and lendingrelated categories. Purchased credit-impaired loans are excluded from individual loan product discussions and are addressed separately below. For further information about the Firm's consumer portfolio, related delinquency information and other credit quality indicators, see Note 14 on pages 220-238 of this Annual Report.

It is the Firm's policy to charge down residential real estate loans to net realizable value at no later than 180 days past due. During the fourth quarter of 2010, the Firm recorded an aggregate adjustment of $\$ 632$ million to increase net charge-offs related to the estimated net realizable value of the collateral underlying delinquent residential home loans. Because these losses were previously recognized in the provision and allowance for loan losses, this adjustment had no impact on the Firm's net income. The impact of this aggregate adjustment on reported net charge-off rates is provided in footnote ( n ) above.

Home equity: Home equity loans at December 31, 2010, were $\$ 88.4$ billion, compared with $\$ 101.4$ billion at December 31, 2009. The decrease in this portfolio primarily reflected loan paydowns and charge-offs. Junior lien net charge-offs declined from the prior year but remained high. Senior lien nonaccrual loans remained relatively flat, while junior lien nonaccrual loans decreased from prior year-end as a result of improvement in early-stage delinquencies.

Improvements in delinquencies and charge-offs slowed during the second half of the year and stabilized at these elevated levels. In addition to delinquent accounts, the Firm monitors current junior lien loans where the borrower has a first mortgage loan which is either delinquent or has been modified, as such junior lien loans are considered to be at higher risk of delinquency. The portfolio contained an estimated $\$ 4$ billion of such junior lien loans. The risk associated with these junior lien loans was considered in establishing the allowance for loan losses at December 31, 2010.

Mortgage: Mortgage loans at December 31, 2010, including prime and subprime mortgages and mortgage loans held-for-sale, were $\$ 86.0$ billion, compared with $\$ 88.4$ billion at December 31, 2009. The decrease was primarily due to portfolio runoff, partially offset by the addition of loans to the balance sheet as a result of the adoption of the accounting guidance related to VIEs. Net charge-offs decreased from the prior year but remained elevated.
Prime mortgages at December 31, 2010, including option ARMs, were $\$ 74.7$ billion, compared with $\$ 75.9$ billion at December 31, 2009. The decrease in loans was due to paydowns and charge-offs on delinquent loans, partially offset by the addition of loans as a result of the adoption of the accounting guidance related to VIEs. Earlystage delinquencies showed improvement during the year but remained at elevated levels. Late-stage delinquencies increased during the first half of the year, then trended lower for several months before flattening toward the end of 2010. Nonaccrual loans showed improvement, but also remained elevated as a result of ongoing modification activity and foreclosure processing delays. Charge-offs declined year over year but remained high.
Option ARM loans, which are included in the prime mortgage portfolio, were $\$ 8.1$ billion at December 31, 2010, and represented $11 \%$ of the prime mortgage portfolio. These are primarily loans with low LTV ratios and high borrower FICOs. Accordingly, the Firm expects substantially lower losses on this portfolio when compared with the PCI option ARM pool. As of December 31, 2010, approximately $8 \%$ of the option ARM borrowers were delinquent, $4 \%$ were making interest-only or negatively amortizing payments, and $88 \%$ were making amortizing payments. Substantially all borrowers within the portfolio are subject to risk of payment shock due to future payment recast as a limited number of these loans have been modified. The cumulative amount of unpaid interest added to the

## Management's discussion and analysis

unpaid principal balance due to negative amortization of option ARMs was $\$ 24$ million and $\$ 78$ million at December 31, 2010 and 2009, respectively. The Firm estimates the following balances of option ARM loans will experience a recast that results in a payment increase: $\$ 72$ million in 2011, $\$ 241$ million in 2012 and $\$ 784$ million in 2013. The Firm did not originate option ARMs and new originations of option ARMs were discontinued by Washington Mutual prior to the date of JPMorgan Chase's acquisition of its banking operations.

Subprime mortgages at December 31, 2010 were $\$ 11.3$ billion, compared with $\$ 12.5$ billion at December 31, 2009. The decrease was due to paydowns and charge-offs on delinquent loans, partially offset by the addition of loans as a result of the adoption of the accounting guidance related to VIEs. Late-stage delinquencies remained elevated but continued to improve, albeit at a slower rate during the second half of the year, while early-stage delinquencies stabilized at an elevated level during this period. Nonaccrual loans improved largely as a result of the improvement in late-stage delinquencies. Charge-offs reflected modest improvement.

Auto: Auto loans at December 31, 2010, were $\$ 48.4$ billion, compared with $\$ 46.0$ billion at December 31, 2009. Delinquent and nonaccrual loans have decreased. In addition, net charge-offs have declined $52 \%$ from the prior year. Provision expense decreased due to favorable loss severity as a result of a strong used-car market nationwide and reduced loss frequency due to the tightening of underwriting criteria in earlier periods. The auto loan portfolio reflected a high concentration of prime quality credits.

Business banking: Business banking loans at December 31, 2010, were $\$ 16.8$ billion, compared with $\$ 17.0$ billion at December 31, 2009. The decrease was primarily a result of run-off of the Washington Mutual portfolio and charge-offs on delinquent loans. These loans primarily include loans which are highly collateralized, often with personal loan guarantees. Nonaccrual loans continued to remain elevated. After having increased during the first half of 2010, nonaccrual loans as of December 31, 2010, declined to year-end 2009 levels.

Student and other: Student and other loans at December 31, 2010, including loans held-for-sale, were $\$ 15.3$ billion, compared with $\$ 16.4$ billion at December 31, 2009. Other loans primarily include other secured and unsecured consumer loans. Delinquencies reflected some stabilization in the second half of 2010, but remained elevated. Charge-offs during 2010 remained relatively flat with 2009 levels reflecting the impact of elevated unemployment levels.

Purchased credit-impaired loans: PCI loans at December 31, 2010, were $\$ 72.8$ billion compared with $\$ 81.2$ billion at December 31, 2009. This portfolio represents loans acquired in the Washington Mutual transaction that were recorded at fair value at the time of acquisition. That fair value included an estimate of credit losses expected to be realized over the remaining lives of the loans, and therefore no allowance for loan losses was recorded for these loans as of the acquisition date.

The Firm regularly updates the amount of principal and interest cash flows expected to be collected for these loans. Probable decreases in expected loan principal cash flows would trigger the recognition of impairment through the provision for loan losses. Probable and significant increases in expected cash flows (e.g., decreased principal credit losses, the net benefit of modifications) would first reverse any previously recorded allowance for loan losses, with any remaining increase in the expected cash flows recognized prospectively in interest income over the remaining estimated lives of the underlying loans.

During 2010, management concluded as part of the Firm's regular assessment of the PCl pools that it was probable that higher expected principal credit losses would result in a decrease in expected cash flows. Accordingly, the Firm recognized an aggregate $\$ 3.4$ billion impairment related to the home equity, prime mortgage, option ARM and subprime mortgage PCI portfolios. As a result of this impairment, the Firm's allowance for loan losses for the home equity, prime mortgage, option ARM and subprime mortgage PCI portfolios was $\$ 1.6$ billion, $\$ 1.8$ billion, $\$ 1.5$ billion and $\$ 98$ million, respectively, at December 31, 2010, compared with an allowance for loan losses of $\$ 1.1$ billion and $\$ 491$ million for the prime mortgage and option ARM PCI portfolios, respectively, at December 31, 2009.

Approximately 39\% of the option ARM borrowers were delinquent, 5\% were making interest-only or negatively amortizing payments, and 56\% were making amortizing payments. Approximately 50\% of current borrowers are subject to risk of payment shock due to future payment recast; substantially all of the remaining loans have been modified to a fixed rate fully amortizing loan. The cumulative amount of unpaid interest added to the unpaid principal balance of the option ARM PCI pool was $\$ 1.4$ billion and $\$ 1.9$ billion at December 31, 2010 and 2009, respectively. The Firm estimates the following balances of option ARM PCI loans will experience a recast that results in a payment increase: $\$ 1.2$ billion in 2011, $\$ 2.7$ billion in 2012 and \$508 million in 2013.

The following table provides a summary of lifetime loss estimates included in both the nonaccretable difference and the allowance for loan losses. Principal charge-offs will not be recorded on these pools until the nonaccretable difference has been fully depleted.

| December 31, (in millions) | Lifetime loss estimates(a) |  |  |  | LTD liquidation losses(b) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2010 |  | 2009 |  | 2010 |  | 2009 |
| Option ARMs | \$ | 11,588 | \$ | 10,650 | \$ | 4,860 | \$ | 1,744 |
| Home equity |  | 14,698 |  | 13,138 |  | 8,810 |  | 6,060 |
| Prime mortgage |  | 4,870 |  | 4,240 |  | 1,495 |  | 794 |
| Subprime mortgage |  | 3,732 |  | 3,842 |  | 1,250 |  | 796 |
| Total | \$ | 34,888 | \$ | 31,870 | \$ | 16,415 | \$ | 9,394 |

(a) Includes the original nonaccretable difference established in purchase accounting of $\$ 30.5$ billion for principal losses only. The remaining nonaccretable difference for principal losses only was $\$ 14.1$ billion and $\$ 21.1$ billion at December 31, 2010 and 2009, respectively. All probable increases in principal losses and foregone interest subsequent to the purchase date are reflected in the allowance for loan losses.
(b) Life-to-date ("LTD") liquidation losses represent realization of loss upon loan resolution.

Top 5 States - Residential Real Estate ${ }^{(a)}$
(at December 31, 2010)


Top 5 States - Residential Real Estate ${ }^{(\text {ap })}$
(at December 31, 2009)

(a) Represents residential real estate loan related, excluding purchased credit-impaired loans acquired in the Washington Mutual transaction and loans insured by U.S. government agencies.

The consumer credit portfolio is geographically diverse. The greatest concentration of residential real estate loans is in California. Excluding mortgage loans insured by U.S. government agencies and PCI loans, California-based loans retained represented $24 \%$ of total residential real estate loans retained at December 31, 2010, compared with $25 \%$ at December 31, 2009. Of the total residential real estate loan portfolio retained, excluding mortgage loans insured by U.S. government agencies and PCI loans, $\$ 86.4$ billion, or $54 \%$, were concentrated in California, New York, Arizona, Florida and Michigan at December 31, 2010, compared with $\$ 95.9$ billion, or $54 \%$, at December 31, 2009.

The current estimated average LTV ratio for residential real estate loans retained, excluding mortgage loans insured by U.S. government agencies and PCI loans, was $83 \%$ at December 31, 2010, compared with $81 \%$ at December 31, 2009. Excluding mortgage loans insured
by U.S. government agencies and PCI loans, $24 \%$ of the retained portfolio had a current estimated LTV ratio greater than 100\%, and $10 \%$ of the retained portfolio had a current estimated LTV ratio greater than $125 \%$ at December 31, 2010, compared with $22 \%$ with a current estimated LTV ratio greater than 100\%, and 9\% with a current estimated LTV ratio greater than $125 \%$, at December 31, 2009. The decline in home prices had a significant impact on the collateral value underlying the Firm's residential real estate loan portfolio. In general, the delinquency rate for loans with high LTV ratios is greater than the delinquency rate for loans in which the borrower has equity in the collateral. While a large portion of the loans with current estimated LTV ratios greater than $100 \%$ continue to pay and are current, the continued willingness and ability of these borrowers to pay remains uncertain.

The following table presents the current estimated LTV ratio, as well as the ratio of the carrying value of the underlying loans to the current estimated collateral value, for PCI loans. Because such loans were initially measured at fair value, the ratio of the carrying value to the current estimated collateral value will be lower than the current estimated LTV ratio, which is based on the unpaid principal balance. The estimated collateral values used to calculate these ratios do not represent actual appraised loan-level collateral values; as such, the resulting ratios are necessarily imprecise and should therefore be viewed as estimates.

## LTV ratios and ratios of carrying values to current estimated collateral values - PCI loans

| December 31, 2010 <br> (in millions, except ratios) | Unpaid principal balance ${ }^{(a)}$ |  | $\begin{aligned} & \text { Current estimated LTV } \\ & \text { ratio(b) } \end{aligned}$ | Carrying value(d) | Ratio of carrying value to current estimated collateral value(e) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Home equity | \$ | 28,312 | 117\%(c) | \$ 24,459 | 95\% |
| Prime mortgage |  | 18,928 | 109 | 17,322 | 90 |
| Subprime mortgage |  | 8,042 | 113 | 5,398 | 74 |
| Option ARMs |  | 30,791 | 111 | 25,584 | 87 |
| December 31, 2009 (in millions, except ratios) | Unpaid principal balance(a) |  | Current estimated LTV ratio(b) | Carrying value(d) | Ratio of carrying value to current estimated collateral value(e) |
| Home equity | \$ | 32,958 | 113\%(c) | \$ 26,520 | 91\% |
| Prime mortgage |  | 21,972 | 103 | 19,693 | 87 |
| Subprime mortgage |  | 9,021 | 107 | 5,993 | 71 |
| Option ARMs |  | 37,379 | 111 | 29,039 | 85 |

(a) Represents the contractual amount of principal owed at December 31, 2010 and 2009.

## Management's discussion and analysis

(b) Represents the aggregate unpaid principal balance of loans divided by the estimated current property value. Current property values are estimated based on home valuation models utilizing nationally recognized home price index valuation estimates. Prior period amounts have been revised to conform to the current period presentation.
(c) Represents current estimated combined LTV, which considers all available lien positions related to the property. All other products are presented without consideration of subordinate liens on the property.
(d) Carrying value includes the effect of fair value adjustments that were applied to the consumer PCI portfolio at the date of acquisition.
(e) At December 31, 2010, and 2009, the ratios of carrying value to current estimated collateral value are net of the allowance for loan losses of $\$ 1.6$ billion and zero for home equity, respectively, $\$ 1.8$ billion and $\$ 1.1$ billion for prime mortgage, respectively, $\$ 98$ million and zero for subprime mortgage, respectively, and $\$ 1.5$ billion and $\$ 491$ million for option ARMs, respectively.

PCI loans in the states of California and Florida represented 53\% and $10 \%$, respectively, of total PCI loans at December 31, 2010, compared with 54\% and 11\%, respectively, at December 31, 2009. The current estimated average LTV ratios were 118\% and 135\% for California and Florida loans, respectively, at December 31, 2010, compared with $114 \%$ and 131\%, respectively, at December 31, 2009. Continued pressure on housing prices in California and Florida have contributed negatively to both the current estimated average LTV ratio and the ratio of carrying value to current collateral value for loans in the PCI portfolio. For the PCI portfolio, $63 \%$ had a current estimated LTV ratio greater than $100 \%$, and $31 \%$ of the PCI portfolio had a current estimated LTV ratio greater than $125 \%$ at
December 31, 2010; this compared with $59 \%$ of the PCI portfolio with a current estimated LTV ratio greater than 100\%, and 28\% with a current estimated LTV ratio greater than 125\%, at December 31, 2009.

The carrying value of PCI loans is below the current estimated collateral value of the loans and, accordingly, the ultimate performance of this portfolio is highly dependent on borrowers' behavior and ongoing ability and willingness to continue to make payments on homes with negative equity, as well as on the cost of alternative housing. For further information on the geographic composition and current estimated LTVs of residential real estate non PCI and PCl loans, see Note 14 on pages 220-238 of this Annual Report.

## Loan modification activities

For additional information about consumer loan modification activities, including consumer loan modifications accounted for as troubled debt restructurings, see Note 14 on pages 220-238 of this Annual Report.

Residential real estate loans: For both the Firm's on-balance sheet loans and loans serviced for others, more than 1,038,000 mortgage modifications have been offered to borrowers and approximately 318,000 have been approved since the beginning of 2009. Of these, approximately 285,000 have achieved permanent modification as of December 31, 2010. Of the remaining 720,000 modifications, 34\% are in a trial period or still being reviewed for a modification, while $66 \%$ have dropped out of the modification program or otherwise were not eligible for final modification.
The Firm is participating in the U.S. Treasury's MHA programs and is continuing to expand its other loss-mitigation efforts for financially distressed borrowers who do not qualify for the U.S. Treasury's programs. The MHA programs include the Home Affordable Modification Program ("HAMP") and the Second Lien Modification Program ("2MP"); these programs mandate standard modification terms across the industry and provide incentives to borrowers, servicers and investors who participate. The Firm completed its first permanent modifications under HAMP in September 2009. Under 2MP, which
the Firm implemented in May 2010, homeowners are offered a way to modify their second mortgage to make it more affordable when their first mortgage has been modified under HAMP.

The Firm's other loss-mitigation programs for troubled borrowers who do not qualify for HAMP include the traditional modification programs offered by the GSE's and Ginnie Mae, as well as the Firm's proprietary modification programs, which include similar concessions to those offered under HAMP but with expanded eligibility criteria. In addition, the Firm has offered modification programs targeted specifically to borrowers with higher-risk mortgage products.
MHA, as well as the Firm's other loss-mitigation programs, generally provide various concessions to financially troubled borrowers, including, but not limited to, interest rate reductions, term or payment extensions, and deferral of principal payments that would have otherwise been required under the terms of the original agreement. For the 54,500 on-balance sheet loans modified under HAMP and the Firm's other loss-mitigation programs since July 1, 2009, 55\% of permanent loan modifications have included interest rate reductions, 49\% have included term or payment extensions, 9\% have included principal deferment and 22\% have included principal forgiveness. Principal forgiveness has been limited to a specific modification program for option ARMs. The sum of the percentages of the types of loan modifications exceeds 100\% because, in some cases, the modification of an individual loan includes more than one type of concession.

Generally, borrowers must make at least three payments under the revised contractual terms during a trial modification and be successfully re-underwritten with income verification before a mortgage or home equity loan can be permanently modified. When the Firm modifies home equity lines of credit, future lending commitments related to the modified loans are canceled as part of the terms of the modification.

The ultimate success of these modification programs and their impact on reducing credit losses remains uncertain given the short period of time since modification. The primary indicator used by management to monitor the success of these programs is the rate at which the modified loans redefault. Modification redefault rates are affected by a number of factors, including the type of loan modified, the borrower's overall ability and willingness to repay the modified loan and other macroeconomic factors. Reduction in payment size for a borrower has shown to be the most significant driver in improving redefault rates. Modifications completed after July 1, 2009, whether under HAMP or under the Firm's other modification programs, differ from modifications completed under prior programs in that they are generally fully underwritten after a
successful trial payment period of at least three months.
Approximately $87 \%$ of on-balance sheet modifications completed since July 1, 2009, were completed in 2010, with approximately $10 \%$ completed as recently as the fourth quarter of 2010. Performance metrics to date for modifications seasoned more than six months show
weighted average redefault rates of $25 \%$ and $28 \%$ for HAMP and the Firm's other modification programs, respectively. While these rates compare favorably to equivalent metrics for modifications completed under prior programs, ultimate redefault rates will remain uncertain until modified loans have seasoned.

The following table presents information as of December 31, 2010 and 2009, relating to restructured on-balance sheet residential real estate loans for which concessions have been granted to borrowers experiencing financial difficulty. Modifications of PCI loans continue to be accounted for and reported as PCI loans, and the impact of the modification is incorporated into the Firm's quarterly assessment of estimated future cash flows. Modifications of consumer loans other than PCI loans are generally accounted for and reported as troubled debt restructurings ("TDRs").

## Restructured residential real estate loans

| December 31, (in millions) | 2010 |  |  |  | 2009 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | On-balance sheet loans |  | Nonaccrual on-balance sheet loans(d) |  | On-balance sheet loans |  | Nonaccrual on-balance sheet loans(d) |  |
| Restructured residential real estate loans - excluding PCI loans (a)(b) |  |  |  |  |  |  |  |  |
| Home equity - senior lien | \$ | 226 | \$ | 38 | \$ | 168 | \$ | 30 |
| Home equity - junior lien |  | 283 |  | 63 |  | 222 |  | 43 |
| Prime mortgage, including option ARMs |  | 2,084 |  | 534 |  | 642 |  | 249 |
| Subprime mortgage |  | 2,751 |  | 632 |  | 1,998 |  | 598 |
| Total restructured residential real estate loans - excluding PCI loans | \$ | 5,344 | \$ | 1,267 | \$ | 3,030 | \$ | 920 |
| Restructured PCI loans(c) |  |  |  |  |  |  |  |  |
| Home equity | \$ | 492 |  | NA | \$ | 453 |  | NA |
| Prime mortgage |  | 3,018 |  | NA |  | 1,526 |  | NA |
| Subprime mortgage |  | 3,329 |  | NA |  | 1,954 |  | NA |
| Option ARMs |  | 9,396 |  | NA |  | 2,972 |  | NA |
| Total restructured PCI loans | \$ | 16,235 |  | NA | \$ | 6,905 |  | NA |

(a) Amounts represent the carrying value of restructured residential real estate loans.
(b) At December 31, 2010 and 2009, $\$ 3.0$ billion and $\$ 296$ million, respectively, of loans modified subsequent to repurchase from Ginnie Mae were excluded from loans accounted for as TDRs. When such loans perform subsequent to modification they are generally sold back into Ginnie Mae loan pools. Modified loans that do not re-perform become subject to foreclosure. Substantially all amounts due under the terms of these loans continue to be insured and, where applicable, reimbursement of insured amounts is proceeding normally.
(c) Amounts represent the unpaid principal balance of restructured PCI loans.
(d) Nonaccrual loans modified in a TDR may be returned to accrual status when repayment is reasonably assured and the borrower has made a minimum of six payments under the new terms. As of December 31, 2010 and 2009, nonaccrual loans of $\$ 580$ million and $\$ 256$ million, respectively, are TDRs for which the borrowers have not yet made six payments under their modified terms

Foreclosure prevention: Foreclosure is a last resort and the Firm makes significant efforts to help borrowers stay in their homes. Since the first quarter of 2009, the Firm has prevented two foreclosures (through loan modification, short sales, and other foreclosure prevention means) for every foreclosure completed.
The Firm has a well-defined foreclosure prevention process when a borrower fails to pay on his or her loan. Customer contacts are attempted multiple times in various ways to pursue options other than foreclosure (including through loan modification, short sales, and other foreclosure prevention means). In addition, if the Firm is unable to contact a customer, various reviews are completed of borrower's facts and circumstances before a foreclosure sale is completed. By the time of a foreclosure sale, borrowers have not made a payment on average for approximately 14 months.

## Foreclosure process issues

The foreclosure process is governed by laws and regulations established on a state-by-state basis. In some states, the foreclosure process involves a judicial process requiring filing documents with a court. In other states, the process is mostly non-judicial, involving various processes, some of which require filing documents with governmental agencies. During the third quarter of 2010, the Firm became aware that certain documents executed by Firm personnel in connection with the foreclosure process may not have complied with all applicable procedural requirements. For example, in certain instances, the underlying loan file review and verification of information for inclusion in an affidavit was performed by Firm personnel other than the affiant, or the affidavit may not have been properly notarized. The Firm instructed its outside foreclosure counsel to temporarily suspend foreclosures, foreclosure sales and evictions in 43 states so that it could review its processes. These matters are the subject of investigation by federal and state officials. For further discussion, see "Mortgage Foreclosure Investigations and Litigation" in Note 32 on pages 282-289 of this Annual Report.

## Management's discussion and analysis

As a result of these foreclosure process issues, the Firm has undertaken remedial actions to ensure that it satisfies all procedural requirements relating to mortgage foreclosures. These actions include:

- A complete review of the foreclosure document execution policies and procedures;
- The creation of model affidavits that will comply with all local law requirements and be used in every case;
- Implementation of enhanced procedures designed to ensure that employees who execute affidavits personally verify their contents and that the affidavits are executed only in the physical presence of a licensed notary;
- Extensive training for all personnel who will have responsibility for document execution going forward and certification of those personnel by outside counsel;
- Implementation of a rigorous quality control double-check review of affidavits completed by the Firm's employees; and
- Review and verification of our revised procedures by outside experts.
As of January 2011, the Firm has resumed initiation of new foreclosure proceedings in nearly all states in which it had previously suspended such proceedings.

The following table presents information as of December 31, 2010 and 2009, about the Firm's nonperforming consumer assets, excluding credit card.
Nonperforming assets(a)

| December 31, (in millions) | $\mathbf{2 0 1 0}$ | 2009 |
| :--- | ---: | ---: |
| Nonaccrual loans(b) |  |  |
| Home equity - senior lien | $\mathbf{\$ 7 9}$ | $\$ \mathbf{4 7 7}$ |
| Home equity - junior lien | $\mathbf{7 8 4}$ | 1,188 |
| Prime mortgage, including option ARMs | $\mathbf{4 , 3 2 0}$ | 4,667 |
| Subprime mortgage | $\mathbf{2 , 2 1 0}$ | 3,248 |
| Auto | $\mathbf{1 4 1}$ | 177 |
| Business banking | $\mathbf{8 3 2}$ | 826 |
| Student and other | $\mathbf{6 7}$ | 74 |
| Total nonaccrual loans | $\mathbf{8 , 8 3 3}$ | 10,657 |
| Assets acquired in loan satisfactions | $\mathbf{1 , 2 9 4}$ | 1,156 |
| Real estate owned | $\mathbf{6 7}$ | 99 |
| Other | $\mathbf{1 , 3 6 1}$ | 1,255 |
| Total assets acquired in loan satisfactions | $\mathbf{\$ 1 0 , 1 9 4}$ | $\$ 11,912$ |

(a) At December 31, 2010 and 2009, nonperforming assets excluded: (1) mortgage loans insured by U.S. government agencies of $\$ 10.5$ billion and $\$ 9.0$ billion, respectively, that are 90 days past due and accruing at the guaranteed reimbursement rate; (2) real estate owned insured by U.S. government agencies of $\$ 1.9$ billion and $\$ 579$ million, respectively; and (3) student loans that are 90 days past due and still accruing, which are insured by U.S. government agencies under the FFELP, of $\$ 625$ million and $\$ 542$ million, respectively. These amounts are excluded as reimbursement of insured amounts is proceeding normally.
(b) Excludes PCI loans that were acquired as part of the Washington Mutual transaction, which are accounted for on a pool basis. Since each pool is accounted for as a single asset with a single composite interest rate and an aggregate expectation of cash flows, the past-due status of the pools, or that of individual loans within the pools, is not meaningful. Because the Firm is recognizing interest income on each pool of loans, they are all considered to be performing.

Nonaccrual loans: Total consumer nonaccrual loans, excluding credit card, were $\$ 8.8$ billion, compared with $\$ 10.7$ billion at December 31, 2009. Nonaccrual loans have stabilized, but remained at elevated levels. The increase in loan modification activities is expected to continue to result in elevated levels of nonaccrual loans in the residential real estate portfolios as a result of both redefault of modified loans as well as the Firm's policy that modified loans remain in nonaccrual status until repayment is reasonably assured and the borrower has made a minimum of six payments under the new terms. Nonaccrual loans in the residential real estate portfolio totaled $\$ 7.8$ billion at December 31, 2010, of which $71 \%$ were greater than 150 days past due; this compared with nonaccrual residential real estate loans of $\$ 9.6$ billion at December 31, 2009, of which $64 \%$ were greater than 150 days past due. Modified residential real estate loans of $\$ 1.3$ billion and $\$ 920$ million at December 31, 2010 and 2009, respectively, were classified as nonaccrual loans. Of these modified residential real estate loans, $\$ 580$ million and $\$ 256$ million had yet to make six payments under their modified terms at December 31, 2010 and 2009, respectively, with the remaining nonaccrual modified loans having redefaulted. In the aggregate, the unpaid principal balance of residential real estate loans greater than 150 days past due was charged down by approximately $46 \%$ and $36 \%$ to estimated collateral value at December 31, 2010 and 2009, respectively.
Real estate owned ("REO"): As part of the residential real estate foreclosure process, loans are written down to the fair value of the underlying real estate asset, less costs to sell, at acquisition. Typically, any further gains or losses on REO assets are recorded as part of other income. In those instances where the Firm gains ownership and possession of individual properties at the completion of the foreclosure process, these REO assets are managed for prompt sale and disposition at the best possible economic value. Operating expense, such as real estate taxes and maintenance, are charged to other expense. REO assets, excluding those insured by U.S. government agencies, increased by $\$ 138$ million from December 31, 2009 to $\$ 1.3$ billion, primarily related to foreclosures of non-PCI loans. It is anticipated that REO assets will continue to increase over the next several quarters, as loans moving through the foreclosure process are expected to increase.

## Credit Card

Credit card receivables (which include receivables in Firm-sponsored credit card securitization trusts that were not reported on the Consolidated Balance Sheets prior to January 1, 2010) were $\$ 137.7$ billion at December 31, 2010, a decrease of $\$ 25.7$ billion from December 31, 2009, due to the decline in lower-yielding promotional balances and runoff of the Washington Mutual portfolio.

The 30-day delinquency rate decreased to 4.07\% at December 31, 2010, from $6.28 \%$ at December 31, 2009, while the net charge-off rate increased to $9.73 \%$ for 2010, from $9.33 \%$ in 2009 due primarily to the decline in outstanding loans. The delinquency trend is showing improvement, especially within early stage delinquencies. Chargeoffs were elevated in 2010 but showed improvement in the second half of the year as a result of lower delinquent loans and higher repayment rates. The credit card portfolio continues to reflect a wellseasoned, largely rewards-based portfolio that has good U.S. geographic diversification. The greatest geographic concentration of credit card loans is in California which represented $13 \%$ of total loans at December 2010, compared with $14 \%$ at December 2009. Loan concentration for the top five states of California, New York, Texas, Florida and Illinois consisted of $\$ 55.1$ billion in receivables, or $40 \%$ of the

Top 5 States Credit Card - Managed
(at December 31, 2010)


## Modifications of credit card loans

For additional information about credit card loan modification activities, including credit card loan modifications accounted for as troubled debt restructurings, see Note 14 on pages 220-238 of this Annual Report.
JPMorgan Chase may offer one of a number of loan modification programs to borrowers who are experiencing financial difficulty. The Firm has short-term programs for borrowers who may be in need of temporary relief, and long-term programs for borrowers who are experiencing a more fundamental level of financial difficulties. Most of the Firm's modified credit card
portfolio, at December 2010, compared with $\$ 65.9$ billion, or 40\%, at December 2009.

Credit card receivables, excluding the Washington Mutual portfolio, were $\$ 123.9$ billion at December 31, 2010, compared with $\$ 143.8$ billion at December 31, 2009. The 30-day delinquency rate, excluding the Washington Mutual portfolio, was $3.66 \%$ at December 31, 2010, down from $5.52 \%$ at December 31, 2009, while the net charge-off rate increased to $8.72 \%$ in 2010 from $8.45 \%$ in 2009 due largely to the decrease in outstanding loans.
Credit card receivables in the Washington Mutual portfolio were $\$ 13.7$ billion at December 31, 2010, compared with $\$ 19.7$ billion at December 31, 2009. The Washington Mutual portfolio's 30-day delinquency rate was $7.74 \%$ at December 31, 2010, down from $12.72 \%$ at December 31, 2009; the 2009 delinquency rate excludes the impact of the consolidation of the Washington Mutual Master Trust ("WMMT") in the second quarter of 2009. The net charge-off rate in 2010 was 18.73\%, compared with 18.79\% in 2009, excluding the impact of the purchase accounting adjustments related to the consolidation of the WMMT in the second quarter of 2009.

Top 5 States Credit Card - Managed
(at December 31, 2009)

loans have been modified under the Firm's long-term programs. Modifications under the Firm's long-term programs involve placing the customer on a fixed payment plan not exceeding 60 months. Modifications under all of these programs typically include reducing the interest rate on the card. Also, in all cases, the Firm cancels the customer's available line of credit on the credit card. Substantially all of these modifications, both short-term and long-term, are considered to be TDRs. Based on the Firm's historical experience, the Firm expects that a significant portion of the borrowers will not ultimately comply with the modified payment terms.

## Management's discussion and analysis

If the cardholder does not comply with the modified payment terms, then the credit card loan agreement generally reverts back to its premodification payment rate terms. Assuming that those borrowers do not begin to perform in accordance with those payment terms, the loans continue to age and will ultimately be charged off in accordance with the Firm's standard charge-off policy. In addition, if a borrower successfully completes a short-term modification program, then the loan reverts back to its pre-modification payment terms. However, in most cases the Firm does not reinstate the borrower's line of credit.

At December 31, 2010 and 2009, the Firm had $\$ 10.0$ billion and $\$ 6.2$ billion, respectively, of on-balance sheet credit card loans outstanding that have been modified in troubled debt restructurings.

These balances include both credit card loans with modified payment terms and credit card loans that have reverted back to their premodification payment terms. The increase in modified credit card loans outstanding from December 31, 2009, to December 31, 2010, is primarily attributable to previously-modified loans held in Firmsponsored credit card securitization trusts being consolidated as a result of adopting the new accounting guidance regarding consolidation of VIEs.

Consistent with the Firm's policy, all credit card loans typically remain on accrual status. However, the Firm separately establishes an allowance for the estimated uncollectible portion of billed and accrued interest and fee income on credit card loans.

## COMMUNITY REINVESTMENT ACT EXPOSURE

The Community Reinvestment Act ("CRA") encourages banks to meet the credit needs of borrowers in all segments of their communities, including neighborhoods with low or moderate incomes. JPMorgan Chase is a national leader in community development by providing loans, investments and community development services in communities across the United States.

At December 31, 2010 and 2009, the Firm's CRA loan portfolio was approximately $\$ 16$ billion and $\$ 18$ billion, respectively. Of the CRA portfolio $65 \%$ were residential mortgage loans and $15 \%$ were business banking loans at both December 31, 2010 and 2009, respectively; $9 \%$ and $8 \%$, respectively, were commercial real estate loans; and $11 \%$ and $12 \%$, respectively, were other loans. The CRA nonaccrual loans were 6\% of the Firm's nonaccrual loans at both December 31, 2010 and 2009. Net charge-offs in the CRA portfolio were $3 \%$ of the Firm's net charge-offs in both 2010 and 2009.

JPMorgan Chase's allowance for loan losses covers the wholesale (risk-rated), and consumer (primarily scored) portfolios. The allowance represents management's estimate of probable credit losses inherent in the Firm's loan portfolio. Management also determines an allowance for wholesale and consumer (excluding credit card) lending-related commitments using a methodology similar to that used for the wholesale loans. During 2010, the Firm did not make any significant changes to the methodologies or policies used to establish its allowance for credit losses.

For a further discussion of the components of the allowance for credit losses, see Critical Accounting Estimates Used by the Firm on pages 149-154 and Note 15 on pages 239-243 of this Annual Report.
At least quarterly, the allowance for credit losses is reviewed by the Chief Risk Officer, the Chief Financial Officer and the Controller of the Firm and discussed with the Risk Policy and Audit Committees of the Board of Directors of the Firm. As of December 31, 2010, JPMorgan Chase deemed the allowance for credit losses to be appropriate (i.e., sufficient to absorb losses inherent in the portfolio, including those not yet identifiable).

The allowance for credit losses was $\$ 33.0$ billion at December 31, 2010, an increase of $\$ 442$ million from $\$ 32.5$ billion at December 31, 2009. The increase was primarily due to the Firm's adoption of accounting guidance related to VIEs. As a result of the consolidation of certain securitization entities, the Firm established an allowance for loan losses of $\$ 7.5$ billion at January 1, 2010, primarily related to the receivables that had been held in credit card securitization trusts. Excluding the $\$ 7.5$ billion transition adjustment at adoption, the allowance decreased by $\$ 6.8$ billion in the consumer and wholesale portfolios, generally reflecting an improvement in credit quality.

The consumer (excluding credit card) allowance for loan losses increased $\$ 1.6$ billion largely due to a $\$ 3.4$ billion increase related to further estimated deterioration in the Washington Mutual PCI pools, partially offset by a $\$ 1.8$ billion reduction predominantly in non-creditimpaired residential real estate reserves reflecting improved loss outlook as a result of the resumption of favorable delinquency trends at the end of 2010, as well as a $\$ 632$ million adjustment related to the estimated net realizable value of the collateral underlying delinquent residential home loans. For additional information, refer to page 131 of this Annual Report.

The credit card allowance for loan losses increased $\$ 1.4$ billion from December 31, 2009, largely due to the impact of the adoption of the accounting guidance related to VIEs. Excluding the effect of the transition adjustment at adoption, the credit card allowance decreased by $\$ 6.0$ billion from December 31, 2009, reflecting lower estimated losses primarily related to improved delinquency trends as well as lower levels of outstandings.

The wholesale allowance for loan losses decreased by $\$ 2.4$ billion from December 31, 2009, primarily due to repayments and loan sales, as well as continued improvement in the credit quality of the commercial and industrial loan portfolio.

The allowance for lending-related commitments for both wholesale and consumer (excluding credit card), which is reported in other liabilities, was $\$ 717$ million and $\$ 939$ million at December 31, 2010 and 2009, respectively. The decrease primarily reflected the continued improvement in the credit quality of the wholesale commercial and industrial loan portfolio.

The credit ratios in the table below are based on retained loan balances, which exclude loans held-for-sale and loans accounted for at fair value.

## Management's discussion and analysis

## Summary of changes in the allowance for credit losses

| Year ended December 31, (in millions, except ratios) | 2010 |  |  |  |  |  |  |  | 2009 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wholesale |  | Consumer, excluding credit card |  | Credit Card |  | Total |  | Wholesale |  | Consumer, excluding credit card |  | Credit Card |  | Total |  |
| Allowance for loan losses |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning balance at January 1, | \$ | 7,145 | \$ | 14,785 | \$ | 9,672 | \$ | 31,602 | \$ | 6,545 | \$ | 8,927 | \$ | 7,692 | \$ | 23,164 |
| Cumulative effect of change in accounting principles(a) |  | 14 |  | 127 |  | 7,353 |  | 7,494 |  | - |  | - |  | - |  | - |
| Gross charge-offs(a) |  | 1,989 |  | 8,383 |  | 15,410 |  | 25,782 |  | 3,226 |  | 10,421 |  | 10,371 |  | 24,018 |
| Gross (recoveries)(a) |  | (262) |  | (474) |  | $(1,373)$ |  | $(2,109)$ |  | (94) |  | (222) |  | (737) |  | $(1,053)$ |
| Net charge-offs(a) |  | 1,727 |  | 7,909 |  | 14,037 |  | 23,673 |  | 3,132 |  | 10,199 |  | 9,634 |  | 22,965 |
| Provision for loan losses(a) |  | (673) |  | 9,458 |  | 8,037 |  | 16,822 |  | 3,684 |  | 16,032 |  | 12,019 |  | 31,735 |
| Other(b) |  | 2 |  | 10 |  | 9 |  | 21 |  | 48 |  | 25 |  | (405) |  | (332) |
| Ending balance | \$ | 4,761 | \$ | 16,471 | \$ | 11,034 | \$ | 32,266 | \$ | 7,145 | \$ | 14,785 | \$ | 9,672 | \$ | 31,602 |
| Impairment methodology Asset-specific(c)(d)(e) | \$ | 1,574 | \$ | 1,075 | \$ | 4,069 | \$ | 6,718 | \$ | 2,046 | \$ | 896 | \$ | 3,117 | \$ | 6,059 |
| Formula-based(a)(e) |  | 3,187 |  | 10,455 |  | 6,965 |  | 20,607 |  | 5,099 |  | 12,308 |  | 6,555 |  | 23,962 |
| PCI |  | - |  | 4,941 |  | - |  | 4,941 |  | - |  | 1,581 |  | - |  | 1,581 |
| Total allowance for loan losses | \$ | 4,761 | \$ | 16,471 | \$ | 11,034 | \$ | 32,266 | \$ | 7,145 | \$ | 14,785 | \$ | 9,672 | \$ | 31,602 |
| Allowance for lending-related commitments |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning balance at January 1, | \$ | 927 | \$ | 12 | \$ | - | \$ | 939 | \$ | 634 | \$ | 25 | \$ | - | \$ | 659 |
| Cumulative effect of change in accounting principles(a) |  | (18) |  | - |  | - |  | (18) |  | - |  | - |  | - |  | - |
| Provision for lending-related commitments(a) |  | (177) |  | (6) |  | - |  | (183) |  | 290 |  | (10) |  | - |  | 280 |
| Other |  | (21) |  | - |  | - |  | (21) |  | 3 |  | (3) |  | - |  | - |
| Ending balance | \$ | 711 | \$ | 6 | \$ | - | \$ | 717 | \$ | 927 | \$ | 12 | \$ | - | \$ | 939 |
| Impairment methodology |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Asset-specific | \$ | 180 | \$ | - | \$ | - | \$ | 180 | \$ | 297 | \$ | - | \$ | - | \$ | 297 |
| Formula-based |  | 531 |  | 6 |  | - |  | 537 |  | 630 |  | 12 |  | - |  | 642 |
| Total allowance for lendingrelated commitments | \$ | 711 | \$ | 6 | \$ | - | \$ | 717 | \$ | 927 | \$ | 12 | \$ | - | \$ | 939 |
| Total allowance for credit losses | \$ | 5,472 | \$ | 16,477 | \$ | 11,034 | \$ | 32,983 | \$ | 8,072 | \$ | 14,797 | \$ | 9,672 | \$ | 32,541 |
| Memo: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Retained loans, end of period | \$ | 222,510 | \$ | 327,464 | \$ | 135,524 | \$ | 685,498 | \$ | 200,077 | \$ | 348,355 | \$ | 78,786 | \$ | 627,218 |
| Retained loans, average |  | 213,609 |  | 340,334 |  | 144,219 |  | 698,162 |  | 223,047 |  | 362,216 |  | 87,029 |  | 672,292 |
| Credit ratios |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Allowance for loan losses to retained loans |  | 2.14\% |  | 5.03\% |  | 8.14\% |  | 4.71\% |  | 3.57\% |  | 4.24\% |  | 12.28\% |  | 5.04\% |
| Allowance for loan losses to retained nonaccrual loans $(f)$ |  | 86 |  | 186 |  | NM |  | 225 |  | 109 |  | 139 |  | NM |  | 184 |
| Allowance for loan losses to retained nonaccrual loans |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| excluding credit card |  | 86 |  | 186 |  | NM |  | 148 |  | 109 |  | 139 |  | NM |  | 127 |
| Net charge-off rates(g) |  | 0.81 |  | 2.32 |  | 9.73 |  | 3.39 |  | 1.40 |  | 2.82 |  | 11.07 |  | 3.42 |
| Credit ratios excluding home lending PCI loans and loans held by the WMMT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Allowance for loan losses to retained loans(h) |  | 2.14 |  | 4.53 |  | 8.14 |  | 4.46 |  | 3.57 |  | 4.94 |  | 12.43 |  | 5.51 |
| Allowance for loan losses to retained nonaccrual loans $(f)(\mathrm{h})$ |  | 86 |  | 131 |  | NM |  | 190 |  | 109 |  | 124 |  | NM |  | 174 |
| Allowance for loan losses to retained nonaccrual loans excluding credit card(f)(h) |  | 86 |  | 131 |  | NM |  | 114 |  | 109 |  | 124 |  | NM |  | 118 |

(a) Effective January 1, 2010, the Firm adopted accounting guidance related to VIEs. Upon the adoption of the guidance, the Firm consolidated its Firm-sponsored credit card securitization trusts, its Firm-administered multi-seller conduits and certain other consumer loan securitization entities, primarily mortgage-related. As a result $\$ 7.4$ billion, $\$ 14$ million and $\$ 127$ million, respectively, of allowance for loan losses were recorded on-balance sheet associated with the consolidation of these entities. For further discussion, see Note 16 on pages 244-259 of this Annual Report.
(b) Other predominantly includes a reclassification in 2009 related to the issuance and retention of securities from the Chase Issuance Trust.
(c) Includes risk-rated loans that have been placed on nonaccrual status and loans that have been modified in a TDR.
(d) The asset-specific consumer (excluding credit card) allowance for loan losses includes TDR reserves of $\$ 985$ million and $\$ 754$ million at December 31, 2010 and 2009, respectively. Prior-period amounts have been reclassified from formula-based to conform with the current period presentation.
(e) At December 31, 2010, the Firm's allowance for loan losses on credit card loans for which the Firm has modified the terms of the loans for borrowers who are experiencing financial difficulty was reclassified to the asset-specific allowance. Prior periods have been revised to reflect the current presentation.
(f) The Firm's policy is generally to exempt credit card loans from being placed on nonaccrual status as permitted by regulatory guidance. Under the guidance issued by the FFIEC, credit card loans are charged off by the end of the month in which the account becomes 180 days past due or within 60 days from receiving notification about a specified event (e.g., bankruptcy of the borrower), whichever is earlier.
g) Charge-offs are not recorded on PCI loans until actual losses exceed estimated losses recorded as purchase accounting adjustments at the time of acquisition
(h) Excludes the impact of PCl loans acquired as part of the Washington Mutual transaction. The allowance for loan losses on PCl loans was $\$ 4.9$ billion and $\$ 1.6$ billion as of December 31, 2010 and 2009, respectively.

The following table presents a credit ratio excluding: home lending PCl loans acquired in the Washington Mutual transaction; and credit card loans held by the Washington Mutual Master Trust which were consolidated onto the Firm's balance sheet at fair value during the second quarter of 2009. The PCI loans were accounted for at fair value on the acquisition date, which incorporated management's estimate, as of that date, of credit losses over the remaining life of the portfolio. Accordingly, no allowance for loan losses was recorded for these loans as of the acquisition date. Subsequent evaluations of
estimated credit deterioration in this portfolio resulted in the recording of an allowance for loan losses of $\$ 4.9$ billion and $\$ 1.6$ billion at December 31, 2010 and 2009, respectively. For more information on home lending PCI loans, see pages $132-134$ of this Annual Report. For more information on the consolidation of assets from the Washington Mutual Master Trust, see Note 16 on pages 244-259 of this Annual Report.

The calculation of the allowance for loan losses to total retained loans, excluding PCI loans and loans held by the WMMT, is presented below.

| December 31, (in millions, except ratios) | 2010 |  | 2009 |  |
| :---: | :---: | :---: | :---: | :---: |
| Allowance for loan losses | \$ | 32,266 | \$ | 31,602 |
| Less: Allowance for PCI loans |  | 4,941 |  | 1,581 |
| Adjusted allowance for loan losses | \$ | 27,325 | \$ | 30,021 |
| Total loans retained |  | 685,498 |  | 627,218 |
| Less: Firmwide PCI loans |  | 72,807 |  | 81,380 |
| Loans held by the WMMT |  | - |  | 1,002 |
| Adjusted loans | \$ | 612,691 | \$ | 544,836 |
| Allowance for loan losses to ending loans excluding PCI loans and loans held by the WMMT |  | 4.46\% |  | 5.51\% |

## Provision for credit losses

The provision for credit losses was $\$ 16.6$ billion for the year ended December 31, 2010, down by $\$ 21.8$ billion, or $57 \%$, from the prioryear provision. The total consumer provision (excluding credit card) for credit losses was $\$ 9.5$ billion, reflecting an addition to the allowance for loan losses of $\$ 1.6$ billion (primarily related to the increase in allowance for the PCI portfolio of $\$ 3.4$ billion), partially offset by a $\$ 1.8$ billion reduction in allowance predominantly for non-credit-impaired residential real estate loans. The prior year provision was $\$ 16.0$ billion reflecting additions of $\$ 5.8$ billion predominantly for the home equity and mortgage portfolios, including $\$ 1.6$ billion for the PCl portfolio.

The total credit card provision for credit losses was $\$ 8.0$ billion, primarily reflecting a reduction in the allowance for credit losses of $\$ 6.0$ billion as a result of improved delinquency trends and reduced net charge-offs. The prior year managed provision was $\$ 18.5$ billion reflecting additions to the allowance of $\$ 2.4$ billion. The wholesale provision for credit losses was a benefit of $\$ 850$ million, compared with expense of $\$ 4.0$ billion, reflecting a reduction in the allowance for credit losses predominantly as a result of continued improvement in the credit quality of the commercial and industrial portfolio, reduced net charge-offs and repayments.

| Year ended December 31, (in millions) | Provision for loan losses |  |  |  |  |  | Provision for lending-related commitments |  |  |  |  |  | Total provision for credit losses |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2010 |  | 2009 |  | 2008 | 2010 |  | 2009 |  | 2008 |  | 2010 |  | 2009 | 2008 |  |
| Wholesale | \$ | (673) | \$ | 3,684 | \$ | 3,536 | \$ | (177) | \$ | 290 | \$ | (209) | \$ | (850) | \$ 3,974 |  | 3,327 |
| Consumer, excluding credit card(a) |  | 9,458 |  | 16,032 |  | 10,659 |  | (6) |  | (10) |  | (49) |  | 9,452 | 16,022 |  | 10,610 |
| Credit card - reported(a)(b) |  | 8,037 |  | 12,019 |  | 7,042 |  | - |  | - |  | - |  | 8,037 | 12,019 |  | 7,042 |
| Total provision for credit losses - reported |  | 16,822 |  | 31,735 |  | 21,237 |  | (183) |  | 280 |  | (258) |  | 16,639 | 32,015 |  | 20,979 |
| Credit card - securitized(b)(c) |  | NA |  | 6,443 |  | 3,612 |  | NA |  | - |  | - |  | NA | 6,443 |  | 3,612 |
| Total provision for credit losses - managed |  | 16,822 |  | 38,178 |  | 24,849 | \$ | (183) | \$ | 280 | \$ | (258) |  | 16,639 | \$ 38,458 |  | 24,591 |

(a) Includes adjustments to the provision for credit losses recognized in the Corporate/Private Equity segment related to the Washington Mutual transaction in 2008.
(b) Effective January 1, 2010, the Firm adopted accounting guidance related to VIEs. As a result of the consolidation of the credit card securitization trusts, reported and managed basis relating to credit card securitizations are equivalent for periods beginning after January 1, 2010. For further discussion regarding the Firm's application and the impact of the new guidance, see Explanation and Reconciliation of the Firm's Use of Non-GAAP Financial Measures on pages 64-65 of this Annual Report.
(c) Loans securitized are defined as loans that were sold to unconsolidated securitization trusts and were not included in reported loans. For further discussion of credit card securitizations, see Note 16 on pages 244-259 of this Annual Report.

## Management's discussion and analysis

## MARKET RISK MANAGEMENT

Market risk is the exposure to an adverse change in the market value of portfolios and financial instruments caused by a change in market prices or rates.

## Market risk management

Market Risk is an independent risk management function that works in close partnership with the business segments to identify and monitor market risks throughout the Firm and to define market risk policies and procedures. The risk management function is headed by the Firm's Chief Risk Officer.

Market Risk seeks to facilitate efficient risk/return decisions, reduce volatility in operating performance and provide transparency into the Firm's market risk profile for senior management, the Board of Directors and regulators. Market Risk is responsible for the following functions:

- establishing a market risk policy framework
- independent measurement, monitoring and control of line-ofbusiness market risk
- definition, approval and monitoring of limits
- performance of stress testing and qualitative risk assessments


## Risk identification and classification

Each line of business is responsible for the comprehensive identification and verification of market risks within its units. The Firm's market risks arise primarily from the activities in IB, Mortgage Production and Servicing, and CIO in Corporate/Private Equity.
IB makes markets and trades its products across the fixed income, foreign exchange, equities and commodities markets. This trading activity may lead to a potential decline in net income due to adverse changes in market rates. In addition to these trading risks, there are risks in IB's credit portfolio from retained loans and commitments, derivative credit valuation adjustments, hedges of the credit valuation adjustments and mark-to-market hedges of the retained loan portfolio. Additional risk positions result from the debit valuation adjustments taken on certain structured liabilities and derivatives to reflect the credit quality of the Firm.
The Firm's Mortgage Production and Servicing business includes the Firm's mortgage pipeline and warehouse loans, MSRs and all related hedges. These activities give rise to complex interest rate risks, as well as option and basis risk. Option risk arises primarily from prepayment options embedded in mortgages and changes in the probability of newly
originated mortgage commitments actually closing. Basis risk results from differences in the relative movements of the rate indices underlying mortgage exposure and other interest rates.

CIO is primarily concerned with managing structural risks which arise out of the various business activities of the Firm. Market Risk measures and monitors the gross structural exposures as well as the net exposures related to these activities.

## Risk measurement

Tools used to measure risk
Because no single measure can reflect all aspects of market risk, the Firm uses various metrics, both statistical and nonstatistical, including:

- Value-at-risk ("VaR")
- Economic-value stress testing
- Nonstatistical risk measures
- Loss advisories
- Revenue drawdowns
- Risk identification for large exposures ("RIFLEs")
- Earnings-at-risk stress testing


## Value-at-risk

JPMorgan Chase utilizes VaR, a statistical risk measure, to estimate the potential loss from adverse market moves. Each business day, as part of its risk management activities, the Firm undertakes a comprehensive VaR calculation that includes the majority of its material market risks. VaR provides a consistent cross-business measure of risk profiles and levels of diversification and is used for comparing risks across businesses and monitoring limits. These VaR results are reported to senior management and regulators, and they feed regulatory capital calculations.

The Firm calculates VaR to estimate possible economic outcomes for current positions using historical data from the previous twelve months. This approach assumes that historical changes in market values are representative of current risk; this assumption may not always be valid. VaR is calculated using a one-day time horizon and an expected tail-loss methodology, which approximates a $95 \%$ confidence level. This means the Firm would expect to incur losses greater than that predicted by VaR estimates five times in every 100 trading days, or about 12 to 13 times a year.

The table below shows the results of the Firm's VaR measure using a 95\% confidence level.

## 95\% Confidence-Level VaR

## Total IB trading VaR by risk type, credit portfolio VaR and other VaR

| As of or for the year ended December 31, (in millions) | 2010 |  |  |  |  |  | 2009 |  |  |  |  |  | At December 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average |  | Minimum |  | Maximum |  | Average |  | Minimum |  | Maximum |  | 2010 |  | 2009 |  |
| IB VaR by risk type |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fixed income | \$ | 65 | \$ | 33 | \$ | 95 | \$ | 160 | \$ | 80 | \$ | 216 | \$ | 52 | \$ | 80 |
| Foreign exchange |  | 11 |  | 6 |  | 20 |  | 18 |  | 7 |  | 39 |  | 16 |  | 10 |
| Equities |  | 22 |  | 10 |  | 52 |  | 47 |  | 8 |  | 156 |  | 30 |  | 43 |
| Commodities and other |  | 16 |  | 11 |  | 32 |  | 20 |  | 11 |  | 35 |  | 13 |  | 14 |
| Diversification benefit to IB trading VaR |  | (43)(a) |  | $\mathrm{NM}(\mathrm{b})$ |  | NM(b) |  | (91)(a) |  | NM(b) |  | NM(b) |  | (34)(a) |  | (54)(a) |
| IB trading VaR | \$ | 71 | \$ | 40 | \$ | 107 | \$ | 154 | \$ | 77 | \$ | 236 | \$ | 77 | \$ | 93 |
| Credit portfolio VaR |  | 26 |  | 15 |  | 40 |  | 52 |  | 18 |  | 106 |  | 27 |  | 21 |
| Diversification benefit to IB trading and credit portfolio VaR |  | (10) ${ }^{(a)}$ |  | $\mathrm{NM}(\mathrm{b})$ |  | $\mathrm{NM}(\mathrm{b})$ |  | (42)(a) |  | NM(b) |  | NM(b) |  | (5) ${ }^{(a)}$ |  | (9)(a) |
| Total IB trading and credit portfolio VaR | \$ | 87 | \$ | 50 | \$ | 128 | \$ | 164 | \$ | 93 | \$ | 256 | \$ | 99 | \$ | 105 |
| Mortgage Production and Servicing VaR | \$ | 23 | \$ | 8 | \$ | 47 | \$ | 57 | \$ | 19 | \$ | 151 | \$ | 9 | \$ | 28 |
| Chief Investment Office ("CIO") VaR |  | 61 |  | 44 |  | 80 |  | 103 |  | 71 |  | 126 |  | 56 |  | 76 |
| Diversification benefit to total other VaR |  | (13)(a) |  | $\mathrm{NM}(\mathrm{b})$ |  | NM(b) |  | (36)(a) |  | NM(b) |  | NM(b) |  | (10)(a) |  | (13)(a) |
| Total other VaR | \$ | 71 | \$ | 48 | \$ | 100 | \$ | 124 | \$ | 79 | \$ | 202 | \$ | 55 | \$ | 91 |
| Diversification benefit to total IB and other VaR |  | (59)(a) |  | $\mathrm{NM}(\mathrm{b})$ |  | NM(b) |  | (82)(a) |  | NM(b) |  | NM(b) |  | (65)(a) |  | (73)(a) |
| Total IB and other VaR | \$ | 99 | \$ | 66 | \$ | 142 | \$ | 206 | \$ | 111 | \$ | 328 | \$ | 89 | \$ | 123 |

(a) Average VaR and period-end VaR were less than the sum of the VaR of the components described above, which is due to portfolio diversification. The diversification effect reflects the fact that the risks were not perfectly correlated. The risk of a portfolio of positions is therefore usually less than the sum of the risks of the positions themselves.
(b) Designated as not meaningful ("NM"), because the minimum and maximum may occur on different days for different risk components, and hence it is not meaningful to compute a portfolio-diversification effect.

## VaR measurement

IB trading and credit portfolio VaR includes substantially all trading activities in IB, including the credit spread sensitivities of certain mortgage products and syndicated lending facilities that the Firm intends to distribute. The Firm uses proxies to estimate the VaR for these products since daily time series are largely not available. It is likely that using an actual price-based time series for these products, if available, would affect the VaR results presented. In addition, for certain products included in IB trading and credit portfolio VaR, particular risk parameters are not fully captured - for example, correlation risk.

Total other VaR includes certain positions employed as part of the Firm's risk management function within CIO and in the Mortgage Production and Servicing business. CIO VaR includes positions, primarily in debt securities and credit products, used to manage structural and other risks including interest rate, credit and mortgage risks arising from the Firm's ongoing business activities. The Mortgage Production and Servicing VaR includes the Firm's mortgage pipeline and warehouse loans, MSRs and all related hedges.
In the Firm's view, including IB trading and credit portfolio VaR within total other VaR produces a more complete and transparent perspective of the Firm's market risk profile.

IB and other VaR does not include the retained credit portfolio, which is not marked to market; however, it does include hedges of those
positions. It also does not include debit valuation adjustments ("DVA") taken on derivative and structured liabilities to reflect the credit quality of the Firm, principal investments (mezzanine financing, tax-oriented investments, etc.), and certain securities and investments held by the Corporate/Private Equity line of business, including private equity investments, capital management positions and longer-term investments managed by CIO. These longer-term positions are managed through the Firm's earnings at risk and other cash flow monitoring processes, rather than by using a VaR measure. Principal investing activities and Private Equity positions are managed using stress and scenario analyses. See the DVA Sensitivity table on page 144 of this Annual Report for further details. For a discussion of Corporate/Private Equity, see pages 89-90 of this Annual Report.

## 2010 and 2009 VaR results

As presented in the table, average total IB and other VaR totaled $\$ 99$ million for 2010, compared with $\$ 206$ million for 2009. The decrease in average VaR in 2010 was driven by a decline in market volatility in early 2009, as well as a reduction in exposures, primarily in CIO and IB. Average total IB trading and credit portfolio VaR for 2010 was $\$ 87$ million, compared with $\$ 164$ million for 2009. The decrease in IB trading and credit portfolio VaR for 2010 was also driven by the decline in market volatility, as well as a reduction in exposure, primarily in the fixed income risk component. CIO VaR averaged $\$ 61$ million for 2010, compared with $\$ 103$ million for 2009. Mortgage Production and Servicing VaR averaged $\$ 23$ million for 2010,

## Management's discussion and analysis

compared with $\$ 57$ million for 2009. Decreases in CIO and Mortgage Production and Servicing VaR for 2010 were again driven by the decline in market volatility and position changes. The decline in Mortgage Production and Servicing VaR at December 31, 2010, reflects management's decision to reduce risk given market volatility at the time.

The Firm's average IB and other VaR diversification benefit was $\$ 59$ million or $37 \%$ of the sum for 2010, compared with $\$ 82$ million or $28 \%$ of the sum for 2009. The Firm experienced an increase in thediversification benefit in 2010 as positions changed and correlations decreased. In general, over the course of the year, VaR exposure can vary significantly as positions change, market volatility fluctuates and diversification benefits change.

## VaR back-testing

The Firm conducts daily back-testing of VaR against its market riskrelated revenue, which is defined as the change in value of: principal transactions revenue for IB and CIO (less Private Equity gains/losses and revenue from longer-term CIO investments); trading-related net interest income for IB, CIO and Mortgage Production and Servicing; IB brokerage commissions, underwriting fees or other revenue; revenue from syndicated lending facilities that the Firm intends to distribute; and mortgage fees and related income for the Firm's mortgage pipeline and warehouse loans, MSRs, and all related hedges. Daily firmwide market risk-related revenue excludes gains and losses from DVA.

The following histogram illustrates the daily market risk-related gains and losses for IB, CIO and Mortgage Production and Servicing positions for 2010. The chart shows that the Firm posted market risk-related gains on 248 out of 261 days in this period, with 12 days exceeding $\$ 210$ million. The inset graph looks at those days on which the Firm experienced losses and depicts the amount by which the $95 \%$ confidence-level VaR exceeded the actual loss on each of those days. During 2010, losses were sustained on 13 days, none of which exceeded the VaR measure.


The following table provides information about the gross sensitivity of DVA to a one-basis-point increase in JPMorgan Chase's credit spreads. This sensitivity represents the impact from a one-basis-point parallel shift in JPMorgan Chase's entire credit curve. As credit curves do not typically move in a parallel fashion, the sensitivity multiplied by the change in spreads at a single maturity point may not be representative of the actual revenue recognized.

## Debit valuation adjustment sensitivity

| December 31, (in millions) | 1 Basis point increase in <br> JPMorgan Chase's credit spread |
| :--- | :---: |
| 2010 | $\$ 35$ |
| 2009 | $\$ 39$ |

## Economic value stress testing

While VaR reflects the risk of loss due to adverse changes in markets using recent historical market behavior as an indicator of losses, stress testing captures the Firm's exposure to unlikely but plausible events in abnormal markets using multiple scenarios that assume significant changes in credit spreads, equity prices, interest rates, currency rates or commodity prices. Scenarios are updated dynamically and may be redefined on an ongoing basis to reflect current market conditions. Along with VaR, stress testing is important in measuring and controlling risk; it enhances understanding of the Firm's risk profile and loss potential, as stress losses are monitored against limits. Stress testing is also employed in cross-business risk management. Stress-test results, trends and explanations based on current market risk positions are reported to the Firm's senior management and to the lines of business to allow them to better understand event risk-sensitive positions and manage risks with more transparency.

## Nonstatistical risk measures

Nonstatistical risk measures as well as stress testing include sensitivities to variables used to value positions, such as credit spread sensitivities, interest rate basis point values and market values. These measures provide granular information on the Firm's market risk exposure. They are aggregated by line-of-business and by risk type, and are used for tactical control and monitoring limits.

## Loss advisories and revenue drawdowns

Loss advisories and net revenue drawdowns are tools used to highlight trading losses above certain levels of risk tolerance. Net revenue drawdown is defined as the decline in net revenue since the year-to-date peak revenue level.

## Risk identification for large exposures

Individuals who manage risk positions in IB are responsible for identifying potential losses that could arise from specific, unusual events, such as a potential change in tax legislation, or a particular combination of unusual market moves. This information is aggregated centrally for IB. Trading businesses are responsible for RIFLEs, thereby permitting the Firm to monitor further earnings vulnerability not adequately covered by standard risk measures.

## Earnings-at-risk stress testing

The VaR and stress-test measures described above illustrate the total economic sensitivity of the Firm's Consolidated Balance Sheets to changes in market variables. The effect of interest rate exposure on reported net income is also important. Interest rate risk exposure in the Firm's core nontrading business activities (i.e., asset/liability management positions, including accrual loans within IB and CIO) results from on- and off-balance sheet positions. ALCO establishes the Firm's interest rate risk policies, sets risk guidelines and limits and reviews the risk profile of the Firm. Treasury, working in partnership with the lines of business, calculates the Firm's interest rate risk profile weekly and reports to senior management.
Interest rate risk for nontrading activities can occur due to a variety of factors, including:

- Differences in the timing among the maturity or repricing of assets, liabilities and off-balance sheet instruments. For example, if liabilities reprice more quickly than assets and funding interest rates are declining, earnings will increase initially.
- Differences in the amounts of assets, liabilities and off-balance sheet instruments that are repricing at the same time. For example, if more deposit liabilities are repricing than assets when general interest rates are declining, earnings will increase initially.
- Differences in the amounts by which short-term and long-term market interest rates change (for example, changes in the slope of the yield curve) because the Firm has the ability to lend at long-term fixed rates and borrow at variable or short-term fixed rates. Based on these scenarios, the Firm's earnings would be affected negatively by a sudden and unanticipated increase in short-term rates paid on its liabilities (e.g., deposits) without a corresponding increase in long-term rates received on its assets (e.g., loans). Conversely, higher long-term rates received on assets generally are beneficial to earnings, particularly when the increase is not accompanied by rising short-term rates paid on liabilities.
- The impact of changes in the maturity of various assets, liabilities or off-balance sheet instruments as interest rates change. For example, if more borrowers than forecasted pay down higher-rate loan balances when general interest rates are declining, earnings may decrease initially.

The Firm manages interest rate exposure related to its assets and liabilities on a consolidated, corporate-wide basis. Business units transfer their interest rate risk to Treasury through a transfer-pricing system, which takes into account the elements of interest rate exposure that can be risk-managed in financial markets. These elements include asset and liability balances and contractual rates of interest, contractual principal payment schedules, expected prepayment experience, interest rate reset dates and maturities, rate indices used for repricing, and any interest rate ceilings or floors for adjustable rate products. All transfer-pricing assumptions are dynamically reviewed.
The Firm conducts simulations of changes in net interest income from its nontrading activities under a variety of interest rate scenarios. Earnings-at-risk tests measure the potential change in the Firm's net interest income, and the corresponding impact to the Firm's pretax earnings, over the following 12 months. These tests highlight exposures to various rate-sensitive factors, such as the rates themselves (e.g., the prime lending rate), pricing strategies on deposits, optionality and changes in product mix. The tests include forecasted balance sheet changes, such as asset sales and securitizations, as well as prepayment and reinvestment behavior. Mortgage prepayment assumptions are based on current interest rates compared with underlying contractual rates, the time since origination, and other factors which are updated periodically based on historical experience and forward market expectations. The balance and pricing assumptions of deposits that have no stated maturity are based on historical performance, the competitive environment, customer behavior, and product mix.

## Management's discussion and analysis

Immediate changes in interest rates present a limited view of risk, and so a number of alternative scenarios are also reviewed. These scenarios include the implied forward curve, nonparallel rate shifts and severe interest rate shocks on selected key rates. These scenarios are intended to provide a comprehensive view of JPMorgan Chase's earnings at risk over a wide range of outcomes.
JPMorgan Chase's 12-month pretax earnings sensitivity profiles as of December 31, 2010 and 2009, were as follows.

|  | Immediate change in rates |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| December 31, (in millions) | +200bp | +100 bp | -100 bp | -200 bp |
| 2010 | $\$ 2,465$ | $\$ 1,483$ | NM(a)(b) | NM(a)(b) |
| 2009 | $\$(1,594)$ | $\$(554)$ | NM(a) | NM(a) |

(a) Downward 100- and 200-basis-point parallel shocks result in a Fed Funds target rate of zero, and negative three- and six-month Treasury rates. The earnings-atrisk results of such a low-probability scenario are not meaningful.
(b) Excludes economic value stress losses.

The change in earnings at risk from December 31, 2009, resulted from investment portfolio repositioning, assumed higher levels of deposit balances and reduced levels of fixed-rate loans. The Firm's risk to rising rates was largely the result of widening deposit margins, which are currently compressed due to very low short-term interest rates.
Additionally, another interest rate scenario conducted by the Firm involving a steeper yield curve with long-term rates rising by 100 basis points and short-term rates staying at current levels - results in a 12-month pretax earnings benefit of $\$ 770$ million. The increase in earnings under this scenario is due to reinvestment of maturing assets at the higher long-term rates, with funding costs remaining unchanged.

## Risk monitoring and control

## Limits

Market risk is controlled primarily through a series of limits. Limits reflect the Firm's risk appetite in the context of the market environment and business strategy. In setting limits, the Firm takes into consideration factors such as senior management risk appetite, market volatility, product liquidity, accommodation of client business and management experience.

Market risk management regularly reviews and updates risk limits. Senior management, including the Firm's Chief Executive Officer and Chief Risk Officer, is responsible for reviewing and approving certain risk limits on an ongoing basis.

The Firm maintains different levels of limits. Corporate-level limits include VaR and stress limits. Similarly, line-of-business limits include VaR and stress limits and may be supplemented by loss advisories, nonstatistical measurements and profit and loss drawdowns. Businesses are responsible for adhering to established limits, against which exposures are monitored and reported. Limit breaches are reported in a timely manner to senior management, and the affected line-of-business is required to reduce trading positions or consult with senior management on the appropriate action.

## Model review

Some of the Firm's financial instruments cannot be valued based on quoted market prices but are instead valued using pricing models. These pricing models and VaR models are used for management of risk positions, such as reporting against limits, as well as for valuation. The Model Risk Group, which is independent of the businesses and market risk management, reviews the models the Firm uses and assesses model appropriateness and consistency. The model reviews consider a number of factors about the model's suitability for valuation and risk management of a particular product. These factors include whether the model accurately reflects the characteristics of the transaction and its significant risks, the suitability and convergence properties of numerical algorithms, reliability of data sources, consistency of the treatment with models for similar products, and sensitivity to input parameters and assumptions that cannot be priced from the market.

Reviews are conducted of new or changed models, as well as previously accepted models, to assess whether there have been any changes in the product or market that may affect the model's validity and whether there are theoretical or competitive developments that may require reassessment of the model's adequacy. For a summary of valuations based on models, see Critical Accounting Estimates Used by the Firm on pages 149-154 of this Annual Report.

## Risk reporting

Nonstatistical risk measures, VaR, loss advisories and limit excesses are reported daily to the lines of business and to senior management. Market risk exposure trends, VaR trends, profit-and-loss changes and portfolio concentrations are reported weekly. Stress-test results are also reported weekly to the lines of business and to senior management.

The Firm makes principal investments in private equity. The illiquid nature and long-term holding periods associated with these investments differentiates private equity risk from the risk of positions held in the trading portfolios. The Firm's approach to managing private equity risk is consistent with the Firm's general risk governance structure. Controls are in place establishing expected levels for total and annual investment in order to control the overall size of the portfolios. Industry and geographic concentration limits are in place and intended to ensure diversification of the portfolios. All investments are approved by investment committees that include
executives who are not part of the investing businesses. An independent valuation function is responsible for reviewing the appropriateness of the carrying values of private equity investments in accordance with relevant accounting policies. At December 31 2010 and 2009, the carrying value of the Private Equity portfolio was $\$ 8.7$ billion and $\$ 7.3$ billion, respectively, of which $\$ 875$ million and $\$ 762$ million, respectively, represented publicly-traded positions. For further information on the Private Equity portfolio, see page 90 of this Annual Report.

## OPERATIONAL RISK MANAGEMENT

Operational risk is the risk of loss resulting from inadequate or failed processes or systems, human factors or external events.

## Overview

Operational risk is inherent in each of the Firm's businesses and support activities. Operational risk can manifest itself in various ways, including errors, fraudulent acts, business interruptions, inappropriate behavior of employees, or vendors that do not perform in accordance with their arrangements. These events could result in financial losses and other damage to the Firm, including reputational harm.

To monitor and control operational risk, the Firm maintains a system of comprehensive policies and a control framework designed to provide a sound and well-controlled operational environment. The goal is to keep operational risk at appropriate levels, in light of the Firm's financial strength, the characteristics of its businesses, the markets in which it operates, and the competitive and regulatory environment to which it is subject. Notwithstanding these control measures, the Firm incurs operational losses.

The Firm's approach to operational risk management is intended to mitigate such losses by supplementing traditional control-based approaches to operational risk with risk measures, tools and disciplines that are risk-specific, consistently applied and utilized firmwide. Key themes are transparency of information, escalation of key issues and accountability for issue resolution.

One of the ways operational risk is mitigated is through insurance maintained by the Firm. The Firm purchases insurance to be in compliance with local laws and regulations, as well as to serve other needs of the Firm. Insurance may also be required by third parties with whom the Firm does business. The insurance purchased is reviewed and approved by senior management.
The Firm's operational risk framework is supported by Phoenix, an internally designed operational risk software tool. Phoenix integrates the individual components of the operational risk management framework into a unified, web-based tool. Phoenix enhances the capture, reporting and analysis of operational risk data by enabling risk identification, measurement, monitoring, reporting and analysis to be done in an integrated manner, thereby enabling efficiencies in the Firm's monitoring and management of its operational risk.

For purposes of identification, monitoring, reporting and analysis, the Firm categorizes operational risk events as follows:

- Client service and selection
- Business practices
- Fraud, theft and malice
- Execution, delivery and process management
- Employee disputes
- Disasters and public safety
- Technology and infrastructure failures


## Risk identification

Risk identification is the recognition of the operational risk events that management believes may give rise to operational losses. All businesses utilize the Firm's standard self-assessment process and supporting architecture as a dynamic risk management tool. The goal of the self-assessment process is for each business to identify the key operational risks specific to its environment and assess the degree to which it maintains appropriate controls. Action plans are developed for control issues that are identified, and businesses are held accountable for tracking and resolving these issues on a timely basis.

## Risk measurement

Operational risk is measured for each business on the basis of historical loss experience using a statistically based loss-distribution approach. The current business environment, potential stress scenarios and measures of the control environment are then factored into the statistical measure in determining firmwide operational risk capital. This methodology is designed to comply with the advanced measurement rules under the Basel II Framework.

## Risk monitoring

The Firm has a process for monitoring operational risk-event data, permitting analysis of errors and losses as well as trends. Such analysis, performed both at a line-of-business level and by risk-event type, enables identification of the causes associated with risk events faced by the businesses. Where available, the internal data can be supplemented with external data for comparative analysis with industry patterns. The data reported enables the Firm to back-test against self-assessment results. The Firm is a founding member of the Operational Riskdata eXchange Association, a not-for-profit industry association formed for the purpose of collecting operational loss data, sharing data in an anonymous form and benchmarking results back to mem-

## Management's discussion and analysis

bers. Such information supplements the Firm's ongoing operational risk measurement and analysis.

## Risk reporting and analysis

Operational risk management reports provide timely and accurate information, including information about actual operational loss levels and self-assessment results, to the lines of business and senior management. The purpose of these reports is to enable management to maintain operational risk at appropriate levels within each line of
business, to escalate issues and to provide consistent data aggregation across the Firm's businesses and support areas.

## Audit alignment

Internal Audit utilizes a risk-based program of audit coverage to provide an independent assessment of the design and effectiveness of key controls over the Firm's operations, regulatory compliance and reporting. This includes reviewing the operational risk framework, the effectiveness of the business self-assessment process, and the loss data-collection and reporting activities.

## REPUTATION AND FIDUCIARY RISK MANAGEMENT

The Firm's success depends not only on its prudent management of the liquidity, credit, market and operational risks that are part of its business risk, but equally on the maintenance among its many constituents-customers and clients, investors, regulators, as well as the general public-of a reputation for business practices of the highest quality. Attention to reputation has always been a key aspect of the Firm's practices, and maintenance of the Firm's reputation is the responsibility of each individual employee at the Firm. JPMorgan Chase bolsters this individual responsibility in many ways, including through the Firm's Code of Conduct, which is based on the Firm's fundamental belief that no one should ever sacrifice integrity - or give the impression that he or she has - even if one thinks it would help the Firm's business. The Code requires prompt reporting of any known or suspected violation of the Code, any internal Firm policy, or any law or regulation applicable to the Firm's business. It also requires the reporting of any illegal conduct, or conduct that violates the underlying principles of the Code, by any of our customers, suppliers, contract workers, business partners or agents. Concerns may be reported anonymously and the Firm prohibits retaliation against employees for the good faith reporting of any actual or suspected violations of the Code.
In addition to training of employees with regard to the principles and requirements of the Code, and requiring annual affirmation by each employee of compliance with the Code, the Firm has established policies and procedures, and has in place various oversight functions, intended to promote the Firm's culture of "doing the right thing". These include a Conflicts Office which examines wholesale transactions with the potential to create conflicts of interest for the Firm. In addition, each line of business has a risk committee which includes in its mandate oversight of the reputational risks in its business that may produce significant losses or
reputational damage. In IB, there is a separate Reputation Risk Office and several regional reputation risk committees, members of which are senior representatives of businesses and control functions, that focus on transactions that raise reputational issues. Such transactions may include, for example, complex derivatives and structured finance transactions. The Firm also established this year a Consumer Reputational Risk Committee, comprised of senior management from the Firm's Operating Committee, including the heads of its primary consumer facing businesses, RFS and Card, that helps to ensure that the Firm has a consistent, disciplined focus on the review of the impact on consumers of Chase products and practices, including any that could raise reputational issues.

## Fiduciary Risk Management

The Fiduciary Risk Management function works with relevant line of business risk committees, with the goal of ensuring that businesses providing investment or risk management products or services that give rise to fiduciary duties to clients perform at the appropriate standard relative to their fiduciary relationship with a client. Of particular focus are the policies and practices that address a business' responsibilities to a client, including performance and service requirements and expectations; client suitability determinations; and disclosure obligations and communications. In this way, the relevant line of business risk committees, together with the Fiduciary Risk Management function, provide oversight of the Firm's efforts to monitor, measure and control the performance and risks that may arise in the delivery of products or services to clients that give rise to such fiduciary duties, as well as those stemming from any of the Firm's fiduciary responsibilities under the Firm's various employee benefit plans.

JPMorgan Chase's accounting policies and use of estimates are integral to understanding its reported results. The Firm's most complex accounting estimates require management's judgment to ascertain the value of assets and liabilities. The Firm has established detailed policies and control procedures intended to ensure that valuation methods, including any judgments made as part of such methods, are well-controlled, independently reviewed and applied consistently from period to period. In addition, the policies and procedures are intended to ensure that the process for changing methodologies occurs in an appropriate manner. The Firm believes its estimates for determining the value of its assets and liabilities are appropriate. The following is a brief description of the Firm's critical accounting estimates involving significant valuation judgments.

## Allowance for credit losses

JPMorgan Chase's allowance for credit losses covers the retained wholesale and consumer loan portfolios, as well as the Firm's wholesale and consumer lending-related commitments. The allowance for loan losses is intended to adjust the value of the Firm's loan assets to reflect probable credit losses inherent in the portfolio as of the balance sheet date. The allowance for lending-related commitments is established to cover probable losses in the lendingrelated commitments portfolio. For a further discussion of the methodologies used in establishing the Firm's allowance for credit losses, see Note 15 on pages 239-243 of this Annual Report

Wholesale loans and lending-related commitments
The methodology for calculating the allowance for loan losses and the allowance for lending-related commitments involves significant judgment. First and foremost, it involves the early identification of credits that are deteriorating. Second, it involves judgment in establishing the inputs used to estimate the allowances. Third, it involves management judgment to evaluate certain macroeconomic factors, underwriting standards, and other relevant internal and external factors affecting the credit quality of the current portfolio, and to refine loss factors to better reflect these conditions.

The Firm uses a risk-rating system to determine the credit quality of its wholesale loans. Wholesale loans are reviewed for information affecting the obligor's ability to fulfill its obligations. In assessing the risk rating of a particular loan, among the factors considered are the obligor's debt capacity and financial flexibility, the level of the obligor's earnings, the amount and sources for repayment, the level and nature of contingencies, management strength, and the industry and geography in which the obligor operates. These factors are based on an evaluation of historical and current information and involve subjective assessment and interpretation. Emphasizing one factor over another or considering additional factors could affect the risk rating assigned by the Firm to that loan.

The Firm applies its judgment to establish loss factors used in calculating the allowances. Wherever possible, the Firm uses independent, verifiable data or the Firm's own historical loss experience in its models for estimating the allowances. Many factors can affect estimates of loss, including volatility of loss given default, probability of default and rating migrations. Consideration is given as to whether the loss estimates should be calculated as an average over the entire credit cycle or at a particular point in the credit cycle, as well as to which external data should be used and when they should be used. Choosing data that are not reflective of the Firm's specific loan portfolio characteristics could also affect loss estimates. The application of different inputs would change the amount of the allowance for credit losses determined appropriate by the Firm.

Management also applies its judgment to adjust the loss factors derived, taking into consideration model imprecision, external factors and economic events that have occurred but are not yet reflected in the loss factors. Historical experience of both loss given default and probability of default are considered when estimating these adjustments. Factors related to concentrated and deteriorating industries also are incorporated where relevant. These estimates are based on management's view of uncertainties that relate to current macroeconomic and political conditions, quality of underwriting standards and other relevant internal and external factors affecting the credit quality of the current portfolio.

As noted above, the Firm's wholesale allowance is sensitive to the risk rating assigned to a loan. As of December 31, 2010, assuming a one-notch downgrade in the Firm's internal risk ratings for its entire wholesale portfolio, the allowance for loan losses for the wholesale portfolio would increase by approximately $\$ 1.3$ billion. This sensitivity analysis is hypothetical. In the Firm's view, the likelihood of a onenotch downgrade for all wholesale loans within a short timeframe is remote. The purpose of this analysis is to provide an indication of the impact of risk ratings on the estimate of the allowance for loan losses for wholesale loans. It is not intended to imply management's expectation of future deterioration in risk ratings. Given the process the Firm follows in determining the risk ratings of its loans, management believes the risk ratings currently assigned to wholesale loans are appropriate.

## Consumer loans and lending-related commitments

The allowance for credit losses for the consumer portfolio, including credit card, is sensitive to changes in the economic environment, delinquency status, the realizable value of collateral, FICO scores, borrower behavior and other risk factors, and is intended to represent management's best estimate of probable losses inherent in the portfolio as of the balance sheet date. The credit performance of the consumer portfolio across the entire consumer credit product spectrum has stabilized but high unemployment and weak overall economic conditions continue to result in an elevated level of chargeoffs, while weak housing prices continue to negatively affect the severity of losses realized on residential real estate loans that default. Significant judgment is required to estimate the duration and severity

## Management's discussion and analysis

of the current economic downturn, as well as its potential impact on housing prices and the labor market. While the allowance for credit losses is highly sensitive to both home prices and unemployment rates, in the current market it is difficult to estimate how potential changes in one or both of these factors might affect the allowance for credit losses. For example, while both factors are important determinants of overall allowance levels, changes in one factor or the other may not occur at the same rate, or changes may be directionally inconsistent such that improvement in one factor may offset deterioration in the other. In addition, changes in these factors would not necessarily be consistent across all geographies or product types. Finally, it is difficult to predict the extent to which changes in both or either of these factors would ultimately affect the frequency of losses, the severity of losses or both; overall loss rates are a function of both the frequency and severity of individual loan losses.

The consumer allowance is calculated by applying statistical loss factors and other risk indicators to pools of loans with similar risk characteristics to arrive at an estimate of incurred losses in the portfolio. Management applies judgment to the statistical loss estimates for each loan portfolio category, using delinquency trends and other risk characteristics to estimate probable losses inherent in the portfolio. Management uses additional statistical methods
and considers portfolio and collateral valuation trends to review the appropriateness of the primary statistical loss estimate. The statistical calculation is then adjusted to take into consideration model imprecision, external factors and current economic events that have occurred but are not yet reflected in the factors used to derive the statistical calculation; this adjustment is accomplished in part by analyzing the historical loss experience for each major product segment. In the current economic environment, it is difficult to predict whether historical loss experience is indicative of future loss levels. Management applies judgment in making this adjustment, taking into account uncertainties associated with current macroeconomic and political conditions, quality of underwriting standards, borrower behavior and other relevant internal and external factors affecting the credit quality of the portfolio. For junior lien products, management considers the delinquency and/or modification status of any senior liens in determining the adjustment. The application of different inputs into the statistical calculation, and the assumptions used by management to adjust the statistical calculation, are subject to management judgment, and emphasizing one input or assumption over another, or considering other inputs or assumptions, could affect the estimate of the allowance for loan losses for the consumer credit portfolio.

## Management's discussion and analysis

## Fair value of financial instruments, MSRs and commodities inventories

JPMorgan Chase carries a portion of its assets and liabilities at fair value. The majority of such assets and liabilities are carried at fair value on a recurring basis. Certain assets and liabilities are measured at fair value on a nonrecurring basis, including loans accounted for at the lower of cost or fair value that are only subject to fair value adjustments under certain circumstances.
Under U.S. GAAP there is a three-level valuation hierarchy for disclosure of fair value measurements. An instrument's categorization within the hierarchy is based on the lowest level of input that
is significant to the fair value measurement. Therefore, for instruments classified in levels 1 and 2 of the hierarchy, where inputs are principally based on observable market data, there is less judgment applied in arriving at a fair value measurement. For instruments classified within level 3 of the hierarchy, judgments are more significant. The Firm reviews and updates the fair value hierarchy classifications on a quarterly basis. Changes from one quarter to the next related to the observability of inputs to a fair value measurement may result in a reclassification between hierarchy levels.

## Assets measured at fair value

The following table includes the Firm's assets measured at fair value and the portion of such assets that are classified within level 3 of the valuation hierarchy.

| December 31, <br> (in billions, except ratio data) | 2010 |  |  |  | 2009 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total at fair value |  | Level 3 total |  | Total at fair value |  | Level 3 total |  |
| Trading debt and equity instruments(a) | \$ | 409.4 | \$ | 33.9 | \$ | 330.9 | \$ | 35.2 |
| Derivative receivables - gross |  | 1,529.4 |  | 35.3 |  | 1,565.5 |  | 46.7 |
| Netting adjustment |  | $(1,448.9)$ |  | - |  | $(1,485.3)$ |  | - |
| Derivative receivables - net |  | 80.5 |  | 35.3(d) |  | 80.2 |  | 46.7(d) |
| AFS securities |  | 316.3 |  | 14.3 |  | 360.4 |  | 13.2 |
| Loans |  | 2.0 |  | 1.5 |  | 1.4 |  | 1.0 |
| MSRs |  | 13.6 |  | 13.6 |  | 15.5 |  | 15.5 |
| Private equity investments |  | 8.7 |  | 7.9 |  | 7.3 |  | 6.6 |
| Other(b) |  | 43.8 |  | 4.1 |  | 44.4 |  | 9.5 |
| Total assets measured at fair value on a recurring basis |  | 874.3 |  | 110.6 |  | 840.1 |  | 127.7 |
| Total assets measured at fair value on a nonrecurring basis(c) |  | 10.1 |  | 4.2 |  | 8.2 |  | 2.7 |
| Total assets measured at fair value | \$ | 884.4 | \$ | 114.8(e) | \$ | 848.3 | \$ | 130.4(e) |
| Total Firm assets | \$ | 2,117.6 |  |  | \$ | 2,032.0 |  |  |
| Level 3 assets as a percentage of total Firm assets |  |  |  | 5\% |  |  |  | 6\% |
| Level 3 assets as a percentage of total Firm assets at fair value |  |  |  | 13 |  |  |  | 15 |

(a) Includes physical commodities generally carried at the lower of cost or fair value.
(b) Includes certain securities purchased under resale agreements, securities borrowed, accrued interest receivable and other investments.
(c) Predominantly includes mortgage, home equity and other loans, where the carrying value is based on the fair value of the underlying collateral, and on credit card and leveraged lending loans carried on the Consolidated Balance Sheets at the lower of cost or fair value.
 a legally enforceable master netting agreement in place with counterparties. For purposes of the table above, the Firm does not reduce level 3 derivative receivable balances for netting adjustments, as such an adjustment is not relevant to a presentation that is based on the transparency of inputs to the valuation. Therefore, the derivative balances reported in the fair value hierarchy levels are gross of any counterparty netting adjustments. However, if the Firm were to net such balances within level 3 , the reduction in the level 3 derivative receivable and payable balances would be $\$ 12.7$ billion and $\$ 16.0$ billion at December 31, 2010 and 2009 , respectively, exclusive of the netting benefit associated with cash collateral, which would further reduce the level 3 balances.
(e) At December 31, 2010 and 2009, included $\$ 66.0$ billion and $\$ 80.0$ billion, respectively, of level 3 assets, consisting of recurring and nonrecurring assets carried by IB.

## Management's discussion and analysis

## Valuation

The Firm has an established and well-documented process for determining fair value. Fair value is based on quoted market prices, where available. If listed prices or quotes are not available, fair value is based on internally developed models that primarily use as inputs market-based or independently sourced market parameters. The Firm's process is intended to ensure that all applicable inputs are appropriately calibrated to market data, including but not limited to yield curves, interest rates, volatilities, equity or debt prices, foreign exchange rates and credit curves. In addition to market information, models also incorporate transaction details, such as maturity. Valuation adjustments may be made to ensure that financial instruments are recorded at fair value. These adjustments include amounts to reflect counterparty credit quality, the Firm's creditworthiness, constraints on liquidity and unobservable parameters that are applied consistently over time.
For instruments classified within level 3 of the hierarchy, judgments used to estimate fair value may be significant. In arriving at an estimate of fair value for an instrument within level 3, management must first determine the appropriate model to use. Second, due to the lack of observability of significant inputs, management must assess all relevant empirical data in deriving valuation inputs - including, but not limited to, yield curves, interest rates, volatilities, equity or debt prices, foreign exchange rates and credit curves. In addition to market information, models also incorporate transaction details, such as maturity. Finally, management judgment must be applied to assess the appropriate level of valuation adjustments to reflect counterparty credit quality, the Firm's creditworthiness, constraints on liquidity and unobservable parameters, where relevant. The judgments made are typically affected by the type of product and its specific contractual terms, and the level of liquidity for the product or within the market as a whole. The Firm has numerous controls in place to ensure that its valuations are appropriate. An independent model review group reviews the Firm's valuation models and approves them for use for specific products. All valuation models of the Firm are subject to this review process. A price verification group, independent from the risktaking functions, ensures observable market prices and market-based parameters are used for valuation whenever possible. For those products with material parameter risk for which observable market levels do not exist, an independent review of the assumptions made on pricing is performed. Additional review includes deconstruction of the model valuations for certain structured instruments into their components; benchmarking valuations, where possible, to similar products; validating valuation estimates through actual cash settlement; and detailed review and explanation of recorded gains and losses, which are analyzed daily and over time. Valuation adjustments, which are also determined by the independent price verification group, are based on established policies and applied consistently over time. Any changes to the valuation methodology are reviewed by management to confirm the changes are justified. As markets and products develop and the pricing for certain products becomes more transparent, the Firm continues to refine its valuation methodologies. During 2010, no changes were made to
the Firm's valuation models that had, or are expected to have, a material impact on the Firm's Consolidated Balance Sheets or results of operations.
Imprecision in estimating unobservable market inputs can affect the amount of revenue or loss recorded for a particular position.
Furthermore, while the Firm believes its valuation methods are appropriate and consistent with those of other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date. For a detailed discussion of the determination of fair value for individual financial instruments, see Note 3 on pages 170-187 of this Annual Report.

## Purchased credit-impaired loans

In connection with the Washington Mutual transaction, JPMorgan Chase acquired certain loans with evidence of deterioration of credit quality since origination and for which it was probable, at acquisition, that the Firm would be unable to collect all contractually required payments receivable. These loans are considered to be purchased credit-impaired ("PCI") loans and are accounted for as described in Note 14 on pages 220-238 of this Annual Report. The application of the accounting guidance for PCl loans requires a number of significant estimates and judgment, such as determining: (i) which loans are within the scope of PCl accounting guidance, (ii) the fair value of the PCI loans at acquisition, (iii) how loans are aggregated to apply the guidance on accounting for pools of loans, and
(iv) estimates of cash flows to be collected over the term of the loans.

Determining which loans are in the scope of PCl accounting guidance is highly subjective and requires significant judgment. In the Washington Mutual transaction, consumer loans with certain attributes (e.g., higher loan-to-value ratios, borrowers with lower FICO scores, delinquencies) were determined to be credit-impaired, provided that those attributes arose subsequent to the loans' origination dates. A wholesale loan was determined to be creditimpaired if it was risk-rated such that it would otherwise have required an asset-specific allowance for loan losses.

At the acquisition date, the Firm recorded its PCI loans at fair value, which included an estimate of losses that were then expected to be incurred over the estimated remaining lives of the loans. The Firm estimated the fair value of its PCl loans at the acquisition date by discounting the cash flows expected to be collected at a marketobservable discount rate, when available, adjusted for factors that a market participant would consider in determining fair value. The initial estimate of cash flows to be collected was derived from assumptions such as default rates, loss severities and the amount and timing of prepayments.

The PCl accounting guidance states that investors may aggregate loans into pools that have common risk characteristics and thereby use a composite interest rate and estimate of cash flows expected to be collected for the pools. The pools then become the unit of accounting and are considered one loan for purposes of accounting for these loans at and subsequent to acquisition. Once a pool is assembled, the integrity of the pool must be
maintained. The Firm has aggregated substantially all of the PCl loans identified in the Washington Mutual transaction (i.e., the residential real estate loans) into pools with common risk characteristics. Significant judgment is required to determine whether individual loans have common risk characteristics for purposes of establishing pools of loans.

The Firm's estimate of cash flows expected to be collected must be updated each reporting period based on updated assumptions regarding default rates, loss severities, the amounts and timing of prepayments and other factors that are reflective of current and expected future market conditions. These estimates are dependent on assumptions regarding the level of future home price declines, and the duration and severity of the current economic downturn, among other factors. These estimates and assumptions require significant management judgment and certain assumptions are highly subjective. These estimates of cash flows expected to be collected may have a significant impact on the recognition of impairment losses and/or interest income. As of December 31, 2010, a 1\% decrease in expected future principal cash payments for the entire portfolio of purchased credit-impaired loans would result in the recognition of an allowance for loan losses for these loans of approximately $\$ 670$ million.

## Goodwill impairment

Under U.S. GAAP, goodwill must be allocated to reporting units and tested for impairment at least annually. The Firm's process and methodology used to conduct goodwill impairment testing is described in Note 17 on pages 260-263 of this Annual Report.
Management applies significant judgment when estimating the fair value of its reporting units. Estimates of fair value are dependent upon estimates of (a) the future earnings potential of the Firm's reporting units, including the estimated effects of regulatory and legislative changes, such as the Dodd-Frank Act, the CARD Act, and limitations on non-sufficient funds and overdraft fees and (b) the relevant cost of equity and long-term growth rates. Imprecision in estimating these factors can affect the estimated fair value of the reporting units. The fair values of a significant majority of the Firm's reporting units exceeded their carrying values by substantial amounts (fair value as a percent of carrying value ranged from $120 \%$ to $380 \%$ ) and did not indicate a significant risk of goodwill impairment based on current projections and valuations.

However, the fair value of the Firm's consumer lending businesses in RFS and Card each exceeded their carrying values by approximately $25 \%$ and $7 \%$ respectively and the associated goodwill remains at
an elevated risk of impairment due to their exposure to U.S. consumer credit risk and the effects of regulatory and legislative changes. The assumptions used in the valuation of these businesses include (a) estimates of future cash flows (which are dependent on portfolio outstanding balances, net interest margin, operating expense, credit losses, and the amount of capital necessary given the risk of business activities to meet regulatory capital requirements), (b) the cost of equity used to discount those cash flows to a present value. Each of these factors requires significant judgment and the assumptions used are based on management's best and most current projections, including those derived from the Firm's business forecasting process reviewed with senior management. These projections are consistent with the short-term assumptions discussed in Business Outlook on pages 57-58 of this Form 10-K and, in the longer term, incorporate a set of macroeconomic assumptions (for example, allowing for relatively high but gradually declining unemployment rates for the next few years) and the Firm's best estimates of long-term growth and returns of its businesses. Where possible, the Firm uses third-party and peer data to benchmark its assumptions and estimates. The cost of equity used in the discounted cash flow model reflected the estimated risk and uncertainty in these businesses and was evaluated in comparison with relevant market peers.

The Firm did not recognize goodwill impairment as of December 31, 2010, or at anytime during 2010, based on management's best estimates. However, deterioration in economic market conditions, increased estimates of the effects of recent regulatory or legislative changes, or additional regulatory or legislative changes may result in declines in projected business performance beyond management's current expectations. For example, in Card such declines could result from deterioration in economic conditions, such as: increased unemployment claims or bankruptcy filings that result in increased credit losses, changes in customer behavior that cause decreased account activity or receivables balances, or unanticipated effects of regulatory or legislative changes. In RFS, such declines could result from deterioration in economic conditions that result in increased credit losses, including decreases in home prices beyond management's current expectations; or loan repurchase costs that significantly exceed management's current expectations. Such declines in business performance, or increases in the estimated cost of equity, could cause the estimated fair values of the Firm's reporting units or their associated goodwill to decline, which could result in a material impairment charge to earnings in a future period related to some portion of the associated goodwill.

## Management's discussion and analysis

## ncome taxes

JPMorgan Chase is subject to the income tax laws of the various jurisdictions in which it operates, including U.S. federal, state and local and non-U.S. jurisdictions. These laws are often complex and may be subject to different interpretations. To determine the financial statement impact of accounting for income taxes, including the provision for income tax expense and unrecognized tax benefits, JPMorgan Chase must make assumptions and judgments about how to interpret and apply these complex tax laws to numerous transactions and business events, as well as make judgments regarding the timing of when certain items may affect taxable income in the U.S. and non-U.S. tax jurisdictions.

JPMorgan Chase's interpretations of tax laws around the world are subject to review and examination by the various taxing authorities in the jurisdictions where the Firm operates, and disputes may occur regarding its view on a tax position. These disputes over interpretations with the various taxing authorities may be settled by audit, administrative appeals or adjudication in the court systems of the tax jurisdictions in which the Firm operates. JPMorgan Chase regularly reviews whether it may be assessed additional income taxes as a result of the resolution of these matters, and the Firm records additional reserves as appropriate. In addition, the Firm may revise its estimate of income taxes due to changes in income tax laws, legal interpretations and tax planning strategies. It is possible that revisions in the Firm's estimate of income taxes may materially affect the Firm's results of operations in any reporting period.

The Firm's provision for income taxes is composed of current and deferred taxes. Deferred taxes arise from differences between assets and liabilities measured for financial reporting versus income tax
return purposes. Deferred tax assets are recognized if, in management's judgment, their realizability is determined to be more likely than not. The Firm has also recognized deferred tax assets in connection with certain net operating losses. The Firm performs regular reviews to ascertain whether deferred tax assets are realizable. These reviews include management's estimates and assumptions regarding future taxable income, which also incorporates various tax planning strategies, including strategies that may be available to utilize net operating losses before they expire. In connection with these reviews, if it is determined that a deferred tax asset is not realizable, a valuation allowance is established. The valuation allowance may be reversed in a subsequent reporting period if the Firm determines that, based on revised estimates of future taxable income or changes in tax planning strategies, it is more likely than not that all or part of the deferred tax asset will become realizable. As of December 31, 2010, management has determined it is more likely than not that the Firm will realize its deferred tax assets, net of the existing valuation allowance.

The Firm adjusts its unrecognized tax benefits as necessary when additional information becomes available. Uncertain tax positions that meet the more-likely-than-not recognition threshold are measured to determine the amount of benefit to recognize. An uncertain tax position is measured at the largest amount of benefit that management believes is more likely than not to be realized upon settlement. It is possible that the reassessment of JPMorgan Chase's unrecognized tax benefits may have a material impact on its effective tax rate in the period in which the reassessment occurs.
For additional information on income taxes, see Note 27 on pages 271-273 of this Annual Report.

## ACCOUNTING AND REPORTING DEVELOPMENTS

## Accounting for transfers of financial assets and consolidation of variable interest entities

Effective January 1, 2010, the Firm implemented new accounting guidance that amends the accounting for the transfers of financial assets and the consolidation of VIEs. Upon adoption of the new guidance, the Firm consolidated its Firm-sponsored credit card securitization trusts, Firm-administered multi-seller conduits, and certain mortgage and other consumer loan securitization entities. The Financial Accounting Standards Board ("FASB") deferred the requirements of the new accounting guidance for VIEs for certain investment funds, including mutual funds, private equity funds and hedge funds, until the FASB reconsiders the appropriate accounting guidance for these funds. For additional information about the impact of the adoption of the new accounting guidance on January 1, 2010, see Note 16 on pages 244-259 of this Annual Report.

## Fair value measurements and disclosures

In January 2010, the FASB issued guidance that requires new disclosures, and clarifies existing disclosure requirements, about fair value measurements. The clarifications and the requirement to separately disclose transfers of instruments between level 1 and level 2 of the fair value hierarchy are effective for interim reporting periods beginning after December 15, 2009; the Firm adopted this guidance in the first quarter of 2010. For additional information about the impact of the adoption of the new fair value measurements guidance, see Note 3 on pages 170-187 of this Annual Report. In addition, a new requirement to provide purchases, sales, issuances and settlements in the level 3 rollforward on a gross basis is effective for fiscal years beginning after December 15, 2010.

## Subsequent events

In May 2009, the FASB issued guidance that established general standards of accounting for and disclosure of events that occur after the balance sheet date but before financial statements are issued or are available to be issued. The guidance was effective for interim or annual financial periods ending after June 15, 2009. In February 2010, the FASB amended the guidance by eliminating the requirement for SEC filers to disclose the date through which it evaluated subsequent events. The Firm adopted the amended guidance in the first quarter of 2010. The application of the guidance had no effect on the Firm's Consolidated Balance Sheets or results of operations.

## Accounting for certain embedded credit derivatives

In March 2010, the FASB issued guidance clarifying the circumstances in which a credit derivative embedded in beneficial interests in securitized financial assets is required to be separately accounted for as a derivative instrument. The guidance is effective for the first fiscal quarter beginning after June 15, 2010, with early adoption permitted. Upon adoption, the new guidance permits the election of the fair value option for beneficial interests in securitized financial assets. The Firm adopted the new guidance prospectively, effective July 1, 2010. The adoption of the guidance did not have a material impact on the Firm's Consolidated Balance Sheets or results of operations. For additional information about the impact of the adoption of the new guidance, see Note 6 on pages 191-199 of this Annual Report.
Accounting for troubled debt restructurings of purchased creditimpaired loans that are part of a pool
In April 2010, the FASB issued guidance that amends the accounting for troubled debt restructurings ("TDRs") of PCI loans accounted for within a pool. The guidance clarifies that modified PCI loans should not be removed from a pool even if the modification would otherwise be considered a TDR. Additionally, the guidance clarifies that the impact of modifications should be included in evaluating whether a pool of loans is impaired. The guidance was effective for the Firm beginning in the third quarter of 2010, and is to be applied prospectively. The guidance is consistent with the Firm's previously existing accounting practice and, therefore, had no impact on the Firm's Consolidated Balance Sheets or results of operations.
Disclosures about the credit quality of financing receivables and the allowance for credit losses
In July 2010, the FASB issued guidance that requires enhanced disclosures surrounding the credit characteristics of the Firm's loan portfolio. Under the new guidance, the Firm is required to disclose its accounting policies, the methods it uses to determine the components of the allowance for credit losses, and qualitative and quantitative information about the credit risk inherent in the loan portfolio, including additional information on certain types of loan modifications. For the Firm, the new disclosures became effective for the 2010 Annual Report. For additional information, see Notes 14 and 15 on pages 220-243 of this Annual Report. The adoption of this guidance only affects JPMorgan Chase's disclosures of financing receivables and not its Consolidated Balance Sheets or results of operations. In January 2011, the FASB issued guidance that deferred the effective date of certain disclosures in this guidance regarding TDRs, pending resolution on the FASB's project to amend the scope of TDR guidance.

## Management's discussion and analysis

NONEXCHANGE-TRADED COMMODITY DERIVATIVE CONTRACTS AT FAIR VALUE

In the normal course of business, JPMorgan Chase trades nonexchange-traded commodity derivative contracts. To determine the fair value of these contracts, the Firm uses various fair value estimation techniques, primarily based on internal models with significant observable market parameters. The Firm's nonexchangetraded commodity derivative contracts are primarily energy-related.
The following table summarizes the changes in fair value for nonexchange-traded commodity derivative contracts for the year ended December 31, 2010.

| For the year ended December 31, 2010 (in millions) | Asset position |  | Liability position |  |
| :---: | :---: | :---: | :---: | :---: |
| Net fair value of contracts outstanding at January 1, 2010 | \$ | 5,027 | \$ | 1,737 |
| Effect of legally enforceable master netting agreements |  | 25,282 |  | 26,490 |
| Gross fair value of contracts outstanding at January 1, 2010 |  | 30,309 |  | 28,227 |
| Contracts realized or otherwise settled |  | $(18,309)$ |  | $(17,232)$ |
| Fair value of new contracts |  | 24,294 |  | 23,194 |
| Changes in fair values attributable to changes in valuation techniques and assumptions |  | - |  |  |
| Other changes in fair value |  | 13,156 |  | 14,914 |
| Gross fair value of contracts outstanding at December 31, 2010 |  | 49,450 |  | 49,103 |
| Effect of legally enforceable master netting agreements |  | $(41,284)$ |  | $(41,919)$ |
| Net fair value of contracts outstanding at December 31, 2010 | \$ | 8,166 | \$ | 7,184 |

The following table indicates the maturities of nonexchange-traded commodity derivative contracts at December 31, 2010.

| December 31, 2010 (in millions) | Asset position | Liability position |  |
| :--- | ---: | ---: | ---: |
| Maturity less than 1 year | $\$$ | 22,713 | $\$$ |
| Maturity 1-3 years | 16,689 |  | 19,402 |
| Maturity 4-5 years | 8,500 | 7,840 |  |
| Maturity in excess of 5 years | 1,548 | 5,787 |  |
| Gross fair value of contracts outstanding at |  |  |  |
| $\quad$ December 31, 2010 | 49,450 |  | 49,103 |
| Effect of legally enforceable master netting |  | $(41,284)$ | $(41,919)$ |
| $\quad$ agreements |  |  |  |
| Net fair value of contracts outstanding at |  | 8,166 | $\$$ |
| $\quad$ December 31, 2010 |  |  |  |

From time to time, the Firm has made and will make forward-looking statements. These statements can be identified by the fact that they do not relate strictly to historical or current facts. Forward-looking statements often use words such as "anticipate," "target," "expect," "estimate," "intend," "plan," "goal," "believe," or other words of similar meaning. Forward-looking statements provide JPMorgan Chase's current expectations or forecasts of future events, circumstances, results or aspirations. JPMorgan Chase's disclosures in this Annual Report contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. The Firm also may make forward-looking statements in its other documents filed or furnished with the Securities and Exchange Commission. In addition, the Firm's senior management may make forward-looking statements orally to analysts, investors, representatives of the media and others.

All forward-looking statements are, by their nature, subject to risks and uncertainties, many of which are beyond the Firm's control. JPMorgan Chase's actual future results may differ materially from those set forth in its forward-looking statements. While there is no assurance that any list of risks and uncertainties or risk factors is complete, below are certain factors which could cause actual results to differ from those in the forward-looking statements:

- local, regional and international business, economic and political conditions and geopolitical events;
- changes in laws and regulatory requirements, including as a result of the newly-enacted financial services legislation;
- changes in trade, monetary and fiscal policies and laws;
- securities and capital markets behavior, including changes in market liquidity and volatility;
- changes in investor sentiment or consumer spending or savings behavior;
- ability of the Firm to manage effectively its liquidity;
- changes in credit ratings assigned to the Firm or its subsidiaries;
- damage to the Firm's reputation;
- ability of the Firm to deal effectively with an economic slowdown or other economic or market disruption;
- technology changes instituted by the Firm, its counterparties or competitors;
- mergers and acquisitions, including the Firm's ability to integrate acquisitions;
- ability of the Firm to develop new products and services, and the extent to which products or services previously sold by the Firm require the Firm to incur liabilities or absorb losses not contemplated at their initiation or origination;
- acceptance of the Firm's new and existing products and services by the marketplace and the ability of the Firm to increase market share;
- ability of the Firm to attract and retain employees;
- ability of the Firm to control expense;
- competitive pressures;
- changes in the credit quality of the Firm's customers and counterparties;
- adequacy of the Firm's risk management framework;
- adverse judicial or regulatory proceedings;
- changes in applicable accounting policies;
- ability of the Firm to determine accurate values of certain assets and liabilities;
- occurrence of natural or man-made disasters or calamities or conflicts, including any effect of any such disasters, calamities or conflicts on the Firm's power generation facilities and the Firm's other commodity-related activities;
- the other risks and uncertainties detailed in Part 1, Item 1A: Risk Factors in the Firm's Annual Report on Form 10-K for the year ended December 31, 2010.
Any forward-looking statements made by or on behalf of the Firm speak only as of the date they are made, and JPMorgan Chase does not undertake to update forward-looking statements to reflect the impact of circumstances or events that arise after the date the forward-looking statements were made. The reader should, however, consult any further disclosures of a forward-looking nature the Firm may make in any subsequent Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, or Current Reports on Form 8-K.


## Management's report on internal control over financial reporting

Management of JPMorgan Chase \& Co. ("JPMorgan Chase" or the "Firm") is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed by, or under the supervision of, the Firm's principal executive and principal financial officers, or persons performing similar functions, and effected by JPMorgan Chase's Board of Directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America.

JPMorgan Chase's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records, that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the Firm's assets; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Firm are being made only in accordance with authorizations of JPMorgan Chase's management and directors; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Firm's assets that could have a material effect on the financial statements.
Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management has completed an assessment of the effectiveness of the Firm's internal control over financial reporting as of December 31, 2010. In making the assessment, management used the framework in "Internal Control - Integrated Framework" promulgated by the Committee of Sponsoring Organizations of the Treadway Commission, commonly referred to as the "COSO" criteria.

Based upon the assessment performed, management concluded that as of December 31, 2010, JPMorgan Chase's internal control over financial reporting was effective based upon the COSO criteria. Additionally, based upon management's assessment, the Firm determined that there were no material weaknesses in its internal control over financial reporting as of December 31, 2010.

The effectiveness of the Firm's internal control over financial reporting as of December 31, 2010, has been audited by
PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears herein.


James Dimon Chairman and Chief Executive Officer


Douglas L. Braunstein
Executive Vice President and Chief Financial Officer
February 28, 2011

## Report of independent registered public accounting firm pw

## Report of Independent Registered Public Accounting Firm To the Board of Directors and Stockholders of JPMorgan Chase \& Co.:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of income, changes in stockholders' equity and comprehensive income and cash flows present fairly, in all material respects, the financial position of JPMorgan Chase \& Co. and its subsidiaries (the "Firm") at December 31, 2010 and 2009, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2010, in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Firm maintained, in all material respects, effective internal control over financial reporting as of December 31, 2010, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Firm's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying "Management's report on internal control over financial reporting." Our responsibility is to express opinions on these financial statements and on the Firm's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

## Prinionamine locums

February 28, 2011, except for the effects of business segment changes discussed in Note 34, as to which the date is November 4, 2011

## Consolidated statements of income

| Year ended December 31, (in millions, except per share data) | 2010 |  | 2009 |  | 2008 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Revenue |  |  |  |  |  |  |
| Investment banking fees | \$ | 6,190 | \$ | 7,087 | \$ | 5,526 |
| Principal transactions |  | 10,894 |  | 9,796 |  | $(10,699)$ |
| Lending- and deposit-related fees |  | 6,340 |  | 7,045 |  | 5,088 |
| Asset management, administration and commissions |  | 13,499 |  | 12,540 |  | 13,943 |
| Securities gains(a) |  | 2,965 |  | 1,110 |  | 1,560 |
| Mortgage fees and related income |  | 3,870 |  | 3,678 |  | 3,467 |
| Credit card income |  | 5,891 |  | 7,110 |  | 7,419 |
| Other income |  | 2,044 |  | 916 |  | 2,169 |
| Noninterest revenue |  | 51,693 |  | 49,282 |  | 28,473 |
| Interest income |  | 63,782 |  | 66,350 |  | 73,018 |
| Interest expense |  | 12,781 |  | 15,198 |  | 34,239 |
| Net interest income |  | 51,001 |  | 51,152 |  | 38,779 |
| Total net revenue |  | 102,694 |  | 100,434 |  | 67,252 |
| Provision for credit losses |  | 16,639 |  | 32,015 |  | 20,979 |
| Noninterest expense |  |  |  |  |  |  |
| Compensation expense |  | 28,124 |  | 26,928 |  | 22,746 |
| Occupancy expense |  | 3,681 |  | 3,666 |  | 3,038 |
| Technology, communications and equipment expense |  | 4,684 |  | 4,624 |  | 4,315 |
| Professional and outside services |  | 6,767 |  | 6,232 |  | 6,053 |
| Marketing |  | 2,446 |  | 1,777 |  | 1,913 |
| Other expense |  | 14,558 |  | 7,594 |  | 3,740 |
| Amortization of intangibles |  | 936 |  | 1,050 |  | 1,263 |
| Merger costs |  | - |  | 481 |  | 432 |
| Total noninterest expense |  | 61,196 |  | 52,352 |  | 43,500 |
| Income before income tax expense/(benefit) and extraordinary gain |  | 24,859 |  | 16,067 |  | 2,773 |
| Income tax expense/(benefit) |  | 7,489 |  | 4,415 |  | (926) |
| Income before extraordinary gain |  | 17,370 |  | 11,652 |  | 3,699 |
| Extraordinary gain |  | - |  | 76 |  | 1,906 |
| Net income | \$ | 17,370 | \$ | 11,728 | \$ | 5,605 |
| Net income applicable to common stockholders | \$ | 15,764 | \$ | 8,774 | \$ | 4,742 |
| Per common share data |  |  |  |  |  |  |
| Basic earnings per share |  |  |  |  |  |  |
| Income before extraordinary gain | \$ | 3.98 | \$ | 2.25 | \$ | 0.81 |
| Net income |  | 3.98 |  | 2.27 |  | 1.35 |
| Diluted earnings per share |  |  |  |  |  |  |
| Income before extraordinary gain |  | 3.96 |  | 2.24 |  | 0.81 |
| Net income |  | 3.96 |  | 2.26 |  | 1.35 |
| Weighted-average basic shares |  | 3,956 |  | 3,863 |  | 3,501 |
| Weighted-average diluted shares |  | 3,977 |  | 3,880 |  | 3,522 |
| Cash dividends declared per common share | \$ | 0.20 | \$ | 0.20 | \$ | 1.52 |

(a) The following other-than-temporary impairment losses are included in securities gains for the periods presented.

| Year ended December 31, (in millions) | $\mathbf{2 0 1 0}$ | 2009 |
| :--- | :---: | :---: |
| Total other-than-temporary impairment losses | $\mathbf{\$}$ | $\mathbf{( 9 4 )}$ |
| Losses recorded in/(reclassified from) other comprehensive income | $\mathbf{( 6 )}$ | $(\mathbf{9 4 6 )}$ |
| Total credit losses recognized in income | $\mathbf{\$}$ | $\mathbf{( 1 0 0 )}$ |

The Notes to Consolidated Financial Statements are an integral part of these statements.

## Consolidated balance sheets

| December 31, (in millions, except share data) | 2010 | 2009 |
| :---: | :---: | :---: |
| Assets |  |  |
| Cash and due from banks | \$ 27,567 | \$ 26,206 |
| Deposits with banks | 21,673 | 63,230 |
| Federal funds sold and securities purchased under resale agreements (included \$20,299 and \$20,536 at fair value) | 222,554 | 195,404 |
| Securities borrowed (included \$13,961 and \$7,032 at fair value) | 123,587 | 119,630 |
| Trading assets (included assets pledged of \$73,056 and \$38,315) | 489,892 | 411,128 |
| Securities (included \$316,318 and \$360,365 at fair value and assets pledged of \$86,891 and \$140,631) | 316,336 | 360,390 |
| Loans (included \$1,976 and \$1,364 at fair value) | 692,927 | 633,458 |
| Allowance for loan losses | $(32,266)$ | $(31,602)$ |
| Loans, net of allowance for loan losses | 660,661 | 601,856 |
| Accrued interest and accounts receivable (included zero and \$5,012 at fair value) | 70,147 | 67,427 |
| Premises and equipment | 13,355 | 11,118 |
| Goodwill | 48,854 | 48,357 |
| Mortgage servicing rights | 13,649 | 15,531 |
| Other intangible assets | 4,039 | 4,621 |
| Other assets (included \$18,201 and \$19,165 at fair value and assets pledged of \$1,485 and \$1,762) | 105,291 | 107,091 |
| Total assets ${ }^{(a)}$ | \$ 2,117,605 | \$ 2,031,989 |
| Liabilities |  |  |
| Deposits (included \$4,369 and \$4,455 at fair value) | \$ 930,369 | \$ 938,367 |
| Federal funds purchased and securities loaned or sold under repurchase agreements (included \$4,060 and \$3,396 at fair value) | 276,644 | 261,413 |
| Commercial paper | 35,363 | 41,794 |
| Other borrowed funds (included \$9,931 and \$5,637 at fair value) | 57,309 | 55,740 |
| Trading liabilities | 146,166 | 125,071 |
| Accounts payable and other liabilities (included the allowance for lending-related commitments of \$717 and \$939 and \$236 and \$357 at fair value) | 170,330 | 162,696 |
| Beneficial interests issued by consolidated variable interest entities (included \$1,495 and \$1,410 at fair value) | 77,649 | 15,225 |
| Long-term debt (included \$38,839 and \$48,972 at fair value) | 247,669 | 266,318 |
| Total liabilities(a) | 1,941,499 | 1,866,624 |
| Commitments and contingencies (see Note 31 on pages 280-281 of this Annual Report) |  |  |
| Stockholders' equity |  |  |
| Preferred stock (\$1 par value; authorized 200,000,000 shares; issued 780,000 and 2,538,107 shares) | 7,800 | 8,152 |
| Common stock (\$1 par value; authorized 9,000,000,000 shares; issued 4,104,933,895 shares) | 4,105 | 4,105 |
| Capital surplus | 97,415 | 97,982 |
| Retained earnings | 73,998 | 62,481 |
| Accumulated other comprehensive income/(loss) | 1,001 | (91) |
| Shares held in RSU Trust, at cost (1,192,712 shares and 1,526,944 shares) | (53) | (68) |
| Treasury stock, at cost (194,639,785 shares and 162,974,783 shares) | $(8,160)$ | $(7,196)$ |
| Total stockholders' equity | 176,106 | 165,365 |
| Total liabilities and stockholders' equity | \$ 2,117,605 | \$ 2,031,989 |

 VIE assets and liabilities represents the Firm's interests in those entities, which were eliminated in consolidation.

| December 31, (in millions) | 2010 |  | 2009 |  |
| :---: | :---: | :---: | :---: | :---: |
| Assets |  |  |  |  |
| Trading assets | \$ | 9,837 | \$ | 6,347 |
| Loans |  | 95,587 |  | 13,004 |
| All other assets |  | 3,494 |  | 5,043 |
| Total assets | \$ | 108,918 | \$ | 24,394 |
| Liabilities |  |  |  |  |
| Beneficial interests issued by consolidated variable interest entities | \$ | 77,649 | \$ | 15,225 |
| All other liabilities |  | 1,922 |  | 2,197 |
| Total liabilities | \$ | 79,571 | \$ | 17,422 |

 Chase. At December 31, 2010, the Firm provided limited program-wide credit enhancement of $\$ 2.0$ billion related to its Firm-administered multi-seller conduits. For further discussion, see Note 16 on pages 244-259 of this Annual Report.

The Notes to Consolidated Financial Statements are an integral part of these statements.

## Consolidated statements of changes in stockholders' equity and comprehensive income

| Year ended December 31, (in millions, except per share data) | 2010 |  | 2009 |  | 2008 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Preferred stock |  |  |  |  |  |  |
| Balance at January 1 | \$ | 8,152 | \$ | 31,939 | \$ | - |
| Issuance of preferred stock |  | - |  | - |  | 31,550 |
| Issuance of preferred stock - conversion of the Bear Stearns preferred stock |  | - |  | - |  | 352 |
| Accretion of preferred stock discount on issuance to the U.S. Treasury |  | - |  | 1,213 |  | 37 |
| Redemption of preferred stock issued to the U.S. Treasury |  | - |  | $(25,000)$ |  | - |
| Redemption of other preferred stock |  | (352) |  | - |  | - |
| Balance at December 31 |  | 7,800 |  | 8,152 |  | 31,939 |
| Common stock |  |  |  |  |  |  |
| Balance at January 1 |  | 4,105 |  | 3,942 |  | 3,658 |
| Issuance of common stock |  | - |  | 163 |  | 284 |
| Balance at December 31 |  | 4,105 |  | 4,105 |  | 3,942 |
| Capital surplus |  |  |  |  |  |  |
| Balance at January 1 |  | 97,982 |  | 92,143 |  | 78,597 |
| Issuance of common stock |  | - |  | 5,593 |  | 11,201 |
| Warrant issued to U.S. Treasury in connection with issuance of preferred stock |  | - |  | - |  | 1,250 |
| Preferred stock issue cost |  | - |  | - |  | (54) |
| Shares issued and commitments to issue common stock for employee stock-based compensation |  |  |  |  |  |  |
| Net change from the Bear Stearns merger: |  |  |  |  |  |  |
| Reissuance of treasury stock and the Share Exchange agreement |  | - |  | - |  | 48 |
| Employee stock awards |  | - |  | - |  | 242 |
| Other |  | $(1,273)$ |  | (228) |  | - |
| Balance at December 31 |  | 97,415 |  | 97,982 |  | 92,143 |
| Retained earnings |  |  |  |  |  |  |
| Balance at January 1 |  | 62,481 |  | 54,013 |  | 54,715 |
| Cumulative effect of changes in accounting principles |  | $(4,376)$ |  |  |  |  |
| Net income |  | 17,370 |  | 11,728 |  | 5,605 |
| Dividends declared: |  |  |  |  |  |  |
| Preferred stock |  | (642) |  | $(1,328)$ |  | (674) |
| Accelerated amortization from redemption of preferred stock issued to the U.S. Treasury |  | - |  | $(1,112)$ |  |  |
| Common stock ( $\$ 0.20, \$ 0.20$ and $\$ 1.52$ per share for 2010, 2009 and 2008, respectively) |  | (835) |  | (820) |  | $(5,633)$ |
| Balance at December 31 |  | 73,998 |  | 62,481 |  | 54,013 |
| Accumulated other comprehensive income/(loss) |  |  |  |  |  |  |
| Balance at January 1 |  | (91) |  | $(5,687)$ |  | (917) |
| Cumulative effect of changes in accounting principles |  | (144) |  | - |  | - |
| Other comprehensive income/(loss) |  | 1,236 |  | 5,596 |  | $(4,770)$ |
| Balance at December 31 |  | 1,001 |  | (91) |  | $(5,687)$ |
| Shares held in RSU Trust |  |  |  |  |  |  |
| Balance at January 1 |  | (68) |  | (217) |  | - |
| Resulting from the Bear Stearns merger |  | - |  | - |  | (269) |
| Reissuance from RSU Trust |  | 15 |  | 149 |  | 52 |
| Balance at December 31 |  | (53) |  | (68) |  | (217) |
| Treasury stock, at cost |  |  |  |  |  |  |
| Balance at January 1 |  | $(7,196)$ |  | $(9,249)$ |  | $(12,832)$ |
| Purchase of treasury stock |  | $(2,999)$ |  | - |  | - |
| Reissuance from treasury stock |  | 2,040 |  | 2,079 |  | 2,454 |
| Share repurchases related to employee stock-based compensation awards |  | (5) |  | (26) |  | (21) |
| Net change from the Bear Stearns merger as a result of the reissuance of treasury stock and the Share Exchange agreement |  | - |  | - |  | 1,150 |
| Balance at December 31 |  | $(8,160)$ |  | $(7,196)$ |  | (9,249) |
| Total stockholders' equity | \$ | 176,106 | \$ | 165,365 |  | 166,884 |
| Comprehensive income |  |  |  |  |  |  |
| Net income | \$ | 17,370 | \$ | 11,728 | \$ | 5,605 |
| Other comprehensive income/(loss) |  | 1,236 |  | 5,596 |  | $(4,770)$ |
| Comprehensive income | \$ | 18,606 | \$ | 17,324 | \$ | 835 |

The Notes to Consolidated Financial Statements are an integral part of these statements.

## Consolidated statements of cash flows

| Year ended December 31, (in millions) | 2010 |  | 2009 |  | 2008 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Operating activities |  |  |  |  |  |  |
| Net income | \$ | 17,370 | \$ | 11,728 | \$ | 5,605 |
| Adjustments to reconcile net income to net cash (used in)/provided by operating activities: |  |  |  |  |  |  |
| Provision for credit losses |  | 16,639 |  | 32,015 |  | 20,979 |
| Depreciation and amortization |  | 4,029 |  | 3,308 |  | 3,265 |
| Amortization of intangibles |  | 936 |  | 1,050 |  | 1,263 |
| Deferred tax benefit |  | (968) |  | $(3,622)$ |  | $(2,637)$ |
| Investment securities gains |  | $(2,965)$ |  | $(1,110)$ |  | $(1,560)$ |
| Proceeds on sale of investment |  | - |  | - |  | $(1,540)$ |
| Stock-based compensation |  | 3,251 |  | 3,355 |  | 2,637 |
| Originations and purchases of loans held-for-sale |  | $(37,085)$ |  | $(22,417)$ |  | $(34,902)$ |
| Proceeds from sales, securitizations and paydowns of loans held-for-sale |  | 40,155 |  | 33,902 |  | 38,036 |
| Net change in: |  |  |  |  |  |  |
| Trading assets |  | $(72,082)$ |  | 133,488 |  | $(12,787)$ |
| Securities borrowed |  | $(3,926)$ |  | 4,452 |  | 15,408 |
| Accrued interest and accounts receivable |  | 443 |  | $(6,312)$ |  | 10,221 |
| Other assets |  | $(12,452)$ |  | 32,557 |  | $(32,919)$ |
| Trading liabilities |  | 19,344 |  | $(79,314)$ |  | 24,061 |
| Accounts payable and other liabilities |  | 17,325 |  | $(26,450)$ |  | 1,012 |
| Other operating adjustments |  | 6,234 |  | 6,167 |  | $(12,212)$ |
| Net cash (used in)/provided by operating activities |  | $(3,752)$ |  | 122,797 |  | 23,930 |

## Investing activities

Net change in:
Deposits with bank
Federal funds sold and securities purchased under resale agreemen


Held-to-maturity securities:
Proceeds
Available-for-sale securities:
Proceeds from maturities
Proceeds from sales
Purchases
Proceeds from sales and securitizations of loans held-for-investment
Other changes in loans, net

| $\mathbf{4 1 , 6 2 5}$ | 74,829 | $(118,929)$ |
| ---: | ---: | ---: |
| $\mathbf{( 2 6 , 9 5 7 )}$ | 7,082 | $(44,597)$ |
| $\mathbf{7}$ | 9 | 10 |
| $\mathbf{9 2 , 7 4 0}$ | 87,712 | 44,414 |
| $\mathbf{1 1 8 , 6 0 0}$ | 114,041 | 96,806 |
| $\mathbf{( 1 7 9 , 4 8 7 )}$ | $(346,372)$ | $(248,599)$ |
| $\mathbf{8 , 8 5 3}$ | 30,434 | 27,531 |
| $\mathbf{3 , 6 4 5}$ | 51,251 | $(59,123)$ |
| $\mathbf{( 4 , 9 1 0})$ | $(97)$ | 2,128 |
| - | - | 28,850 |
| $\mathbf{-}$ | 11,228 | $(11,228)$ |
| $\mathbf{( 1 1 4 )}$ | $(762)$ | $(934)$ |
| $\mathbf{5 4 , 0 0 2}$ | 29,355 | $(283,671)$ |

Net cash (used)/received in business acquisitions or dispositions
Proceeds from assets sale to the FRBNY
Net maturities/(purchases) of asset-backed commercial paper guaranteed by the FRBB
All other investing activities, net
Net cash provided byl(used in) investing activities
54,002

## Financing activities

Net change in:
Deposits
Federal funds purchased and securities loaned or sold under repurchase agreements

| $(9,637)$ | $(107,700)$ | 177,331 |
| :---: | :---: | :---: |
| 15,202 | 67,785 | 15,250 |
| $(6,869)$ | $(67,198)$ | 9,219 |
| 2,426 | $(4,076)$ | (55) |
| 55,181 | 51,324 | 72,407 |
| $(99,043)$ | $(68,441)$ | $(65,344)$ |
| 26 | 17 | 148 |
| - | - | 25,000 |
| - | - | 7,746 |
| - | $(25,000)$ |  |
| (352) | - | - |
| - | 5,756 | 11,500 |
| $(2,999)$ | - |  |
| $(1,486)$ | $(3,422)$ | $(5,911)$ |
| $(1,666)$ | $(2,124)$ | (292) |
| $(49,217)$ | $(153,079)$ | 246,999 |
| 328 | 238 | (507) |
| 1,361 | (689) | $(13,249)$ |
| 26,206 | 26,895 | 40,144 |
| 27,567 | \$ 26,206 | \$ 26,895 |
| 12,404 | \$ 16,875 | \$ 37,267 |
| 9,747 | 5,434 | 2,280 |

Beneficial interests issued by consolidated variable interest entities
Proceeds from long-term borrowings and trust preferred capital debt securities
Payments of long-term borrowings and trust preferred capital debt securities
Excess tax benefits related to stock-based compensation
Proceeds from issuance of preferred stock and Warrant to the U.S. Treasury
Proceeds from issuance of other preferred stock
Redemption of preferred stock issued to the U.S. Treasury
Redemption of other preferred stock
Proceeds from issuance of common stock
Treasury stock purchased
Dividends paid
All other financing activities, net

| Net cash (used in)/provided by financing activities |  | $(49,217)$ |  | $(153,079)$ |  | 246,999 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Effect of exchange rate changes on cash and due from banks |  | 328 |  | 238 |  | (507) |
| Net increase/(decrease) in cash and due from banks |  | 1,361 |  | (689) |  | $(13,249)$ |
| Cash and due from banks at the beginning of the year |  | 26,206 |  | 26,895 |  | 40,144 |
| Cash and due from banks at the end of the year | \$ | 27,567 | \$ | 26,206 | \$ | 26,895 |
| Cash interest paid | \$ | 12,404 | \$ | 16,875 | \$ | 37,267 |
| Cash income taxes paid, net |  | 9,747 |  | 5,434 |  | 2,280 |

Note: Effective January 1, 2010, the Firm adopted accounting guidance related to VIEs. Upon adoption of the guidance, the Firm consolidated noncash assets and liabilities of $\$ 87.7$ billion and $\$ 92.2$ billion, respectively.

In 2008, the fair values of noncash assets acquired and liabilities assumed in: (1) the merger with Bear Stearns were $\$ 288.2$ billion and $\$ 287.7$ billion, respectively (approximately 26 million shares of common stock valued at approximately $\$ 1.2$ billion were issued in connection with the Bear Stearns merger); and (2) the Washington Mutual transaction were $\$ 260.3$ billion and $\$ 260.1$ billion, respectively.

## Notes to consolidated financial statements

## Note 1 - Basis of presentation

JPMorgan Chase \& Co. ("JPMorgan Chase" or the "Firm"), a financial holding company incorporated under Delaware law in 1968, is a leading global financial services firm and one of the largest banking institutions in the United States of America ("U.S."), with operations worldwide. The Firm is a leader in investment banking, financial services for consumers, small business and commercial banking, financial transaction processing, asset management and private equity. For a discussion of the Firm's business segment information, see Note 34 on pages 290-293 of this Annual Report.
The accounting and financial reporting policies of JPMorgan Chase and its subsidiaries conform to accounting principles generally accepted in the United States of America ("U.S. GAAP"). Additionally, where applicable, the policies conform to the accounting and reporting guidelines prescribed by bank regulatory authorities.

Certain amounts in prior periods have been reclassified to conform to the current presentation.

## Consolidation

The Consolidated Financial Statements include the accounts of JPMorgan Chase and other entities in which the Firm has a controlling financial interest. All material intercompany balances and transactions have been eliminated. The Firm determines whether it has a controlling financial interest in an entity by first evaluating whether the entity is a voting interest entity or a variable interest entity ("VIE").

## Voting Interest Entities

Voting interest entities are entities that have sufficient equity and provide the equity investors voting rights that enable them to make significant decisions relating to the entity's operations. For these types of entities, the Firm's determination of whether it has a controlling interest is primarily based on the amount of voting equity interests held. Entities in which the Firm has a controlling financial interest, through ownership of the majority of the entities' voting equity interests, or through other contractual rights that give the Firm control, are consolidated by the Firm.
Investments in companies in which the Firm has significant influence over operating and financing decisions (but does not own a majority of the voting equity interests) are accounted for (i) in accordance with the equity method of accounting (which requires the Firm to recognize its proportionate share of the entity's net earnings), or (ii) at fair value if the fair value option was elected at the inception of the Firm's investment. These investments are generally included in other assets, with income or loss included in other income.
The Firm-sponsored asset management funds are generally structured as limited partnerships or limited liability companies, which are typically considered voting interest entities. For the significant majority of these entities, the Firm is the general partner or managing member, but the non-affiliated partners or members have the ability to remove the Firm as the general partner or managing member without cause (i.e., kick-out rights), based on a simple majority vote, or the non-affiliated partners or members have rights to participate in important decisions. Accordingly, the Firm does not consolidate these funds. In the limited cases where the non-affiliated partners or members do not have substantive kick-out or participating rights, the Firm consolidates the funds.

The Firm's investment companies make investments in both public and private entities, including investments in buyouts, growth equity and venture opportunities. These investments are accounted for under investment company guidelines and accordingly, irrespective of the percentage of equity ownership interests held, are carried on the Consolidated Balance Sheets at fair value, and are recorded in other assets.

## Variable Interest Entities

VIEs are entities that, by design, either (1) lack sufficient equity to permit the entity to finance its activities without additional subordinated financial support from other parties, or (2) have equity investors that do not have the ability to make significant decisions relating to the entity's operations through voting rights, or do not have the obligation to absorb the expected losses, or do not have the right to receive the residual returns of the entity.
The most common type of VIE is a special purpose entity ("SPE"). SPEs are commonly used in securitization transactions in order to isolate certain assets and distribute the cash flows from those assets to investors. SPEs are an important part of the financial markets, including the mortgage- and asset-backed securities and commercial paper markets, as they provide market liquidity by facilitating investors' access to specific portfolios of assets and risks. SPEs may be organized as trusts, partnerships or corporations and are typically established for a single, discrete purpose. SPEs are not typically operating entities and usually have a limited life and no employees. The basic SPE structure involves a company selling assets to the SPE; the SPE funds the purchase of those assets by issuing securities to investors. The legal documents that govern the transaction specify how the cash earned on the assets must be allocated to the SPE's investors and other parties that have rights to those cash flows. SPEs are generally structured to insulate investors from claims on the SPE's assets by creditors of other entities, including the creditors of the seller of the assets.
On January 1, 2010, the Firm implemented new consolidation accounting guidance related to VIEs. The new guidance eliminates the concept of qualified special purpose entities ("QSPEs") that were previously exempt from consolidation, and introduces a new framework for consolidation of VIEs. The primary beneficiary of a VIE is required to consolidate the assets and liabilities of the VIE. Under the new guidance, the primary beneficiary is the party that has both (1) the power to direct the activities of an entity that most significantly impact the VIE's economic performance; and (2) through its interests in the VIE, the obligation to absorb losses or the right to receive benefits from the VIE that could potentially be significant to the VIE.

To assess whether the Firm has the power to direct the activities of a VIE that most significantly impact the VIE's economic performance, the Firm considers all the facts and circumstances, including its role in establishing the VIE and its ongoing rights and responsibilities. This assessment includes, first, identifying the activities that most significantly impact the VIE's economic performance; and second, identifying which party, if any, has power over those activities. In general, the parties that make the most significant decisions affecting the VIE (such as asset managers, collateral managers, servicers, or owners of call options or liquidation rights over the VIE's assets) or have the right to unilaterally remove those decision-makers are deemed to have the power to direct the activities of a VIE.

To assess whether the Firm has the obligation to absorb losses of the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE, the Firm considers all of its economic interests, including debt and equity investments, servicing fees, and derivative or other arrangements deemed to be variable interests in the VIE. This assessment requires that the Firm apply judgment in determining whether these interests, in the aggregate, are considered potentially significant to the VIE. Factors considered in assessing significance include: the design of the VIE, including its capitalization structure; subordination of interests; payment priority; relative share of interests held across various classes within the VIE's capital structure; and the reasons why the interests are held by the Firm.

The Firm performs on-going reassessments of: (1) whether entities previously evaluated under the majority voting-interest framework have become VIEs, based on certain events, and therefore subject to the VIE consolidation framework; and (2) whether changes in the facts and circumstances regarding the Firm's involvement with a VIE cause the Firm's consolidation conclusion to change.

For further details regarding the Firm's application of the accounting guidance effective January 1, 2010, see Note 16 on pages 244-259 of this Annual Report.
The Financial Accounting Standards Board ("FASB") issued an amendment which deferred the requirements of the accounting guidance for certain investment funds, including mutual funds, private equity funds and hedge funds. For the funds to which the deferral applies, the Firm continues to apply other existing authoritative guidance to determine whether such funds should be consolidated.
Assets held for clients in an agency or fiduciary capacity by the Firm are not assets of JPMorgan Chase and are not included in the Consolidated Balance Sheets.

For reporting periods prior to January 1, 2010, there were two different accounting frameworks applicable to SPEs: The qualifying special purpose entity ("QSPE") framework and the VIE framework. The applicable framework depended on the nature of the entity and the Firm's relation to that entity. The QSPE framework was applicable when an entity sold financial assets to an SPE meeting certain defined criteria that were designed to ensure that the activities of the entity were essentially predetermined at the inception of the vehicle and that the transferor of the financial assets could not exercise control over the entity and the assets therein. QSPEs were not consolidated by the transferor or other counterparties as long as they did not have the unilateral ability to liquidate or to cause the entity to no longer meet the QSPE criteria. The Firm's securitizations of residential and commercial mortgages, credit card, automobile and student loans generally were evaluated using the QSPE framework. For further details, see Note 16 on pages 244-259 of this Annual Report.
Additionally, the other SPEs were evaluated using the VIE framework, which was based on a risk and reward approach, and required a variable interest holder (i.e., an investor or other counterparty to a VIE) to consolidate the VIE if that party absorbed a majority of the expected losses of the VIE, received the majority of the expected residual returns of the VIE, or both. In making the determination of whether the Firm should consolidate a VIE, the Firm evaluated the VIE's design, capital structure and relationships among the variable interest holders. If the Firm could not identify the party that
consolidates a VIE through a qualitative analysis, the Firm performed a quantitative analysis, which computed and allocated expected losses or residual returns to variable interest holders. The allocation of expected cash flows in this analysis was based on the relative rights and preferences of each variable interest holder in the VIE's capital structure. The Firm reconsidered whether it was the primary beneficiary of a VIE only when certain defined events occurred.

## Use of estimates in the preparation of consolidated financial

 statementsThe preparation of Consolidated Financial Statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, revenue and expense, and disclosures of contingent assets and liabilities. Actual results could be different from these estimates.

## Foreign currency translation

JPMorgan Chase revalues assets, liabilities, revenue and expense denominated in non-U.S. currencies into U.S. dollars using applicable exchange rates.

Gains and losses relating to translating functional currency financial statements for U.S. reporting are included in other comprehensive income/(loss) within stockholders' equity. Gains and losses relating to nonfunctional currency transactions, including non-U.S. operations where the functional currency is the U.S. dollar, are reported in the Consolidated Statements of Income.

## Statements of cash flows

For JPMorgan Chase's Consolidated Statements of Cash Flows, cash is defined as those amounts included in cash and due from banks.

## Significant accounting policies

The following table identifies JPMorgan Chase's other significant accounting policies and the Note and page where a detailed description of each policy can be found.

| Business changes and developments | Note 2 | Page 166 |
| :--- | ---: | :--- |
| Fair value measurement | Note 3 | Page 170 |
| Fair value option | Note 4 | Page 187 |
| Derivative instruments | Note 6 | Page 191 |
| Noninterest revenue | Note 7 | Page 199 |
| Interest income and interest expense | Note 8 | Page 200 |
| Pension and other postretirement employee benefit plans | Note 9 | Page 201 |
| Employee stock-based incentives | Note 10 | Page 210 |
| Securities | Note 12 | Page 214 |
| Securities financing activities | Note 13 | Page 219 |
| Loans | Note 14 | Page 220 |
| Allowance for credit losses | Note 15 | Page 239 |
| Variable interest entities | Note 16 | Page 244 |
| Goodwill and other intangible assets | Note 17 | Page 260 |
| Premises and equipment | Note 18 | Page 263 |
| Long-term debt | Note 22 | Page 265 |
| Income taxes | Note 27 | Page 271 |
| Off-balance sheet lending-related financial instruments, |  |  |
| guarantees and other commitments | Note 30 | Page 275 |
| Litigation | Note 32 | Page 282 |

## Notes to consolidated financial statements

## Note 2 - Business changes and developments

## Decrease in common stock dividend

On February 23, 2009, the Board of Directors reduced the Firm's quarterly common stock dividend from $\$ 0.38$ to $\$ 0.05$ per share, effective with the dividend paid on April 30, 2009, to shareholders of record on April 6, 2009.

## Acquisition of the banking operations of Washington Mutual Bank

On September 25, 2008, JPMorgan Chase acquired the banking operations of Washington Mutual Bank ("Washington Mutual") from the FDIC for $\$ 1.9$ billion. The acquisition expanded JPMorgan Chase's consumer branch network into several states, including California, Florida Washington, Georgia, Idaho, Nevada and Oregon and created the third largest branch network in the U.S. The acquisition also extended the reach of the Firm's business banking, commercial banking, credit card, consumer lending and wealth management businesses.

The acquisition was accounted for under the purchase method of accounting, which requires that the assets and liabilities of Washington Mutual be initially reported at fair value.
In 2008, the $\$ 1.9$ billion purchase price was preliminarily allocated to the Washington Mutual assets acquired and liabilities assumed, which resulted in negative goodwill. In accordance with U.S. GAAP for business combinations that was in effect at the time of the acquisition, noncurrent nonfinancial assets acquired in the Washington Mutual transaction that were not held-for-sale, such as the premises and equipment and other intangibles, were written down against the negative goodwill. The negative goodwill that remained after writing down the nonfinancial assets was recognized as an extraordinary gain of $\$ 1.9$ billion at December 31, 2008. The final total extraordinary gain that resulted from the Washington Mutual transaction was $\$ 2.0$ billion.

The final summary computation of the purchase price and the allocation of the final total purchase price of $\$ 1.9$ billion to the net assets acquired of Washington Mutual, based on their respective fair values as of September 25, 2008, and the resulting final negative goodwill of $\$ 2.0$ billion are presented below.

September 25, 2008 (in millions)

| Purchase price |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Purchase price |  |  | \$ | 1,938 |
| Direct acquisition costs |  |  |  | 3 |
| Total purchase price |  |  |  | 1,941 |
| Net assets acquired: |  |  |  |  |
| Washington Mutual's net assets before fair value adjustments |  | 39,186 |  |  |
| Washington Mutual's goodwill and other intangible assets |  | $(7,566)$ |  |  |
| Subtotal |  | 31,620 |  |  |
| Adjustments to reflect assets acquired at fair value: |  |  |  |  |
| Securities |  | (16) |  |  |
| Trading assets |  | (591) |  |  |
| Loans |  | $(30,998)$ |  |  |
| Allowance for loan losses |  | 8,216 |  |  |
| Premises and equipment |  | 680 |  |  |
| Accrued interest and accounts receivable |  | (243) |  |  |
| Other assets |  | 4,010 |  |  |
| Adjustments to reflect liabilities assumed at fair value: |  |  |  |  |
| Deposits |  | (686) |  |  |
| Other borrowed funds |  | 68 |  |  |
| Accounts payable, accrued expense and other liabilities |  | $(1,124)$ |  |  |
| Long-term debt |  | 1,063 |  |  |
| Fair value of net assets acquired |  |  |  | 11,999 |
| Negative goodwill before allocation to nonfinancial assets |  |  |  | $(10,058)$ |
| Negative goodwill allocated to nonfinancial assets(a) |  |  |  | 8,076 |
| Negative goodwill resulting from the acquisition(b) |  |  | \$ | $(1,982)$ |

 contracts and other commitments) of an acquired business to be recorded at their respective fair values as of the effective date of the acquisition and consolidated with those of JPMorgan Chase. The fair value of the net assets of Washington Mutual's banking operations exceeded the $\$ 1.9$ billion purchase price, resulting in negative goodwill. Noncurrent, nonfinancial assets not held-for-sale, such as premises and equipment and other intangibles, were written down against the negative goodwill. The negative goodwill that remained after writing down transaction-related core deposit intangibles of approximately $\$ 4.9$ billion and premises and equipment of approximately $\$ 3.2$ billion was recognized as an extraordinary gain of $\$ 2.0$ billion.
(b) The extraordinary gain was recorded net of tax expense in Corporate/Private Equity.

## Condensed statement of net assets acquired

The following condensed statement of net assets acquired reflects the final value assigned to the Washington Mutual net assets as of September 25, 2008.
(in millions)

## Assets

Cash and due from banks 3,680
Deposits with banks 3,517
Federal funds sold and securities purchased under resale agreements 1,700

Trading assets ,700
Trading assets
Securities
Loans (net of allowance for loan losses)
Accrued interest and accounts receivable
3,253
Mortgage servicing rights 2,874

| All other assets | 16,596 |
| :--- | ---: |
| Total assets | 263,991 |


| Liabilities |
| :--- | :--- |
| Deposits |

Federal funds purchased and securities loaned or sold under repurchase agreements 4,549
Other borrowed funds

Trading liabilities
Accounts payable, accrued expense and other liabilities $\quad 6,708$

| Long-term debt | 6,718 |
| :--- | :--- |
| Total liabilities | 260,068 |


|  | 260,068 |
| :--- | :--- |
| Nashington Mutual net assets acquired |  |

## Merger with The Bear Stearns Companies Inc.

Effective May 30, 2008, BSC Merger Corporation, a wholly owned subsidiary of JPMorgan Chase, merged with The Bear Stearns Companies Inc. ("Bear Stearns") pursuant to the Agreement and Plan of Merger, dated as of March 16, 2008, as amended March 24, 2008, and Bear Stearns became a wholly owned subsidiary of JPMorgan Chase. The merger provided the Firm with a leading global prime brokerage platform; strengthened the Firm's equities and asset management businesses; enhanced capabilities in mortgage origination, securitization and servicing; and expanded the platform of the Firm's energy business. The merger was accounted for under the purchase method of accounting, which requires that the assets and liabilities of Bear Stearns be fair valued. The final total purchase price to complete the merger was $\$ 1.5$ billion.

The merger with Bear Stearns was accomplished through a series of transactions that were reflected as step acquisitions. On April 8, 2008, pursuant to a share exchange agreement, JPMorgan Chase acquired 95 million newly issued shares of Bear Stearns common stock (or $39.5 \%$ of Bear Stearns common stock after giving effect to the issuance) for 20.7 million shares of JPMorgan Chase common stock. Further, between March 24, 2008, and May 12, 2008, JPMorgan Chase acquired approximately 24 million shares of Bear Stearns common stock in the open market at an average purchase price of $\$ 12.37$ per share. The share exchange and cash purchase transactions resulted in JPMorgan Chase owning approximately 49.4\% of Bear Stearns common stock immediately prior to consummation of the merger. Finally, on May 30, 2008, JPMorgan Chase completed the merger. As a result of the merger, each outstanding share of Bear Stearns common stock (other than shares
then held by JPMorgan Chase) was converted into the right to receive 0.21753 shares of common stock of JPMorgan Chase. Also, on May 30, 2008, the shares of common stock that JPMorgan Chase and Bear Stearns acquired from each other in the share exchange transaction were cancelled. From April 8, 2008, through May 30, 2008, JPMorgan Chase accounted for the investment in Bear Stearns under the equity method of accounting. During this period, JPMorgan Chase recorded reductions to its investment in Bear Stearns representing its share of Bear Stearns net losses, which was recorded in other income and accumulated other comprehensive income. The difference between the net assets acquired and the fair value of the net assets acquired (including goodwill), presented in the tables below, represent JPMorgan Chase's net losses recorded under the equity method of accounting.
In conjunction with the Bear Stearns merger, in June 2008, the Federal Reserve Bank of New York (the "FRBNY") took control, through a limited liability company ("LLC") formed for this purpose, of a portfolio of $\$ 30$ billion in assets acquired from Bear Stearns, based on the value of the portfolio as of March 14, 2008. The assets of the LLC were funded by a $\$ 28.85$ billion term loan from the FRBNY, and a $\$ 1.15$ billion subordinated loan from JPMorgan Chase. The JPMorgan Chase loan is subordinated to the FRBNY loan and will bear the first $\$ 1.15$ billion of any losses of the portfolio. Any remaining assets in the portfolio after repayment of the FRBNY loan, the JPMorgan Chase note and the expense of the LLC will be for the account of the FRBNY.

## Notes to consolidated financial statements

As a result of step acquisition accounting, the final total purchase price of $\$ 1.5$ billion was allocated to the Bear Stearns assets acquired and liabilities assumed using their fair values as of April 8,2008 , and May 30,2008 , respectively. The final summary computation of the purchase price and the allocation of the final total purchase price of $\$ 1.5$ billion to the net assets acquired of Bear Stearns are presented below.

May 30, 2008 (in millions, except shares, per share amounts, ratios and where otherwise noted)
Purchase price
Shares exchanged in the Share Exchange transaction (April 8, 2008)
95,000
Other Bear Stearns shares outstanding
145,759
Total Bear Stearns stock outstanding
240,759
Cancellation of shares issued in the Share Exchange transaction
Cancellation of shares acquired by JPMorgan Chase for cash in the open market
$(95,000)$

Bear Stearns common stock exchanged as of May 30, 2008
Exchange ratio
JPMorgan Chase common stock issued
Average purchase price per JPMorgan Chase common share(a)
Total fair value of JPMorgan Chase common stock issued
Bear Stearns common stock acquired for cash in the open market ( 24 million shares at an average share price of $\$ 12.37$ per share)
$(24,061)$

Fair value of employee stock awards (largely to be settled by shares held in the RSU Trust(b))
Direct acquisition costs
Less: Fair value of Bear Stearns common stock held in the RSU Trust and included in the exchange of common stock
0.21753
$\$ \quad 45.26$

Total purchase price
Net assets acquired
Bear Stearns common stockholders' equity
\$ 6,052
Adjustments to reflect assets acquired at fair value:
Trading assets
Premises and equipment
Other assets (288)

Adjustments to reflect liabilities assumed at fair value:
Long-term debt
Other liabilities
Fair value of net assets acquired excluding goodwill
Goodwill resulting from the merger(c)
(a) The value of JPMorgan Chase common stock was determined by averaging the closing prices of JPMorgan Chase's common stock for the four trading days during the period March 19 through 25, 2008.
(b) Represents shares of Bear Stearns common stock held in an irrevocable grantor trust (the "RSU Trust"), to be used to settle stock awards granted to selected employees and certain key executives under certain heritage Bear Stearns employee stock plans. Shares in the RSU Trust were exchanged for 6 million shares of JPMorgan Chase common stock at the merger exchange ratio of 0.21753 . For further discussion of the RSU Trust, see Note 10 on pages 210-212 of this Annual Report.
(c) The goodwill was recorded in Investment Bank and is not tax-deductible.

## Condensed statement of net assets acquired

The following condensed statement of net assets acquired reflects the final values assigned to the Bear Stearns net assets as of May 30, 2008.

| (in millions) | May 30, 2008 |  |
| :---: | :---: | :---: |
| Assets |  |  |
| Cash and due from banks | \$ | 534 |
| Federal funds sold and securities purchased under resale agreements |  | 21,204 |
| Securities borrowed |  | 55,195 |
| Trading assets |  | 136,489 |
| Loans |  | 4,407 |
| Accrued interest and accounts receivable |  | 34,677 |
| Goodwill |  | 885 |
| All other assets |  | 35,377 |
| Total assets | \$ | 288,768 |
| Liabilities |  |  |
| Federal funds purchased and securities loaned or sold under repurchase agreements | \$ | 54,643 |
| Other borrowings |  | 16,166 |
| Trading liabilities |  | 24,267 |
| Beneficial interests issued by consolidated VIEs |  | 47,042 |
| Long-term debt |  | 67,015 |
| Accounts payable and other liabilities |  | 78,569 |
| Total liabilities |  | 287,702 |
| Bear Stearns net assets(a) | \$ | 1,066 |

(a) Reflects the fair value assigned to $49.4 \%$ of the Bear Stearns net assets acquired on April 8, 2008 (net of related amortization), and the fair value assigned to the remaining $50.6 \%$ of the Bear Stearns net assets acquired on May 30, 2008. The difference between the net assets acquired, as presented above, and the fair value of the net assets acquired (including goodwill), presented in the previous table, represents JPMorgan Chase's net losses recorded under the equity method of accounting.

## Unaudited pro forma condensed combined financial information

 reflecting the Bear Stearns merger and Washington Mutual transactionThe following unaudited pro forma condensed combined financial information presents the 2008 results of operations of the Firm as they may have appeared, if the Bear Stearns merger and the Washington Mutual transaction had been completed on January 1, 2008.

Year ended December 31,

| (in millions, except per share data) | 2008 |
| :--- | ---: |
| Total net revenue | $\$ 68,149$ |
| Loss before extraordinary gain | $(14,090)$ |
| Net loss | $(12,184)$ |

Net loss per common share data:
Basic earnings per share
Loss before extraordinary gain \$ (4.26)
Net loss
+(3.72)
Diluted earnings per share(a)
Loss before extraordinary gain
Net loss
Average common shares issued and outstanding
Basic
Diluted 3,510.5
(a) Common equivalent shares have been excluded from the pro forma computation of diluted loss per share for the year ended December 31, 2008, as the effect would be antidilutive.
The unaudited pro forma combined financial information is presented for illustrative purposes only and does not indicate the financial results of the combined company had the companies actually been combined as of January 1, 2008, nor is it indicative of the results of operations in future periods. Included in the unaudited pro forma combined financial information for the year ended December 31, 2008, were pro forma adjustments to reflect the results of operations of Bear Stearns and Washington Mutual's banking operations, considering the purchase accounting, valuation and accounting conformity adjustments. For the Washington Mutual transaction, the amortization of purchase accounting adjustments to report interestearning assets acquired and interest-bearing liabilities assumed at current interest rates is reflected for the year ended December 31, 2008. Valuation adjustments and the adjustment to conform allowance methodologies in the Washington Mutual transaction, and valuation and accounting conformity adjustments related to the Bear Stearns merger are reflected in the results for the year ended December 31, 2008.

Internal reorganization related to the Bear Stearns merger On June 30, 2008, JPMorgan Chase fully and unconditionally guaranteed each series of outstanding preferred stock of Bear Stearns, as well as all of Bear Stearns' outstanding U.S. Securities and Exchange Commission ("SEC") registered U.S. debt securities and obligations relating to trust preferred capital debt securities. Subsequently, on July 15, 2008, JPMorgan Chase completed an internal merger transaction, which resulted in each series of outstanding preferred stock of Bear Stearns being automatically exchanged into newly-issued shares of JPMorgan Chase preferred stock having substantially identical terms. In addition, pursuant to internal transactions in July 2008 and the first quarter of 2009, JPMorgan Chase assumed or guaranteed the remaining outstanding securities of Bear Stearns and its subsidiaries, in each case in accordance with the indentures and other agreements governing those securities. As discussed below, all of the above series of preferred stock, and the depositary shares representing such preferred stock, were redeemed on August 20, 2010.

## Other business events

Redemption of Series E, F and G cumulative preferred stock On August 20, 2010, JPMorgan Chase redeemed at stated redemption value, all outstanding shares of its Series E 6.15\% Cumulative Preferred Stock; Series F 5.72\% Cumulative Preferred Stock; and Series G 5.49\% Cumulative Preferred Stock. For a further discussion of preferred stock, see Note 23 on pages 267-268 of this Annual Report.

## RBS Sempra transaction

On July 1, 2010, JPMorgan Chase completed the acquisition of RBS Sempra Commodities' global oil, global metals and European power and gas businesses. The Firm acquired approximately $\$ 1.7$ billion of net assets which included $\$ 3.3$ billion of debt which was immediately repaid. This acquisition almost doubled the number of clients the Firm's commodities business can serve and will enable the Firm to offer clients more products in more regions of the world.

## Purchase of remaining interest in J.P. Morgan Cazenove

On January 4, 2010, JPMorgan Chase purchased the remaining interest in J.P. Morgan Cazenove, an investment banking business partnership formed in 2005, which resulted in an adjustment to the Firm's capital surplus of approximately $\$ 1.3$ billion.

## Notes to consolidated financial statements

## Termination of Chase Paymentech Solutions joint venture

The dissolution of the Chase Paymentech Solutions joint venture, a global payments and merchant acquiring joint venture between JPMorgan Chase and First Data Corporation, was completed on November 1, 2008. JPMorgan Chase retained approximately 51\% of the business, which it operates under the name Chase Paymentech Solutions. The dissolution of the Chase Paymentech Solutions joint venture was accounted for as a step acquisition in accordance with U.S. GAAP for business combinations, and the Firm recognized an after-tax gain of $\$ 627$ million in the fourth quarter of 2008 as a result of the dissolution. The gain represents the amount by which the fair value of the net assets acquired (predominantly intangible assets and goodwill) exceeded JPMorgan Chase's carrying value in the net assets transferred to First Data Corporation. Upon dissolution, the Firm consolidated the retained Chase Paymentech Solutions business.

## Proceeds from Visa Inc. shares

On March 19, 2008, Visa Inc. ("Visa") completed its initial public offering ("IPO"). Prior to the IPO, JPMorgan Chase held approximately a 13\% equity interest in Visa. On March 28, 2008, Visa used a portion of the proceeds from the offering to redeem a portion of the Firm's equity interest, which resulted in the recognition of a pretax gain of $\$ 1.5$ billion (recorded in other income). In conjunction with the IPO, Visa placed $\$ 3.0$ billion in escrow to cover liabilities related to certain litigation matters. The escrow was increased by $\$ 1.1$ billion in 2008, $\$ 700$ million in 2009 and by $\$ 1.3$ billion in 2010. Increases in Visa's escrow account results in a dilution of the value of the Firm's ownership of Visa Inc. JPMorgan Chase's interest in the escrow was recorded as a reduction of other expense and reported net to the extent of established litigation reserves.

## Purchase of remaining interest in Highbridge Capital Management

In January 2008, JPMorgan Chase purchased an additional equity interest in Highbridge Capital Management, LLC ("Highbridge"), which resulted in the Firm owning 77.5\% of Highbridge. In July 2009, JPMorgan Chase completed its purchase of the remaining interest in Highbridge, which resulted in a $\$ 228$ million adjustment to capital surplus.

## Note 3 - Fair value measurement

JPMorgan Chase carries a portion of its assets and liabilities at fair value. The majority of such assets and liabilities are carried at fair value on a recurring basis. Certain assets and liabilities are carried at fair value on a nonrecurring basis, including held-for-sale loans, which are accounted for at the lower of cost or fair value and that are only subject to fair value adjustments under certain circumstances.
The Firm has an established and well-documented process for determining fair values. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value is based on quoted market prices, where available. If listed prices or quotes are not available, fair value is based on internally developed models that primarily use, as inputs, market-based or independently sourced market parameters, including but not limited to yield curves, interest rates, volatilities, equity or debt prices, foreign exchange rates and credit curves. In addition to market information, models also incorporate transaction details, such as maturity of the instrument. Valuation adjustments may be made to ensure that financial instruments are recorded at fair value. These adjustments include amounts to reflect counterparty credit quality, the Firm's creditworthiness, constraints on liquidity and unobservable parameters. Valuation adjustments are applied consistently over time.

- Credit valuation adjustments ("CVA") are necessary when the market price (or parameter) is not indicative of the credit quality of the counterparty. As few classes of derivative contracts are listed on an exchange, the majority of derivative positions are valued using internally developed models that use as their basis observable market parameters. An adjustment is necessary to reflect the credit quality of each derivative counterparty to arrive at fair value. The adjustment also takes into account contractual factors designed to reduce the Firm's credit exposure to each counterparty, such as collateral and legal rights of offset.
- Debit valuation adjustments ("DVA") are necessary to reflect the credit quality of the Firm in the valuation of liabilities measured at fair value. The methodology to determine the adjustment is consistent with CVA and incorporates JPMorgan Chase's credit spread as observed through the credit default swap market.
- Liquidity valuation adjustments are necessary when the Firm may not be able to observe a recent market price for a financial instrument that trades in inactive (or less active) markets or to reflect the cost of exiting larger-than-normal market-size risk positions (liquidity adjustments are not taken for positions classified within level 1 of the fair value hierarchy; see below). The Firm estimates the amount of uncertainty in the initial valuation based on the degree of liquidity in the market in which the financial instrument trades and makes liquidity adjustments to the carrying value of the financial instrument. The Firm measures the liquidity adjustment based on the following factors: (1) the amount of time since the last relevant pricing point; (2) whether there was an actual trade or relevant external quote; and (3) the volatility of the principal risk component of the financial instrument. Costs to exit larger-than-normal market-size risk positions are determined based on the size of the adverse market move that is likely to occur during the period required to bring a position down to a nonconcentrated level.
- Unobservable parameter valuation adjustments are necessary when positions are valued using internally developed models that use as their basis unobservable parameters - that is, parameters that must be estimated and are, therefore, subject to management judgment. Such positions are normally traded less actively. Examples include certain credit products where parameters such as correlation and recovery rates are unobservable. Unobservable parameter valuation adjustments are applied to mitigate the possibility of error and revision in the estimate of the market price provided by the model.
The Firm has numerous controls in place intended to ensure that its fair values are appropriate. An independent model review group reviews the Firm's valuation models and approves them for use for specific products. All valuation models within the Firm are subject to this review process. A price verification group, independent from the risk-taking function, ensures observable market prices and marketbased parameters are used for valuation wherever possible. For those products with material parameter risk for which observable market levels do not exist, an independent review of the assumptions made on pricing is performed. Additional review includes deconstruction of the model valuations for certain structured instruments into their components and benchmarking valuations, where possible, to similar products; validating valuation estimates through actual cash settlement; and detailed review and explanation of recorded gains and losses, which are analyzed daily and over time. Valuation adjustments, which are also determined by the independent price verification group, are based on established policies and applied consistently over time. Any changes to the valuation methodology are reviewed by management to confirm that the changes are justified. As markets and products develop and the pricing for certain products becomes more or less transparent, the Firm continues to refine its valuation methodologies. During 2010, no changes were made to the Firm's valuation models that had, or are ex-
pected to have, a material impact on the Firm's Consolidated Balance Sheets or results of operations.

The methods described above to estimate fair value may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Firm believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date.

## Valuation Hierarchy

A three-level valuation hierarchy has been established under U.S. GAAP for disclosure of fair value measurements. The valuation hierarchy is based on the transparency of inputs to the valuation of an asset or liability as of the measurement date. The three levels are defined as follows.

- Level 1 - inputs to the valuation methodology are quoted prices (unadjusted) for identical assets or liabilities in active markets.
- Level 2 - inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.
- Level 3 - one or more inputs to the valuation methodology are unobservable and significant to the fair value measurement.
A financial instrument's categorization within the valuation hierarchy is based on the lowest level of input that is significant to the fair value measurement.

Following is a description of the valuation methodologies used by the Firm to measure instruments at fair value, including the general classification of such instruments pursuant to the valuation hierarchy.

## Assets

## Securities purchased under resale agreements ("resale agreements") and securities borrowed

To estimate the fair value of resale agreements and securities borrowed transactions, cash flows are first evaluated taking into consideration any derivative features of the resale agreement and are then discounted using the appropriate market rates for the applicable maturity. As the inputs into the valuation are primarily based on readily observable pricing information, such resale agreements are classified within level 2 of the valuation hierarchy.

## Loans and unfunded lending-related commitments

The majority of the Firm's loans and lending-related commitments are not carried at fair value on a recurring basis on the Consolidated Balance Sheets, nor are they actively traded. The fair value of such loans and lending-related commitments is included in the additional disclosures of fair value of certain financial instruments required by U.S. GAAP on pages 185-186 of this Note. Loans

## Notes to consolidated financial statements

carried at fair value on a recurring and nonrecurring basis are included in the applicable tables that follow.
Wholesale
There is no liquid secondary market for most loans and lendingrelated commitments in the Firm's wholesale portfolio. In the limited circumstances where direct secondary market information - including pricing of actual market transactions, broker quotations or quoted market prices for similar instruments - is available (principally for loans in the Firm's secondary trading portfolio), such information is used in the determination of fair value. For the remainder of the portfolio, fair value is estimated using a discounted cash flow ("DCF") model. In addition to the characteristics of the underlying loans (including principal, contractual interest rate and contractual fees), key inputs to the model include interest rates, prepayment rates and credit spreads. The credit spread input is derived from the cost of credit default swaps ("CDS") and, as a result, also incorporates the effects of secondary market liquidity. As many of the Firm's clients do not have bonds traded with sufficient liquidity in the public markets to have observable CDS spreads, the Firm principally develops benchmark credit curves by industry and credit rating to estimate fair value. Also incorporated into the valuation process are additional adjustments to account for the difference in loss severity rates between bonds, on which the cost of credit derivatives is based, and loans as well as loan equivalents (which represent the portion of an unused commitment expected, based on the Firm's average portfolio historical experience, to become outstanding prior to an obligor default). Certain floating rate loans that are not carried on the balance sheet at fair value are carried at amounts that approximate fair value due to their short term nature and negligible credit risk (e.g. based on historical experience or collateralization).
The Firm's loans and unfunded lending-related commitments carried at fair value are classified within level 2 or 3 of the valuation hierarchy, depending on the level of liquidity and activity in the markets for a particular product.

## Consumer

The only products in the Firm's consumer loan portfolio with a meaningful level of secondary market activity in the current economic environment are certain conforming residential mortgages. These loans are classified as trading assets and carried at fair value on the Consolidated Balance Sheets. They are predominantly classified within level 2 of the valuation hierarchy based on the level of market liquidity and activity.
The fair value of the Firm's other consumer loans (except for credit card receivables) is generally determined by discounting the loan principal and interest cash flows expected to be collected at a market observable discount rate, when available. Portfolio-specific factors that a market participant would consider in determining fair value (e.g., expected lifetime credit losses, estimated prepayments, servicing costs and market liquidity) are either modeled into the cash flow projections or incorporated as an adjustment to the discount rate. For products that continue to
be offered in the market, discount rates are derived from marketobservable primary origination rates. Where primary origination rates are not available (i.e., subprime mortgages, subprime home equity and option adjustable-rate mortgages ("option ARMs")) the valuation is based on the Firm's estimate of a market participant's required return on equity for similar products (i.e., a hypothetical origination spread). Estimated lifetime credit losses consider expected and current default rates for existing portfolios, collateral prices (where applicable) and expectations about changes in the economic environment (e.g., unemployment rates).
The fair value of credit card receivables is determined using a discounted expected cash flow methodology. Key estimates and assumptions include: projected interest income and late fee revenue, funding, servicing, credit costs, and loan payment rates. The projected loan payment rates are used to determine the estimated life of the credit card loan receivables, which are then discounted using a risk-appropriate discount rate. The discount rate is derived from the Firm's estimate of a market participant's expected return on credit card receivables. As the credit card portfolio has a short-term life, an amount equal to the allowance for loan losses is considered a reasonable proxy for the credit cost component.

Loans that are not carried on the Consolidated Balance Sheets at fair value are not classified within the fair value hierarchy.

## Mortgage loans carried at fair value

For certain loans that are expected to be securitized, fair value is estimated using a combination of observed transaction prices, independent pricing services and relevant broker quotes. Consideration is given to the nature of the quotes (e.g., indicative or firm) and the relationship of recently evidenced market activity to the prices provided from independent pricing services. When relevant market activity is not occurring or is limited, fair value is estimated by projecting the expected cash flows and discounting those cash flows at a rate reflective of current market liquidity. To estimate the projected cash flows of a residential mortgage loan (inclusive of assumptions of prepayment, default rates and loss severity), specific consideration is given to both borrower-specific and other market factors, including, but not limited to: the borrower's FICO score; the type of collateral supporting the loans; the level of documentation for the loan; and market-derived expectations for home price appreciation or depreciation in the respective geography of the borrower. For commercial mortgages, consideration is given to both borrower-specific and other market factors, including but not limited to: the borrower's debt-to-service coverage ratio; the type of commercial property (e.g., retail, office, lodging, multi-family, etc.); an estimate of the current loan-to-value ratio; and market-derived expectations for property price appreciation or depreciation in the respective geographic location. In addition, commercial mortgage loans typically have lock-out periods where the borrower is restricted from prepaying the loan due to prepayment penalties. These features reduce prepayment risk for commercial mortgages rela-
tive to that of residential mortgages. These loans are classified within level 2 or 3 of the valuation hierarchy, depending on the level of liquidity and activity in the markets for the particular product.

## Securities

Where quoted prices for identical securities are available in an active market, securities are classified in level 1 of the valuation hierarchy. Level 1 securities include highly liquid government bonds; mortgage products for which there are quoted prices in active markets such as U.S. government agency or U.S. government-sponsored enterprise (collectively, "U.S. government agencies") markets; pass-through mortgage-backed securities ("MBS"); and exchange-traded equities (e.g., common and preferred stocks).

If quoted market prices are not available for the specific security, the Firm may estimate the value of such instruments using a combination of observed transaction prices, independent pricing services and relevant broker quotes. Consideration is given to the nature of the quotes (e.g., indicative or firm) and the relationship of recently evidenced market activity to the prices provided from independent pricing services. The Firm may also use pricing models or discounted cash flows. The majority of such instruments are classified within level 2 of the valuation hierarchy; however, in cases where there is limited activity or less transparency around inputs to the valuation, securities are classified within level 3 of the valuation hierarchy.
For mortgage-backed securities, where market activity is not occurring or is limited, fair value is estimated considering the value of the collateral and the specific attributes of the securities held by the Firm. The value of the collateral pool supporting the securities is analyzed using the same techniques and factors described above for residential mortgage loans, albeit in a more aggregated manner across the pool. For example, for residential MBS, factors evaluated may include average FICO scores, average delinquency rates, average loss severities and prepayment rates, among other metrics. For commercial MBS, factors evaluated may include average delinquencies, loan or geographic concentrations, and average debtservice coverage ratios, among other metrics. In addition, as each securitization vehicle distributes cash in a manner or order that is predetermined at the inception of the vehicle, the priority in which each particular MBS is allocated cash flows, and the level of credit enhancement in place to support those cash flows, are key considerations in deriving the value of MBS. Finally, the risk premium that investors demand for securitized products in the current market is factored into the valuation. To benchmark its valuations, the Firm looks to transactions for similar instruments and uses independent pricing provided by third-party vendors, broker quotes and relevant market indices, such as the ABX index, as applicable. While none of those sources are solely indicative of fair value, they serve as directional indicators for the appropriateness of the Firm's estimates.

For certain collateralized mortgage and debt obligations, assetbacked securities ("ABS") and high-yield debt securities, the determination of fair value may require benchmarking to similar instruments or analyzing default and recovery rates. For cash collateralized debt obligations ("CDOs"), external price information is not available. Therefore, cash CDOs are valued using marketstandard models, such as Intex, to model the specific collateral composition and cash flow structure of each deal; key inputs to the model are market spread data for each credit rating, collateral type and other relevant contractual features. Asset-backed securities are valued based on external prices or market spread data, using current market assumptions on prepayments and defaults. For ABS where the external price data is not observable or the limited available data is opaque, the collateral performance is monitored and considered in the valuation of the security. To benchmark its valuations, the Firm looks to transactions for similar instruments and uses independent prices provided by third-party vendors, broker quotes and relevant market indices, such as the ABX index, as applicable. While none of those sources are solely indicative of fair value, they serve as directional indicators for the appropriateness of the Firm's estimates. The majority of collateralized mortgage and debt obligations, highyield debt securities and ABS are currently classified in level 3 of the valuation hierarchy.

Collateralized loan obligations ("CLOs") are securities backed by corporate loans, and they are predominantly held in the Firm's available-for-sale ("AFS") securities portfolio. For these securities, external pricing information is not readily available. They are therefore valued using market-standard models to model the specific collateral composition and cash flow structure of each deal; key inputs to the model are market spread data for each credit rating, collateral type and other relevant contractual features. For further discussion, see Note 12 on pages 214-218 of this Annual Report.

## Commodities

Commodities inventory is generally carried at the lower of cost or fair value. The fair value of commodities inventory is determined primarily using pricing and data derived from the markets on which the commodities are traded. The majority of commodities inventory is classified within level 1 of the valuation hierarchy.
The Firm also has positions in commodities-based derivatives that can be traded on an exchange or over-the-counter ("OTC") and carried at fair value. The pricing inputs to these derivatives include forward curves of underlying commodities, basis curves, volatilities, correlations, and occasionally other model parameters. The valuation of these derivatives is based on calibrating to market transactions, as well as to independent pricing information from sources such as brokers and consensus pricing services. Where inputs are historical time series data, they are adjusted for uncertainty where appropriate. The majority of commodities-based derivatives are classified within level 2 of the valuation hierarchy.

## Derivatives

Exchange-traded derivatives valued using quoted prices are classified within level 1 of the valuation hierarchy. However, few classes of derivative contracts are listed on an exchange; thus, the majority of the Firm's derivative positions are valued using internally developed models that use as their basis readily observable market parameters - that is, parameters that are actively quoted and can be validated to external sources, including industry pricing services. Depending on the types and contractual terms of derivatives, fair value can be modeled using a series of techniques, such as the Black-Scholes option pricing model, simulation models or a combination of various models, which are consistently applied. Where derivative products have been established for some time, the Firm uses models that are widely accepted in the financial services industry. These models reflect the contractual terms of the derivatives, including the period to maturity, and market-based parameters such as interest rates, volatility, and the credit quality of the counterparty. Further, many of these models do not contain a high level of subjectivity, as the methodologies used in the models do not require significant judgment, and inputs to the models are readily observable from actively quoted markets, as is the case for "plain vanilla" interest rate swaps, option contracts and CDS. Such instruments are generally classified within level 2 of the valuation hierarchy.

Derivatives that are valued based on models with significant unobservable market parameters and that are normally traded less actively, have trade activity that is one way, and/or are traded in lessdeveloped markets are classified within level 3 of the valuation hierarchy. Level 3 derivatives include, for example, CDS referenced to certain MBS, certain types of CDO transactions, options on baskets of single-name stocks, and callable exotic interest rate options.

Other complex products, such as those sensitive to correlation between two or more underlying parameters, also fall within level 3 of the valuation hierarchy, and include structured credit derivatives which are illiquid and non-standard in nature (e.g., synthetic CDOs collateralized by a portfolio of credit default swaps "CDS"). For most CDO transactions, while inputs such as CDS spreads may be observable, the correlation between the underlying debt instruments is unobservable. Correlation levels are modeled on a transaction basis and calibrated to liquid benchmark tranche indices. For all structured credit derivatives, actual transactions, where available, are used regularly to recalibrate all unobservable parameters.

Correlation sensitivity is also material to the overall valuation of options on baskets of single-name stocks; the valuation of these baskets is typically not observable due to their non-standardized structuring. Correlation for products such as these is typically estimated based on an observable basket of stocks and then adjusted to reflect the differences between the underlying equities.

For callable exotic interest rate options, while most of the assumptions in the valuation can be observed in active markets (e.g., interest rates and volatility), the callable option transaction flow is essentially one-way, and as such, price observability is limited. As pricing information is limited, assumptions are based on the dynamics of the underlying markets (e.g., the interest rate markets) including the range and possible outcomes of the applicable inputs. In addition, the models used are calibrated, as relevant, to liquid benchmarks, and valuation is tested against monthly independent pricing services and actual transactions.

## Mortgage servicing rights and certain retained interests in securitizations

Mortgage servicing rights ("MSRs") and certain retained interests from securitization activities do not trade in an active, open market with readily observable prices. Accordingly, the Firm estimates the fair value of MSRs and certain other retained interests in securitizations using DCF models.

- For MSRs, the Firm uses an option-adjusted spread ("OAS") valuation model in conjunction with the Firm's proprietary prepayment model to project MSR cash flows over multiple interest rate scenarios; these scenarios are then discounted at riskadjusted rates to estimate the fair value of the MSRs. The OAS model considers portfolio characteristics, contractually specified servicing fees, prepayment assumptions, delinquency rates, late charges, other ancillary revenue, costs to service and other economic factors. The Firm reassesses and periodically adjusts the underlying inputs and assumptions used in the OAS model to reflect market conditions and assumptions that a market participant would consider in valuing the MSR asset. Due to the nature of the valuation inputs, MSRs are classified within level 3 of the valuation hierarchy.
- For certain retained interests in securitizations, the Firm estimates the fair value for those retained interests by calculating the present value of future expected cash flows using modeling techniques. Such models incorporate management's best estimates of key variables, such as expected credit losses, prepayment speeds and the appropriate discount rates, considering the risk involved. Changes in the assumptions used may have a significant impact on the Firm's valuation of retained interests, and such interests are therefore typically classified within level 3 of the valuation hierarchy.

For both MSRs and certain other retained interests in securitizations, the Firm compares its fair value estimates and assumptions to observable market data where available and to recent market activity and actual portfolio experience. For further discussion of the most significant assumptions used to value retained interests and MSRs, as well as the applicable stress tests for those assumptions, see Note 16 on pages 244-259, and Note 17 on pages 260-263 of this Annual Report.

## Private equity investments

The valuation of nonpublic private equity investments, which are held primarily by the Private Equity business within the Corporate/Private Equity line of business, requires significant management judgment due to the absence of quoted market prices, the inherent lack of liquidity and the long-term nature of such assets. As such, nonpublic private equity investments are valued initially based on cost. Each quarter, valuations are reviewed using available and relevant market data to determine if the carrying value of these investments should be adjusted. Such market data primarily include observations of the trading multiples of public companies considered comparable to the private companies being valued and the operating performance of the underlying portfolio company, including its historical and projected net income and its earnings before interest, taxes, depreciation and amortization ("EBITDA"). Valuations are adjusted to account for company-specific issues, the lack of liquidity inherent in a nonpublic investment, and the fact that comparable public companies are not identical to the companies being valued. In addition, a variety of additional factors are reviewed by management, including, but not limited to, financing and sales transactions with third parties, future expectations of the particular investment, changes in market outlook and the third-party financing environment. Nonpublic private equity investments are included in level 3 of the valuation hierarchy.

Private equity investments also include publicly held equity investments, generally obtained through the initial public offering of privately held equity investments. Investments in securities of publicly held companies that trade in liquid markets are marked to market at the quoted public value less adjustments for regulatory or contractual sales restrictions. Discounts for restrictions are quantified by analyzing the length of the restriction period and the volatility of the equity security. Publicly held investments are predominantly classified in level 2 of the valuation hierarchy.

## Other fund investments

The Firm holds investments in mutual/collective investment funds, private equity funds, hedge funds and real estate funds. Where the funds produce a daily net asset value ("NAV") that is validated by a sufficient level of observable activity (purchases and sales at NAV), the NAV is used to value the fund investment and it is classified in level 1 of the valuation hierarchy. Where adjustments to the NAV are required, for example, with respect to interests in funds subject to restrictions on redemption (such as lock-up periods or withdrawal limitations) and/or observable activity for the fund investment is limited, investments are classified within level 2 or 3 of the valuation hierarchy.

## Liabilities

## Securities sold under repurchase agreements ("repurchase agreements")

To estimate the fair value of repurchase agreements, cash flows are first evaluated taking into consideration any derivative features of the repurchase agreements and are then discounted using the appropriate market rates for the applicable maturity. Generally, for these types of agreements, there is a requirement that collateral be maintained with a market value equal to, or in excess of, the principal amount loaned; as a result, there would be no adjustment, or an immaterial adjustment, to reflect the credit quality of the Firm (i.e., DVA) related to these agreements. As the inputs into the valuation are primarily based on observable pricing information, repurchase agreements are classified within level 2 of the valuation hierarchy.

## Beneficial interests issued by consolidated VIEs

The fair value of beneficial interests issued by consolidated VIEs ("beneficial interests") is estimated based on the fair value of the underlying assets held by the VIEs. The valuation of beneficial interests does not include an adjustment to reflect the credit quality of the Firm, as the holders of these beneficial interests do not have recourse to the general credit of JPMorgan Chase. Where the inputs into the valuation are based on observable market pricing information, the beneficial interests are classified within level 2 of the valuation hierarchy. Where significant inputs into the valuation are unobservable, the beneficial interests are classified within level 3 of the valuation hierarchy.

## Deposits, other borrowed funds and long-term debt

To estimate the fair value of long-term debt, cash flows are discounted using the appropriate market rates for the applicable maturities, with an adjustment to reflect the credit quality of the Firm (i.e., the DVA). Included within deposits, other borrowed funds and long-term debt are structured notes issued by the Firm that are financial instruments containing embedded derivatives. In addition to the above, the estimation of the fair value of structured notes takes into consideration any derivative features. Where the inputs into the valuation are primarily based on observable market prices, the structured notes are classified within level 2 of the valuation hierarchy. Where significant inputs are unobservable, the structured notes are classified within level 3 of the valuation hierarchy.

## Notes to consolidated financial statements

The following tables present assets and liabilities measured at fair value as of December 31, 2010 and 2009, by major product category and by the fair value hierarchy (as described above).

## Assets and liabilities measured at fair value on a recurring basis

| December 31, 2010 (in millions) | Fair value hierarchy |  |  | Netting adjustments | Total fair value |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level 1(i) | Level 2 (i) | Level 3(i) |  |  |
| Federal funds sold and securities purchased under resale agreements | \$ | \$ 20,299 | \$ | \$ - | \$ 20,299 |
| Securities borrowed | - | 13,961 | - | - | 13,961 |
| Trading assets: |  |  |  |  |  |
| Debt instruments: |  |  |  |  |  |
| Mortgage-backed securities: |  |  |  |  |  |
| U.S. government agencies(a) | 36,813 | 10,738 | 174 | - | 47,725 |
| Residential - nonagency | - | 2,807 | 687 | - | 3,494 |
| Commercial - nonagency | - | 1,093 | 2,069 | - | 3,162 |
| Total mortgage-backed securities | 36,813 | 14,638 | 2,930 | - | 54,381 |
| U.S. Treasury and government agencies(a) | 12,863 | 9,026 | - | - | 21,889 |
| Obligations of U.S. states and municipalities | - | 11,715 | 2,257 | - | 13,972 |
| Certificates of deposit, bankers' acceptances and commercial paper | - | 3,248 | - | - | 3,248 |
| Non-U.S. government debt securities | 31,127 | 38,482 | 697 | - | 70,306 |
| Corporate debt securities |  | 42,280 | 4,946 | - | 47,226 |
| Loans(b) | - | 21,736 | 13,144 | - | 34,880 |
| Asset-backed securities | - | 2,743 | 7,965 | - | 10,708 |
| Total debt instruments | 80,803 | 143,868 | 31,939 | - | 256,610 |
| Equity securities | 124,400 | 3,153 | 1,685 | - | 129,238 |
| Physical commodities(c) | 18,327 | 2,708 | - | - | 21,035 |
| Other | - | 2,275 | 253 | - | 2,528 |
| Total debt and equity instruments(d) | 223,530 | 152,004 | 33,877 | - | 409,411 |
| Derivative receivables: |  |  |  |  |  |
| Interest rate | 2,278 | 1,120,282 | 5,422 | $(1,095,427)$ | 32,555 |
| Credit(e) | - | 111,827 | 17,902 | $(122,004)$ | 7,725 |
| Foreign exchange | 1,121 | 163,114 | 4,236 | $(142,613)$ | 25,858 |
| Equity | 30 | 38,041 | 5,562 | $(39,429)$ | 4,204 |
| Commodity | 1,324 | 56,076 | 2,197 | $(49,458)$ | 10,139 |
| Total derivative receivables(f) | 4,753 | 1,489,340 | 35,319 | $(1,448,931)$ | 80,481 |
| Total trading assets | 228,283 | 1,641,344 | 69,196 | $(1,448,931)$ | 489,892 |
| Available-for-sale securities: |  |  |  |  |  |
| Mortgage-backed securities: |  |  |  |  |  |
| U.S. government agencies(a) | 104,736 | 15,490 | - | - | 120,226 |
| Residential - nonagency | - | 48,969 | 5 | - | 48,974 |
| Commercial - nonagency | - | 5,403 | 251 | - | 5,654 |
| Total mortgage-backed securities | 104,736 | 69,862 | 256 | - | 174,854 |
| U.S. Treasury and government agencies(a) | 522 | 10,826 | - | - | 11,348 |
| Obligations of U.S. states and municipalities | 31 | 11,272 | 256 | - | 11,559 |
| Certificates of deposit | 6 | 3,641 | - | - | 3,647 |
| Non-U.S. government debt securities | 13,107 | 7,670 | - | - | 20,777 |
| Corporate debt securities | 1 | 61,793 | - | - | 61,794 |
| Asset-backed securities: |  |  |  |  |  |
| Credit card receivables | - | 7,608 | - | - | 7,608 |
| Collateralized loan obligations | - | 128 | 13,470 | - | 13,598 |
| Other | - | 8,777 | 305 | - | 9,082 |
| Equity securities | 1,998 | 53 | - | - | 2,051 |
| Total available-for-sale securities | 120,401 | 181,630 | 14,287 | - | 316,318 |
| Loans | - | 510 | 1,466 | - | 1,976 |
| Mortgage servicing rights | - | - | 13,649 | - | 13,649 |
| Other assets: |  |  |  |  |  |
| Private equity investments(g) | 49 | 826 | 7,862 | - | 8,737 |
| All other | 5,093 | 192 | 4,179 | - | 9,464 |
| Total other assets | 5,142 | 1,018 | 12,041 | - | 18,201 |
| Total assets measured at fair value on a recurring basis( h ) | \$ 353,826 | \$ 1,858,762 | \$ 110,639 | \$ (1,448,931) | \$ 874,296 |


| December 31, 2010 (in millions) | Fair value hierarchy |  |  |  |  |  | Netting adjustments | Total fair value |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level 1(i) |  | Level 2(i) |  | Level 3(i) |  |  |  |  |
| Deposits | \$ | - | \$ | 3,736 | \$ | 633 | \$ | \$ | 4,369 |
| Federal funds purchased and securities loaned or sold under repurchase agreements |  | - |  | 4,060 |  | - | - |  | 4,060 |
| Other borrowed funds |  | - |  | 8,959 |  | 972 | - |  | 9,931 |
| Trading liabilities: |  |  |  |  |  |  |  |  |  |
| Debt and equity instruments(d) |  | 58,468 |  | 18,425 |  | 54 | - |  | 76,947 |
| Derivative payables: |  |  |  |  |  |  |  |  |  |
| Interest rate |  | 2,625 |  | 1,085,233 |  | 2,586 | $(1,070,057)$ |  | 20,387 |
| Credit(e) |  | - |  | 112,545 |  | 12,516 | $(119,923)$ |  | 5,138 |
| Foreign exchange |  | 972 |  | 158,908 |  | 4,850 | $(139,715)$ |  | 25,015 |
| Equity |  | 22 |  | 39,046 |  | 7,331 | $(35,949)$ |  | 10,450 |
| Commodity |  | 862 |  | 54,611 |  | 3,002 | $(50,246)$ |  | 8,229 |
| Total derivative payables(f) |  | 4,481 |  | 1,450,343 |  | 30,285 | (1,415,890) |  | 69,219 |
| Total trading liabilities |  | 62,949 |  | 1,468,768 |  | 30,339 | (1,415,890) |  | 146,166 |
| Accounts payable and other liabilities |  | - |  | - |  | 236 | - |  | 236 |
| Beneficial interests issued by consolidated VIEs |  | - |  | 622 |  | 873 | - |  | 1,495 |
| Long-term debt |  | - |  | 25,795 |  | 13,044 | - |  | 38,839 |
| Total liabilities measured at fair value on a recurring basis | \$ | 62,949 |  | 1,511,940 | \$ | 46,097 | \$ (1,415,890) |  | 205,096 |

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| December 31, 2009 (in millions) | Fair value hierarchy |  |  |  |  | Netting adjustments |  | Total fair value |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level 1 | Level 2 |  | Level 3 |  |  |  |  |  |
| Federal funds sold and securities purchased under resale agreements | \$ | \$ | 20,536 | \$ | - | \$ | - | \$ | 20,536 |
| Securities borrowed | - |  | 7,032 |  | - |  | - |  | 7,032 |
| Trading assets: |  |  |  |  |  |  |  |  |  |
| Debt instruments: |  |  |  |  |  |  |  |  |  |
| Mortgage-backed securities: |  |  |  |  |  |  |  |  |  |
| U.S. government agencies(a) | 33,092 |  | 8,373 |  | 260 |  | - |  | 41,725 |
| Residential - nonagency |  |  | 2,284 |  | 1,115 |  | - |  | 3,399 |
| Commercial - nonagency | - |  | 537 |  | 1,770 |  | - |  | 2,307 |
| Total mortgage-backed securities | 33,092 |  | 11,194 |  | 3,145 |  | - |  | 47,431 |
| U.S. Treasury and government agencies(a) | 13,701 |  | 9,559 |  | - |  | - |  | 23,260 |
| Obligations of U.S. states and municipalities | - |  | 5,681 |  | 1,971 |  | - |  | 7,652 |
| Certificates of deposit, bankers' acceptances and commercial paper | - |  | 5,419 |  | - |  | - |  | 5,419 |
| Non-U.S. government debt securities | 25,684 |  | 32,487 |  | 734 |  | - |  | 58,905 |
| Corporate debt securities | - |  | 48,754 |  | 5,241 |  | - |  | 53,995 |
| Loans(b) | - |  | 18,330 |  | 13,218 |  | - |  | 31,548 |
| Asset-backed securities | - |  | 1,428 |  | 7,975 |  | - |  | 9,403 |
| Total debt instruments | 72,477 |  | 132,852 |  | 32,284 |  | - |  | 237,613 |
| Equity securities | 75,053 |  | 3,450 |  | 1,956 |  | - |  | 80,459 |
| Physical commodities(c) | 9,450 |  | 586 |  | - |  | - |  | 10,036 |
| Other | - |  | 1,884 |  | 926 |  | - |  | 2,810 |
| Total debt and equity instruments(d) | 156,980 |  | 138,772 |  | 35,166 |  | - |  | 330,918 |
| Derivative receivables(e)(f) | 2,344 |  | 1,516,490 |  | 46,684 |  | 308) |  | 80,210 |
| Total trading assets | 159,324 |  | 1,655,262 |  | 81,850 |  | 308) |  | 411,128 |
| Available-for-sale securities: |  |  |  |  |  |  |  |  |  |
| Mortgage-backed securities: |  |  |  |  |  |  |  |  |  |
| U.S. government agencies(a) | 158,957 |  | 8,941 |  | - |  | - |  | 167,898 |
| Residential - nonagency | - |  | 14,773 |  | 25 |  | - |  | 14,798 |
| Commercial - nonagency | - |  | 4,590 |  | - |  | - |  | 4,590 |
| Total mortgage-backed securities | 158,957 |  | 28,304 |  | 25 |  | - |  | 187,286 |
| U.S. Treasury and government agencies(a) | 405 |  | 29,592 |  | - |  | - |  | 29,997 |
| Obligations of U.S. states and municipalities | - |  | 6,188 |  | 349 |  | - |  | 6,537 |
| Certificates of deposit | - |  | 2,650 |  | - |  | - |  | 2,650 |
| Non-U.S. government debt securities | 5,506 |  | 18,997 |  | - |  | - |  | 24,503 |
| Corporate debt securities | 1 |  | 62,007 |  | - |  | - |  | 62,008 |
| Asset-backed securities: |  |  |  |  |  |  |  |  |  |
| Credit card receivables | - |  | 25,742 |  | - |  | - |  | 25,742 |
| Collateralized debt and loan obligations | - |  | 5 |  | 12,144 |  | - |  | 12,149 |
| Other | - |  | 6,206 |  | 588 |  | - |  | 6,794 |
| Equity securities | 2,466 |  | 146 |  | 87 |  | - |  | 2,699 |
| Total available-for-sale securities | 167,335 |  | 179,837 |  | 13,193 |  | - |  | 360,365 |
| Loans | - |  | 374 |  | 990 |  | - |  | 1,364 |
| Mortgage servicing rights | - |  | - |  | 15,531 |  | - |  | 15,531 |
| Other assets: |  |  |  |  |  |  |  |  |  |
| Private equity investments(g) | 165 |  | 597 |  | 6,563 |  | - |  | 7,325 |
| All other(i) | 7,241 |  | 90 |  | 9,521 |  | - |  | 16,852 |
| Total other assets | 7,406 |  | 687 |  | 16,084 |  | - |  | 24,177 |
| Total assets measured at fair value on a recurring basis( h ) | \$ 334,065 |  | 1,863,728 |  | 127,648 |  | 308) |  | 840,133 |


| December 31, 2009 (in millions) | Fair value hierarchy |  |  |  |  |  | Netting adjustments | Total fair value |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level 1 |  | Level 2 |  | Level 3 |  |  |  |  |
| Deposits | \$ | - | \$ | 3,979 | \$ | 476 | \$ | \$ | 4,455 |
| Federal funds purchased and securities loaned or sold under repurchase agreements |  | - |  | 3,396 |  | - | - |  | 3,396 |
| Other borrowed funds |  | - |  | 5,095 |  | 542 | - |  | 5,637 |
| Trading liabilities: |  |  |  |  |  |  |  |  |  |
| Debt and equity instruments(d) |  | 50,577 |  | 14,359 |  | 10 | - |  | 64,946 |
| Derivative payables(e)(f) |  | 2,038 |  | 1,481,813 |  | 35,332 | $(1,459,058)$ |  | 60,125 |
| Total trading liabilities |  | 52,615 |  | 1,496,172 |  | 35,342 | $(1,459,058)$ |  | 125,071 |
| Accounts payable and other liabilities |  | - |  | 2 |  | 355 | - |  | 357 |
| Beneficial interests issued by consolidated VIEs |  | - |  | 785 |  | 625 | - |  | 1,410 |
| Long-term debt |  | - |  | 30,685 |  | 18,287 | - |  | 48,972 |
| Total liabilities measured at fair value on a recurring basis | \$ | 52,615 |  | 1,540,114 | \$ | 55,627 | \$ (1,459,058) | \$ | 189,298 |

(a) At December 31, 2010 and 2009, included total U.S. government-sponsored enterprise obligations of $\$ 137.3$ billion and $\$ 195.8$ billion respectively, which were predominantly mortgage-related.
(b) At December 31, 2010 and 2009, included within trading loans were $\$ 22.7$ billion and $\$ 20.7$ billion, respectively, of residential first-lien mortgages and $\$ 2.6$ billion and $\$ 2.7$ billion, respectively, of commercial first-lien mortgages. Residential mortgage loans include conforming mortgage loans originated with the intent to sell to U.S. government agencies of $\$ 13.1$ billion and $\$ 11.1$ billion, respectively, and reverse mortgages of $\$ 4.0$ billion and $\$ 4.5$ billion, respectively.
(c) Physical commodities inventories are generally accounted for at the lower of cost or fair value
(d) Balances reflect the reduction of securities owned (long positions) by the amount of securities sold but not yet purchased (short positions) when the long and short positions have identical Committee on Uniform Security Identification Procedures ("CUSIPs").
(e) The level 3 amounts for derivative receivables and derivative payables related to credit primarily include structured credit derivative instruments. For further information on the classification of instruments within the valuation hierarchy, see pages $171-175$ of this Note.
(f) As permitted under U.S. GAAP, the Firm has elected to net derivative receivables and derivative payables and the related cash collateral received and paid when a legally enforceable master netting agreement exists. For purposes of the tables above, the Firm does not reduce derivative receivables and derivative payables balances for this netting adjustment, either within or across the levels of the fair value hierarchy, as such netting is not relevant to a presentation based on the transparency of inputs to the valuation of an asset or liability. Therefore, the balances reported in the fair value hierarchy table above are gross of any counterparty netting adjustments. However, if the Firm were to net such balances within level 3, the reduction in the level 3 derivative receivable and derivative payable balances would be $\$ 12.7$ billion and $\$ 16.0$ billion at December 31, 2010 and 2009, respectively, exclusive of the netting benefit associated with cash collateral, which would further reduce the level 3 balances.
(g) Private equity instruments represent investments within the Corporate/Private Equity line of business. The cost basis of the private equity investment portfolio totaled $\$ 10.0$ billion and $\$ 8.8$ billion at December 31, 2010 and 2009, respectively.
(h) At December 31, 2010 and 2009, balances included investments valued at net asset value of $\$ 12.1$ billion and $\$ 16.8$ billion, respectively, of which $\$ 5.9$ billion and $\$ 9.0$ billion, respectively, were classified in level $1, \$ 2.0$ billion and $\$ 3.2$ billion, respectively, in level 2 and $\$ 4.2$ billion and $\$ 4.6$ billion in level 3 .
(i) For the year ended December 31, 2010, there were no significant transfers between levels 1 and 2 . Transfers from level 3 into level 2 included $\$ 1.2$ billion of trading loans due to increased price transparency. There were no significant transfers into level 3.
(j) Included assets within accrued interest receivable and other assets at December 31, 2009.

## Changes in level 3 recurring fair value measurements

The following tables include a rollforward of the balance sheet amounts (including changes in fair value) for financial instruments classified by the Firm within level 3 of the fair value hierarchy for the years ended December 31, 2010, 2009 and 2008. When a determination is made to classify a financial instrument within level 3 , the determination is based on the significance of the unobservable parameters to the overall fair value measurement. However, level 3 financial instruments typically include, in addition to the unobservable or level 3 components, observable components (that is, components that are actively quoted and can be validated to external sources); accordingly, the gains and losses in the table
below include changes in fair value due in part to observable factors that are part of the valuation methodology. Also, the Firm riskmanages the observable components of level 3 financial instruments using securities and derivative positions that are classified within level 1 or 2 of the fair value hierarchy; as these level 1 and level 2 risk management instruments are not included below, the gains or losses in the following tables do not reflect the effect of the Firm's risk management activities related to such level 3 instruments.

## Notes to consolidated financial statements



Fair value measurements using significant unobservable inputs


## Assets: Trading assets: <br> Debt instruments:

| Mortgage-backed securities: |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| U.S. government agencies | \$ | 163 | \$ | (38) | \$ | 62 | \$ | 73 | \$ | 260 | \$ | (38) |
| Residential - nonagency |  | 3,339 |  | (782) |  | (245) |  | $(1,197)$ |  | 1,115 |  | (871) |
| Commercial - nonagency |  | 2,487 |  | (242) |  | (325) |  | (150) |  | 1,770 |  | (313) |
| Total mortgage-backed securities |  | 5,989 |  | $(1,062)$ |  | (508) |  | $(1,274)$ |  | 3,145 |  | $(1,222)$ |
| Obligations of U.S. states and municipalities |  | 2,641 |  | (22) |  | (648) |  | - |  | 1,971 |  | (123) |
| Non-U.S. government debt securities |  | 707 |  | 38 |  | (75) |  | 64 |  | 734 |  | 34 |
| Corporate debt securities |  | 5,280 |  | 38 |  | $(3,416)$ |  | 3,339 |  | 5,241 |  | (72) |
| Loans |  | 17,091 |  | (871) |  | $(3,497)$ |  | 495 |  | 13,218 |  | $(1,167)$ |
| Asset-backed securities |  | 7,106 |  | 1,436 |  | (378) |  | (189) |  | 7,975 |  | 734 |
| Total debt instruments |  | 38,814 |  | (443) |  | $(8,522)$ |  | 2,435 |  | 32,284 |  | $(1,816)$ |
| Equity securities |  | 1,380 |  | (149) |  | (512) |  | 1,237 |  | 1,956 |  | (51) |
| Other |  | 1,226 |  | (79) |  | (253) |  | 32 |  | 926 |  | (119) |
| Total debt and equity instruments |  | 41,420 |  | (671)(a) |  | $(9,287)$ |  | 3,704 |  | 35,166 |  | $(1,986)(\mathrm{a})$ |
| Total net derivative receivables |  | 9,507 |  | $(11,406)(\mathrm{a})$ |  | $(3,448)$ |  | 16,699 |  | 11,352 |  | $(10,835)^{(a)}$ |
| Available-for-sale securities: |  |  |  |  |  |  |  |  |  |  |  |  |
| Asset-backed securities |  | 11,447 |  | (2) |  | 1,112 |  | 175 |  | 12,732 |  | (48) |
| Other |  | 944 |  | (269) |  | 302 |  | (516) |  | 461 |  | 43 |
| Total available-for-sale securities |  | 12,391 |  | (271)(b) |  | 1,414 |  | (341) |  | 13,193 |  | (5)(b) |
| Loans |  | 2,667 |  | (448)(a) |  | $(1,906)$ |  | 677 |  | 990 |  | (488)(a) |
| Mortgage servicing rights |  | 9,403 |  | 5,807(c) |  | 321 |  | - |  | 15,531 |  | 5,807(c) |
| Other assets: |  |  |  |  |  |  |  |  |  |  |  |  |
| Private equity investments |  | 6,369 |  | (407)(a) |  | 582 |  | 19 |  | 6,563 |  | (369)(a) |
| All other(g) |  | 8,114 |  | (676)(d) |  | 2,439 |  | (356) |  | 9,521 |  | (612) ${ }^{(d)}$ |



Notes to consolidated financial statements

 are reported in mortgage fees and related income.
 Unrealized gains and losses are reported in other comprehensive income.
(c) Changes in fair value for Retail Financial Services mortgage servicing rights are reported in mortgage fees and related income.
d) Predominantly reported in other income.
(e) All transfers into and/or out of level 3 are assumed to occur at the beginning of the reporting period.
 25\% at December 31, 2010, 2009 and 2008, respectively.
(g) Includes certain assets that are classified within accrued interest receivable and other assets on the Consolidated Balance Sheet at December 31,2009 and 2008.

## Assets and liabilities measured at fair value on a nonrecurring basis

Certain assets, liabilities and unfunded lending-related commitments are measured at fair value on a nonrecurring basis; that is, they are not measured at fair value on an ongoing basis but instead are subject to fair value adjustments only in certain circumstances (for example, when there is evidence of impairment). The following tables present the assets and liabilities carried on the Consolidated Balance Sheets by caption and level within the valuation hierarchy (as described above) as of December 31, 2010 and 2009, for which a nonrecurring change in fair value has been recorded during the reporting period.

| December 31, 2010 (in millions) | Fair value hierarchy |  |  |  |  |  | Total fair value |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level 1(d) |  | Level 2(d) |  | Level 3(d) |  |  |  |
| Loans retained(a) | \$ | - | \$ | 5,484 | \$ | 690 | \$ | 6,174 |
| Loans held-for-sale(b) |  | - |  | 312 |  | 3,200 |  | 3,512 |
| Total loans |  | - |  | 5,796 |  | 3,890 |  | 9,686 |
| Other real estate owned |  | - |  | 78 |  | 311 |  | 389 |
| Other assets |  | - |  | - |  | 2 |  | 2 |
| Total other assets |  | - |  | 78 |  | 313 |  | 391 |
| Total assets at fair value on a nonrecurring basis | \$ | - | \$ | 5,874 | \$ | 4,203 | \$ | 10,077 |
| Accounts payable and other liabilities(c) | \$ | - | \$ | 53 | \$ | 18 | \$ | 71 |
| Total liabilities at fair value on a nonrecurring basis | \$ | - | \$ | 53 | \$ | 18 | \$ | 71 |


| December 31, 2009 (in millions) | Fair value hierarchy |  |  |  |  |  | Total fair value |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level 1 |  | Level 2 |  | Level 3 |  |  |  |
| Loans retained(a) | \$ | - | \$ | 4,544 | \$ | 1,137 | \$ | 5,681 |
| Loans held-for-sale(b) |  | - |  | 601 |  | 1,029 |  | 1,630 |
| Total loans |  | - |  | 5,145 |  | 2,166 |  | 7,311 |
| Other real estate owned |  | - |  | 307 |  | 387 |  | 694 |
| Other assets |  | - |  | - |  | 184 |  | 184 |
| Total other assets |  | - |  | 307 |  | 571 |  | 878 |
| Total assets at fair value on a nonrecurring basis | \$ | - | \$ | 5,452 | \$ | 2,737 | \$ | 8,189 |
| Accounts payable and other liabilities(c) | \$ | - | \$ | 87 | \$ | 39 | \$ | 126 |
| Total liabilities at fair value on a nonrecurring basis | \$ | - | \$ | 87 | \$ | 39 | \$ | 126 |

(a) Reflects mortgage, home equity and other loans where the carrying value is based on the fair value of the underlying collateral.
(b) Predominantly includes credit card loans at December 31, 2010. Predominantly includes leveraged lending loans at December 31, 2009. Loans held-for-sale are carried on the Consolidated Balance Sheets at the lower of cost or fair value.
(c) Represents, at December 31, 2010 and 2009, fair value adjustments associated with $\$ 517$ million and $\$ 648$ million, respectively, of unfunded held-for-sale lending-related commitments within the leveraged lending portfolio.
(d) In the year ended December 31, 2010, transfers between levels 1, 2 and 3 were not significant.

The method used to estimate the fair value of impaired collateraldependent loans, and other loans where the carrying value is based on the fair value of the underlying collateral (e.g., residential mortgage loans charged off in accordance with regulatory guidance), depends on the type of collateral (e.g., securities, real estate, nonfinancial assets) underlying the loan. Fair value of the collateral is estimated based on quoted market prices, broker quotes or independent appraisals, or by using a DCF model. For further information, see Note 15 on pages 239-243 of this Annual Report.

## Nonrecurring fair value changes

The following table presents the total change in value of assets and liabilities for which a fair value adjustment has been included in the Consolidated Statements of Income for the years ended December 31, 2010, 2009 and 2008, related to financial instruments held at those dates.

| Year ended December 31, <br> (in millions) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: |
| Loans retained | $\mathbf{\$ ( 3 , 4 1 3 )}$ | $\$(3,550)$ | $\$(1,159)$ |
| Loans held-for-sale | $\mathbf{2 9}$ | $(389)$ | $(2,728)$ |
| Total loans | $\mathbf{( 3 , 3 8 4 )}$ | $(3,939)$ | $(3,887)$ |
|  |  |  |  |
| Other assets | $\mathbf{2 5}$ | $(104)$ | $(685)$ |
| Accounts payable and other liabilities | $\mathbf{6}$ | 31 | $(285)$ |
| Total nonrecurring fair value gains/(losses) | $\mathbf{\$ ( 3 , 3 5 3 )}$ | $\$(4,012)$ | $\$(4,857)$ |

In the above table, loans predominantly include: (1) mortgage, home equity, and other loans where changes in the carrying value are based on the fair value of the underlying collateral; and (2) the change in fair value for leveraged lending loans carried on the Consolidated Balance Sheets at the lower of cost or fair value. Accounts payable and other liabilities predominantly include the change in fair value for unfunded lending-related commitments within the leveraged lending portfolio.

## Level 3 analysis

Level 3 assets at December 31, 2010, predominantly include derivative receivables, mortgage servicing rights ("MSRs"), collateralized loan obligations ("CLOs") held within the available-forsale securities portfolio, trading loans, asset-backed trading securities and private equity investments.

- Derivative receivables included $\$ 35.3$ billion of interest rate, credit, foreign exchange, equity and commodity contracts classified within level 3 at December 31, 2010. Included within this balance was $\$ 11.6$ billion of structured credit derivatives with corporate debt underlying. In assessing the Firm's risk exposure to structured credit derivatives, the Firm believes consideration should also be given to derivative liabilities with similar, and therefore offsetting, risk profiles. At December 31, 2010, $\$ 5.6$ billion of level 3 derivative liabilities had risk characteristics similar to those of the derivative receivable assets classified in level 3.
- Mortgage servicing rights represent the fair value of future cash flows for performing specified mortgage servicing activities for others (predominantly with respect to residential mortgage loans). For a further description of the MSR asset, interest rate risk management and the valuation methodology used for MSRs, including valuation assumptions and sensitivities, see Note 17 on pages 260-263 of this Annual Report.
- CLOs totaling $\$ 13.5$ billion were securities backed by corporate loans held in the Firm's AFS securities portfolio. Substantially all of these securities are rated "AAA," "AA" and "A" and had an average credit enhancement of $30 \%$. Credit enhancement in CLOs is primarily in the form of subordination, which is a form of structural credit enhancement where realized losses associated with assets held by an issuing vehicle are allocated to issued tranches considering their relative seniority. For further discussion, see Note 12 on pages 214-218 of this Annual Report.
- Trading loans totaling $\$ 13.1$ billion included $\$ 4.4$ billion of nonagency residential mortgage whole loans and commercial mortgage loans held in IB for which there is limited price transparency; and $\$ 4.0$ billion of reverse mortgages for which the principal risk sensitivities are mortality risk and home prices. The fair value of


## Notes to consolidated financial statements

the commercial and residential mortgage loans is estimated by projecting expected cash flows, considering relevant borrowerspecific and market factors, and discounting those cash flows at a rate reflecting current market liquidity. Loans are partially hedged by level 2 instruments, including credit default swaps and interest rate derivatives, which are observable and liquid.

## Consolidated Balance Sheets changes

Level 3 assets (including assets measured at fair value on a nonrecurring basis) were $5 \%$ of total Firm assets at December 31, 2010.

The following describes significant changes to level 3 assets during the year.

## For the year ended December 31,2010

Level 3 assets decreased by $\$ 15.5$ billion during 2010, due to the following:

- $\$ 11.4$ billion decrease in derivative receivables, predominantly driven by changes in credit spreads;
- A net decrease of $\$ 3.5$ billion due to the adoption of new accounting guidance related to VIEs. As a result of the adoption of the new guidance, there was a decrease of $\$ 5.0$ billion in accrued interest and accounts receivable related to retained securitization interests in Firm-sponsored credit card securitization trusts that were eliminated upon consolidation, partially offset by an increase of $\$ 1.5$ billion in trading debt and equity instruments;
- $\$ 2.8$ billion decrease in trading assets - debt and equity instruments, driven by sales, securitizations and transfers of trading loans to level 2 due to increased price transparency;
- $\$ 1.9$ billion decrease in MSRs. For a further discussion of the change, refer to Note 17 on pages 260-263 of this Annual Report;
- $\$ 2.2$ billion increase in nonrecurring loans held-for-sale, largely driven by an increase in credit card loans;
- \$1.3 billion increase in private equity investments, largely driven by additional follow-on investments and net gains in the portfolio; and
- $\$ 1.0$ billion increase in asset-backed AFS securities, predominantly driven by purchases of CLOs.


## Gains and Losses

Gains and losses included in the tables for 2010, 2009 and 2008 included:

## 2010

Included in the tables for the year ended December 31,2010

- $\$ 2.3$ billion of losses on MSRs; and
- $\$ 1.0$ billion gain in private equity, largely driven by gains on investments in the portfolio.

Included in the tables for the year ended December 31,2009

- $\$ 11.4$ billion of net losses on derivatives, primarily related to the tightening of credit spreads;
- Net losses on trading - debt and equity instruments of $\$ 671$ million, consisting of $\$ 2.1$ billion of losses, primarily related to residential and commercial loans and MBS, principally driven by markdowns and sales, partially offset by gains of $\$ 1.4$ billion, reflecting increases in the fair value of other ABS;
- \$5.8 billion of gains on MSRs; and
- \$1.4 billion of losses related to structured note liabilities, predominantly due to volatility in the equity markets.


## 2008

Included in the tables for the year ended December 31,2008

- Losses on trading-debt and equity instruments of approximately $\$ 12.8$ billion, principally from mortgage-related transactions and auction-rate securities;
- Losses of $\$ 6.9$ billion on MSRs;
- Losses of approximately $\$ 3.9$ billion on leveraged loans;
- Net gains of $\$ 4.6$ billion related to derivatives, principally due to changes in credit spreads and rate curves;
- Gains of $\$ 4.5$ billion related to structured notes, principally due to significant volatility in the fixed income, commodities and equity markets; and
- Private equity losses of $\$ 638$ million.

For further information on changes in the fair value of the MSRs, see Note 17 on pages 260-263 of this Annual Report.

## Credit adjustments

When determining the fair value of an instrument, it may be necessary to record a valuation adjustment to arrive at an exit price under U.S. GAAP. Valuation adjustments include, but are not limited to, amounts to reflect counterparty credit quality and the Firm's own creditworthiness. The market's view of the Firm's credit quality is reflected in credit spreads observed in the credit default swap market. For a detailed discussion of the valuation adjustments the Firm considers, see the valuation discussion at the beginning of this Note.

The following table provides the credit adjustments, excluding the effect of any hedging activity, reflected within the Consolidated Balance Sheets as of the dates indicated.

December 31,

| (in millions) | $\mathbf{2 0 1 0}$ | 2009 |
| :--- | :---: | :---: |
| Derivative receivables balance | $\mathbf{\$ 8 0 , 4 8 1}$ | $\$ 80,210$ |
| Derivatives CVA(a) | $\mathbf{( 4 , 3 6 2 )}$ | $(3,697)$ |
| Derivative payables balance | $\mathbf{6 9 , 2 1 9}$ | 60,125 |
| Derivatives DVA | $\mathbf{( 8 8 2 )}$ | $(841)($ d) |
| Structured notes balance(b)(c) | $\mathbf{5 3 , 1 3 9}$ | 59,064 |
| Structured notes DVA | $\mathbf{( 1 , 1 5 3 )}$ | $(685)($ d) |

(a) Derivatives credit valuation adjustments ("CVA"), gross of hedges, includes results managed by credit portfolio and other lines of business within IB.
(b) Structured notes are recorded within long-term debt, other borrowed funds or deposits on the Consolidated Balance Sheets, based on the tenor and legal form of the note.
(c) Structured notes are measured at fair value based on the Firm's election under the fair value option. For further information on these elections, see Note 4 on pages 187-189 of this Annual Report.
(d) The prior period has been revised.

The following table provides the impact of credit adjustments on earnings in the respective periods, excluding the effect of any hedging activity.

| Year ended December 31, <br> (in millions) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | :---: | ---: | ---: |
| Credit adjustments: | $\mathbf{\$ ( 6 6 5 )}$ | $\$ 5,869$ | $\$(7,561)$ |
| $\quad$ Derivative CVA(a) | $\mathbf{4 1}$ | $(548)(\mathrm{c})$ | 789 |
| $\quad$ Derivative DVA | $\mathbf{4 6 8}$ | $(1,748)(\mathrm{c})$ | 1,211 |
| Structured note DVA(b) |  |  |  |

(a) Derivatives CVA, gross of hedges, includes results managed by credit portfolio and other lines of business within IB.
(b) Structured notes are measured at fair value based on the Firm's election under the fair value option. For further information on these elections, see Note 4 on pages 187-189 of this Annual Report.
(c) The 2009 prior period has been revised.

## Additional disclosures about the fair value of financial instruments (including financial instruments not carried at fair

 value)U.S. GAAP requires disclosure of the estimated fair value of certain financial instruments, and the methods and significant assumptions used to estimate their fair value. Financial instruments within the scope of these disclosure requirements are included in the following table. However, certain financial instruments and all nonfinancial instruments are excluded from the scope of these disclosure requirements. Accordingly, the fair value disclosures provided in the following table include only a partial estimate of the fair value of JPMorgan Chase's assets and liabilities.

For example, the Firm has developed long-term relationships with its customers through its deposit base and credit card accounts, commonly referred to as core deposit intangibles and credit card relationships. In the opinion of management, these items, in the aggregate, add significant value to JPMorgan Chase, but their fair value is not disclosed in this Note.

Financial instruments for which carrying value approximates fair value Certain financial instruments that are not carried at fair value on the Consolidated Balance Sheets are carried at amounts that approximate fair value, due to their short-term nature and generally negligible credit risk. These instruments include cash and due from banks; deposits with banks; federal funds sold; securities purchased under resale agreements and securities borrowed with short-dated maturities; short-term receivables and accrued interest receivable; commercial paper; federal funds purchased; securities loaned and sold under repurchase agreements with short-dated maturities; other borrowed funds (excluding advances from the Federal Home Loan Banks ("FHLBs")); accounts payable; and accrued liabilities. In addition, U.S. GAAP requires that the fair value for deposit liabilities with no stated maturity (i.e., demand, savings and certain money market deposits) be equal to their carrying value; recognition of the inherent funding value of these instruments is not permitted.

## Notes to consolidated financial statements

The following table presents the carrying value and estimated fair values of financial assets and liabilities.

| December 31, (in billions) | 2010 |  |  |  |  |  | 2009 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Carrying value |  | Estimated fair value |  | Appreciation/ (depreciation) |  | Carrying value |  | Estimated fair value |  | Appreciation/ (depreciation) |  |
| Financial assets |  |  |  |  |  |  |  |  |  |  |  |  |
| Assets for which fair value approximates carrying value | \$ | 49.2 | \$ | 49.2 | \$ | - | \$ | 89.4 | \$ | 89.4 | \$ | - |
| Accrued interest and accounts receivable (included zero and $\$ 5.0$ at fair value) |  | 70.1 |  | 70.1 |  | - |  | 67.4 |  | 67.4 |  | - |
| Federal funds sold and securities purchased under resale agreements (included \$20.3 and \$20.5 at fair value) |  | 222.6 |  | 222.6 |  | - |  | 195.4 |  | 195.4 |  | - |
| Securities borrowed (included \$14.0 and \$7.0 at fair value) |  | 123.6 |  | 123.6 |  | - |  | 119.6 |  | 119.6 |  | - |
| Trading assets |  | 489.9 |  | 489.9 |  | - |  | 411.1 |  | 411.1 |  | - |
| Securities (included \$316.3 and \$360.4 at fair value) |  | 316.3 |  | 316.3 |  | - |  | 360.4 |  | 360.4 |  | - |
| Loans (included \$2.0 and \$1.4 at fair value)(a)(b) |  | 660.7 |  | 663.5 |  | 2.8 |  | 601.9 |  | 598.3 |  | (3.6) |
| Mortgage servicing rights at fair value |  | 13.6 |  | 13.6 |  | - |  | 15.5 |  | 15.5 |  | - |
| Other (included \$18.2 and \$19.2 at fair value) |  | 64.9 |  | 65.0 |  | 0.1 |  | 73.4 |  | 73.2 |  | (0.2) |
| Total financial assets |  | ,010.9 | \$ | 2,013.8 | \$ | 2.9 |  | 1,934.1 | \$ | 1,930.3 | \$ | (3.8) |
| Financial liabilities |  |  |  |  |  |  |  |  |  |  |  |  |
| Deposits (included \$4.4 and \$4.5 at fair value) | \$ | 930.4 | \$ | 931.5 | \$ | (1.1) | \$ | 938.4 | \$ | 939.5 | \$ | (1.1) |
| Federal funds purchased and securities loaned or sold under repurchase agreements (included \$4.1 and \$3.4 at fair value) |  | 276.6 |  | 276.6 |  | - |  | 261.4 |  | 261.4 |  | - |
| Commercial paper |  | 35.4 |  | 35.4 |  | - |  | 41.8 |  | 41.8 |  | - |
| Other borrowed funds (included \$9.9 and \$5.6 at fair value) |  | 57.3 |  | 57.2 |  | 0.1 |  | 55.7 |  | 55.9 |  | (0.2) |
| Trading liabilities |  | 146.2 |  | 146.2 |  | - |  | 125.1 |  | 125.1 |  | - |
| Accounts payable and other liabilities (included \$0.2 and \$0.4 at fair value) |  | 138.2 |  | 138.2 |  | - |  | 136.8 |  | 136.8 |  | - |
| Beneficial interests issued by consolidated VIEs (included \$1.5 and $\$ 1.4$ at fair value) |  | 77.6 |  | 77.9 |  | (0.3) |  | 15.2 |  | 15.2 |  | - |
| Long-term debt and junior subordinated deferrable interest debentures (included \$38.8 and \$49.0 at fair value) |  | 247.7 |  | 249.0 |  | (1.3) |  | 266.3 |  | 268.4 |  | (2.1) |
| Total financial liabilities |  | 1,909.4 | \$ | 1,912.0 | \$ | (2.6) |  | 1,840.7 | \$ | 1,844.1 | \$ | (3.4) |
| Net appreciation/(depreciation) |  |  |  |  | \$ | 0.3 |  |  |  |  | \$ | (7.2) |

(a) For originated or purchased loans held for investment, other than PCI loans, the carrying value is the principal amount outstanding, net of the allowance for loan losses, net charge-offs, interest applied to principal (for loans accounted for on the cost recovery method), unamortized discounts and premiums, and deferred loan fees or costs. For a further discussion of the Firm's loan accounting framework, see Note 14 on pages 220-238 of this Annual Report.
(b) Fair value is typically estimated using a discounted cash flow model that incorporates the characteristics of the underlying loans (including principal, contractual interest rate and contractual fees) and key inputs, including expected lifetime credit losses, interest rates, prepayment rates, and primary origination or secondary market spreads. The difference between the estimated fair value and carrying value is the result of the different methodologies used to determine fair value as compared to carrying value. For example, credit losses are estimated for the asset's remaining life in a fair value calculation but are estimated for a loss emergence period in a loan loss reserve calculation; future loan income (interest and fees) is incorporated in a fair value calculation but is generally not considered in a loan loss reserve calculation. For a further discussion of the Firm's methodologies for estimating the fair value of loans and lending-related commitments, see pages 171-173 of this Note.

The majority of the Firm's unfunded lending-related commitments are not carried at fair value on a recurring basis on the Consolidated Balance Sheets, nor are they actively traded. The carrying value and estimated fair value of the Firm's wholesale lending-related commitments were as follows for the periods indicated.

|  | 2010 |  |  |  | 2009 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| December 31, (in billions) | Carrying value (a) |  | Estimatedfair value |  | Carrying value (a) |  | Estimated fair value |  |
| Wholesale lending-related commitments | \$ | 0.7 | \$ | 0.9 | \$ | 0.9 | \$ | 1.3 |

(a) Represents the allowance for wholesale unfunded lending-related commitments. Excludes the current carrying values of the guarantee liability and the offsetting asset each recognized at fair value at the inception of guarantees.
The Firm does not estimate the fair value of consumer lending-related commitments. In many cases, the Firm can reduce or cancel these commitments by providing the borrower prior notice or, in some cases, without notice as permitted by law. For a further discussion of the valuation of lending-related commitments, see pages 171-173 of this Note.

## Trading assets and liabilities

Trading assets include debt and equity instruments held for trading purposes that JPMorgan Chase owns ("long" positions), certain loans managed on a fair value basis and for which the Firm has elected the fair value option, and physical commodities inventories that are generally accounted for at the lower of cost or fair value. Trading liabilities include debt and equity instruments that the Firm has sold to other parties but does not own ("short" positions). The Firm is obligated to purchase instruments at a future date to cover
the short positions. Included in trading assets and trading liabilities are the reported receivables (unrealized gains) and payables (unrealized losses) related to derivatives. Trading assets and liabilities are carried at fair value on the Consolidated Balance Sheets. Balances reflect the reduction of securities owned (long positions) by the amount of securities sold but not yet purchased (short positions) when the long and short positions have identical Committee on Uniform Security Identification Procedures ("CUSIPs").

## Trading assets and liabilities-average balances

Average trading assets and liabilities were as follows for the periods indicated.

| Year ended December 31, (in millions) | $\mathbf{2 0 1 0}$ |  |
| :--- | ---: | ---: |
| Trading assets - debt and equity instruments(a) | $\mathbf{2 0 0 0}$ |  |
| Trading assets - derivative receivables | $\mathbf{3 5 4 , 4 4 1}$ | $\mathbf{8 4 , 6 7 6}$ |
| Trading liabilities - debt and equity instruments(a)(b) | $\mathbf{7 8 , 1 5 9}$ | $\mathbf{3 1 8 , 0 6 3}$ |
| Trading liabilities - derivative payables | $\mathbf{1 1 0 , 4 5 7}$ |  |

(a) Balances reflect the reduction of securities owned (long positions) by the amount of securities sold, but not yet purchased (short positions) when the long and short positions have identical CUSIPs.
(b) Primarily represent securities sold, not yet purchased.

## Note 4 - Fair value option

The fair value option provides an option to elect fair value as an alternative measurement for selected financial assets, financial liabilities, unrecognized firm commitments, and written loan commitments not previously carried at fair value.

## Elections

Elections were made by the Firm to:

- Mitigate income statement volatility caused by the differences in the measurement basis of elected instruments (for example, certain instruments elected were previously accounted for on an accrual basis) while the associated risk management arrangements are accounted for on a fair value basis;
- Eliminate the complexities of applying certain accounting models (e.g., hedge accounting or bifurcation accounting for hybrid instruments); and
- Better reflect those instruments that are managed on a fair value basis.

Elections include the following:

- Loans purchased or originated as part of securitization warehousing activity, subject to bifurcation accounting, or managed on a fair value basis.
- Securities financing arrangements with an embedded derivative and/or a maturity of greater than one year.
- Owned beneficial interests in securitized financial assets that contain embedded credit derivatives, which would otherwise be required to be separately accounted for as a derivative instrument.
- Certain tax credits and other equity investments acquired as part of the Washington Mutual transaction.
- Structured notes issued as part of IB's client-driven activities. (Structured notes are financial instruments that contain embedded derivatives.)
- Long-term beneficial interests issued by IB's consolidated securitization trusts where the underlying assets are carried at fair value.


## Notes to consolidated financial statements

## Changes in fair value under the fair value option election

The following table presents the changes in fair value included in the Consolidated Statements of Income for the years ended December 31, 2010, 2009 and 2008, for items for which the fair value election was made. The profit and loss information presented below only includes the financial instruments that were elected to be measured at fair value; related risk management instruments, which are required to be measured at fair value, are not included in the table.

| December 31, (in millions) | 2010 |  |  |  |  | 2009 |  |  |  |  | 2008 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Principaltransactions |  | Other income | Total changes in fair value recorded |  | Principal transactions |  | Other income | Total changes in fair value recorded |  | Principal transactions |  | Other income | Total changes in fair value recorded |  |
| Federal funds sold and securities purchased under resale agreements | \$ | 173 | \$ | \$ | 173 | \$ | (553) | \$ | \$ | (553) | \$ | 1,139 | \$ | \$ | 1,139 |
| Securities borrowed |  | 31 | - |  | 31 |  | 82 | - |  | 82 |  | 29 | - |  | 29 |
| Trading assets: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Debt and equity instruments, excluding loans |  | 556 | (2)(c) |  | 554 |  | 619 | 25(c) |  | 644 |  | (870) | (58)(c) |  | (928) |
| Loans reported as trading assets: Changes in instrumentspecific credit risk Other changes in fair value |  | $\begin{gathered} 1,279 \\ (312) \end{gathered}$ | $\begin{array}{r} \text { (6)(c) } \\ 4,449(\mathrm{c}) \end{array}$ |  | 1,273 4,137 |  | $(300)$ 1,132 | $\begin{gathered} (177)(\mathrm{c}) \\ 3,119(\mathrm{c}) \end{gathered}$ |  | $(477)$ 4,251 |  | $(9,802)$ 696 | $\begin{gathered} (283)(\mathrm{c}) \\ 1,178(\mathrm{c}) \end{gathered}$ |  | $(10,085)$ 1,874 |
| Loans: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Changes in instrument-specific credit risk |  | 95 | - |  | 95 |  | (78) | - |  | (78) |  | $(1,991)$ | - |  | $(1,991)$ |
| Other changes in fair value |  | 90 | (263) |  | 90 |  | (343) | (731)(d) |  | (343) |  | (42) | - |  | (42) |
| Other assets |  | - | (263)(d) |  | (263) |  | ) | (731)(d) |  | (731) |  |  | (660)(d) |  | (660) |
| Deposits(a) <br> Federal funds purchased and |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Federal funds purchased and securities loaned or sold under repurchase agreements |  | (29) | - |  | (29) |  | 116 | - |  | 116 |  | (127) | - |  | (127) |
| Other borrowed funds(a) |  | 123 | - |  | 123 |  | $(1,287)$ | - |  | $(1,287)$ |  | 1,888 | - |  | 1,888 |
| Trading liabilities |  | (23) | - |  | (23) |  | (3) | - |  | (3) |  | 35 | - |  | 35 |
| Beneficial interests issued by consolidated VIEs |  | (12) | - |  | (12) |  | (351) | - |  | (351) |  | 355 | - |  | 355 |
| Other liabilities |  | (9) | 8(d) |  | (1) |  | 64 | - |  | 64 |  | - | - |  | - |
| Long-term debt: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Changes in instrument-specific credit risk(a) |  | $400$ | 二 |  | 400 |  | $(1,704)$ | - |  | $(1,704)$ |  | 1,174 | - |  | 1,174 |
| Other changes in fair value(b) |  | 1,297 | - |  | 1,297 |  | $(2,393)$ | - |  | $(2,393)$ |  | $16,202$ | - |  | $16,202$ |

(a) Total changes in instrument-specific credit risk related to structured notes were $\$ 468$ million, $\$(1.7)$ billion and $\$ 1.2$ billion for the years ended December 31, 2010, 2009 and 2008, respectively. These totals include adjustments for structured notes classified within deposits and other borrowed funds, as well as long-term debt. The 2009 prior period has been revised.
(b) Structured notes are debt instruments with embedded derivatives that are tailored to meet a client's need for derivative risk in funded form. The embedded derivative is the primary driver of risk. The 2008 gain included in "Other changes in fair value" results from a significant decline in the value of certain structured notes where the embedded derivative is principally linked to either equity indices or commodity prices, both of which declined sharply during the third quarter of 2008. Although the risk associated with the structured notes is actively managed, the gains reported in this table do not include the income statement impact of such risk management instruments.
(c) Reported in mortgage fees and related income.
(d) Reported in other income.

## Determination of instrument-specific credit risk for items for

 which a fair value election was madeThe following describes how the gains and losses included in earnings during 2010, 2009 and 2008, which were attributable to changes in instrument-specific credit risk, were determined.

- Loans and lending-related commitments: For floating-rate instruments, all changes in value are attributed to instrumentspecific credit risk. For fixed-rate instruments, an allocation of the changes in value for the period is made between those changes in value that are interest rate-related and changes in value that are credit-related. Allocations are generally based on an analysis of bor-
rower-specific credit spread and recovery information, where available, or benchmarking to similar entities or industries.
- Long-term debt: Changes in value attributable to instrumentspecific credit risk were derived principally from observable changes in the Firm's credit spread.
- Resale and repurchase agreements, securities borrowed agreements and securities lending agreements: Generally, for these types of agreements, there is a requirement that collateral be maintained with a market value equal to or in excess of the principal amount loaned; as a result, there would be no adjustment or an immaterial adjustment for instrument-specific credit risk related to these agreements.

Difference between aggregate fair value and aggregate remaining contractual principal balance outstanding
The following table reflects the difference between the aggregate fair value and the aggregate remaining contractual principal balance outstanding as of December 31, 2010 and 2009, for loans, long-term debt and long-term beneficial interests for which the fair value option has been elected.

(a) Remaining contractual principal is not applicable to nonprincipal-protected notes. Unlike principal-protected notes, for which the Firm is obligated to return a stated amount of principal at the maturity of the note, nonprincipal-protected notes do not obligate the Firm to return a stated amount of principal at maturity, but to return an amount based on the performance of an underlying variable or derivative feature embedded in the note.
(b) Where the Firm issues principal-protected zero-coupon or discount notes, the balance reflected as the remaining contractual principal is the final principal payment at maturity.

At December 31, 2010 and 2009, the contractual amount of letters of credit for which the fair value option was elected was $\$ 3.8$ billion and $\$ 3.7$ billion, respectively, with a corresponding fair value of $\$ 6$ million at both December 31, 2010 and 2009. For further information regarding offbalance sheet commitments, see Note 30 on pages 275-280 of this Annual Report.

## Note 5 - Credit risk concentrations

Concentrations of credit risk arise when a number of customers are engaged in similar business activities or activities in the same geographic region, or when they have similar economic features that would cause their ability to meet contractual obligations to be similarly affected by changes in economic conditions.

JPMorgan Chase regularly monitors various segments of its credit portfolio to assess potential concentration risks and to obtain collateral when deemed necessary. Senior management is significantly involved in the credit approval and review process, and risk levels are adjusted as needed to reflect management's risk tolerance.

In the Firm's wholesale portfolio, risk concentrations are evaluated primarily by industry and monitored regularly on both an aggregate portfolio level and on an individual customer basis. Management of the Firm's wholesale exposure is accomplished through loan syndication and participation, loan sales, securitizations, credit derivatives, use of master netting agreements, and collateral and other risk-reduction techniques. In the consumer portfolio, concentrations are evaluated primarily by product and by U.S. geographic region, with a key focus on trends and concentrations at the portfolio level, where potential risk concentrations can be remedied through changes in underwriting policies and portfolio guidelines.

The Firm does not believe that its exposure to any particular loan product (e.g., option ARMs), industry segment (e.g., commercial real estate) or its exposure to residential real estate loans with high loan-to-value ratios results in a significant concentration of credit risk. Terms of loan products and collateral coverage are included in the Firm's assessment when extending credit and establishing its allowance for loan losses.
For further information regarding on-balance sheet credit concentrations by major product and/or geography, see Notes 14 and 15 on pages 220-238 and 239-243, respectively, of this Annual Report. For information regarding concentrations of off-balance sheet lending-related financial instruments by major product, see Note 30 on pages 275-280 of this Annual Report.
Customer receivables representing primarily margin loans to prime and retail brokerage clients of $\$ 32.5$ billion and $\$ 15.7$ billion at December 31, 2010 and 2009, respectively, are included in the table below. These margin loans are generally over-collateralized through a pledge of assets maintained in clients' brokerage accounts and are subject to daily minimum collateral requirements. In the event that the collateral value decreases, a maintenance margin call is made to the client to provide additional collateral into the account. If additional collateral is not

## Notes to consolidated financial statements

provided by the client, the client's positions may be liquidated by the Firm to meet the minimum collateral requirements. As a result of the Firm's credit risk mitigation practices, the Firm does not hold any
reserves for credit impairment on these agreements as of December 31, 2010 and 2009.

The table below presents both on-balance sheet and off-balance sheet wholesale- and consumer-related credit exposure by the Firm's three portfolio segments as of December 31, 2010, and 2009.

| December 31, (in millions) | 2010 |  |  |  |  |  |  |  | 2009 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Creditexposure |  | On-balance sheet |  |  |  | Off-balance sheet(d) |  | Creditexposure |  | On-balance sheet |  |  |  | $\begin{gathered} \hline \begin{array}{c} \text { Off-balance } \\ \text { sheet(d) }) \end{array} \\ \hline \end{gathered}$ |  |
|  |  |  |  | Loans |  | rivatives |  |  |  | Loans |  | rivatives |  |  |
| Wholesale(a) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Banks and finance companies | \$ | 65,867 | \$ | 21,562 | \$ | 20,935 | \$ | 23,370 |  |  | \$ | 54,053 | \$ | 14,396 | \$ | 17,957 | \$ | 21,700 |
| Real estate |  | 64,351 |  | 53,635 |  | 868 |  | 9,848 |  | 68,509 |  | 57,195 |  | 1,112 |  | 10,202 |
| Healthcare |  | 41,093 |  | 6,047 |  | 2,121 |  | 32,925 |  | 35,605 |  | 4,992 |  | 1,917 |  | 28,696 |
| State and municipal |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Asset managers |  | 29,364 |  | 7,070 |  | 7,124 |  | 15,170 |  | 24,920 |  | 5,930 |  | 6,640 |  | 12,350 |
| Consumer products |  | 27,508 |  | 7,921 |  | 1,039 |  | 18,548 |  | 27,004 |  | 7,880 |  | 1,094 |  | 18,030 |
| Oil and gas |  | 26,459 |  | 5,701 |  | 3,866 |  | 16,892 |  | 23,322 |  | 5,895 |  | 2,309 |  | 15,118 |
| Utilities |  | 25,911 |  | 4,220 |  | 3,104 |  | 18,587 |  | 27,178 |  | 5,451 |  | 3,073 |  | 18,654 |
| Retail and consumer services |  | 20,882 |  | 5,876 |  | 796 |  | 14,210 |  | 20,673 |  | 5,611 |  | 769 |  | 14,293 |
|  |  | 14,348 |  | 2,752 |  | 1,554 |  | 10,042 |  | 14,169 |  | 3,802 |  | 1,409 |  | 8,958 |
| Machinery and equipment |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 9,114 |
| Building materials/construction |  | 12,808 |  | 3,285 |  | 295 |  | 9,228 |  | 10,448 |  | 3,252 |  | 281 |  | 6,915 |
| Chemicals/plastics |  | 12,312 |  | 3,372 |  | 350 |  | 8,590 |  | 9,870 |  | 2,719 |  | 392 |  | 6,759 |
| Metals/mining |  | 11,426 |  | 3,301 |  | 1,018 |  | 7,107 |  | 12,547 |  | 3,410 |  | 1,158 |  | 7,979 |
| Business services |  | 11,247 |  | 3,850 |  | 370 |  | 7,027 |  | 10,667 |  | 3,627 |  | 397 |  | 6,643 |
| Central government |  | 11,173 |  | 1,146 |  | 6,052 |  | 3,975 |  | 9,557 |  | 1,703 |  | 5,501 |  | 2,353 |
| Media |  | 10,967 |  | 3,711 |  | 284 |  | 6,972 |  | 12,379 |  | 4,173 |  | 329 |  | 7,877 |
| Insurance |  | 10,918 |  | 1,103 |  | 1,660 |  | 8,155 |  | 13,421 |  | 1,292 |  | 2,511 |  | 9,618 |
| Telecom services |  | 10,709 |  | 1,524 |  | 1,362 |  | 7,823 |  | 11,265 |  | 2,042 |  | 1,273 |  | 7,950 |
| Holding companies |  | 10,504 |  | 3,885 |  | 894 |  | 5,725 |  | 16,018 |  | 4,360 |  | 1,042 |  | 10,616 |
| Transportation |  | 9,652 |  | 3,754 |  | 822 |  | 5,076 |  | 9,749 |  | 3,141 |  | 1,238 |  | 5,370 |
| Securities firms and exchanges |  | 9,415 |  | 1,722 |  | 5,038 |  | 2,655 |  | 10,832 |  | 3,457 |  | 4,796 |  | 2,579 |
| Automotive |  | 9,011 |  | 2,026 |  | 248 |  | 6,737 |  | 9,357 |  | 2,510 |  | 357 |  | 6,490 |
| Agriculture/paper manufacturing |  | 7,368 |  | 1,918 |  | 250 |  | 5,200 |  | 5,801 |  | 1,928 |  | 251 |  | 3,622 |
| Aerospace |  | 5,732 |  | 516 |  | 197 |  | 5,019 |  | 5,254 |  | 597 |  | 79 |  | 4,578 |
| All other(b) |  | 140,926 |  | 62,917 |  | 14,641 |  | 63,368 |  | 137,359 |  | 41,838 |  | 18,890 |  | 76,631 |
| Subtotal |  | 649,070 |  | 222,510 |  | 80,481 |  | 346,079 |  | 627,442 |  | 200,077 |  | 80,210 |  | 347,155 |
| Loans held-for-sale and loans at fair value |  | 5,123 |  | 5,123 |  | - |  | - |  | 4,098 |  | 4,098 |  | - |  | - |
| Receivables from customers |  | 32,541 |  | - |  | - |  | - |  | 15,745 |  | - |  | - |  | - |
| Interests in purchased receivables |  | 391 |  | - |  | - |  | - |  | 2,927 |  | - |  | - |  | - |
| Total wholesale |  | 687,125 |  | 227,633 |  | 80,481 |  | 346,079 |  | 650,212 |  | 204,175 |  | 80,210 |  | 347,155 |
| Consumer, excluding credit card |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Home equity - senior lien |  | 40,436 |  | 24,376 |  | - |  | 16,060 |  | 46,622 |  | 27,376 |  | - |  | 19,246 |
| Home equity - junior lien |  | 92,690 |  | 64,009 |  | - |  | 28,681 |  | 111,280 |  | 74,049 |  | - |  | 37,231 |
| Prime mortgage, including |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Subprime mortgage(a) |  | 11,287 |  | 11,287 |  | - |  |  |  | 12,526 |  | 12,526 |  | - |  | - |
| Auto (a) |  | 53,613 |  | 48,367 |  | - |  | 5,246 |  | 51,498 |  | 46,031 |  | - |  | 5,467 |
| Business banking |  | 26,514 |  | 16,812 |  | - |  | 9,702 |  | 26,014 |  | 16,974 |  | - |  | 9,040 |
| Student and other(a) |  | 15,890 |  | 15,311 |  | - |  | 579 |  | 16,915 |  | 14,726 |  | - |  | 2,189 |
| PCI-Home equity |  | 24,459 |  | 24,459 |  | - |  | - |  | 26,520 |  | 26,520 |  | - |  | - |
| PCI-Prime mortgage |  | 17,322 |  | 17,322 |  | - |  | - |  | 19,693 |  | 19,693 |  | - |  |  |
| PCI-Subprime mortgage |  | 5,398 |  | 5,398 |  | - |  | - |  | 5,993 |  | 5,993 |  | - |  | - |
| PCI-option ARMs |  | 25,584 |  | 25,584 |  | - |  | - |  | 29,039 |  | 29,039 |  | - |  | - |
| Loans held-for-sale |  | 154 |  | 154 |  | - |  | - |  | 2,142 |  | 2,142 |  | - |  | - |
| Total consumer, excluding credit card |  | 389,152 |  | 327,618 |  | - |  | 61,534 |  | 425,324 |  | 350,497 |  | - |  | 74,827 |
| Credit Card |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Credit card - retained(a)(c) |  | 682,751 |  | 135,524 |  | - |  | 547,227 |  | 647,899 |  | 78,786 |  | - |  | 569,113 |
| Credit card - held-for-sale |  | 2,152 |  | 2,152 |  | - |  | - |  | - |  | - |  | - |  | - |
| Total credit card |  | 684,903 |  | 137,676 |  | - |  | 547,227 |  | 647,899 |  | 78,786 |  | - |  | 569,113 |
| Total exposure |  | 1,761,180 | \$ | 692,927 | \$ | 80,481 | \$ | 954,840 |  | ,723,435 | \$ | 633,458 | \$ | 80,210 | \$ | 991,095 |

(a) Effective January 1, 2010, the Firm adopted accounting guidance related to VIEs. Upon the adoption of the guidance, the Firm consolidated its Firm-sponsored credit card securitization trusts and certain other consumer loan securitization entities, primarily mortgage-related. As a result, related receivables are now recorded as loans on the Consolidated Balance Sheet. For further information, see Note 16 on pages 244-259 of this Annual Report.
(b) For more information on exposures to SPEs included in all other, see Note 16 on pages 244-259 of this Annual Report.
(c) Excludes $\$ 84.6$ billion of securitized credit card receivables at December 31, 2009.
(d) Represents lending-related financial instruments.

## Note 6 - Derivative instruments

Derivative instruments enable end-users to modify or mitigate exposure to credit or market risks. Counterparties to a derivative contract seek to obtain risks and rewards similar to those that could be obtained from purchasing or selling a related cash instrument without having to exchange upfront the full purchase or sales price. JPMorgan Chase makes markets in derivatives for customers and also uses derivatives to hedge or manage its own market risk exposures. The majority of the Firm's derivatives are entered into for market-making purposes.

## Trading derivatives

The Firm makes markets in a variety of derivatives in its trading portfolios to meet the needs of customers (both dealers and clients) and to generate revenue through this trading activity ("client derivatives"). Customers use derivatives to mitigate or modify interest rate, credit, foreign exchange, equity and commodity risks. The Firm actively manages the risks from its exposure to these derivatives by entering into other derivative transactions or by purchasing or selling other financial instruments that partially or fully offset the exposure from client derivatives. The Firm also seeks to earn a spread between the client derivatives and offsetting positions, and from the remaining open risk positions.

## Risk management derivatives

The Firm manages its market risk exposures using various derivative instruments.
Interest rate contracts are used to minimize fluctuations in earnings that are caused by changes in interest rates. Fixed-rate assets and liabilities appreciate or depreciate in market value as interest rates change. Similarly, interest income and expense increase or decrease as a result of variable-rate assets and liabilities resetting to current market rates, and as a result of the repayment and subsequent origination or issuance of fixed-rate assets and liabilities at current market rates. Gains or losses on the derivative instruments that are related to such assets and liabilities are expected to substantially offset this variability in earnings. The Firm generally uses interest rate swaps, forwards and futures to manage the impact of interest rate fluctuations on earnings.
Foreign currency forward contracts are used to manage the foreign exchange risk associated with certain foreign currencydenominated (i.e., non-U.S.) assets and liabilities and forecasted transactions, as well as the Firm's net investments in certain nonU.S. subsidiaries or branches whose functional currencies are not the U.S. dollar. As a result of fluctuations in foreign currencies, the U.S. dollar-equivalent values of the foreign currency-denominated assets and liabilities or forecasted revenue or expense increase or decrease. Gains or losses on the derivative instruments related to these foreign currency-denominated assets or liabilities, or forecasted transactions, are expected to substantially offset this variability.
Commodities based forward and futures contracts are used to manage the price risk of certain inventory, including gold and base metals, in the Firm's commodities portfolio. Gains or losses on the forwards and futures are expected to substantially offset the
depreciation or appreciation of the related inventory. Also in the commodities portfolio, electricity and natural gas futures and forwards contracts are used to manage price risk associated with energyrelated tolling and load-serving contracts and investments.

The Firm uses credit derivatives to manage the counterparty credit risk associated with loans and lending-related commitments. Credit derivatives compensate the purchaser when the entity referenced in the contract experiences a credit event, such as bankruptcy or a failure to pay an obligation when due. For a further discussion of credit derivatives, see the discussion in the Credit derivatives section on pages 197-199 of this Note.
For more information about risk management derivatives, see the risk management derivatives gains and losses table on page 196 of this Annual Report, and the hedge accounting gains and losses tables on pages 194-195 of this Note.

## Accounting for derivatives

All free-standing derivatives are required to be recorded on the Consolidated Balance Sheets at fair value. As permitted under U.S. GAAP, the Firm nets derivative assets and liabilities, and the related cash collateral received and paid, when a legally enforceable master netting agreement exists between the Firm and the derivative counterparty. The accounting for changes in value of a derivative depends on whether or not the transaction has been designated and qualifies for hedge accounting. Derivatives that are not designated as hedges are marked to market through earnings. The tabular disclosures on pages 192-199 of this Note provide additional information on the amount of, and reporting for, derivative assets, liabilities, gains and losses. For further discussion of derivatives embedded in structured notes, see Notes 3 and 4 on pages 170-187 and 187-189, respectively, of this Annual Report.

## Derivatives designated as hedges

The Firm applies hedge accounting to certain derivatives executed for risk management purposes - generally interest rate, foreign exchange and gold and base metal derivatives. However, JPMorgan Chase does not seek to apply hedge accounting to all of the derivatives involved in the Firm's risk management activities. For example, the Firm does not apply hedge accounting to purchased credit default swaps used to manage the credit risk of loans and commitments, because of the difficulties in qualifying such contracts as hedges. For the same reason, the Firm does not apply hedge accounting to certain interest rate and commodity derivatives used for risk management purposes.

To qualify for hedge accounting, a derivative must be highly effective at reducing the risk associated with the exposure being hedged. In addition, for a derivative to be designated as a hedge, the risk management objective and strategy must be documented. Hedge documentation must identify the derivative hedging instrument, the asset or liability or forecasted transaction and type of risk to be hedged, and how the effectiveness of the derivative is assessed prospectively and retrospectively. To assess effectiveness, the Firm uses statistical methods such as regression analysis, as

## Notes to consolidated financial statements

well as nonstatistical methods including dollar-value comparisons of the change in the fair value of the derivative to the change in the fair value or cash flows of the hedged item. The extent to which a derivative has been, and is expected to continue to be, effective at offsetting changes in the fair value or cash flows of the hedged item must be assessed and documented at least quarterly. Any hedge ineffectiveness (i.e., the amount by which the gain or loss on the designated derivative instrument does not exactly offset the change in the hedged item attributable to the hedged risk) must be reported in current-period earnings. If it is determined that a derivative is not highly effective at hedging the designated exposure, hedge accounting is discontinued.
There are three types of hedge accounting designations: fair value hedges, cash flow hedges and net investment hedges. JPMorgan Chase uses fair value hedges primarily to hedge fixed-rate longterm debt, AFS securities and gold and base metal inventory. For qualifying fair value hedges, the changes in the fair value of the derivative, and in the value of the hedged item, for the risk being hedged, are recognized in earnings. If the hedge relationship is terminated, then the fair value adjustment to the hedged item continues to be reported as part of the basis of the hedged item and for interest-bearing instruments is amortized to earnings as a yield adjustment. Derivative amounts affecting earnings are recognized consistent with the classification of the hedged item - primarily net interest income and principal transactions revenue.

JPMorgan Chase uses cash flow hedges to hedge the exposure to variability in cash flows from floating-rate financial instruments and forecasted transactions, primarily the rollover of short-term assets and liabilities, and foreign currency-denominated revenue and expense. For qualifying cash flow hedges, the effective portion of the change in the fair value of the derivative is recorded in other comprehensive income/(loss) ("OCl") and recognized in the Consolidated Statements of Income when the hedged cash flows affect earnings. Derivative amounts affecting earnings are recognized consistent with the classification of the hedged item primarily interest income, interest expense, noninterest revenue and compensation expense. The ineffective portions of cash flow hedges are immediately recognized in earnings. If the hedge relationship is terminated, then the value of the derivative recorded in accumulated other comprehensive income/(loss) ("AOCI") is recognized in earnings when the cash flows that were hedged affect earnings. For hedge relationships that are discontinued because a forecasted transaction is not expected to occur according to the original hedge forecast, any related derivative values recorded in AOCl are immediately recognized in earnings.
JPMorgan Chase uses foreign currency hedges to protect the value of the Firm's net investments in certain non-U.S. subsidiaries or
branches whose functional currencies are not the U.S. dollar. For foreign currency qualifying net investment hedges, changes in the fair value of the derivatives are recorded in the translation adjustments account within AOCI.
Notional amount of derivative contracts
The following table summarizes the notional amount of derivative contracts outstanding as of December 31, 2010 and 2009.

|  | Notional amounts(b) |  |
| :--- | ---: | ---: |
| December 31, (in billions) | $\mathbf{2 0 1 0}$ | 2009 |
| Interest rate contracts |  |  |
| Swaps | $\mathbf{\$ 4 6 , 2 9 9}$ | $\$ 47,663$ |
| Futures and forwards | $\mathbf{9 , 2 9 8}$ | 6,986 |
| Written options | $\mathbf{4 , 0 7 5}$ | 4,553 |
| Purchased options | $\mathbf{3 , 9 6 8}$ | 4,584 |
| Total interest rate contracts | $\mathbf{5 , 4 7 0}$ | 63,786 |
| Credit derivatives(a) |  | 5,994 |
| Foreign exchange contracts | $\mathbf{2 , 5 6 8}$ | 2,217 |
| Cross-currency swaps | $\mathbf{3 , 8 9 3}$ | 3,578 |
| Spot, futures and forwards | $\mathbf{6 7 4}$ | 685 |
| Written options | $\mathbf{6 4 9}$ | 699 |
| Purchased options | $\mathbf{7 , 7 8 4}$ | $\mathbf{7 , 1 7 9}$ |
| Total foreign exchange contracts |  |  |
| Equity contracts | $\mathbf{1 1 6}$ | $\mathbf{8 1}$ |
| Swaps | $\mathbf{4 9}$ | 45 |
| Futures and forwards | $\mathbf{4 3 0}$ | 502 |
| Written options | $\mathbf{3 7 7}$ | 449 |
| Purchased options | $\mathbf{9 7 2}$ | 1,077 |
| Total equity contracts |  |  |
| Commodity contracts | $\mathbf{3 4 9}$ | 178 |
| Swaps | $\mathbf{1 7 0}$ | 113 |
| Spot, futures and forwards | $\mathbf{2 6 4}$ | 201 |
| Written options | $\mathbf{2 5 4}$ | $\mathbf{2 0 5}$ |
| Purchased options | $\mathbf{1 , 0 3 7}$ | 697 |
| Total commodity contracts | $\mathbf{\$ 7 8 , 9 0 5}$ | $\$ 78,733$ |
| Total derivative notional amounts |  |  |

(a) Primarily consists of credit default swaps. For more information on volumes and types of credit derivative contracts, see the Credit derivatives discussion on pages 197-199 of this Note.
(b) Represents the sum of gross long and gross short third-party notional derivative contracts.

While the notional amounts disclosed above give an indication of the volume of the Firm's derivative activity, the notional amounts significantly exceed, in the Firm's view, the possible losses that could arise from such transactions. For most derivative transactions, the notional amount does not change hands; it is used simply as a reference to calculate payments.

Impact of derivatives on the Consolidated Balance Sheets The following tables summarize derivative fair values as of December 31, 2010 and 2009, by accounting designation (e.g., whether the derivatives were designated as hedges or not) and contract type.

## Free-standing derivatives(a)

| December 31, 2010 <br> (in millions) | Derivative receivables |  |  |  |  |  | Derivative payables |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Not designated as hedges |  | Designated as hedges |  | Total derivative receivables |  | Not designated as hedges | Designated as hedges |  | Total derivative payables |  |
| Trading assets and liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Interest rate | \$ | 1,121,703 | \$ | 6,279 | \$ | 1,127,982 | \$ 1,089,604 | \$ | 840 | \$ | 1,090,444 |
| Credit |  | 129,729 |  | - |  | 129,729 | 125,061 |  | - |  | 125,061 |
| Foreign exchange(b) |  | 165,240 |  | 3,231 |  | 168,471 | 163,671 |  | 1,059 |  | 164,730 |
| Equity |  | 43,633 |  | - |  | 43,633 | 46,399 |  | - |  | 46,399 |
| Commodity |  | 59,573 |  | 24 |  | 59,597 | 56,397 |  | 2,078(d) |  | 58,475 |
| Gross fair value of trading assets and liabilities | \$ | 1,519,878 | \$ | 9,534 | \$ | 1,529,412 | \$ 1,481,132 | \$ | 3,977 | \$ | 1,485,109 |
| Netting adjustment(c) |  |  |  |  |  | $(1,448,931)$ |  |  |  |  | $(1,415,890)$ |
| Carrying value of derivative trading assets and trading liabilities on the Consolidated Balance Sheets |  |  |  |  |  |  |  |  |  |  |  |
|  | Derivative receivables |  |  |  |  |  | Derivative payables |  |  |  |  |
| December 31, 2009 <br> (in millions) | Not designated as hedges |  | Designated as hedges |  | Total derivative receivables |  | Not designated as hedges | Designated as hedges |  | Total derivative payables |  |
| Trading assets and liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Interest rate | \$ | 1,148,901 | \$ | 6,568 | \$ | 1,155,469 | \$ 1,121,978 | \$ | 427 | \$ | 1,122,405 |
| Credit |  | 170,864 |  | - |  | 170,864 | 164,790 |  | - |  | 164,790 |
| Foreign exchange(b) |  | 141,790 |  | 2,497 |  | 144,287 | 137,865 |  | 353 |  | 138,218 |
| Equity |  | 57,871 |  | - |  | 57,871 | 58,494 |  | - |  | 58,494 |
| Commodity |  | 36,988 |  | 39 |  | 37,027 | 35,082 |  | 194(d) |  | 35,276 |
| Gross fair value of trading assets and liabilities | \$ | 1,556,414 | \$ | 9,104 | \$ | 1,565,518 | \$ 1,518,209 | \$ | 974 | \$ | 1,519,183 |
| Netting adjustment(c) |  |  |  |  |  | $(1,485,308)$ |  |  |  |  | $(1,459,058)$ |
| Carrying value of derivative trading assets and trading liabilities on the | Carrying value of derivative trading |  |  |  |  |  |  |  |  |  |  |
| Consolidated Balance Sheets |  |  |  |  | \$ | 80,210 |  |  |  | \$ | 60,125 |

(a) Excludes structured notes for which the fair value option has been elected. See Note 4 on pages 187-189 of this Annual Report for further information.
(b) Excludes $\$ 21$ million of foreign currency-denominated debt designated as a net investment hedge at December 31, 2010. The Firm did not use foreign currency-denominated debt as a hedging instrument in 2009, and therefore there was no impact as of December, 31, 2009.
(c) U.S. GAAP permits the netting of derivative receivables and payables, and the related cash collateral received and paid when a legally enforceable master netting agreement exists between the Firm and a derivative counterparty.
(d) Excludes $\$ 1.0$ billion and $\$ 1.3$ billion related to commodity derivatives that are embedded in a debt instrument and used as fair value hedging instruments that are recorded in the line item of the host contract (other borrowed funds) for December 31, 2010 and 2009, respectively.

Derivative receivables and payables mark-to-market
The following table summarizes the fair values of derivative receivables and payables, including those designated as hedges, by contract type after netting adjustments as of December 31, 2010 and 2009.

| December 31, (in millions) | Trading assets - Derivative receivables |  |  |  | Trading liabilities - Derivative payables |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 |  | 2009 |  | 2010 |  | 2009 |  |
| Contract type |  |  |  |  |  |  |  |  |
| Interest rate(a) | \$ | 32,555 | \$ | 33,733 | \$ | 20,387 | \$ | 19,688 |
| Credit(a) |  | 7,725 |  | 11,859 |  | 5,138 |  | 6,036 |
| Foreign exchange |  | 25,858 |  | 21,984 |  | 25,015 |  | 19,818 |
| Equity |  | 4,204 |  | 6,635 |  | 10,450 |  | 11,554 |
| Commodity |  | 10,139 |  | 5,999 |  | 8,229 |  | 3,029 |
| Total | \$ | 80,481 | \$ | 80,210 | \$ | 69,219 | \$ | 60,125 |

(a) In 2010, the reporting of cash collateral netting was enhanced to reflect a refined allocation by product. Prior periods have been revised to conform to the current presentation. The refinement resulted in an increase to interest rate derivative receivables, and an offsetting decrease to credit derivative receivables, of $\$ 7.0$ billion, and an increase to interest rate derivative payables and a corresponding decrease to credit derivative payables of $\$ 4.5$ billion as of December 31, 2009.

## Notes to consolidated financial statements

The tables that follow reflect the derivative-related income statement impact by accounting designation for the years ended December 31, 2010 and 2009, respectively.

Fair value hedge gains and losses
The following tables present derivative instruments, by contract type, used in fair value hedge accounting relationships, as well as pretax gains/(losses) recorded on such derivatives and the related hedged items for the years ended December 31, 2010 and 2009. The Firm includes gains/(losses) on the hedging derivative and the related hedged item in the same line item in the Consolidated Statements of Income.

|  | ins/(losses) recorded in income |  |  | me statement impact due to: |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year ended <br> December 31, 2010 <br> (in millions) | Derivatives | Hedged items | Total income statement impact(d) | $\begin{gathered} \text { Hedge } \\ \text { ineffectiveness(e) } \end{gathered}$ | Excluded components $(f)$ |
| Contract type |  |  |  |  |  |
| Foreign exchange(b) | 1,357(g) | $(1,812)$ | (455) | - | (455) |
| Commodity(c) | $(1,354)$ | 1,882 | 528 | - | 528 |
| Total | \$ 1,069 | (384) | \$ 685 | \$ 172 | \$ 513 |
|  |  | (losses) recorded | come | Income stater | act due to: |
| Year ended December 31, 2009 (in millions) | Derivatives | Hedged items | Total income statement impact(d) | Hedge ineffectiveness(e) | Excluded components(f) |
| Contract type |  |  |  |  |  |
| Foreign exchange(b) | $(1,421)(\mathrm{g})$ | 1,445 | 24 | ( | 24 |
| Commodity(c) | (430) | 399 | (31) | - | (31) |
| Total | \$ $(5,681)$ | \$6,482 | \$801 | \$(466) | \$1,267 |

(a) Primarily consists of hedges of the benchmark (e.g., London Interbank Offered Rate ("LIBOR")) interest rate risk of fixed-rate long-term debt and AFS securities. Gains and losses were recorded in net interest income.
(b) Primarily consists of hedges of the foreign currency risk of long-term debt and AFS securities for changes in spot foreign currency rates. Gains and losses related to the derivatives and the hedged items, due to changes in spot foreign currency rates, were recorded in principal transactions revenue.
(c) Consists of overall fair value hedges of gold and base metal inventory. Gains and losses were recorded in principal transactions revenue.
(d) Total income statement impact for fair value hedges consists of hedge ineffectiveness and any components excluded from the assessment of hedge effectiveness. The related amount for the year ended December 31, 2008 was a net gain of $\$ 434$ million.
(e) Hedge ineffectiveness is the amount by which the gain or loss on the designated derivative instrument does not exactly offset the gain or loss on the hedged item attributable to the hedged risk.
(f) Certain components of hedging derivatives are permitted to be excluded from the assessment of hedge effectiveness, such as forward points on a futures or forward contract. Amounts related to excluded components are recorded in current-period income.
(g) For the years ended December 31, 2010 and 2009, includes $\$ 278$ million and $\$(1.6)$ billion of revenue related to certain foreign exchange trading derivatives designated as fair value hedging instruments, respectively.

Cash flow hedge gains and losses
The following tables present derivative instruments, by contract type, used in cash flow hedge accounting relationships, and the pretax gains/(losses) recorded on such derivatives, for the years ended December 31, 2010 and 2009, respectively. The Firm includes the gain/(loss) on the hedging derivative in the same line item as the offsetting change in cash flows on the hedged item in the Consolidated Statements of Income.

| Year ended <br> December 31, 2010 (in millions) | Gains/(losses) recorded in income and other comprehensive income/(loss) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Derivatives effective portion reclassified from AOCl to income |  | Hedgeineffectivenessrecorded directlyin income(d) |  | Total income statement impact |  | Derivatives effective portion recorded in OCl |  | $\begin{aligned} & \text { Total change } \\ & \text { in OCI } \\ & \text { for period } \\ & \hline \end{aligned}$ |  |
| Contract type |  |  |  |  |  |  |  |  |  |  |
| Interest rate ${ }^{(a)}$ <br> Foreign exchange(b) | \$ | $\begin{aligned} & \text { 288(c) } \\ & (82) \end{aligned}$ | \$ | $20$ | \$ | $\begin{aligned} & 308 \\ & (85) \end{aligned}$ | \$ | $\begin{array}{r} 388 \\ (141) \\ \hline \end{array}$ | \$ | $\begin{gathered} 100 \\ (59) \\ \hline \end{gathered}$ |
| Total | \$ | 206 | \$ | 17 | \$ | 223 | \$ | 247 | \$ | 41 |


| Year ended <br> December 31, 2009 (in millions) | Gains/(losses) recorded in income and other comprehensive income/(loss) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Derivatives effective portion reclassified from AOCI to income |  | Hedge ineffectiveness recorded directly in income(d) |  | Total income statement impact |  | Derivatives effective portion recorded in OCI |  | $\begin{gathered} \text { Total change } \\ \text { in OCI } \\ \text { for period } \\ \hline \end{gathered}$ |  |
| Contract type |  |  |  |  |  |  |  |  |  |  |
| Interest rate(a) | \$ | (158)(c) | \$ | (62) | \$ | (220) | \$ | 61 | \$ | 219 |
| Foreign exchange(b) |  | 282 |  | - |  | 282 |  | 706 |  | 424 |
| Total | \$ | 124 | \$ | (62) | \$ | 62 | \$ | 767 | \$ | 643 |

(a) Primarily consists of benchmark interest rate hedges of LIBOR-indexed floating-rate assets and floating-rate liabilities. Gains and losses were recorded in net interest income.
(b) Primarily consists of hedges of the foreign currency risk of non-U.S. dollar-denominated revenue and expense. The income statement classification of gains and losses follows the hedged item - primarily net interest income, compensation expense and other expense.
(c) In 2010, the Firm reclassified a $\$ 25$ million loss from accumulated other comprehensive income ("AOCI") to earnings because the Firm determined that it is probable that forecasted interest payment cash flows related to certain wholesale deposits will not occur. The Firm did not experience forecasted transactions that failed to occur for the year ended December 31, 2009.
(d) Hedge ineffectiveness is the amount by which the cumulative gain or loss on the designated derivative instrument exceeds the present value of the cumulative expected change in cash flows on the hedged item attributable to the hedged risk. Hedge ineffectiveness recorded directly in income for cash flow hedges was a net gain of $\$ 18$ million for the year ended December 31, 2008.
Over the next 12 months, the Firm expects that $\$ 282$ million (after-tax) of net losses recorded in AOCI at December 31, 2010, related to cash flow hedges will be recognized in income. The maximum length of time over which forecasted transactions are hedged is 10 years, and such transactions primarily relate to core lending and borrowing activities.

Net investment hedge gains and losses
The following table presents hedging instruments, by contract type, that were used in net investment hedge accounting relationships, and the pretax gains/(losses) recorded on such instruments for the years ended December 31, 2010 and 2009.

| Hedging instruments - excluded components recorded directly in income ${ }^{(a)}$ |  |  |  | Hedging instruments - effective portion recorded in OCl |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2010 |  | 2009 |  | 2010 |  | 2009 |  |
| \$ | (139) | \$ | (112) | \$ | (30) | \$ | (259) |
|  | - |  | NA |  | 41 |  | NA |
| \$ | (139) | \$ | (112) | \$ | 11 | \$ | (259) |

(a) Certain components of hedging derivatives are permitted to be excluded from the assessment of hedge effectiveness, such as forward points on a futures or forward contract. Amounts related to excluded components are recorded in current-period income. There was no ineffectiveness for net investment hedge accounting relationships during 2010 and 2009.

## Notes to consolidated financial statements

## Risk management derivatives gains and losses (not designated as

 hedging instruments)The following table presents nontrading derivatives, by contract type, that were not designated in hedge accounting relationships, and the pretax gains/(losses) recorded on such derivatives for the years ended December 31, 2010 and 2009. These derivatives are risk management instruments used to mitigate or transform market risk exposures arising from banking activities other than trading activities, which are discussed separately below.

|  | Derivatives gains/(losses) <br> recorded in income |  |
| :--- | ---: | ---: |
| Year ended December 31, <br> (in millions) | $\mathbf{2 0 1 0}$ | 2009 |
| Contract type | $\mathbf{\$ 4 , 9 9 7}$ | $\$(3,113)$ |
| Interest rate(a) | $\mathbf{( 2 3 7 )}$ | $(3,222)$ |
| Credit(b) | $\mathbf{( 8 5 )}$ | $(197)$ |
| Foreign exchange(c) | $\mathbf{-}$ | $(8)$ |
| Equity(b) | $\mathbf{( 2 4 )}$ | $(50)$ |
| Commodity(b) | $\mathbf{\$ 4 , 6 5 1}$ | $\$(6,590)$ |
| Total |  |  |

(a) Gains and losses were recorded in principal transactions revenue, mortgage fees and related income, and net interest income.
(b) Gains and losses were recorded in principal transactions revenue
(c) Gains and losses were recorded in principal transactions revenue and net interest income.

## Trading derivative gains and losses

The Firm has elected to present derivative gains and losses related to its trading activities together with the cash instruments with which they are risk managed. All amounts are recorded in principal transactions revenue in the Consolidated Statements of Income for the years ended December 31, 2010 and 2009. The amounts below do not represent a comprehensive view of the Firm's trading activities because they do not include certain revenue associated with those activities, including net interest income earned on cash instruments used in trading activities and gains and losses on cash instruments that are risk managed without derivative instruments.

|  | Gains/(losses) recorded in principal <br> Year ended December 31, <br> (in millions) |  |  |
| :--- | :---: | :---: | ---: |
|  | transactions revenue |  |  |

(a) In 2010, the reporting of trading gains and losses was enhanced to include trading gains and losses related to certain trading derivatives designated as fair value hedging instruments. Prior period amounts have been revised to conform to the current presentation.

Credit risk, liquidity risk and credit-related contingent features In addition to the specific market risks introduced by each derivative contract type, derivatives expose JPMorgan Chase to credit risk - the risk that derivative counterparties may fail to meet their payment obligations under the derivative contracts and the collateral, if any, held by the Firm proves to be of insufficient value to cover the payment obligation. It is the policy of JPMorgan Chase to enter into legally enforceable master netting agreements as well as to actively pursue the use of collateral agreements to mitigate derivative counterparty credit risk. The amount of derivative receivables reported on the Consolidated Balance Sheets is the fair value of the derivative contracts after giving effect to legally enforceable master netting agreements and cash collateral held by the Firm. These amounts represent the cost to the Firm to replace the contracts at then-current market rates should the counterparty default.

While derivative receivables expose the Firm to credit risk, derivative payables expose the Firm to liquidity risk, as the derivative contracts typically require the Firm to post cash or securities collateral with counterparties as the mark-to-market ("MTM") of the contracts moves in the counterparties' favor, or upon specified downgrades in the Firm's and its subsidiaries' respective credit ratings. Certain derivative contracts also provide for termination of the contract, generally upon a downgrade of either the Firm or the counterparty, at the fair value of the derivative contracts. The aggregate fair value of net derivative payables that contain contingent collateral or termination features triggered upon a downgrade was $\$ 19.8$ billion and $\$ 22.6$ billion at December 31, 2010 and 2009, respectively, for which the Firm has posted collateral of $\$ 14.6$ billion and $\$ 22.3$ billion, respectively, in the normal course of business. At December 31, 2010 and 2009, the impact of a single-notch and two-notch ratings downgrade to JPMorgan Chase \& Co. and its subsidiaries, primarily JPMorgan Chase Bank, National Association ("JPMorgan Chase Bank, N.A."), would have required $\$ 1.9$ billion and $\$ 3.5$ billion, respectively, and $\$ 1.2$ billion and $\$ 2.2$ billion, respectively, of additional collateral to be posted by the Firm. In addition, at December 31, 2010 and 2009, the impact of single-notch and twonotch ratings downgrades to JPMorgan Chase \& Co. and its subsidiaries, primarily JPMorgan Chase Bank, N.A., related to contracts with termination triggers would have required the Firm to settle trades with a fair value of $\$ 430$ million and $\$ 1.0$ billion, respectively, and $\$ 260$ million and $\$ 270$ million, respectively.

The following table shows the current credit risk of derivative receivables after netting adjustments, and the current liquidity risk of derivative payables after netting adjustments, as of December 31, 2010 and 2009.

| December 31, (in millions) | Derivative receivables |  |  |  | Derivative payables |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2010 |  | 2009 |  | 2010 |  | 2009 |
| Gross derivative fair value |  | \$ 1,529,412 |  | 1,565,518 |  | 1,485,109 |  | 1,519,183 |
| Netting adjustment - offsetting receivables/payables |  | $(1,376,969)$ |  | $(1,419,840)$ |  | $(1,376,969)$ |  | $(1,419,840)$ |
| Netting adjustment - cash collateral received/paid |  | $(71,962)$ |  | $(65,468)$ |  | $(38,921)$ |  | $(39,218)$ |
| Carrying value on Consolidated Balance Sheets | \$ | \$ 80,481 | \$ | 80,210 | \$ | 69,219 |  | 60,125 |

In addition to the collateral amounts reflected in the table above, at December 31, 2010 and 2009, the Firm had received liquid securities and other cash collateral in the amount of $\$ 16.5$ billion and $\$ 15.5$ billion, respectively, and had posted $\$ 10.9$ billion and $\$ 11.7$ billion, respectively. The Firm also receives and delivers collateral at the initiation of derivative transactions, which is available as security against potential exposure that could arise should the fair value of the transactions move in the Firm's or client's favor, respectively. Furthermore, the Firm and its counterparties hold collateral related to contracts that have a non-daily call frequency for collateral to be posted, and collateral that the Firm or a counterparty has agreed to return but has not yet settled as of the reporting date. At December 31, 2010 and 2009, the Firm had received $\$ 18.0$ billion and $\$ 16.9$ billion, respectively, and delivered $\$ 8.4$ billion and $\$ 5.8$ billion, respectively, of such additional collateral. These amounts were not netted against the derivative receivables and payables in the table above, because, at an individual counterparty level, the collateral exceeded the fair value exposure at December 31, 2010 and 2009.

## Credit derivatives

Credit derivatives are financial instruments whose value is derived from the credit risk associated with the debt of a third-party issuer (the reference entity) and which allow one party (the protection purchaser) to transfer that risk to another party (the protection seller). Credit derivatives expose the protection purchaser to the creditworthiness of the protection seller, as the protection seller is required to make payments under the contract when the reference entity experiences a credit event, such as a bankruptcy, a failure to pay its obligation or a restructuring. The seller of credit protection receives a premium for providing protection but has the risk that the underlying instrument referenced in the contract will be subject to a credit event.

The Firm is both a purchaser and seller of protection in the credit derivatives market and uses these derivatives for two primary purposes. First, in its capacity as a market-maker in the dealer/client business, the Firm actively risk manages a portfolio of credit derivatives by purchasing and selling credit protection, predominantly on corporate debt obligations, to meet the needs of customers. As a seller of protection, the Firm's exposure to a given reference entity may be offset partially, or entirely, with a contract to purchase protection from another counterparty on the same or similar reference entity. Second, the Firm uses credit derivatives to mitigate credit risk associated with its overall derivative receivables and traditional commercial credit lending exposures (loans and unfunded commitments) as well as to manage its exposure to
residential and commercial mortgages. See Note 3 on pages 170187 of this Annual Report for further information on the Firm's mortgage-related exposures. In accomplishing the above, the Firm uses different types of credit derivatives. Following is a summary of various types of credit derivatives.

## Credit default swaps

Credit derivatives may reference the credit of either a single reference entity ("single-name") or a broad-based index. The Firm purchases and sells protection on both single- name and indexreference obligations. Single-name CDS and index CDS contracts are OTC derivative contracts. Single-name CDS are used to manage the default risk of a single reference entity, while index CDS contracts are used to manage the credit risk associated with the broader credit markets or credit market segments. Like the S\&P 500 and other market indices, a CDS index comprises a portfolio of CDS across many reference entities. New series of CDS indices are periodically established with a new underlying portfolio of reference entities to reflect changes in the credit markets. If one of the reference entities in the index experiences a credit event, then the reference entity that defaulted is removed from the index. CDS can also be referenced against specific portfolios of reference names or against customized exposure levels based on specific client demands: for example, to provide protection against the first $\$ 1$ million of realized credit losses in a $\$ 10$ million portfolio of exposure. Such structures are commonly known as tranche CDS.
For both single-name CDS contracts and index CDS contracts, upon the occurrence of a credit event, under the terms of a CDS contract neither party to the CDS contract has recourse to the reference entity. The protection purchaser has recourse to the protection seller for the difference between the face value of the CDS contract and the fair value of the reference obligation at the time of settling the credit derivative contract, also known as the recovery value. The protection purchaser does not need to hold the debt instrument of the underlying reference entity in order to receive amounts due under the CDS contract when a credit event occurs.

## Credit-related notes

A credit-related note is a funded credit derivative where the issuer of the credit-related note purchases from the note investor credit protection on a referenced entity. Under the contract, the investor pays the issuer the par value of the note at the inception of the transaction, and in return, the issuer pays periodic payments to the investor, based on the credit risk of the referenced entity. The issuer also repays the investor the par value of the note at maturity unless the reference entity experiences a specified credit event. If a credit event

## Notes to consolidated financial statements

occurs, the issuer is not obligated to repay the par value of the note, but rather, the issuer pays the investor the difference between the par value of the note and the fair value of the defaulted reference obligation at the time of settlement. Neither party to the credit-related note has recourse to the defaulting reference entity. For a further discussion of credit-related notes, see Note 16 on pages 244-259 of this Annual Report.

Effective July 1, 2010, the Firm adopted new accounting guidance prospectively related to credit derivatives embedded in beneficial interests in securitized financial assets, which resulted in the election of the fair value option for certain instruments in the AFS securities portfolio. The related cumulative effect adjustment increased retained earnings and decreased accumulated other comprehensive income by $\$ 15$ million, respectively, as of July 1, 2010.
The following table presents a summary of the notional amounts of credit derivatives and credit-related notes the Firm sold and purchased as of December 31, 2010 and 2009. Upon a credit event,
the Firm as seller of protection would typically pay out only a percentage of the full notional amount of net protection sold, as the amount actually required to be paid on the contracts takes into account the recovery value of the reference obligation at the time of settlement. The Firm manages the credit risk on contracts to sell protection by purchasing protection with identical or similar underlying reference entities. Other purchased protection referenced in the following table includes credit derivatives bought on related, but not identical, reference positions (including indices, portfolio coverage and other reference points) as well as protection purchased through credit-related notes.

The Firm does not use notional amounts as the primary measure of risk management for credit derivatives, because the notional amount does not take into account the probability of the occurrence of a credit event, the recovery value of the reference obligation, or related cash instruments and economic hedges.

## Total credit derivatives and credit-related notes

| December 31, 2010 (in millions) | Maximum payout/Notional amount |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Protection sold |  | Protection purchased with identical underlyings(c) |  | Net protection (sold)/purchased(d) |  | Other protection purchased(e) |  |
| Credit derivatives |  |  |  |  |  |  |  |  |
| Credit default swaps | \$ | (2,659,240) | \$ | 2,652,313 | \$ | $(6,927)$ | \$ | 32,867 |
| Other credit derivatives(a) |  | $(93,776)$ |  | 10,016 |  | $(83,760)$ |  | 24,234 |
| Total credit derivatives |  | $(2,753,016)$ |  | 2,662,329 |  | $(90,687)$ |  | 57,101 |
| Credit-related notes(b) |  | $(2,008)$ |  | - |  | $(2,008)$ |  | 3,327 |
| Total | \$ | $(2,755,024)$ | \$ | 2,662,329 | \$ | $(92,695)$ | \$ | 60,428 |
| December 31, 2009 (in millions) | Maximum payout/Notional amount |  |  |  |  |  |  |  |
|  | Protection sold |  | Protection purchased with identical underlyings(c) |  | Net protection (sold)/purchased(d) |  | Other protection purchased(e) |  |
| Credit derivatives |  |  |  |  |  |  |  |  |
| Credit default swaps | \$ | $(2,937,442)$ | \$ | 2,978,044 | \$ | 40,602 | \$ | 28,064 |
| Other credit derivatives(a) |  | $(10,575)$ |  | 9,290 |  | $(1,285)$ |  | 30,473 |
| Total credit derivatives |  | $(2,948,017)$ |  | 2,987,334 |  | 39,317 |  | 58,537 |
| Credit-related notes |  | $(4,031)$ |  | - |  | $(4,031)$ |  | 1,728 |
| Total | \$ | $(2,952,048)$ | \$ | 2,987,334 | \$ | 35,286 | \$ | 60,265 |

(a) Primarily consists of total return swaps and credit default swap options.
(b) As a result of the adoption of new accounting guidance, effective July 1, 2010, includes beneficial interests in securitized financial assets that contain embedded credit derivatives.
(c) Represents the total notional amount of protection purchased where the underlying reference instrument is identical to the reference instrument on protection sold; the notional amount of protection purchased for each individual identical underlying reference instrument may be greater or lower than the notional amount of protection sold
(d) Does not take into account the fair value of the reference obligation at the time of settlement, which would generally reduce the amount the seller of protection pays to the buyer of protection in determining settlement value.
(e) Represents protection purchased by the Firm through single-name and index credit default swap or credit-related notes.

The following tables summarize the notional and fair value amounts of credit derivatives and credit-related notes as of December 31, 2010 and 2009, where JPMorgan Chase is the seller of protection. The maturity profile is based on the remaining contractual maturity of the credit derivative contracts. The ratings profile is based on the rating of the reference entity on which the credit derivative contract is based. The ratings and maturity profile of protection purchased are comparable to the profile reflected below.

## Protection sold - credit derivatives and credit-related notes ratings(a) /maturity profile

| December 31, 2010 (in millions) | <1 year |  | $>5$ years |  | Total nal amount | Fair value(b) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Risk rating of reference entity |  | $1-5$ years |  | notional amount |  | \$ |  |
| Investment-grade | \$ $(175,618)$ | \$ (1,194,695) | \$ $(336,309)$ | \$ | $(1,706,622)$ |  | $\begin{aligned} & (17,261) \\ & (59,939) \end{aligned}$ |
| Noninvestment-grade | $(148,434)$ | $(702,638)$ | $(197,330)$ |  | $(1,048,402)$ |  |  |
| Total | \$ (324,052) | \$ (1,897,333) | \$ (533,639) | \$ | $(2,755,024)$ | \$ | $(77,200)$ |
| December 31, 2009 (in millions) | <1 year | $1-5$ years | >5 years |  | Total nal amount |  | ir value(b) |
| Risk rating of reference entity |  |  |  |  |  |  |  |
| Investment-grade | \$ $(215,580)$ | \$ (1,140,133) | \$ (367,015) | \$ | $(1,722,728)$ | \$ | $(16,607)$ |
| Noninvestment-grade | $(150,122)$ | $(806,139)$ | $(273,059)$ |  | (1,229,320) |  | $(90,410)$ |
| Total | \$ (365,702) | \$ (1,946,272) | \$ (640,074) | \$ | $(2,952,048)$ | \$ | $(107,017)$ |

(a) The ratings scale is based on the Firm's internal ratings, which generally correspond to ratings as defined by S\&P and Moody's.
(b) Amounts are shown on a gross basis, before the benefit of legally enforceable master netting agreements and cash collateral held by the Firm.

## Note 7 - Noninterest revenue

## Investment banking fees

This revenue category includes advisory and equity and debt underwriting fees. Advisory fees are recognized as revenue when the related services have been performed and the fee has been earned. Underwriting fees are recognized as revenue when the Firm has rendered all services to the issuer and is entitled to collect the fee from the issuer, as long as there are no other contingencies associated with the fee (e.g., the fee is not contingent upon the customer obtaining financing). Underwriting fees are net of syndicate expense; the Firm recognizes credit arrangement and syndication fees as revenue after satisfying certain retention, timing and yield criteria.

The following table presents the components of investment banking fees.

| Year ended December 31, <br> (in millions) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: |
| Underwriting: |  |  |  |
| $\quad$ Equity |  |  |  |

(a) Effective January 1, 2010, the Firm adopted accounting guidance related to VIEs. Upon adoption of the guidance, the Firm consolidated its Firm-administered multiseller conduits. The consolidation of the conduits did not significantly change the Firm's net income as a whole; however, it did affect the classification of items on the Firm's Consolidated Statements of Income. As a result, certain advisory fees were considered inter-company and eliminated, and the fees charged by the consolidated multi-seller conduits to its customers were classified as lending-and-deposit-related fees.

## Principal transactions

Principal transactions revenue consists of realized and unrealized gains and losses from trading activities (including physical commodities inventories that are generally accounted for at the lower of cost or fair value), changes in fair value associated with financial instruments held by IB for which the fair value option was elected, and loans held-for-sale within the wholesale lines of business. Principal transactions revenue also includes private equity gains and losses.

The following table presents principal transactions revenue.

| Year ended December 31, <br> (in millions) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: |
| Trading revenue | $\mathbf{\$ 9 , 4 0 4}$ | $\$ 9,870$ | $\$(9,791)$ |
| Private equity gains/(losses)(a) | $\mathbf{1 , 4 9 0}$ | $(74)$ | $(908)$ |
| Principal transactions | $\mathbf{\$ 1 0 , 8 9 4}$ | $\$ 9,796$ | $\$(10,699)$ |

(a) Includes revenue on private equity investments held in the Private Equity business within Corporate/Private Equity, as well as those held in other business segments.

## Lending- and deposit-related fees

This revenue category includes fees from loan commitments, standby letters of credit, financial guarantees, deposit-related fees in lieu of compensating balances, cash management-related activities or transactions, deposit accounts and other loan-servicing activities. These fees are recognized over the period in which the related service is provided.

## Asset management, administration and commissions

This revenue category includes fees from investment management and related services, custody, brokerage services, insurance premiums and commissions, and other products. These fees are recognized over the period in which the related service is provided. Performance-based fees, which are earned based on exceeding certain benchmarks or other performance targets, are accrued and recognized at the end of the performance period in which the target is met.

The following table presents the components of asset management, administration and commissions.

| Year ended December 31, (in millions) | 2010 | 2009 | 2008 |
| :---: | :---: | :---: | :---: |
| Asset management: |  |  |  |
| Investment management fees | \$ 5,632 | \$ 4,997 | \$ 5,562 |
| All other asset management fees | 496 | 356 | 432 |
| Total asset management fees | 6,128 | 5,353 | 5,994 |
| Total administration fees(a) | 2,023 | 1,927 | 2,452 |
| Commission and other fees: |  |  |  |
| Brokerage commissions | 2,804 | 2,904 | 3,141 |
| All other commissions and fees | 2,544 | 2,356 | 2,356 |
| Total commissions and fees | 5,348 | 5,260 | 5,497 |
| Total asset management, administration and commissions | \$13,499 | \$12,540 | \$13,943 |

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## Notes to consolidated financial statements

## Mortgage fees and related income

This revenue category primarily reflects Retail Financial Services's ("RFS") mortgage production and servicing revenue, including: fees and income derived from mortgages originated with the intent to sell; mortgage sales and servicing including losses related to the repurchase of previously-sold loans; the impact of risk management activities associated with the mortgage pipeline, warehouse loans and MSRs; and revenue related to any residual interests held from mortgage securitizations. This revenue category also includes gains and losses on sales and lower of cost or fair value adjustments for mortgage loans held-for-sale, as well as changes in fair value for mortgage loans originated with the intent to sell and measured at fair value under the fair value option. Changes in the fair value of RFS mortgage servicing rights are reported in mortgage fees and related income. Net interest income from mortgage loans, and securities gains and losses on AFS securities used in mortgage-related risk management activities, are recorded in interest income and securities gains/(losses), respectively. For a further discussion of MSRs, see Note 17 on pages 260-263 of this Annual Report.

## Credit card income

This revenue category includes interchange income from credit and debit cards. Prior to 2010, this revenue category included servicing fees earned in connection with securitization activities. Effective January 1, 2010, the Firm consolidated its Firm-sponsored credit card securitization trusts (see Note 16 on pages 244-259 of this Annual Report) and, as a result, the servicing fees were eliminated in consolidation. Volume-related payments to partners and expense for rewards programs are netted against interchange income; expense related to rewards programs are recorded when the rewards are earned by the customer. Other fee revenue is recognized as earned, except for annual fees, which are deferred and recognized on a straight-line basis over the 12-month period to which they pertain. Direct loan origination costs are also deferred and recognized over a 12-month period. In addition, due to the consolidation of Chase Paymentech Solutions in the fourth quarter of 2008, this category now includes net fees earned for processing card transactions for merchants.
Credit card revenue sharing agreements
The Firm has contractual agreements with numerous affinity organizations and co-brand partners, which grant the Firm exclusive rights to market to the members or customers of such organizations and partners. These organizations and partners endorse the credit card programs and provide their mailing lists to the Firm, and they may also conduct marketing activities and provide awards under the various credit card programs. The terms of these agreements generally range from three to 10 years. The economic incentives the Firm pays to the endorsing organizations and partners typically include payments based on new account originations, charge volumes, and the cost of the endorsing organizations' or partners' marketing activities and awards.

The Firm recognizes the payments made to the affinity organizations and co-brand partners based on new account originations as direct loan origination costs. Payments based on charge volumes are considered by the Firm as revenue sharing with the affinity organizations and co-brand partners, which are deducted from interchange income as the related revenue is earned. Payments based on marketing efforts undertaken by the endorsing organization
or partner are expensed by the Firm as incurred. These costs are recorded within noninterest expense.

## Note 8 - Interest income and Interest expense

Interest income and interest expense is recorded in the Consolidated Statements of Income and classified based on the nature of the underlying asset or liability. Interest income and interest expense includes the current-period interest accruals for financial instruments measured at fair value, except for financial instruments containing embedded derivatives that would be separately accounted for in accordance with U.S. GAAP absent the fair value option election; for those instruments, all changes in fair value, including any interest elements, are reported in principal transactions revenue. For financial instruments that are not measured at fair value, the related interest is included within interest income or interest expense, as applicable.
Details of interest income and interest expense were as follows.

| Year ended December 31, (in millions) | 2010 | 2009 | 2008 |
| :---: | :---: | :---: | :---: |
| Interest income |  |  |  |
| Loans | \$40,388 | \$38,704 | \$38,347 |
| Securities | 9,540 | 12,377 | 6,344 |
| Trading assets | 11,007 | 12,098 | 17,236 |
| Federal funds sold and securities purchased under resale agreements | 1,786 | 1,750 | 5,983 |
| Securities borrowed | 175 | 4 | 2,297 |
| Deposits with banks | 345 | 938 | 1,916 |
| Other assets(a) | 541 | 479 | 895 |
| Total interest income(b) | 63,782 | 66,350 | 73,018 |
| Interest expense |  |  |  |
| Interest-bearing deposits | 3,424 | 4,826 | 14,546 |
| Short-term and other liabilities(c) | 2,708 | 3,845 | 10,933 |
| Long-term debt | 5,504 | 6,309 | 8,355 |
| Beneficial interests issued by consolidated VIEs | 1,145 | 218 | 405 |
| Total interest expense(b) | 12,781 | 15,198 | 34,239 |
| Net interest income | \$51,001 | \$51,152 | \$38,779 |
| Provision for credit losses | 16,639 | 32,015 | 19,445 |
| Provision for credit losses - accounting conformity(d) | - | - | 1,534 |
| Total provision for credit losses | \$16,639 | \$32,015 | \$20,979 |
| Net interest income after provision for credit losses | \$34,362 | \$19,137 | \$17,800 |

(a) Predominantly margin loans.
(b) Effective January 1, 2010, the Firm adopted accounting guidance related to VIEs. Upon the adoption of the guidance, the Firm consolidated its Firm-sponsored credit card securitization trusts, its Firm-administered multi-seller conduits and certain other consumer loan securitization entities, primarily mortgage-related. The consolidation of these VIEs did not significantly change the Firm's total net income. However, it did affect the classification of items on the Firm's Consolidated Statements of Income; as a result of the adoption of the guidance, certain noninterest revenue was eliminated in consolidation, offset by the recognition of interest income, interest expense, and provision for credit losses.
(c) Includes brokerage customer payables.
(d) 2008 includes an accounting conformity loan loss reserve provision related to the acquisition of Washington Mutual's banking operations.

## Note 9 - Pension and other postretirement employee benefit plans

The Firm's defined benefit pension plans and its other postretirement employee benefit ("OPEB") plans (collectively the "Plans") are accounted for in accordance with U.S. GAAP for retirement benefits.
Defined benefit pension plans
The Firm has a qualified noncontributory U.S. defined benefit pension plan that provides benefits to substantially all U.S. employees. The U.S. plan employs a cash balance formula in the form of pay and interest credits to determine the benefits to be provided at retirement, based on eligible compensation and years of service. Employees begin to accrue plan benefits after completing one year of service, and benefits generally vest after three years of service. In November 2009, the Firm announced certain changes to the pay credit schedule and amount of eligible compensation recognized under the U.S. plan effective February 1, 2010. The Firm also offers benefits through defined benefit pension plans to qualifying employees in certain non-U.S. locations based on factors such as eligible compensation, age and/or years of service.

It is the Firm's policy to fund the pension plans in amounts sufficient to meet the requirements under applicable laws. On January 15, 2009, and August 28, 2009, the Firm made discretionary cash contributions to its U.S. defined benefit pension plan of $\$ 1.3$ billion and $\$ 1.5$ billion, respectively. The amount of potential 2011 contributions to the U.S. defined benefit pension plans, if any, is not determinable at this time. The expected amount of 2011 contributions to the non-U.S. defined benefit pension plans is $\$ 166$ million of which $\$ 154$ million is contractually required
JPMorgan Chase also has a number of defined benefit pension plans not subject to Title IV of the Employee Retirement Income Security Act. The most significant of these plans is the Excess Retirement Plan, pursuant to which certain employees earn pay and interest credits on compensation amounts above the maximum stipulated by law under a qualified plan. The Firm announced that, effective May 1, 2009, pay credits would no longer be provided on compensation amounts above the maximum stipulated by law. The Excess Retirement Plan had an unfunded projected benefit obligation in the amount of $\$ 266$ million and $\$ 267$ million, at December 31, 2010 and 2009, respectively.

## Defined contribution plans

JPMorgan Chase currently provides two qualified defined contribution plans in the U.S. and other similar arrangements in certain non-U.S. locations, all of which are administered in accordance with applicable local laws and regulations. The most significant of these plans is The JPMorgan Chase 401(k) Savings Plan (the "401(k) Savings Plan"), which covers substantially all U.S. employees. The 401(k) Savings Plan allows employees to make pretax and Roth 401(k) contributions to tax-deferred investment portfolios. The JPMorgan Chase Common Stock Fund, which is an investment option under the 401(k) Savings Plan, is a nonleveraged employee stock ownership plan.
The Firm matched eligible employee contributions up to $5 \%$ of benefits-eligible compensation (e.g., base pay) on a per pay period basis through April 30, 2009, and then amended the plan to provide that thereafter matching contributions would be made annually. Employees begin to receive matching contributions after completing a one-year-of-service requirement. Employees with total annual cash compensation of $\$ 250,000$ or more are not eligible for matching contributions. Matching contributions are immediately vested for employees hired before May 1, 2009, and will vest after three years of service for employees hired on or after May 1, 2009. The 401(k) Savings Plan also permits discretionary profit-sharing contributions by participating companies for certain employees, subject to a specified vesting schedule.

Effective August 10, 2009, JPMorgan Chase Bank, N.A. became the sponsor of the WaMu Savings Plan and that plan's assets were merged into the 401(k) Savings Plan effective March 31, 2010.

## OPEB plans

JPMorgan Chase offers postretirement medical and life insurance benefits to certain retirees and postretirement medical benefits to qualifying U.S. employees. These benefits vary with length of service and date of hire and provide for limits on the Firm's share of covered medical benefits. The medical and life insurance benefits are both contributory. Postretirement medical benefits also are offered to qualifying U.K. employees.
JPMorgan Chase's U.S. OPEB obligation is funded with corporateowned life insurance ("COLI") purchased on the lives of eligible employees and retirees. While the Firm owns the COLI policies, COLI proceeds (death benefits, withdrawals and other distributions) may be used only to reimburse the Firm for its net postretirement benefit claim payments and related administrative expense. The U.K. OPEB plan is unfunded.

## Notes to consolidated financial statements

The following table presents the changes in benefit obligations and plan assets and funded status amounts reported on the Consolidated Balance Sheets for the Firm's U.S. and non-U.S. defined benefit pension and OPEB plans.

| As of or for the year ended December 31, (in millions) | Defined benefit pension plans |  |  |  | OPEB plans(f) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | U.S. |  | Non-U.S. |  |  |  |
|  | 2010 | 2009 | 2010 | 2009 | 2010 | 2009 |
| Change in benefit obligation |  |  |  |  |  |  |
| Benefit obligation, beginning of year | \$ $(7,977)$ | \$ $(7,796)$ | \$ 2,536$)$ | \$ $(2,007)$ | \$ $(1,025)$ | \$ $(1,095)$ |
| Benefits earned during the year | (230) | (313) | (30) | (30) | (2) | (3) |
| Interest cost on benefit obligations | (468) | (514) | (128) | (122) | (55) | (64) |
| Plan amendments | - | 384 | 10 | 1 | - | - |
| Business combinations | - | (4)(b) | (12)(b) | - | - | (40)(b) |
| Employee contributions | NA | NA | (4) | (3) | (70) | (64) |
| Net gain/(loss) | (249) | (408) | (71) | (287) | 13 | 101 |
| Benefits paid | 604 | 674 | 96 | 95 | 168 | 160 |
| Expected Medicare Part D subsidy receipts | NA | NA | NA | NA | (10) | (9) |
| Curtailments | - | - | - | 1 | - | (7) |
| Settlements | - | - | 5 | 4 | - | - |
| Special termination benefits | - | - | (1) | (1) | - | - |
| Foreign exchange impact and other | - | - | 71 | (187) | 1 | (4) |
| Benefit obligation, end of year | \$ $(8,320)$ | \$ $(7,977)$ | \$ (2,600) | \$ 2,536$)$ | \$ (980) | \$ $(1,025)$ |
| Change in plan assets |  |  |  |  |  |  |
| Fair value of plan assets, beginning of year | \$ 10,218 | \$ 6,948 | \$ 2,432 | \$ 2,008 | \$ 1,269 | \$ 1,126 |
| Actual return on plan assets | 1,179 | 1,145 | 228 | 218 | 137 | 172 |
| Firm contributions | 35 | 2,799 | 157 | 115 | 3 | 2 |
| Employee contributions | - | - | 4 | 3 | - | - |
| Benefits paid | (604) | (674) | (96) | (95) | (28) | (31) |
| Settlements | - | - | (5) | (4) | - | - |
| Foreign exchange impact and other | - | - | (73) | 187 | - | - |
| Fair value of plan assets, end of year | \$ 10,828(c)(d) | \$ 10,218(c)(d) | \$ 2,647(d) | \$ 2,432(d) | \$ 1,381 | \$ 1,269 |
| Funded/(unfunded) status(a) | \$ 2,508(e) | \$ 2,241(e) | \$ 47 | \$ (104) | \$ 401 | \$ 244 |
| Accumulated benefit obligation, end of year | \$ $(8,271)$ | \$ $(7,964)$ | \$ 2,576 ) | \$ $(2,510)$ | NA | NA |

(a) Represents overfunded plans with an aggregate balance of $\$ 3.5$ billion and $\$ 3.0$ billion at December 31 , 2010 and 2009 , respectively, and underfunded plans with an aggregate balance of $\$ 561$ million and $\$ 623$ million at December 31, 2010 and 2009, respectively.
(b) Represents change resulting from RBS Sempra Commodities business in 2010 and from the Washington Mutual plan in 2009.
(c) At December 31, 2010 and 2009, approximately $\$ 385$ million and $\$ 332$ million, respectively, of U.S. plan assets included participation rights under participating annuity contracts.
 and $\$ 187$ million and $\$ 189$ million, respectively, of accrued liabilities, for U.S. plans; and $\$ 9$ million and $\$ 8$ million, respectively, of accrued receivables for non-U.S. plans.
(e) Does not include any amounts attributable to the Washington Mutual Qualified Pension plan. The disposition of this plan remained subject to litigation and was not determinable.
(f) Includes an unfunded accumulated postretirement benefit obligation of $\$ 36$ million and $\$ 29$ million at December 31 , 2010 and 2009 , respectively, for the U.K. plan.

## Gains and losses

For the Firm's defined benefit pension plans, fair value is used to determine the expected return on plan assets. For the Firm's OPEB plans, a calculated value that recognizes changes in fair value over a five-year period is used to determine the expected return on plan assets. Amortization of net gains and losses is included in annual net periodic benefit cost if, as of the beginning of the year, the net gain or loss exceeds $10 \%$ of the greater of the projected benefit obligation or the fair value of the plan assets. Any excess, as well
as prior service costs, are amortized over the average future service period of defined benefit pension plan participants, which for the U.S. defined benefit pension plan is currently nine years. For OPEB plans, any excess net gains and losses also are amortized over the average future service period, which is currently five years; however, prior service costs are amortized over the average years of service remaining to full eligibility age, which is currently three years.

The following table presents pretax pension and OPEB amounts recorded in AOCI.

| December 31, (in millions) | Defined benefit pension plans |  |  |  |  |  |  |  | OPEB plans |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | U.S. |  |  |  | Non-U.S. |  |  |  |  |  |  |  |
|  | 2010 |  | 2009 |  | 2010 |  | 2009 |  | 2010 |  | 2009 |  |
| Net gain/(loss) | \$ | $(2,627)$ | \$ | $(3,039)$ | \$ | (566) | \$ | (666) | \$ | (119) | \$ | (171) |
| Prior service credit/(cost) |  | 321 |  | 364 |  | 13 |  | 3 |  | 9 |  | 22 |
| Accumulated other comprehensive incomel (loss), pretax, end of year | \$ | $(2,306)$ | \$ | $(2,675)$ | \$ | (553) | \$ | (663) | \$ | (110) | \$ | (149) |

The following table presents the components of net periodic benefit costs reported in the Consolidated Statements of Income and other comprehensive income for the Firm's U.S. and non-U.S. defined benefit pension, defined contribution and OPEB plans.

| Year ended December 31, (in millions) | Pension plans |  |  |  |  |  |  |  |  |  |  |  | OPEB plans |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | U.S. |  |  |  |  |  | Non-U.S. |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 2010 |  | 2009 |  | 2008 |  | 2010 |  | 2009 |  | 2008 | 2010 |  | 2009 |  | 2008 |  |
| Components of net periodic benefit cost |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Benefits earned during the year | \$ | 230 | \$ | 313 | \$ | 278 | \$ | 31 | \$ | 28 | \$ | 29 | \$ | 2 | \$ | 3 | \$ | 5 |
| Interest cost on benefit obligations |  | 468 |  | 514 |  | 488 |  | 128 |  | 122 |  | 142 |  | 55 |  | 65 |  | 74 |
| Expected return on plan assets |  | (742) |  | (585) |  | (719) |  | (126) |  | (115) |  | (152) |  | (96) |  | (97) |  | (98) |
| Amortization: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net loss |  | 225 |  | 304 |  | - |  | 56 |  | 44 |  | 25 |  | (1) |  | - |  | - |
| Prior service cost/(credit) |  | (43) |  | 4 |  | 4 |  | (1) |  | - |  | - |  | (13) |  | (14) |  | (16) |
| Curtailment (gain)/loss |  | - |  | 1 |  | 1 |  | (1) |  | - |  | - |  | - |  | 5 |  | 4 |
| Settlement (gain)/loss |  | - |  | - |  | - |  | 1 |  | 1 |  | - |  | - |  | - |  | - |
| Special termination benefits |  | - |  | - |  | - |  | 1 |  | 1 |  | 3 |  | - |  | - |  | - |
| Net periodic benefit cost |  | 138 |  | 551 |  | 52 |  | 90 |  | 81 |  | 47 |  | (53) |  | (38) |  | (31) |
| Other defined benefit pension plans(a) |  | 14 |  | 15 |  | 11 |  | 11 |  | 12 |  | 14 |  | NA |  | NA |  | NA |
| Total defined benefit plans |  | 152 |  | 566 |  | 63 |  | 101 |  | 93 |  | 61 |  | (53) |  | (38) |  | (31) |
| Total defined contribution plans |  | 332 |  | 359 |  | 263 |  | 251 |  | 226 |  | 286 |  | NA |  | NA |  | NA |
| Total pension and OPEB cost included in compensation expense | \$ | 484 | \$ | 925 | \$ | 326 | \$ | 352 | \$ | 319 | \$ | 347 | \$ | (53) | \$ | (38) | \$ | (31) |
| Changes in plan assets and benefit obligations recognized in other comprehensive income |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net (gain)/loss arising during the year | \$ | (187) | \$ | (168) | \$ | 3,243 | \$ | (21) | \$ | 183 | \$ | 235 | \$ | (54) | \$ | (176) | \$ | 248 |
| Prior service credit arising during the year |  | - |  | (384) |  | - |  | (10) |  | (1) |  | - |  | - |  | - |  | - |
| Amortization of net loss |  | (225) |  | (304) |  | - |  | (56) |  | (44) |  | (27) |  | 1 |  | - |  | - |
| Amortization of prior service (cost)/credit |  | 43 |  | (6) |  | (5) |  | 1 |  | - |  | - |  | 13 |  | 15 |  | 15 |
| Curtailment (gain)/loss |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | 2 |  | 3 |
| Settlement loss/(gain) |  | - |  | - |  | - |  | (1) |  | (1) |  | - |  | - |  | - |  | - |
| Foreign exchange impact and other |  | - |  | 18 |  | - |  | (23) |  | 36 |  | (150) |  | 1 |  | (1) |  | 3 |
| Total recognized in other comprehensive income |  | (369) |  | (844) |  | 3,238 |  | (110) |  | 173 |  | 58 |  | (39) |  | (160) |  | 269 |
| Total recognized in net periodic benefit cost and other comprehensive income | \$ | (231) | \$ | (293) | \$ | 3,290 | \$ | (20) | \$ | 254 | \$ | 105 | \$ | (92) | \$ | (198) | \$ | 238 |

(a) Includes various defined benefit pension plans, which are individually immaterial.

The estimated pretax amounts that will be amortized from AOCI into net periodic benefit cost in 2011 are as follows.

| (in millions) | Defined benefit pension plans |  |  |  | OPEB plans |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | U.S. |  | Non-U.S. |  | U.S. |  | Non-U.S. |  |
| Net loss | \$ | 168 | \$ | 44 | \$ | - | \$ | - |
| Prior service cost/(credit) |  | (43) |  | (1) |  | (8) |  | - |
| Total | \$ | 125 | \$ | 43 | \$ | (8) | \$ | - |

The following table presents the actual rate of return on plan assets for the U.S. and non-U.S. defined benefit pension and OPEB plans.

| December 31, | U.S. |  |  | Non-U.S. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 | 2009 | 2008 | 2010 | 2009 | 2008 |
| Actual rate of return: |  |  |  |  |  |  |
| Defined benefit pension plans | 12.23\% | 13.78\% | (25.17)\% | 0.77-10.65\% | 3.17-22.43\% | (21.58)-5.06\% |
| OPEB plans | 11.23 | 15.93 | (17.89) | NA | NA | NA |

## Notes to consolidated financial statements

## Plan assumptions

JPMorgan Chase's expected long-term rate of return for U.S. defined benefit pension and OPEB plan assets is a blended average of the investment advisor's projected long-term (10 years or more) returns for the various asset classes, weighted by the asset allocation. Returns on asset classes are developed using a forward-looking building-block approach and are not strictly based on historical returns. Equity returns are generally developed as the sum of inflation, expected real earnings growth and expected long-term dividend yield. Bond returns are generally developed as the sum of inflation, real bond yield and risk spread (as appropriate), adjusted for the expected effect on returns from changing yields. Other assetclass returns are derived from their relationship to the equity and bond markets. Consideration is also given to current market conditions and the short-term portfolio mix of each plan; as a result, in 2010 the Firm generally maintained the same expected return on assets as in the prior year.

For the U.K. defined benefit pension plans, which represent the most significant of the non-U.S. defined benefit pension plans, procedures similar to those in the U.S. are used to develop the expected longterm rate of return on defined benefit pension plan
assets, taking into consideration local market conditions and the specific allocation of plan assets. The expected long-term rate of return on U.K. plan assets is an average of projected long-term returns for each asset class. The return on equities has been selected by reference to the yield on long-term U.K. government bonds plus an equity risk premium above the risk-free rate. The return on "AA"-rated long-term corporate bonds has been taken as the average yield on such bonds.
The discount rate used in determining the benefit obligation under the U.S. defined benefit pension and OPEB plans was selected by reference to the yields on portfolios of bonds with maturity dates and coupons that closely match each of the plan's projected cash flows; such portfolios are derived from a broad-based universe of highquality corporate bonds as of the measurement date. In years in which these hypothetical bond portfolios generate excess cash, such excess is assumed to be reinvested at the one-year forward rates implied by the Citigroup Pension Discount Curve published as of the measurement date. The discount rate for the U.K. defined benefit pension and OPEB plans represents a rate implied from the yield curve of the year-end iBoxx $£$ corporate "AA" 15-year-plus bond index.

The following tables present the weighted-average annualized actuarial assumptions for the projected and accumulated postretirement benefit obligations, and the components of net periodic benefit costs, for the Firm's U.S. and non-U.S. defined benefit pension and OPEB plans, as of and for the periods indicated.

## Weighted-average assumptions used to determine benefit obligations

| December 31, |  |  | Non-U.S. |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2010 | 2009 | 2010 | 2009 |
| Discount rate: |  |  |  |  |
| Defined benefit pension plans | 5.50\% | 6.00\% | 1.60-5.50\% | 2.00-5.70\% |
| OPEB plans | 5.50 | 6.00 | 5.50 | 5.70 |
| Rate of compensation increase | 4.00 | 4.00 | 3.00-4.50 | 3.00-4.50 |
| Health care cost trend rate: |  |  |  |  |
| Assumed for next year | 7.00 | 7.75 | 6.50 | 5.40 |
| Ultimate | 5.00 | 5.00 | 6.00 | 4.50 |
| Year when rate will reach ultimate | 2017 | 2014 | 2015 | 2014 |

## Weighted-average assumptions used to determine net periodic benefit costs

|  | U.S. |  |  | Non-U.S. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year ended December 31, | 2010 | 2009 | 2008 | 2010 | 2009 | 2008 |
| Discount rate: |  |  |  |  |  |  |
| Defined benefit pension plans | 6.00\% | 6.65\% | 6.60\% | 2.00-5.70\% | 2.00-6.20\% | 2.25-5.80\% |
| OPEB plans | 6.00 | 6.70 | 6.60 | 5.70 | 6.20 | 5.80 |
| Expected long-term rate of return on plan assets: |  |  |  |  |  |  |
| Defined benefit pension plans | 7.50 | 7.50 | 7.50 | 2.40-6.20 | 2.50-6.90 | 3.25-5.75 |
| OPEB plans | 7.00 | 7.00 | 7.00 | NA | NA | NA |
| Rate of compensation increase | 4.00 | 4.00 | 4.00 | 3.00-4.50 | 3.00-4.00 | 3.00-4.25 |
| Health care cost trend rate: |  |  |  |  |  |  |
| Assumed for next year | 7.75 | 8.50 | 9.25 | 5.40 | 7.00 | 5.75 |
| Ultimate | 5.00 | 5.00 | 5.00 | 4.50 | 5.50 | 4.00 |
| Year when rate will reach ultimate | 2014 | 2014 | 2014 | 2014 | 2012 | 2010 |

The following table presents the effect of a one-percentage-point change in the assumed health care cost trend rate on JPMorgan Chase's total service and interest cost and accumulated postretirement benefit obligation.

| Year ended December 31, 2010 <br> (in millions) | 1-Percentage- <br> point <br> increase | 1-Percentage- <br> point <br> decrease |  |  |
| :--- | :---: | ---: | :---: | ---: |
| Effect on total service and interest cost <br> Effect on accumulated postretirement benefit <br> obligation | $\$$ | 2 | $\$$ | (2) |

At December 31, 2010, the Firm decreased the discount rates used to determine its benefit obligations for the U.S. defined benefit pension and OPEB plans in light of current market interest rates, which will result in an increase in expense of approximately $\$ 21$ million for 2011. The 2011 expected long-term rate of return on U.S. defined benefit pension plan assets and U.S. OPEB plan assets are $7.50 \%$ and $6.25 \%$, respectively, as compared to $7.50 \%$ and $7.00 \%$ in 2010. The initial health care benefit obligation trend assumption declined from $7.75 \%$ in 2010 to $7.00 \%$ in 2011. The ultimate health care trend assumption will remain at $5.00 \%$ in 2011, but the year to ultimate was adjusted from 2014 to 2017. As of December 31, 2010, the interest crediting rate assumption and the assumed rate of compensation increase remained at $5.25 \%$ and $4.00 \%$, respectively.

JPMorgan Chase's U.S. defined benefit pension and OPEB plan expense is sensitive to the expected long-term rate of return on plan assets and the discount rate. With all other assumptions held constant, a 25 -basis point decline in the expected long-term rate of return on U.S. plan assets would result in an increase of approximately an aggregate $\$ 30$ million in 2011 U.S. defined benefit pension and OPEB plan expense. A 25-basis point decline in the discount rate for the U.S. plans would result in an increase in 2011 U.S. defined benefit pension and OPEB plan expense of approximately an aggregate $\$ 11$ million and an increase in the related benefit obligations of approximately an aggregate $\$ 169$ million. A 25 -basis point increase in the interest crediting rate for the U.S. defined benefit pension plan would result in an increase in 2011 U.S. defined benefit pension expense of approximately $\$ 19$ million and an increase in the related projected benefit obligations of approximately $\$ 76$ million. A 25 -basis point decline in the discount rates for the non-U.S. plans would result in an increase in the 2011 non-U.S. defined benefit pension plan expense of approximately $\$ 11$ million.

## Investment strategy and asset allocation

The Firm's U.S. defined benefit pension plan assets are held in trust and are invested in a well-diversified portfolio of equity and fixed income securities, real estate, cash and cash equivalents, and alternative investments (e.g., hedge funds, private equity funds, and real estate funds). Non-U.S. defined benefit pension plan assets are held in various trusts and are also invested in well-diversified portfolios of equity, fixed income and other securities. Assets of the Firm's COLI policies, which are used to partially fund the U.S. OPEB plan, are held
in separate accounts with an insurance company and are invested in equity and fixed income index funds.

The investment policy for the Firm's U.S. defined benefit pension plan assets is to optimize the risk-return relationship as appropriate to the needs and goals using a global portfolio of various asset classes diversified by market segment, economic sector, and issuer. Periodically the Firm performs a comprehensive analysis on the U.S. defined benefit pension plan asset allocations, incorporating projected asset and liability data, which focuses on the short-and long-term impact of the asset allocation on cumulative pension expense, economic cost, present value of contributions and funded status. Currently, approved asset allocation ranges are: U.S. equity $15-35 \%$, international equity $15-25 \%$, debt securities $10-30 \%$, hedge funds $10-30 \%$, real estate $5-20 \%$, and private equity $5-20 \%$. Asset allocations are not managed to a specific target but seek to shift asset class allocations within these stated ranges. Assets are managed by a combination of internal and external investment managers. Asset allocation decisions also incorporate the economic outlook and anticipated implications of the macroeconomic environment on the various asset classes and managers. Maintaining an appropriate level of liquidity, which takes into consideration forecasted requirements for cash is a major consideration in the asset allocation process. The Firm regularly reviews the asset allocations and all factors that continuously impact the portfolio, which is rebalanced when deemed necessary.
For the U.K. defined benefit pension plans, which represent the most significant of the non-U.S. defined benefit pension plans, the assets are invested to maximize returns subject to an appropriate level of risk relative to the plans' liabilities. In order to reduce the volatility in returns relative to the plan's liability profiles, the U.K. defined benefit pension plans' largest asset allocations are to debt securities of appropriate durations. Other assets, mainly equity securities, are then invested for capital appreciation, to provide long-term investment growth. Similar to the U.S. defined benefit pension plan, asset allocations for the U.K. plans are reviewed and rebalanced on a regular basis.
Investments held by the Plans include financial instruments which are exposed to various risks such as interest rate, market and credit risks. Exposure to a concentration of credit risk is mitigated by the broad diversification of both U.S. and non-U.S. investment instruments. Additionally, the investments in each of the common/ collective trust funds and registered investment companies are further diversified into various financial instruments. As of December 31, 2010, assets held by the Firm's U.S. and non-U.S. defined benefit pension and OPEB plans do not include JPMorgan Chase common stock, except in connection with investments in third-party stock-index funds. The plans hold investments in funds that are sponsored or managed by affiliates of JPMorgan Chase in the amount of $\$ 1.7$ billion and $\$ 1.6$ billion for U.S. plans and $\$ 155$ million and $\$ 474$ million for non-U.S. plans, as of December 31, 2010 and 2009, respectively.

## Notes to consolidated financial statements

The following table presents the weighted-average asset allocation of the fair values of total plan assets at December 31 for the years indicated, as well as the respective approved range/target allocation by asset category, for the Firm's U.S. and non-U.S. defined benefit pension and OPEB plans.

(a) Debt securities primarily include corporate debt, U.S. federal, state, local and non-U.S. government, and mortgage-backed securities.
b) Alternatives primarily include limited partnerships
(c) Represents the U.S. OPEB plan only, as the U.K. OPEB plan is unfunded.

## Fair value measurement of the plans' assets and liabilities

The following details the instruments measured at fair value, including the general classification of such instruments pursuant to the valuation hierarchy, as described in Note 3 on pages 170-187 of this Annual Report.

## Cash and cash equivalents

Cash and cash equivalents includes currency on hand, demand deposits with banks or other financial institutions, and any short-term, highly liquid investments readily convertible into cash (i.e., investments with original maturities of three months or less). Due to the highly liquid nature of these assets, they are classified within level 1 of the valuation hierarchy.

## Equity securities

Common and preferred stocks are valued at the closing price reported on the major market on which the individual securities are traded and are generally classified within level 1 of the valuation hierarchy. If quoted exchange prices are not available for the specific security, other independent pricing or broker quotes are consulted for valuation purposes. Consideration is given to the nature of the quotes (e.g., indicative or firm) and the relationship of recently evidenced market activity to the prices provided from independent pricing services. Common and preferred stock that do not have quoted exchange prices are generally classified within level 2 of the valuation hierarchy.

## Common/collective trust funds

These investments are public investment vehicles valued based on the calculated NAV of the fund. Where the funds produce a daily NAV that is validated by a sufficient level of observable activity (purchases and sales at NAV), the NAV is used to value the fund investment and it is classified in level 1 of the valuation hierarchy. Where adjustments to the NAV are required, for example, with respect to interests in funds subject to restrictions on redemption (such as withdrawal limitations) and/or observable activity for the fund investment is limited, investments are classified within level 2 of the valuation hierarchy.

## Limited partnerships

Limited partnerships include investments in hedge funds, private equity funds and real estate funds. Hedge funds are valued based on quoted NAV and are classified within level 2 or 3 of the valuation hierarchy depending on the level of liquidity and activity in the markets for each investment. Certain of these hedge fund investments are subject to restrictions on redemption (such as initial lock-up periods, withdrawal limitations and illiquid assets) and are therefore classified within level 3 of the valuation hierarchy. The valuation of private equity investments and real estate funds require significant management judgment due to the absence of quoted market prices, the inherent lack of liquidity and the long-term nature of such assets and therefore, they are generally classified within level 3 of the valuation hierarchy. Unfunded commitments to purchase limited partnership investments for the Plans were $\$ 1.1$ billion and $\$ 1.3$ billion for 2010 and 2009, respectively.

Corporate debt securities and U.S. federal, state, local and nongovernment debt securities
The Firm estimates the value of debt instruments using a combination of observed transaction prices, independent pricing services and relevant broker quotes. Consideration is given to the nature of the quotes (e.g., indicative or firm) and the relationship of recently evidenced market activity to the prices provided from independent pricing services. The Firm may also use pricing models or discounted cash flows. Such securities are generally classified within level 2 of the valuation hierarchy.

## Mortgage-backed securities

MBS include both U.S. government agency and U.S. governmentsponsored enterprise (collectively, "U.S. government agencies") securities, and nonagency pass-through securities. U.S. government agency securities are valued based on quoted prices in active markets and are therefore classified in level 1 of the valuation hierarchy. Nonagency securities are primarily "AAA" rated residential and commercial MBS valued using a combination of observed transaction prices, independent pricing services and relevant broker quotes. Consideration is given to the nature of the quotes and the relationships of recently evidenced market activity to the prices provided from independent pricing services. Such securities are generally classified within level 2 of the valuation hierarchy.

Derivative receivables and derivative payables
In the normal course of business, foreign exchange, credit, interest rate and equity derivative contracts are used to minimize fluctuations in the value of plan assets caused by exposure to credit or market risks. These instruments may also be used in lieu of investing in cash instruments. Exchange traded derivatives valued using quoted prices are classified within level 1 of the valuation hierarchy. However, a majority of the derivative instruments are valued using internally developed models that use as their basis readily observable market parameters and are therefore classified within level 2 of the valuation hierarchy.
Other
Other consists of exchange traded funds ("ETFs"), mutual fund investments, and participating and non-participating annuity contracts ("Annuity Contracts"). ETFs are valued at the closing price reported on the major market on which the individual securities are
traded and are generally classified within level 1 of the valuation hierarchy. Mutual fund investments are valued using NAV. Those fund investments with a daily NAV that are validated by a sufficient level of observable activity (purchases and sales at NAV) are classified in level 1 of the valuation hierarchy. Where adjustments to the NAV are required, for example, for fund investments subject to restrictions on redemption (such as lock-up periods or withdrawal limitations), and/or observable activity for the fund investment is limited, the mutual fund investments are classified in level 2 or 3 of the valuation hierarchy. Annuity Contracts are valued at the amount by which the fair value of the assets held in the separate account exceeds the actuarially determined guaranteed benefit obligation covered under the Annuity Contracts. Annuity Contracts lack market mechanisms for transferring each individual policy and generally include restrictions on the timing of surrender; therefore, these investments are classified within level 3 of the valuation hierarchy.

## Pension and OPEB plan assets and liabilities measured at fair value

| $\begin{aligned} & \text { December 31, } 2010 \\ & \text { (in millions) } \end{aligned}$ | U.S. defined benefit pension plans |  |  |  |  |  |  |  | Non-U.S. defined benefit pension plans |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level 1 |  | Level 2 |  | Level 3 |  | Total fair value |  | Level 1 |  | Level 2 |  | Level 3 |  | Total fair value |  |
| Cash and cash equivalents | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 81 | \$ | - | \$ | - | \$ | 81 |
| Equity securities: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Capital equipment |  | 748 |  | 9 |  | - |  | 757 |  | 68 |  | 13 |  | - |  | 81 |
| Consumer goods |  | 712 |  | - |  | - |  | 712 |  | 75 |  | 21 |  | - |  | 96 |
| Banks and finance companies |  | 414 |  | 1 |  | - |  | 415 |  | 113 |  | 9 |  | - |  | 122 |
| Business services |  | 444 |  | - |  | - |  | 444 |  | 53 |  | 10 |  | - |  | 63 |
| Energy |  | 195 |  | - |  | - |  | 195 |  | 59 |  | 6 |  | - |  | 65 |
| Materials |  | 205 |  | - |  | - |  | 205 |  | 50 |  | 13 |  | - |  | 63 |
| Real Estate |  | 21 |  | - |  | - |  | 21 |  | 1 |  | - |  | - |  | 1 |
| Other |  | 857 |  | 6 |  | - |  | 863 |  | 194 |  | 16 |  | - |  | 210 |
| Total equity securities |  | 3,596 |  | 16 |  | - |  | 3,612 |  | 613 |  | 88 |  | - |  | 701 |
| Common/collective trust funds(a) |  | 1,195 |  | 756 |  | - |  | 1,951 |  | 46 |  | 180 |  | - |  | 226 |
| Limited partnerships: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hedge funds |  | - |  | 959 |  | 1,102 |  | 2,061 |  | - |  | - |  | - |  | - |
| Private equity funds |  | - |  | - |  | 1,232 |  | 1,232 |  | - |  | - |  | - |  | - |
| Real estate |  | - |  | - |  | 304 |  | 304 |  | - |  | - |  | - |  | - |
| Total limited partnerships |  | - |  | 959 |  | 2,638 |  | 3,597 |  | - |  | - |  | - |  | - |
| Corporate debt securities(b) |  | - |  | 424 |  | 1 |  | 425 |  | - |  | 718 |  | - |  | 718 |
| U.S. federal, state, local and nonU.S. government debt securities |  | - |  | 453 |  | - |  | 453 |  | - |  | 864 |  | - |  | 864 |
| Mortgage-backed securities(c) |  | 188 |  | 55 |  | - |  | 243 |  | 1 |  | - |  | - |  | 1 |
| Derivative receivables(d) |  | 2 |  | 194 |  | - |  | 196 |  | - |  | 3 |  | - |  | 3 |
| Other |  | 218 |  | 58 |  | 387 |  | 663 |  | 18 |  | 51 |  | - |  | 69 |
| Total assets measured at fair value(e)(f) | \$ | 5,199 | \$ | 2,915 | \$ | 3,026 | \$ | 11,140 | \$ | 759 | \$ | 1,904 | \$ | - | \$ | 2,663 |
| Derivative payables |  | - |  | (177) |  | - |  | (177) |  | - |  | (25) |  | - |  | (25) |
| Total liabilities measured at fair value | \$ | - | \$ | (177) | \$ | - | \$ | (177) ${ }^{(g)}$ | \$ | - | \$ | (25) | \$ | - | \$ | (25) |

[^1]
## Notes to consolidated financial statements

| December 31, 2009 (in millions) | U.S. defined benefit pension plans |  |  |  |  |  |  |  | Non-U.S. defined benefit pension plans |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level 1 |  | Level 2 |  | Level 3 |  | Total fair value |  | Level 1 |  | Level 2 |  | Level 3 |  | Total fair value |  |
| Cash and cash equivalents | \$ | 71 | \$ | - | \$ | - | \$ | 71 | \$ | 27 | \$ | - | \$ | - | \$ | 27 |
| Equity securities: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Capital equipment |  | 608 |  | 13 |  | - |  | 621 |  | 49 |  | 16 |  | - |  | 65 |
| Consumer goods |  | 554 |  | - |  | - |  | 554 |  | 64 |  | 18 |  | - |  | 82 |
| Banks and finance companies |  | 324 |  | - |  | - |  | 324 |  | 90 |  | 12 |  | - |  | 102 |
| Business services |  | 322 |  | - |  | - |  | 322 |  | 39 |  | 13 |  | - |  | 52 |
| Energy |  | 188 |  | - |  | - |  | 188 |  | 45 |  | 13 |  | - |  | 58 |
| Materials |  | 186 |  | - |  | - |  | 186 |  | 35 |  | 3 |  | - |  | 38 |
| Real estate |  | 19 |  | - |  | - |  | 19 |  | - |  | - |  | - |  | - |
| Other |  | 571 |  | 1 |  | - |  | 572 |  | 171 |  | - |  | - |  | 171 |
| Total equity securities |  | 2,772 |  | 14 |  | - |  | 2,786 |  | 493 |  | 75 |  | - |  | 568 |
| Common/collective trust funds(a) |  | 1,868 |  | 610 |  | - |  | 2,478 |  | 23 |  | 185 |  | - |  | 208 |
| Limited partnerships: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hedge funds |  | - |  | 912 |  | 627 |  | 1,539 |  | - |  | - |  | - |  | - |
| Private equity funds |  | - |  | - |  | 874 |  | 874 |  | - |  | - |  | - |  | - |
| Real estate |  | - |  | - |  | 196 |  | 196 |  | - |  | - |  | - |  | - |
| Total limited partnerships |  | - |  | 912 |  | 1,697 |  | 2,609 |  | - |  | - |  | - |  | - |
| Corporate debt securities(b) |  | - |  | 941 |  | - |  | 941 |  | - |  | 685 |  | - |  | 685 |
| U.S. federal, state, local and nonU.S. government debt securities |  | - |  | 406 |  | - |  | 406 |  | - |  | 841 |  | - |  | 841 |
| Mortgage-backed securities(c) |  | 169 |  | 54 |  | - |  | 223 |  | - |  | - |  | - |  | - |
| Derivative receivables(d) |  | - |  | 90 |  | - |  | 90 |  | - |  | 5 |  | - |  | 5 |
| Other |  | 348 |  | 115 |  | 334 |  | 797 |  | 18 |  | 89 |  | 13 |  | 120 |
| Total assets measured at fair value(e)(f) | \$ | 5,228 | \$ | 3,142 | \$ | 2,031 | \$ | 10,401 | \$ | 561 | \$ | 1,880 | \$ | 13 | \$ | 2,454 |
| Derivative payables |  | - |  | (76) |  | - |  | (76) |  | - |  | (30) |  | - |  | (30) |
| Total liabilities measured at fair value | \$ | - | \$ | (76) | \$ | - | \$ | (76)(9) | \$ | - | \$ | (30) | \$ | - | \$ | (30) |

(a) At December 31, 2010 and 2009, common/collective trust funds generally include commingled funds that primarily included 22\% and 39\%, respectively, of short-term investment funds; $21 \%$ and $24 \%$, respectively, of equity (index) investments; and $16 \%$ and $15 \%$, respectively, of international investments.
(b) Corporate debt securities include debt securities of U.S. and non-U.S. corporations
(c) At December 31, 2010 and 2009, mortgage-backed securities were generally invested $77 \%$ and $72 \%$, respectively, in debt securities issued by U.S. government agencies.
(d) At December 31, 2010 and 2009, derivative receivables primarily included $89 \%$ and $80 \%$, respectively, of foreign exchange contracts; and $11 \%$ and $16 \%$, respectively, of equity warrants.
(e) At December 31, 2010 and 2009, the fair value of investments valued at NAV were $\$ 4.1$ billion and $\$ 4.2$ billion, respectively, which were classified within the valuation hierarchy as follows: $\$ 1.3$ billion and $\$ 2.0$ billion in level $1, \$ 1.7$ billion and $\$ 1.6$ billion in level 2 and $\$ 1.1$ billion and $\$ 600$ million in level 3 .
(f) At December 31, 2010 and 2009, excluded U.S. defined benefit pension plan receivables for investments sold and dividends and interest receivables of $\$ 52$ million and $\$ 82$ million, respectively; and excluded non-U.S. defined benefit pension plan receivables for dividends and interest receivables of $\$ 9$ million and $\$ 8$ million, respectively.
(g) At December 31, 2010 and 2009, excluded $\$ 149$ million and $\$ 177$ million, respectively, of U.S. defined benefit pension plan payables for investments purchased; and $\$ 38$ million and $\$ 12$ million, respectively, of other liabilities.
At December 31, 2010 and 2009, the Firm's OPEB plan was partially funded with COLI policies of $\$ 1.4$ billion and $\$ 1.3$ billion, respectively, which were classified in level 3 of the valuation hierarchy.

## Changes in level 3 fair value measurements using significant unobservable inputs

| Year ended <br> December 31, 2010 <br> (in millions) | Fair value, January 1, 2010 |  | $\begin{aligned} & \text { Total realized/ } \\ & \text { unrealized } \\ & \text { gains/(losses)(a) } \end{aligned}$ |  | Purchases, sales and settlements, net |  | Transfers in and/or out of level 3 |  | $\begin{gathered} \text { Fair value, } \\ \text { December } 31, \\ 2010 \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| U.S. defined benefit pension plans |  |  |  |  |  |  |  |  |  |  |
| Limited partnerships: |  |  |  |  |  |  |  |  |  |  |
| Hedge funds | \$ | 627 | \$ | 8 | \$ | 388 | \$ | 79 | \$ | 1,102 |
| Private equity funds |  | 874 |  | 111 |  | 235 |  | 12 |  | 1,232 |
| Real estate |  | 196 |  | 19 |  | 89 |  | - |  | 304 |
| Total limited partnerships | \$ | 1,697 | \$ | 138 | \$ | 712 | \$ | 91 | \$ | 2,638 |
| Corporate debt securities |  | - |  | - |  | - |  | 1 |  | 1 |
| Other |  | 334 |  | 53 |  | - |  | - |  | 387 |
| Total U.S. plans | \$ | 2,031 | \$ | 191 | \$ | 712 |  | 92 | \$ | 3,026 |
| Non-U.S. defined benefit pension plans Other | \$ | 13 | \$ | (1) | \$ | (12) | \$ | - | \$ | - |
| Total non-U.S. plans | \$ | 13 | \$ | (1) | \$ | (12) | \$ | - | \$ | - |
| OPEB plans COLI | \$ | 1,269 | \$ | 137 | \$ | (25) | \$ | - | \$ | 1,381 |
| Total OPEB plans | \$ | 1,269 | \$ | 137 | \$ | (25) | \$ | - | \$ | 1,381 |
| Year ended December 31, 2009 (in millions) |  | $\begin{aligned} & \text { llue, } \\ & , 2009 \\ & \hline \end{aligned}$ |  | zed/ <br> d <br> s)(a) |  | les , net |  |  |  | alue, er 31, 9 |
| U.S. defined benefit pension plans |  |  |  |  |  |  |  |  |  |  |
| Limited partnerships: |  |  |  |  |  |  |  |  |  |  |
| Hedge funds | \$ | 524 | \$ | 112 | \$ | (9) | \$ | - | \$ | 627 |
| Private equity funds |  | 810 |  | (1) |  | 80 |  | (15) |  | 874 |
| Real estate |  | 203 |  | (107) |  | 100 |  | - |  | 196 |
| Total limited partnerships | \$ | 1,537 | \$ | 4 | \$ | 171 | \$ | (15) | \$ | 1,697 |
| Corporate debt securities |  | - |  | - |  | - |  | - |  | - |
| Other |  | 315 |  | 19 |  | - |  | - |  | 334 |
| Total U.S. plans $\$$ 1,852 $\$$ 23 $\$$ 171 $\$$  |  |  |  |  |  |  |  |  |  |  |
| Non-U.S. defined benefit pension plans Other | \$ | 14 | \$ | (1) | \$ | - | \$ | - | \$ | 13 |
| Total non-U.S. plans | \$ | 14 | \$ | (1) | \$ | - | \$ | - | \$ | 13 |
| OPEB plans |  |  |  |  |  |  |  |  |  |  |
| Total OPEB plans | \$ | 1,126 | \$ | 172 | \$ | (29) |  | - | \$ | 1,269 |

(a) For the years ended December 31, 2010, and 2009, respectively, total realized (unrealized) gains/(losses) are the changes in unrealized gains or losses relating to assets held at December 31, 2010 and 2009, respectively.

## Notes to consolidated financial statements

## Estimated future benefit payments

The following table presents benefit payments expected to be paid, which include the effect of expected future service, for the years indicated. The OPEB medical and life insurance payments are net of expected retiree contributions.

| Year ended December 31, (in millions) | U.S. defined benefit pension plans | Non-U.S. defined benefit pension plans | OPEB before <br> Medicare Part D subsidy | Medicare Part D subsidy |
| :---: | :---: | :---: | :---: | :---: |
| 2011 | \$ 1,001 | \$ 84 | \$ 99 | \$ 10 |
| 2012 | 1,011 | 92 | 97 | 11 |
| 2013 | 587 | 98 | 95 | 12 |
| 2014 | 593 | 102 | 94 | 13 |
| 2015 | 592 | 111 | 92 | 14 |
| Years 2016-2020 | 3,013 | 640 | 418 | 78 |

## Note 10 - Employee stock-based incentives

## Employee stock-based awards

In 2010, 2009, and 2008, JPMorgan Chase granted long-term stockbased awards to certain key employees under the 2005 Long-Term Incentive Plan (the "2005 Plan"). The 2005 Plan became effective on May 17, 2005, and was amended in May 2008. Under the terms of the amended 2005 plan, as of December 31, 2010, 113 million shares of common stock are available for issuance through May 2013. The amended 2005 Plan is the only active plan under which the Firm is currently granting stock-based incentive awards. In the following discussion, the 2005 Plan, plus prior Firm plans and plans assumed as the result of acquisitions, are referred to collectively as the "LTI Plans," and such plans constitute the Firm's stock-based incentive plans.

Restricted stock units ("RSUs") are awarded at no cost to the recipient upon their grant. RSUs are generally granted annually and generally vest at a rate of $50 \%$ after two years and $50 \%$ after three years and convert into shares of common stock at the vesting date. In addition, RSUs typically include full-career eligibility provisions, which allow employees to continue to vest upon voluntary termination, subject to post-employment and other restrictions based on age or service-related requirements. All of these awards are subject to forfeiture until vested. An RSU entitles the recipient to receive cash payments equivalent to any dividends paid on the underlying common stock during the period the RSU is outstanding and, as such, are considered participating securities as discussed in Note 25 on page 269 of this Annual Report.

Under the LTI Plans, stock options and stock appreciation rights ("SARs") have generally been granted with an exercise price equal to the fair value of JPMorgan Chase's common stock on the grant date. The Firm typically awards SARs to certain key employees once per year, and it also periodically grants discretionary stock-based incentive awards to individual employees, primarily in the form of both employee stock options and SARs. The 2010, 2009 and 2008 grants of SARs to key employees vest ratably over five years (i.e., $20 \%$ per year). The 2010 grants of SARs contain full-career eligibility provisions; the 2009 and 2008 grants of SARs do not include any fullcareer eligibility provisions. SARs generally expire 10 years after the grant date.

The Firm separately recognizes compensation expense for each tranche of each award as if it were a separate award with its own vesting date. Generally, for each tranche granted, compensation expense is recognized on a straight-line basis from the grant date until the vesting date of the respective tranche, provided that the employees will not become full-career eligible during the vesting period. For awards with full-career eligibility provisions and awards granted with no future substantive service requirement, the Firm accrues the estimated value of awards expected to be awarded to employees as of the grant date without giving consideration to the impact of post-employment restrictions. For each tranche granted to employees who will become full-career eligible during the vesting period, compensation expense is recognized on a straight-line basis from the grant date until the earlier of the employee's full-career eligibility date or the vesting date of the respective tranche.

The Firm's policy for issuing shares upon settlement of employee stock-based incentive awards is to issue either new shares of common stock or treasury shares. During 2010, 2009 and 2008, the Firm settled all of its employee stock-based awards by issuing treasury shares.
In January 2008, the Firm awarded to its Chairman and Chief Executive Officer up to 2 million SARs. The terms of this award are distinct from, and more restrictive than, other equity grants regularly awarded by the Firm. The SARs, which have a 10 -year term, will become exercisable no earlier than January 22, 2013, and have an exercise price of $\$ 39.83$. The number of SARs that will become exercisable (ranging from none to the full 2 million) and their exercise date or dates may be determined by the Board of Directors based on an annual assessment of the performance of both the CEO and JPMorgan Chase. The Firm recognizes this award ratably over an assumed five-year service period, subject to a requirement to recognize changes in the fair value of the award through the grant date. The Firm recognized $\$ 4$ million, $\$ 9$ million and $\$ 1$ million in compensation expense in 2010, 2009 and 2008, respectively, for this award.

In connection with the Bear Stearns merger, 46 million Bear Stearns employee stock awards, principally RSUs, capital appreciation plan units and stock options, were exchanged for equivalent JPMorgan Chase awards using the merger exchange ratio of 0.21753 . The fair value of these employee stock awards was included in the Bear Stearns purchase price, since substantially all of the awards were fully vested immediately after the merger date under provisions that provided for accelerated vesting upon a change of control of Bear Stearns. However, Bear Stearns vested employee stock options had no impact on the purchase price; since the employee stock options were significantly out of the money at the merger date, the fair value of these awards was equal to zero upon their conversion into JPMorgan Chase options.
The Firm also exchanged 6 million shares of its common stock for 27 million shares of Bear Stearns common stock held in an irrevocable grantor trust (the "RSU Trust"), using the merger exchange ratio of 0.21753 . The RSU Trust was established to hold common stock underlying awards granted to selected
employees and key executives under certain Bear Stearns employee stock plans. The RSU Trust was consolidated on JPMorgan Chase's Consolidated Balance Sheets as of June 30, 2008, and the shares held in the RSU Trust were recorded in "Shares held in RSU Trust," which reduced stockholders' equity, similar to the treatment for treasury stock. The related obligation to issue stock under these employee stock plans is reported in capital surplus. The issuance of shares held in the RSU Trust to employees has no effect on the Firm's total stockholders' equity, net income or earnings per share. Shares held in the RSU Trust were distributed in 2008, 2009 and 2010, with a majority of the shares in the RSU Trust having been distributed through December 2010. There were 1 million shares in the RSU Trust as of December 31, 2010. These remaining shares are expected to be distributed over the next two years.

## RSU activity

Compensation expense for RSUs is measured based on the number of shares granted multiplied by the stock price at the grant date and is recognized in income as previously described. The following table summarizes JPMorgan Chase's RSU activity for 2010.
$\left.\begin{array}{lrr}\text { Year ended December 31, 2010 } & \begin{array}{r}\text { Weighted- } \\ \text { (in thousands, except weighted average data) }\end{array} & \begin{array}{r}\text { Number of } \\ \text { shares }\end{array} \\ \text { Ourage grant } \\ \text { date fair value }\end{array}\right\}$

The total fair value of shares that vested during the years ended December 31, 2010, 2009 and 2008, was $\$ 2.3$ billion, $\$ 1.3$ billion and $\$ 1.6$ billion, respectively.

## Employee stock option and SARs activity

Compensation expense for employee stock options and SARs, which is measured at the grant date as the fair value of employee stock options and SARs, is recognized in net income as described above.

## Notes to consolidated financial statements

The following table summarizes JPMorgan Chase's employee stock option and SARs activity for the year ended December 31, 2010, including awards granted to key employees and awards granted in prior years under broad-based plans.

| weighted-average data, and where otherwise noted) | Number of options/SARs | Weighted-average exercise price |  | Weighted-average remaining contractual life (in years) | Aggregate intrinsic value |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Outstanding, January 1 | 266,568 | \$ | 45.83 |  |  |
| Granted | 20,949 |  | 42.96 |  |  |
| Exercised | $(12,870)$ |  | 30.69 |  |  |
| Forfeited | $(3,076)$ |  | 34.82 |  |  |
| Canceled | $(37,044)$ |  | 65.95 |  |  |
| Outstanding, December 31 | 234,527 | \$ | 43.33 | 3.4 | \$ 1,191,151 |
| Exercisable, December 31 | 181,183 |  | 45.52 | 2.1 | 788,217 |

The weighted-average grant date per share fair value of stock options and SARs granted during the years ended December 31, 2010, 2009 and 2008, was $\$ 12.27, \$ 8.24$ and $\$ 10.36$, respectively. The total intrinsic value of options exercised during the years ended December 31, 2010, 2009 and 2008, was $\$ 154$ million, $\$ 154$ million and $\$ 391$ million, respectively.

## Compensation expense

The Firm recognized the following noncash compensation expense related to its various employee stock-based incentive plans in its Consolidated Statements of Income.

| Year ended December 31, (in millions) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |  |
| :--- | ---: | ---: | ---: | ---: |
| Cost of prior grants of RSUs and SARs that are <br> amortized over their applicable vesting periods <br> Accrual of estimated costs of RSUs and SARs to be <br> granted in future periods including those to full- <br> career eligible employees | $\mathbf{\$ 2 , 4 7 9}$ | $\$ 2,510$ | $\$ 2,228$ |  |
| Total noncash compensation expense related to <br> employee stock-based incentive plans | $\mathbf{\$ 3 , 2 5 1}$ | $\mathbf{7 7 2}$ | 83,355 | $\mathbf{\$ 2 , 6 3 7}$ |

At December 31, 2010, approximately $\$ 1.5$ billion (pretax) of compensation cost related to unvested awards had not yet been charged to net income. That cost is expected to be amortized into compensation expense over a weighted-average period of 0.9 years. The Firm does not capitalize any compensation cost related to sharebased compensation awards to employees.

## Cash flows and tax benefits

Income tax benefits related to stock-based incentive arrangements recognized in the Firm's Consolidated Statements of Income for the years ended December 31, 2010, 2009 and 2008, were $\$ 1.3$ billion, $\$ 1.3$ billion and $\$ 1.1$ billion, respectively.
The following table sets forth the cash received from the exercise of stock options under all stock-based incentive arrangements, and the actual income tax benefit realized related to tax deductions from the exercise of the stock options

| Year ended December 31, (in millions) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: |
| Cash received for options exercised | $\$ 205$ | $\$ 437$ | $\$ 1,026$ |
| Tax benefit realized | 14 | 11 | 72 |

In June 2007, the FASB ratified guidance which requires that realized tax benefits from dividends or dividend equivalents paid on equityclassified share-based payment awards that are charged to retained earnings be recorded as an increase to additional paid-in capital and included in the pool of excess tax benefits available to absorb tax deficiencies on share-based payment awards. Prior to the issuance of this guidance, the Firm did not include these tax benefits as part of this pool of excess tax benefits. The Firm adopted this guidance on January 1, 2008; its adoption did not have an impact on the Firm's Consolidated Balance Sheets or results of operations.

## Valuation assumptions

The following table presents the assumptions used to value employee stock options and SARs granted during the years ended December 31, 2010, 2009 and 2008, under the Black-Scholes valuation model.

| Year ended December 31, | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | :---: | :---: | :---: |
| Weighted-average annualized |  |  |  |
| $\quad$ valuation assumptions |  |  |  |
| Risk-free interest rate | $\mathbf{3 . 8 9 \%}$ | $2.33 \%$ | $3.90 \%$ |
| Expected dividend yield(a) | $\mathbf{3 . 1 3}$ | 3.40 | 3.57 |
| Expected common stock price volatility | $\mathbf{3 7}$ | 56 | 34 |
| Expected life (in years) | $\mathbf{6 . 4}$ | 6.6 | 6.8 |

(a) In 2010 and 2009, the expected dividend yield was determined using historical dividend yields.
The expected volatility assumption is derived from the implied volatility of JPMorgan Chase's publicly traded stock options. The expected life assumption is an estimate of the length of time that an employee might hold an option or SAR before it is exercised or canceled, and the assumption is based on the Firm's historical experience.

## Note 11 - Noninterest expense

The following table presents the components of noninterest expense.

| Year ended December 31, (in millions) | 2010 |  | 2009 |  | 2008 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Compensation expense(a) | \$ | 28,124 | \$ | 26,928 | \$ | 22,746 |
| Noncompensation expense: |  |  |  |  |  |  |
| Occupancy expense |  | 3,681 |  | 3,666 |  | 3,038 |
| Technology, communications and equipment expense |  | 4,684 |  | 4,624 |  | 4,315 |
| Professional and outside services |  | 6,767 |  | 6,232 |  | 6,053 |
| Marketing |  | 2,446 |  | 1,777 |  | 1,913 |
| Other expense(b)(c)(d) |  | 14,558 |  | 7,594 |  | 3,740 |
| Amortization of intangibles |  | 936 |  | 1,050 |  | 1,263 |
| Total noncompensation expense |  | 33,072 |  | 24,943 |  | 20,322 |
| Merger costs |  | - |  | 481 |  | 432 |
| Total noninterest expense | \$ | 61,196 | \$ | 52,352 | \$ | 43,500 |

 relevant banking employees.
(b) In 2010, 2009 and 2008, included litigation expense of $\$ 7.4$ billion, $\$ 161$ million and a net benefit of $\$ 781$ million, respectively.
(c) Includes foreclosed property expense of $\$ 1.0$ billion, $\$ 1.4$ billion and $\$ 213$ million in 2010, 2009 and 2008, respectively.
(d) Expense for 2009 included a $\$ 675$ million FDIC special assessment.

## Merger costs

Costs associated with the Bear Stearns merger and the Washington Mutual transaction in 2008 are reflected in the merger costs caption of the Consolidated Statements of Income. For a further discussion of the Bear Stearns merger and the Washington Mutual transaction, see Note 2 on pages 166-170 of this Annual Report. A summary of merger-related costs is shown in the following table.

| Year ended December 31, (in millions) | 2009 |  |  |  |  |  | 2008 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bear Stearns |  | Washington Mutual |  | Total |  | Bear Stearns |  | Washington Mutual |  | Total |  |
| Expense category |  |  |  |  |  |  |  |  |  |  |  |  |
| Compensation | \$ | (9) | \$ | 256 | \$ | 247 | \$ | 181 | \$ | 113 | \$ | 294 |
| Occupancy |  | (3) |  | 15 |  | 12 |  | 42 |  | - |  | 42 |
| Technology and communications and other |  | 38 |  | 184 |  | 222 |  | 85 |  | 11 |  | 96 |
| Total(a)(b) | \$ | 26 | \$ | 455 | \$ | 481 | \$ | 308 | \$ | 124 | \$ | 432 |

(a) With the exception of occupancy- and technology-related write-offs, all of the costs in the table required the expenditure of cash.
(b) There were no merger costs for 2010.

The table below shows changes in the merger reserve balance related to costs associated with the above transactions.

|  | 2010 |  |  |  |  |  | 2009 |  |  |  |  |  | 2008 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year ended December 31, (in millions) | Bear Stearns |  | Washington Mutual |  | Total |  | $\begin{gathered} \hline \text { Bear } \\ \text { Stearns } \end{gathered}$ |  | Washington Mutual |  | Total |  | BearStearns |  | Washington Mutual |  | Total |  |
| Merger reserve balance, beginning of period | \$ | 32 | \$ | 57 | \$ | 89 | \$ | 327 | \$ | 441 | \$ | 768 | \$ | - | \$ |  | \$ | - |
| Recorded as merger costs(a) |  | - |  | - |  | - |  | 26 |  | 455 |  | 481 |  | 308 |  | 124 |  | 432 |
| Recorded as goodwill |  | - |  | - |  | - |  | (5) |  | - |  | (5) |  | 112 |  | 435 |  | ,547 |
| Utilization of merger reserve |  | (32) |  | (57) |  | (89) |  | (316) |  | (839) |  | 155) |  | 093) |  | (118) |  | (211) |
| Merger reserve balance, end of period | \$ | - | \$ | - | \$ | - | \$ | 32 | \$ | 57 | \$ | 89 | \$ | 327 | \$ | 441 | \$ |  |

[^2]
## Note 12 - Securities

Securities are classified as AFS, held-to-maturity ("HTM") or trading. Trading securities are discussed in Note 3 on pages 170-187 of this Annual Report. Securities are classified primarily as AFS when used to manage the Firm's exposure to interest rate movements or used for longer-term strategic purposes. AFS securities are carried at fair value on the Consolidated Balance Sheets. Unrealized gains and losses, after any applicable hedge accounting adjustments, are reported as net increases or decreases to accumulated other comprehensive income/(loss). The specific identification method is used to determine realized gains and losses on AFS securities, which are included in securities gains/(losses) on the Consolidated Statements of Income. Securities that the Firm has the positive intent and ability to hold to maturity are classified as HTM and are carried at amortized cost on the Consolidated Balance Sheets. The Firm has not classified new purchases of securities as HTM for the past several years.

## Other-than-temporary impairment

AFS debt and equity securities in unrealized loss positions are analyzed as part of the Firm's ongoing assessment of other-thantemporary impairment ("OTT।"). For debt securities, the Firm considers a decline in fair value to be other-than-temporary when the Firm does not expect to recover the entire amortized cost basis of the security. The Firm also considers an OTTI to have occurred when there is an adverse change in cash flows to beneficial interests in securitizations that are rated below "AA" at their acquisition, or that can be contractually prepaid or otherwise settled in such a way that the Firm would not recover substantially all of its recorded investment. For AFS equity securities, the Firm considers a decline in fair value to be other-than-temporary if it is probable that the Firm will not recover its amortized cost basis.

For debt securities, OTTI losses must be recognized in earnings if an investor has the intent to sell the debt security, or if it is more likely than not that the investor will be required to sell the debt security before recovery of its amortized cost basis. However, even if an investor does not expect to sell a debt security, it must evaluate the expected cash flows to be received and determine if a credit loss exists. In the event of a credit loss, only the amount of impairment associated with the credit loss is recognized in income. Amounts relating to factors other than credit losses are recorded in OCI.
When the Firm intends to sell AFS debt or equity securities, it recognizes an impairment loss equal to the full difference between the amortized cost basis and the fair value of those securities.

When the Firm does not intend to sell AFS debt or equity securities in an unrealized loss position, potential OTTI is considered using a
variety of factors, including the length of time and extent to which the market value has been less than cost; adverse conditions specifically related to the industry, geographic area or financial condition of the issuer or underlying collateral of a security; payment structure of the security; changes to the rating of the security by a rating agency; the volatility of the fair value changes; and changes in fair value of the security after the balance sheet date. For debt securities, the Firm estimates cash flows over the remaining lives of the underlying collateral to assess whether credit losses exist and, where applicable for purchased or retained beneficial interests in securitized assets, to determine if any adverse changes in cash flows have occurred. The Firm's cash flow estimates take into account expectations of relevant market and economic data as of the end of the reporting period. For securities issued in a securitization, the Firm also takes into consideration underlying loan-level data, and structural features of the securitization, such as subordination, excess spread, overcollateralization or other forms of credit enhancement, and compares the losses projected for the underlying collateral ("pool losses") against the level of credit enhancement in the securitization structure to determine whether these features are sufficient to absorb the pool losses, or whether a credit loss on the AFS debt security exists. The Firm also performs other analyses to support its cash flow projections, such as first-loss analyses or stress scenarios.
For equity securities, the Firm considers the above factors, as well as the Firm's intent and ability to retain its investment for a period of time sufficient to allow for any anticipated recovery in market value, and whether evidence exists to support a realizable value equal to or greater than the carrying value.

## Realized gains and losses

The following table presents realized gains and losses from AFS securities.

Year ended December 31,

|  | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: |
| Realized gains | $\mathbf{\$ 3 , 3 8 2}$ | $\$ 2,268$ | $\$ 1,890$ |
| Realized losses | $\mathbf{( 3 1 7 )}$ | $(580)$ | $(330)(\mathrm{c})$ |
| Net realized gains(a) | $\mathbf{3 , 0 6 5}$ | 1,688 | 1,560 |
| Credit losses included in securities gains(b) | $\mathbf{( 1 0 0 )}$ | $(578)$ | NA |
| Net securities gains | $\mathbf{\$ 2 , 9 6 5}$ | $\$ 1,110$ | $\$ 1,560$ |

(a) Proceeds from securities sold were within approximately 3\% of amortized cost in 2010 and 2009 and within approximately $2 \%$ of amortized cost in 2008.
(b) Includes other-than-temporary impairment losses recognized in income on certain prime mortgage-backed securities and obligations of U.S. states and municipalities for the year ended December 31, 2010, and on certain subprime and prime mortgage-backed securities and obligations of U.S. states and municipalities for the year ended December 31, 2009.
(c) Includes $\$ 76$ million of losses due to other-than temporary impairment of subprime mortgage-backed securities.

The amortized costs and estimated fair values of AFS and HTM securities were as follows at December 31, 2010 and 2009.

(a) Includes total U.S. government-sponsored enterprise obligations with fair values of $\$ 94.2$ billion and $\$ 153.0$ billion at December 31, 2010 and 2009 , respectively, which were predominantly mortgage-related.
(b) Consists primarily of bank debt including sovereign government-guaranteed bank debt
(c) Consists primarily of mortgage-backed securities issued by U.S. government-sponsored enterprises.
(d) Includes a total of $\$ 133$ million and $\$ 368$ million (before tax) of unrealized losses related to prime mortgage-backed securities for which credit losses have been recognized in income at December 31, 2010 and 2009, respectively. These unrealized losses are not credit-related and remain reported in AOCI.

## Notes to consolidated financial statements

## Securities impairment

The following table presents the fair value and gross unrealized losses for AFS securities by aging category at December 31, 2010 and 2009.

| December 31, 2010 (in millions) | Securities with gross unrealized losses |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less than 12 months |  |  |  | 12 months or more |  |  |  | Total fair value |  | Total gross unrealized losses |  |
|  | Fair value |  | $\begin{array}{r} \hline \text { Gross } \\ \text { unrealized } \\ \text { losses } \\ \hline \end{array}$ |  | Fair value |  | $\begin{array}{r} \hline \text { Gross } \\ \text { unrealized } \\ \text { losses } \\ \hline \end{array}$ |  |  |  |  |  |
| Available-for-sale debt securities |  |  |  |  |  |  |  |  |  |  |  |  |
| Mortgage-backed securities: |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S. government agencies | \$ | 14,039 | \$ | 297 | \$ | - | \$ | - | \$ | 14,039 | \$ | 297 |
| Residential: |  |  |  |  |  |  |  |  |  |  |  |  |
| Prime and Alt-A |  | - |  | - |  | 1,193 |  | 250 |  | 1,193 |  | 250 |
| Subprime |  | - |  | - |  | - |  | - |  | - |  | - |
| Non-U.S. |  | 35,166 |  | 379 |  | 1,080 |  | 30 |  | 36,246 |  | 409 |
| Commercial |  | 548 |  | 14 |  | 11 |  | 3 |  | 559 |  | 17 |
| Total mortgage-backed securities |  | 49,753 |  | 690 |  | 2,284 |  | 283 |  | 52,037 |  | 973 |
| U.S. Treasury and government agencies |  | 921 |  | 28 |  |  |  | - |  | 921 |  | 28 |
| Obligations of U.S. states and municipalities |  | 6,890 |  | 330 |  | 20 |  | 8 |  | 6,910 |  | 338 |
| Certificates of deposit |  | 1,771 |  | 2 |  | - |  | - |  | 1,771 |  | 2 |
| Non-U.S. government debt securities |  | 6,960 |  | 28 |  | - |  | - |  | 6,960 |  | 28 |
| Corporate debt securities |  | 18,783 |  | 418 |  | 90 |  | 1 |  | 18,873 |  | 419 |
| Asset-backed securities: |  |  |  |  |  |  |  |  |  |  |  |  |
| Credit card receivables |  | - |  | - |  | 345 |  | 5 |  | 345 |  | 5 |
| Collateralized loan obligations |  | 460 |  | 10 |  | 6,321 |  | 200 |  | 6,781 |  | 210 |
| Other |  | 2,615 |  | 9 |  | 32 |  | 7 |  | 2,647 |  | 16 |
| Total available-for-sale debt securities |  | 88,153 |  | 1,515 |  | 9,092 |  | 504 |  | 97,245 |  | 2,019 |
| Available-for-sale equity securities |  | - |  | - |  | 2 |  | 6 |  | 2 |  | 6 |
| Total securities with gross unrealized losses | \$ | 88,153 | \$ | 1,515 | \$ | 9,094 | \$ | 510 | \$ | 97,247 | \$ | 2,025 |


| December 31, 2009 (in millions) | Securities with gross unrealized losses |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less than 12 months |  |  |  | 12 months or more |  |  |  | Total fair value |  | Total gross unrealized losses |  |
|  | Fair value |  | $\begin{gathered} \text { Gross } \\ \text { unrealized } \\ \text { losses } \end{gathered}$ |  | Fair value |  | $\begin{gathered} \text { Gross } \\ \text { unrealized } \\ \text { losses } \end{gathered}$ |  |  |  |  |  |
| Available-for-sale debt securities |  |  |  |  |  |  |  |  |  |  |  |  |
| Mortgage-backed securities: |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S. government agencies | \$ | 43,235 | \$ | 603 | \$ | 644 | \$ | 5 | \$ | 43,879 | \$ | 608 |
| Residential: |  |  |  |  |  |  |  |  |  |  |  |  |
| Prime and Alt-A |  | 183 |  | 27 |  | 3,032 |  | 780 |  | 3,215 |  | 807 |
| Subprime |  | - |  | - |  | - |  | - |  | - |  | - |
| Non-U.S. |  | 391 |  | 1 |  | 1,773 |  | 64 |  | 2,164 |  | 65 |
| Commercial |  | 679 |  | 34 |  | 229 |  | 29 |  | 908 |  | 63 |
| Total mortgage-backed securities |  | 44,488 |  | 665 |  | 5,678 |  | 878 |  | 50,166 |  | 1,543 |
| U.S. Treasury and government agencies |  | 8,433 |  | 135 |  | - |  | - |  | 8,433 |  | 135 |
| Obligations of U.S. states and municipalities |  | 472 |  | 11 |  | 389 |  | 14 |  | 861 |  | 25 |
| Certificates of deposit |  | - |  | - |  | - |  | - |  | - |  | - |
| Non-U.S. government debt securities |  | 2,471 |  | 46 |  | 835 |  | 5 |  | 3,306 |  | 51 |
| Corporate debt securities |  | 1,831 |  | 12 |  | 4,634 |  | 18 |  | 6,465 |  | 30 |
| Asset-backed securities: |  |  |  |  |  |  |  |  |  |  |  |  |
| Credit card receivables |  | - |  | - |  | 745 |  | 26 |  | 745 |  | 26 |
| Collateralized loan obligations |  | 42 |  | 1 |  | 7,883 |  | 435 |  | 7,925 |  | 436 |
| Other |  | 767 |  | 8 |  | 1,767 |  | 46 |  | 2,534 |  | 54 |
| Total available-for-sale debt securities |  | 58,504 |  | 878 |  | 21,931 |  | 1,422 |  | 80,435 |  | 2,300 |
| Available-for-sale equity securities |  | 1 |  | 1 |  | 3 |  | 3 |  | 4 |  | 4 |
| Total securities with gross unrealized losses | \$ | 58,505 | \$ | 879 | \$ | 21,934 | \$ | 1,425 | \$ | 80,439 | \$ | 2,304 |

## Other-than-temporary impairment

The following table presents credit losses that are included in the securities gains and losses table above.

| Year ended December 31, (in millions) | 2010 | 2009 |
| :--- | ---: | ---: |
| Debt securities the Firm does not intend to sell that have <br> credit losses |  |  |
| Total other-than-temporary impairment losses(a) <br> Losses recorded in/(reclassified from) other comprehensive <br> income | $\mathbf{\$ ( 9 4 )}$ | $\$(946)$ |
| Credit losses recognized in income(b)(c) | $\mathbf{\$ ( 1 0 0 )}$ | $\$(578)$ |

(a) For initial OTTI, represents the excess of the amortized cost over the fair value of AFS debt securities. For subsequent OTTI of the same security, represents additional declines in fair value subsequent to the previously recorded OTTI, if applicable.
(b) Represents the credit loss component of certain prime mortgage-backed securities and obligations of U.S. states and municipalities for 2010, and certain prime and subprime mortgage-backed securities and obligations of U.S. states and municipalities for 2009 that the Firm does not intend to sell. Subsequent credit losses may be recorded on securities without a corresponding further decline in fair value if there has been a decline in expected cash flows.
(c) Excluded from this table are OTTI losses of $\$ 7$ million that were recognized in income in 2009, related to subprime mortgage-backed debt securities the Firm intended to sell. These securities were sold in 2009, resulting in the recognition of a recovery of $\$ 1$ million.

## Changes in the credit loss component of credit-impaired debt

 securitiesThe following table presents a rollforward for the years ended December 31, 2010 and 2009, of the credit loss component of OTTI losses that were recognized in income related to debt securities that the Firm does not intend to sell.

| Year ended December 31, (in millions) | $\mathbf{2 0 1 0}$ | 2009 |
| :--- | ---: | ---: |
| Balance, beginning of period | $\mathbf{\$ 5 7 8}$ | $\$-$ |
| Additions: |  |  |
| Newly credit-impaired securities | - | 578 |
| Increase in losses on previously credit-impaired securities <br> Losses reclassified from other comprehensive income on <br> previously credit-impaired securities | $\mathbf{9 4}$ | - |
| Reductions: <br> Sales of credit-impaired securities | $\mathbf{6}$ | - |
| $\quad$ Impact of new accounting guidance related to VIEs | $\mathbf{( 3 1 )}$ | - |
| Balance, end of period | $\mathbf{( 1 5 )}$ | - |

## Gross unrealized losses

Gross unrealized losses have generally decreased since
December 31, 2009, due primarily to market spread improvement and increased liquidity, driving asset prices higher. However, gross unrealized losses on certain securities have increased, including on certain corporate debt securities, which are primarily governmentguaranteed positions that experienced credit spread widening. As of December 31, 2010, the Firm does not intend to sell the securities with a loss position in AOCI, and it is not likely that the Firm will be required to sell these securities before recovery of their amortized cost basis. Except for the securities reported in the table above for which credit losses have been recognized in income, the Firm believes that the securities with an unrealized loss in AOCl are not other-than-temporarily impaired as of December 31, 2010.

Following is a description of the Firm's principal security investments with the most significant unrealized losses as of December 31, 2010, and the key assumptions used in the Firm's estimate of the present value of the cash flows most likely to be collected from these investments.

Mortgage-backed securities - Prime and Alt-A nonagency As of December 31, 2010, gross unrealized losses related to prime and Alt-A residential mortgage-backed securities issued by private issuers were $\$ 250$ million, all of which have been in an unrealized loss position for 12 months or more. Approximately $70 \%$ of the total portfolio (by amortized cost) are currently rated below investmentgrade; the Firm has recorded other-than-temporary impairment losses on 55\% of the below investment-grade positions. In analyzing prime and Alt-A residential mortgage-backed securities for potential credit losses, the Firm utilizes a methodology that focuses on loanlevel detail to estimate future cash flows, which are then allocated to the various tranches of the securities. The loan-level analysis primarily considers current home value, loan-to-value ("LTV") ratio, loan type and geographical location of the underlying property to forecast prepayment, home price, default rate and loss severity. The forecasted weighted average underlying default rate on the positions was $21 \%$ and the related weighted average loss severity was $50 \%$. Based on this analysis, an OTTI loss of $\$ 6$ million was recognized in 2010 related to securities that experienced increased delinquency rates associated with specific collateral types and origination dates. Overall losses have decreased since December 31, 2009, with the recovery in security prices resulting from increased demand for higher-yielding asset classes and a deceleration in the pace of home price declines due in part to the U.S. government programs to facilitate financing and to spur home purchases. The unrealized loss of $\$ 250$ million is considered temporary, based on management's assessment that the estimated future cash flows together with the credit enhancement levels for those securities remain sufficient to support the Firm's investment. The credit enhancements associated with the below investment-grade and investment-grade positions are $9 \%$ and $24 \%$, respectively.

## Asset-backed securities - Collateralized loan obligations

As of December 31, 2010, gross unrealized losses related to CLOs were $\$ 210$ million, of which $\$ 200$ million related to securities that were in an unrealized loss position for 12 months or more. Overall losses have decreased since December 31, 2009, mainly as a result of lower default forecasts and spread tightening across various asset classes. Substantially all of these securities are rated "AAA," "AA" and " A " and have an average credit enhancement of $30 \%$. Credit enhancement in CLOs is primarily in the form of subordination, which is a form of structural credit enhancement where realized losses associated with assets held by an issuing vehicle are allocated to issued tranches considering their relative seniority. The key assumptions considered in analyzing potential credit losses were underlying loan and debt security defaults and loss severity. Based on current default trends, the Firm assumed collateral default rates of $2.1 \%$ for 2010 and 5\% thereafter. Further, loss severities were assumed to be $48 \%$ for loans and $78 \%$ for debt securities. Losses on collateral were estimated to occur approximately 18 months after default.

## Notes to consolidated financial statements

## Contractual maturities and yields

The following table presents the amortized cost and estimated fair value at December 31, 2010, of JPMorgan Chase's AFS and HTM securities by contractual maturity.

| By remaining maturity <br> December 31, 2010 (in millions) | Due in one year or less |  | Due after one year through five years |  | Due after five years through 10 years |  | Due after 10 years(c) |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Available-for-sale debt securities |  |  |  |  |  |  |  |  |  |  |
| Mortgage-backed securities:(a) |  |  |  |  |  |  |  |  |  |  |
| Amortized cost | \$ | 15 | \$ | 259 | \$ | 2,781 | \$ | 168,740 |  | 171,795 |
| Fair value |  | 15 |  | 282 |  | 2,825 |  | 171,732 |  | 174,854 |
| Average yield(b) |  | 8.63\% |  | 6.25\% |  | 2.71\% |  | 3.85\% |  | 3.84\% |
| U.S. Treasury and government agencies:(a) |  |  |  |  |  |  |  |  |  |  |
| Amortized cost | \$ | 1,843 | \$ | 4,913 | \$ | 4,251 | \$ | 251 |  | 11,258 |
| Fair value |  | 1,850 |  | 5,007 |  | 4,260 |  | 231 |  | 11,348 |
| Average yield(b) |  | 1.68\% |  | 2.62\% |  | 3.84\% |  | 3.86\% |  | 2.95\% |
| Obligations of U.S. states and municipalities: |  |  |  |  |  |  |  |  |  |  |
| Amortized cost | \$ | 39 | \$ | 160 | \$ | 333 | \$ | 11,200 |  | 11,732 |
| Fair value |  | 39 |  | 167 |  | 351 |  | 11,002 |  | 11,559 |
| Average yield(b) |  | 3.21\% |  | 4.30\% |  | 5.25\% |  | 5.07\% |  | 5.06\% |
| Certificates of deposit: |  |  |  |  |  |  |  |  |  |  |
| Amortized cost | \$ | 3,642 | \$ | 6 | \$ | - | \$ | - |  | 3,648 |
| Fair value |  | 3,641 |  | 6 |  | - |  | - |  | 3,647 |
| Average yield(b) |  | 5.16\% |  | 10.75\% |  | -\% |  | -\% |  | 5.17\% |
| Non-U.S. government debt securities: |  |  |  |  |  |  |  |  |  |  |
| Amortized cost | \$ | 5,666 | \$ | 13,557 | \$ | 1,388 | \$ | 3 |  | 20,614 |
| Fair value |  | 5,673 |  | 13,712 |  | 1,389 |  | 3 |  | 20,777 |
| Average yield(b) |  | 1.81\% |  | 2.23\% |  | 3.56\% |  | 5.34\% |  | 2.21\% |
| Corporate debt securities: |  |  |  |  |  |  |  |  |  |  |
| Amortized cost | \$ | 12,515 | \$ | 44,137 | \$ | 5,065 | \$ | 1 |  | 61,718 |
| Fair value |  | 12,597 |  | 44,100 |  | 5,096 |  | 1 |  | 61,794 |
| Average yield(b) |  | 2.25\% |  | 2.19\% |  | 4.81\% |  | 1.07\% |  | 2.42\% |
| Asset-backed securities: |  |  |  |  |  |  |  |  |  |  |
| Amortized cost | \$ | 38 | \$ | 3,371 | \$ | 13,567 | \$ | 12,606 |  | 29,582 |
| Fair value |  | 38 |  | 3,454 |  | 14,041 |  | 12,755 |  | 30,288 |
| Average yield(b) |  | 8.94\% |  | 2.05\% |  | 2.48\% |  | 2.19\% |  | 2.32\% |
| Total available-for-sale debt securities |  |  |  |  |  |  |  |  |  |  |
| Amortized cost | \$ | 23,758 | \$ | 66,403 | \$ | 27,385 |  | 192,801 |  | 310,347 |
| Fair value |  | 23,853 |  | 66,728 |  | 27,962 |  | 195,724 |  | 314,267 |
| Average yield(b) |  | 2.56\% |  | 2.24\% |  | 3.23\% |  | 3.81\% |  | 3.33\% |
| Available-for-sale equity securities |  |  |  |  |  |  |  |  |  |  |
| Amortized cost | \$ | - | \$ | - | \$ | - | \$ | 1,894 |  | 1,894 |
| Fair value |  | - |  | - |  | - |  | 2,051 |  | 2,051 |
| Average yield(b) |  | -\% |  | -\% |  | -\% |  | 0.29\% |  | 0.29\% |
| Total available-for-sale securities |  |  |  |  |  |  |  |  |  |  |
| Amortized cost | \$ | 23,758 | \$ | 66,403 | \$ | 27,385 |  | 194,695 |  | 312,241 |
| Fair value |  | 23,853 |  | 66,728 |  | 27,962 |  | 197,775 |  | 316,318 |
| Average yield(b) |  | 2.56\% |  | 2.24\% |  | 3.23\% |  | 3.78\% |  | 3.31\% |
| Total held-to-maturity securities |  |  |  |  |  |  |  |  |  |  |
| Amortized cost | \$ | - | \$ | 6 | \$ | 11 | \$ | 1 | \$ | 18 |
| Fair value |  | - |  | 6 |  | 12 |  | 2 |  | 20 |
| Average yield(b) |  | -\% |  | 6.97\% |  | 6.83\% |  | 6.49\% |  | 6.85\% |

 at December 31, 2010.
(b) Average yield was based on amortized cost balances at the end of the period and did not give effect to changes in fair value reflected in accumulated other comprehensive income/(loss). Yields are derived by dividing interest/dividend income (including the effect of related derivatives on AFS securities and the amortization of premiums and accretion of discounts) by total amortized cost. Taxable-equivalent yields are used where applicable.
(c) Includes securities with no stated maturity. Substantially all of the Firm's residential mortgage-backed securities and collateralized mortgage obligations are due in 10 years or more, based on contractual maturity. The estimated duration, which reflects anticipated future prepayments based on a consensus of dealers in the market, is approximately five years for agency residential mortgage-backed securities, three years for agency residential collateralized mortgage obligations and six years for nonagency residential collateralized mortgage obligations.

## Note 13 - Securities financing activities

JPMorgan Chase enters into resale agreements, repurchase agreements, securities borrowed transactions and securities loaned transactions (collectively, "securities financing agreements") primarily to finance the Firm's inventory positions, acquire securities to cover short positions, accommodate customers' financing needs, and settle other securities obligations.
Securities financing agreements are treated as collateralized financings on the Firm's Consolidated Balance Sheets. Resale and repurchase agreements are generally carried at the amounts at which the securities will be subsequently sold or repurchased, plus accrued interest. Securities borrowed and securities loaned transactions are generally carried at the amount of cash collateral advanced or received. Where appropriate under applicable accounting guidance, resale and repurchase agreements with the same counterparty are reported on a net basis. Fees received or paid in connection with securities financing agreements are recorded in interest income or interest expense.

The Firm has elected the fair value option for certain securities financing agreements. For a further discussion of the fair value option, see Notes 4 on pages 187-189 of this Annual Report. The securities financing agreements for which the fair value option has been elected are reported within securities purchased under resale agreements; securities loaned or sold under repurchase agreements; and securities borrowed on the Consolidated Balance Sheets. Generally, for agreements carried at fair value, current-period interest accruals are recorded within interest income and interest expense, with changes in fair value reported in principal transactions revenue. However, for financial instruments containing embedded derivatives that would be separately accounted for in accordance with accounting guidance for hybrid instruments, all changes in fair value, including any interest elements, are reported in principal transactions revenue.

The following table details the Firm's securities financing agreements, all of which are accounted for as collateralized financings during the periods presented.

| December 31, (in millions) | $\mathbf{2 0 1 0}$ | 2009 |
| :--- | ---: | ---: |
| Securities purchased under resale agreements(a) | $\mathbf{\$ 2 2 2 , 3 0 2}$ | $\$ 195,328$ |
| Securities borrowed(b) | $\mathbf{1 2 3 , 5 8 7}$ | 119,630 |
| Securities sold under repurchase agreements(c) | $\mathbf{\$ 2 6 2 , 7 2 2}$ | $\$ 245,692$ |
| Securities loaned | $\mathbf{1 0 , 5 9 2}$ | 7,835 |

(a) Includes resale agreements of $\$ 20.3$ billion and $\$ 20.5$ billion accounted for at fair value at December 31, 2010 and 2009, respectively.
(b) Includes securities borrowed of $\$ 14.0$ billion and $\$ 7.0$ billion accounted for at fair value at December 31, 2010 and 2009, respectively.
(c) Includes repurchase agreements of $\$ 4.1$ billion and $\$ 3.4$ billion accounted for at fair value at December 31, 2010 and 2009, respectively.

The amounts reported in the table above have been reduced by $\$ 112.7$ billion and $\$ 121.2$ billion at December 31, 2010 and 2009, respectively, as a result of agreements in effect that meet the specified conditions for net presentation under applicable accounting guidance.
JPMorgan Chase's policy is to take possession, where possible, of securities purchased under resale agreements and of securities borrowed. The Firm monitors the market value of the underlying securities that it has received from its counterparties and either requests additional collateral or returns a portion of the collateral when appropriate in light of the market value of the underlying securities. Margin levels are established initially based upon the counterparty and type of collateral and monitored on an ongoing basis to protect against declines in collateral value in the event of default. JPMorgan Chase typically enters into master netting agreements and other collateral arrangements with its resale agreement and securities borrowed counterparties, which provide for the right to liquidate the purchased or borrowed securities in the event of a customer default. As a result of the Firm's credit risk mitigation practices described above on resale and securities borrowed agreements, the Firm did not hold any reserves for credit impairment on these agreements as of December 31, 2010 and 2009.

For a further discussion of assets pledged and collateral received in securities financing agreements see Note 31 on pages 280-281 of this Annual Report.

## Note 14 - Loans

## Loan accounting framework

The accounting for a loan depends on management's strategy for the loan, and on whether the loan was credit-impaired at the date of acquisition. The Firm accounts for loans based on the following categories:

- Originated or purchased loans held-for-investment (other than purchased credit-impaired ("PCl") loans)
- Loans held-for-sale;
- Fair value loans;
- PCI loans held-for-investment

The following provides a detailed accounting discussion of these loan categories:

## Loans held-for-investment (other than PCI loans).

Originated or purchased loans held-for-investment, other than PCI loans, are measured at the principal amount outstanding, net of the following: allowance for loan losses; net charge-offs; interest applied to principal (for loans accounted for on the cost recovery method); unamortized discounts and premiums; and deferred loan fees or cost.

## Interest income

Interest income on performing loans held-for-investment, other than PCl loans, is accrued and recognized as interest income at the contractual rate of interest. Purchase price discounts or premiums, as well as net deferred loan fees or costs, are amortized into interest income over the life of the loan to produce a level rate of return.

## Nonaccrual loans

Nonaccrual loans are those on which the accrual of interest has been suspended. Loans (other than credit card loans and certain consumer loans insured by U.S. government agencies) are placed on nonaccrual status and considered nonperforming when full payment of principal and interest is in doubt, which is generally determined when principal or interest is 90 days or more past due and collateral, if any, is insufficient to cover principal and interest. A loan is determined to be past due when the minimum payment is not received from the borrower by the contractually specified due date or for certain loans (e.g., residential real estate loans), when a monthly payment is due and unpaid for 30 days or more. All interest accrued but not collected is reversed against interest income at the date a loan is placed on nonaccrual status. In addition, the amortization of deferred amounts is suspended. In certain cases, interest income on nonaccrual loans may be recognized to the extent cash is received (i.e., cash basis) when the recorded loan balance is deemed fully collectible; however, if there is doubt regarding the ultimate collectability of the recorded loan balance, all interest cash receipts are applied to reduce the carrying value of the loan (the cost recovery method).

A loan may be returned to accrual status when repayment is reasonably assured and there has been demonstrated performance under the terms of the loan or, if applicable, the terms of the restructured loan.

As permitted by regulatory guidance, credit card loans are generally exempt from being placed on nonaccrual status; accordingly, interest and fees related to credit card loans continue to accrue until the loan is charged off or paid in full. However, the Firm separately establishes an allowance for the estimated uncollectible portion of billed and accrued interest and fee income on credit card loans.

## Allowance for loan losses

The allowance for loan losses represents the estimated probable losses on held-for-investment loans. Changes in the allowance for loan losses are recorded in the Provision for credit losses on the Firm's Consolidated Statements of Income. See Note 15 on pages 239-243 for further information on the Firm's accounting polices for the allowance for loan losses.

## Charge-offs

Wholesale loans and risk-rated business banking and auto loans are charged off against the allowance for loan losses when it is highly certain that a loss has been realized. This determination includes many factors, including the prioritization of the Firm's claim in bankruptcy, expectations of the workout/restructuring of the loan and valuation of the borrower's equity.

Consumer loans, other than risk-rated business banking and auto loans and PCI loans, are generally charged off to the allowance for loan losses upon reaching specified stages of delinquency, in accordance with the Federal Financial Institutions Examination Council ("FFIEC") policy. Residential mortgage loans and scored business banking loans are generally charged down to estimated net realizable value at no later than 180 days past due. Certain consumer loans, including auto loans and non-government guaranteed student loans, are generally charged down to estimated net realizable value at 120 days past due. The Firm regularly assesses the assumptions that it uses to estimate these net realizable values, and updates the underlying assumptions as necessary to further refine its estimates.

Credit card loans are charged off by the end of the month in which the account becomes 180 days past due, or within 60 days from receiving notification about a specified event (e.g., bankruptcy of the borrower), whichever is earlier.
Certain impaired loans are deemed collateral-dependent because repayment of the loan is expected to be provided solely by the underlying collateral, rather than by cash flows from the borrower's operations, income or other resources. Impaired collateral-dependent loans are charged-off to the fair value of the collateral, less costs to sell. See Note 15 on pages 239-243 for information on the Firm's charge-off and valuation policies for collateral-dependent loans.

## Loans held-for-sale

Held-for-sale loans are measured at the lower of cost or fair value, with valuation changes recorded in noninterest revenue. For wholesale loans, the valuation is performed on an individual loan basis. For consumer loans, the valuation is performed on a portfolio basis.

Interest income on loans held-for-sale is accrued and recognized based on the contractual rate of interest.

Loan origination fees or costs and purchase price discounts or premiums are deferred in a contra loan account until the related loan is sold. The deferred fees and discounts or premiums are an adjustment to the basis of the loan and therefore are included in the periodic determination of the lower of cost or fair value adjustments and/or the gain or losses recognized at the time of sale.
Held-for-sale loans are subject to the nonaccrual policies described above.
Because held-for-sale loans are recognized at the lower of cost or fair value, the Firm's allowance for loan losses and charge-off policies do not apply to these loans.

## Fair value loans

Loans used in a trading strategy or risk managed on a fair value basis are measured at fair value, with changes in fair value recorded in noninterest revenue.

For these loans, the earned current contractual interest payment is recognized in interest income. Changes in fair value are recognized in noninterest revenue. Loan origination fees are recognized upfront in noninterest revenue. Loan origination costs are recognized in the associated expense category as incurred.

Because these loans are recognized at fair value, the Firm's nonaccrual, allowance for loan losses, and charge-off policies do not apply to these loans.
See Note 4 on pages 187-189 of this Annual Report for further information on the Firm's elections of fair value accounting under the fair value option. See Note 3 and Note 4 on pages 170-187 and 187189 of this Annual Report for further information on loans carried at fair value and classified as trading assets.

## PCI loans

PCI loans held-for-investment are initially measured at fair value. PCI loans have evidence of credit deterioration since the loan's origination date and therefore it is probable, at acquisition, that all contractually required payments will not be collected. Because PCI loans are initially measured at fair value, which includes an estimate of future credit losses, no allowance for loan losses related to PCI loans is recorded at the acquisition date. See page 233 of this Note for information on accounting for PCl loans subsequent to their acquisition.

## Loan classification changes

Loans in the held-for-investment portfolio that management decides to sell are transferred to the held-for-sale portfolio at the lower of cost or fair value on the date of transfer. Credit-related losses are charged against the allowance for loan losses; losses due to changes in interest rates or foreign currency exchange rates are recognized in noninterest revenue.
In certain limited cases, loans in the held-for-sale portfolio that management decides to retain are transferred to the held-forinvestment portfolio at the lower of cost or fair value on the date of transfer. These loans are subsequently assessed for impairment based on the Firm's allowance methodology. For a further discussion of the methodologies used in establishing the Firm's allowance for loan losses, see Note 15 on pages 239-243 of this Annual Report.

## Loan modifications

The Firm seeks to modify certain loans in conjunction with its lossmitigation activities. Through the modification, JPMorgan Chase grants one or more concessions to a borrower who is experiencing financial difficulty in order to minimize the Firm's economic loss, avoid foreclosure or repossession of the collateral and to ultimately maximize payments received by the Firm from the borrower. The concessions granted vary by program and by borrower-specific characteristics, and may include interest rate reductions, term extensions, payment deferrals, or the acceptance of equity or other assets in lieu of payments. In certain limited circumstances, Ioan modifications include principal forgiveness.
Such modifications are accounted for and reported as troubled debt restructurings ("TDRs"). A loan that has been modified in a TDR is generally considered to be impaired until it matures, is repaid, or is otherwise liquidated, regardless of whether the borrower performs under the modified terms. In certain limited cases, the effective interest rate applicable to the modified loan is at or above the current market rate at the time of the restructuring. In such circumstances, and assuming that the loan subsequently performs under its modified terms and the Firm expects to collect all contractual principal and interest cash flows, the loan is disclosed as impaired and as a TDR only during the year of the modification; in subsequent years, the loan is not disclosed as an impaired loan or as a TDR so long as repayment of the restructured loan under its modified terms is reasonably assured.

Loans, except for credit card loans, modified in a TDR are generally placed on nonaccrual status, although in most cases such loans were already on nonaccrual status prior to modification. These loans may be returned to performing status (resuming the accrual of interest) if the following criteria are met: (a) the borrower has performed under the modified terms for a minimum of six months and/or six payments, and (b) the Firm has an expectation that repayment of the modified loan is reasonably assured based on, for example, the borrower's debt capacity and level of future earnings, collateral values, LTV ratios, and other current market considerations.

## Notes to consolidated financial statements

Because TDRs are considered to be impaired, these loans are evaluated for an asset-specific allowance, which considers the expected re-default rates for the modified loans and is determined based on the same methodology used to estimate the Firm's assetspecific allowance component regardless of whether the loan is performing and has been returned to accrual status. For further discussion of the methodology used to estimate the Firm's assetspecific allowance, see Note 15 on pages 239-243 of this Annual Report.

## Foreclosed property

The Firm acquires property from borrowers through loan restructurings, workouts, and foreclosures. Property acquired may include real property (e.g., residential real estate, land, buildings, and fixtures) and commercial and personal property (e.g., aircraft, railcars, and ships).
At the time JPMorgan Chase takes physical possession, the property is recorded in other assets on the Consolidated Balance Sheets at fair value less estimated costs to sell. Each quarter the fair value of the acquired property is reviewed and adjusted, if necessary. Subsequent changes to fair value are charged/credited to noninterest revenue. Operating expense, such as real estate taxes and maintenance, are charged to other expense.

## Loan Portfolio

The Firm's loan portfolio is divided into three portfolio segments, which are the same segments used by the Firm to determine the allowance for loan losses: Wholesale; Consumer, excluding credit card; and Credit Card. Within each portfolio segment, the Firm monitors and assesses the credit risk in the following classes of loans, based on the risk characteristics of each loan class:

| Wholesale ${ }^{\left({ }^{(a)}\right.}$ | Consumer, excluding <br> credit card${ }^{(b)}$ | Credit Card |
| :---: | :---: | :---: |
| - Commercial and industrial - Real estate - Financial institutions - Government agencies - Other | Residential real estate - excluding PCI <br> - Home equity - senior lien <br> - Home equity - junior lien <br> - Prime mortgage, including option ARMs <br> - Subprime mortgage <br> Other consumer loans <br> - Auto(c) <br> - Business banking(c) <br> - Student and other <br> Residential real estate - PCl <br> - Home equity <br> - Prime mortgage <br> - Subprime mortgage <br> - Option ARMs | - Chase, excluding accounts originated by Washington Mutual <br> - Accounts originated by Washington Mutual |

(a) Includes loans reported in Investment Bank, Commercial Banking, Treasury \& Securities Services, Asset Management and Corporate/Private Equity segments.
(b) Includes loans reported in RFS, auto and student loans reported in Card Services \& Auto ("Card"), and residential real estate loans reported in the Corporate/Private Equity segment.
(c) Includes auto and business banking risk-rated loans that apply the Firm's wholesale methodology for determining the allowance for loan losses; these loans are managed by Card and RFS, respectively, and therefore for consistency in presentation, are included with the other consumer loan classes.

The following table summarizes the Firm's loan balances by portfolio segment:

|  | Consumer, excluding |  |  | Credit Card |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| December 31, 2010 (in millions) |  |  |  |  |  |  |
| Retained(a) | \$ 222,510 | \$ | 327,464 | \$ | 135,524 | \$ 685,498(b) |
| Held-for-sale | 3,147 |  | 154 |  | 2,152 | 5,453 |
| At fair value | 1,976 |  | - |  | - | 1,976 |
| Total | \$ 227,633 | \$ | 327,618 | \$ | 137,676 | \$ 692,927 |
| December 31, 2009 (in millions) | Wholesale | Consumer, excluding credit card |  | Credit Card |  | Total |
| Retained | \$ 200,077 | \$ | 348,355 | \$ | 78,786 | \$ 627,218(b) |
| Held-for-sale | 2,734 |  | 2,142 |  | - | 4,876 |
| At fair value | 1,364 |  | - |  | - | 1,364 |
| Total | \$ 204,175 | \$ | 350,497 | \$ | 78,786 | \$ 633,458 |

(a) Effective January 1, 2010, the Firm adopted accounting guidance related to VIEs. Upon adoption of the guidance, the Firm consolidated $\$ 84.7$ billion of loans associated with Firm-sponsored credit card securitization trusts; $\$ 15.1$ billion of wholesale loans; and $\$ 4.8$ billion of loans associated with certain other consumer securitization entities, primarily mortgage-related. For further information, see Note 16 on pages 244-259 of this Annual Report.
(b) Loans (other than PCI loans and those for which the fair value option has been selected) are presented net of unearned income, unamortized discounts and premiums, and net deferred loan costs of $\$ 1.9$ billion and $\$ 1.4$ billion at December 31, 2010 and 2009, respectively.
On an on-going basis, the Firm manages its exposure to credit risk. Selling loans is one way that the Firm reduces its credit exposures. The following table provides information about the Firm's loan sales by portfolio segment.

| Year ended December 31, (in millions) | 2010 |  | 2009 |  | 2008 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net gains/(losses) on sales of loans (including lower of cost or fair value adjustments)(a) |  |  |  |  |  |  |
| Wholesale | \$ | 215 | \$ | 291 | \$ | $(2,647)$ |
| Consumer, excluding credit card |  | 265 |  | 127 |  | (11) |
| Credit Card |  | (16) |  | 21 |  | 150 |
| Total net gains/(losses) on sales of loans (including lower of cost or fair value adjustments)(a) | \$ | 464 | \$ | 439 | \$ | $(2,508)$ |

(a) Excludes sales related to loans accounted for at fair value.

## Wholesale loan portfolio

Wholesale loans include loans made to a variety of customers from large corporate and institutional clients to certain high-net worth individuals.
The primary credit quality indicator for wholesale loans is the risk rating assigned each loan. Risk ratings are used to identify the credit quality of loans and differentiate risk within the portfolio. Risk ratings on loans consider the probability of default ("PD") and the loss given default ("LGD"). PD is the likelihood that a loan will not be repaid at default. The LGD is the estimated loss on the loan that would be realized upon the default of the borrower and takes into consideration collateral and structural support for each credit facility.
Management considers several factors to determine an appropriate risk rating, including the obligor's debt capacity and financial flexibility, the level of the obligor's earnings, the amount and sources for repayment, the level and nature of contingencies, management strength, and the industry and geography in which the obligor operates. Risk ratings generally represent ratings profiles similar to those defined by S\&P and

Moody's. Investment grade ratings range from "AAA/Aaa" to "BBB-/Baa3". Noninvestment grade ratings are further classified as noncriticized ("BB+/Ba1 and B-/B3") and criticized ("CCC+"/"Caa1 and lower"), and the criticized portion is further subdivided into performing and nonaccrual loans, representing management's assessment of the collectibility of principal and interest. Criticized loans have a higher probability of default than noncriticized loans.
Risk ratings are reviewed on a regular and ongoing basis by Credit Risk Management and are adjusted as necessary for updated information affecting the obligor's ability to fulfill its obligations.
As noted above, the risk rating of a loan considers the industry in which the obligor conducts its operations. As part of the overall credit risk management framework, the Firm focuses on the management and diversification of its industry and client exposures, with particular attention paid to industries with actual or potential credit concern. See Note 5 on pages 189-190 in this Annual Report for further detail on industry concentrations.

## Notes to consolidated financial statements

The table below provides information by class of receivable for the retained loans in the Wholesale portfolio segment.

| As of or for the year ended December 31, (in millions, except ratios) | Commercial and industrial |  |  |  | Real estate |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 |  | 2009 |  | 2010 |  | 2009 |  |
| Loans by risk ratings |  |  |  |  |  |  |  |  |
| Investment grade | \$ | 31,697 | \$ | 31,203 | \$ | 28,504 | \$ | 31,986 |
| Noninvestment grade: |  |  |  |  |  |  |  |  |
| Noncriticized |  | 30,874 |  | 28,714 |  | 16,425 |  | 14,462 |
| Criticized performing |  | 2,371 |  | 6,079 |  | 5,769 |  | 7,859 |
| Criticized-total nonaccrual |  | 1,634 |  | 2,245 |  | 2,937 |  | 2,888 |
| Total noninvestment grade |  | 34,879 |  | 37,038 |  | 25,131 |  | 25,209 |
| Total retained loans | \$ | 66,576 | \$ | 68,241 | \$ | 53,635 | \$ | 57,195 |
| \% of total criticized to total retained loans |  | 6.02\% |  | 12.20\% |  | 16.23\% |  | 18.79\% |
| \% of nonaccrual loans to total retained loans |  | 2.45 |  | 3.29 |  | 5.48 |  | 5.05 |
| Loans by geographic distribution(a) |  |  |  |  |  |  |  |  |
| Total non-U.S. | \$ | 17,731 | \$ | 19,138 | \$ | 1,963 | \$ | 2,227 |
| Total U.S. |  | 48,845 |  | 49,103 |  | 51,672 |  | 54,968 |
| Total retained loans | \$ | 66,576 | \$ | 68,241 | \$ | 53,635 | \$ | 57,195 |
| Net charge-offs | \$ | 403 | \$ | 1,243 | \$ |  | \$ |  |
| \% of net charge-offs to retained loans(b) |  | 0.61\% |  | 1.82\% |  | 1.61\% |  | 1.20\% |
| Loan delinquency(c) |  |  |  |  |  |  |  |  |
| Current and less than 30 days past due and still accruing | \$ | 64,501 | \$ | 65,692 | \$ | 50,299 | \$ | 53,370 |
| 30-89 days past due and still accruing |  | 434 |  | 276 |  | 290 |  | 823 |
| 90 or more days past due and still accruing(d) |  | 7 |  | 28 |  | 109 |  | 114 |
| Nonaccrual |  | 1,634 |  | 2,245 |  | 2,937 |  | 2,888 |
| Total retained loans | \$ | 66,576 | \$ | 68,241 | \$ | 53,635 | \$ | 57,195 |

(a) U.S. and non-U.S. distribution is determined based predominantly on the domicile of the borrower.
(b) Ratios were calculated using end-of-period retained loans
(c) For wholesale loans, the past due status of a loan is generally not a significant indicator of credit quality due to the ongoing review and monitoring of an obligor's ability to meet contractual obligations. For a discussion of more significant factors, see page 223 of this Note.
d) Represents loans that are 90 days or more past due as to principal and/or interest, but that are still accruing interest; these loans are considered well-collateralized.
e) Effective January 1, 2010, the Firm adopted accounting guidance related to VIEs. Upon adoption of the guidance, the Firm consolidated $\$ 15.1$ billion of wholesale loans. For further information, see Note 16 on pages 244-259 of this Annual Report.
(f) Other primarily includes loans to special purpose entities and loans to private banking clients. See Note 1 on page 164-165 of this Annual Report for additional information on SPEs.

The following table presents additional information on the real estate class of loans within the wholesale portfolio segment for the periods ended December 31, 2010 and 2009. The real estate class primarily consists of secured commercial loans mainly to borrowers for multi-family and commercial lessor properties. Multi-family lending specifically finances apartment buildings. Commercial lessors receive financing specifically for real estate leased to retail, office and industrial tenants. The commercial construction and development loans represent financing for the construction of apartments, office and professional buildings and malls. Other real estate loans include lodging, real estate investment trusts ("REITs"), single-family, homebuilders and other real estate.

| December 31, (in millions, except ratios) | Multi-family |  |  |  | Commercial lessors |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 |  | 2009 |  | 2010 |  | 2009 |  |
| Real estate retained loans | \$ | 30,604 | \$ | 31,077 | \$ | 15,796 | \$ | 15,170 |
| Criticized exposure |  | 3,798 |  | 3,942 |  | 3,593 |  | 3,855 |
| \% of total real estate retained loans |  | 12.41\% |  | 12.68\% |  | 22.75\% |  | 25.41\% |
| Criticized nonaccrual | \$ | 1,016 | \$ | 1,109 | \$ | 1,549 | \$ | 687 |
| \% of total real estate retained loans |  | 3.32\% |  | 3.57\% |  | 9.81\% |  | 4.53\% |

(table continued from previous page)

(table continued from previous page)

| Commercial construction and development |  |  |  | Other |  |  |  | Total real estate loans |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2010 |  |  | 2009 | 2010 |  | 2009 |  | 2010 |  | 2009 |  |
| \$ | 3,395 | \$ | 4,599 | \$ | 3,840 | \$ | 6,349 | \$ | 53,635 | \$ | 57,195 |
|  | 619 |  | 1,359 |  | 696 |  | 1,591 |  | 8,706 |  | 10,747 |
|  | 18.23\% |  | 29.55\% |  | 18.13\% |  | 25.06\% |  | 16.23\% |  | 18.79\% |
| \$ | 174 | \$ | 313 | \$ | 198 | \$ | 779 | \$ | 2,937 | \$ | 2,888 |
|  | 5.13\% |  | 6.81\% |  | 5.16\% |  | 12.27\% |  | 5.48\% |  | 5.05\% |

## Notes to consolidated financial statements

## Wholesale impaired loans and loan modifications

Wholesale impaired loans include loans that have been placed on nonaccrual status and/or that have been modified in a TDR. All impaired loans are evaluated for an asset-specific allowance as described in Note 15 on pages 239-243 of this Annual Report.
The table below set forth information about the Firm's wholesale impaired loans.

| December 31, (in millions) | Commercial and industrial |  | Real estate |  | Financial institutions |  | Governmentagencies |  |  |  | Other |  |  | Total retained loans |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 | 2009 | 2010 | 2009 | 2010 | 2009 |  | 10 |  |  |  | 2010 | 2009 | 2010 | 2009 |
| Impaired loans |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| With an allowance | \$ 1,512 | \$ 2,171 | \$ 2,510 | \$ 2,998 | \$ 127 | \$ 579 | \$ | 22 | \$ | 4 | \$ | 697 | \$ 595 | \$ 4,868 | \$ 6,347 |
| Without an allowance(a) | 157 | 89 | 445 | 363 | 8 | 149 |  | - |  | - |  | 8 | 12 | 618 | 613 |
| Total impaired loans | \$ 1,669 | \$ 2,260 | \$ 2,955 | \$ 3,361 | \$135 | \$728 | \$ | 22 | \$ | 4 | \$ | 705 | \$ 607 | \$ 5,486 | \$6,960 |
| Allowance for loan losses related to impaired loans(b) | \$ 435 | \$ 454 | \$ 825 | \$ 1,212 | \$ 61 | \$ 165 | \$ | 14 | \$ | 1 | \$ | 239 | \$ 214 | \$ 1,574 | \$ 2,046 |
| Unpaid principal balance of impaired loans(c) | 2,453 | 3,042 | 3,487 | 3,649 | 244 | 918 |  | 30 |  | 4 |  | 1,046 | 760 | 7,260 | 8,373 |

(a) When the discounted cash flows, collateral value or market price equals or exceeds the recorded investment in the loan, then the loan does not require an allowance. This typically occurs when the impaired loans have been partially charged-off and/or there have been interest payments received and applied to the loan balance.
(b) The allowance for impaired loans is included in JPMorgan Chase's asset-specific allowance for loan losses.
(c) Represents the contractual amount of principal owed at December 31, 2010 and 2009. The unpaid principal balance differs from the impaired loan balances due to various factors, including charge-offs; interest payments received and applied to the carrying value; net deferred loan fees or costs; and discount or premiums on purchased loans.

The following table presents the Firm's average impaired loans for the years ended 2010, 2009 and 2008.

| For the year ended |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (in millions) |  | 2010 |  | 2009 |  | 2008 |
| Commercial and industrial | \$ | 1,655 | \$ | 1,767 | \$ | 337 |
| Real estate |  | 3,101 |  | 2,420 |  | 389 |
| Financial institutions |  | 304 |  | 685 |  | 49 |
| Government agencies |  | 5 |  | 4 |  | 1 |
| Other |  | 884 |  | 468 |  | 120 |
| Total(a) | \$ | 5,949 | \$ | 5,344 | \$ | 896 |

(a) The related interest income on accruing impaired loans, largely in real estate, was $\$ 21$ million, $\$ 15$ million and zero for the years ended December 31, 2010,2009 and 2008. The interest income recognized on a cash basis was not material for the years 2010, 2009 and 2008.

The following table provides information about the Firm's wholesale loans modified in troubled debt restructurings. These TDR loans are included as impaired loans in the above tables.

| December 31, | Commercial and industrial |  | Real estate |  | Financial institutions |  |  |  | Government agencies |  |  | Other |  |  |  | Total retained loans |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (in millions) | 2010 | 2009 | 2010 | 2009 |  | 10 |  | 009 | 2010 |  | 09 |  | 10 |  | 09 | 2010 | 2009 |
| Loans modified in troubled debt restructurings(a) | \$ 212 | \$ 253 | \$ 907 | \$ 856 | \$ | 1 | \$ | - | \$ 22 | \$ | - | \$ | 1 | \$ | - | \$ 1,143 | \$ 1,109 |
| TDRs on nonaccrual status | 163 | 222 | 831 | 269 |  | 1 |  | - | 22 |  | - |  | 1 |  | - | 1,018 | 491 |
| Additional commitments to lend to borrowers whose loans have been modified in TDRs | 1 | 33 | - | 6 |  | - |  | - | - |  | - |  | - |  | - | 1 | 39 |

[^3]
## Consumer loan portfolio

Consumer loans, excluding credit card loans, consist primarily of residential mortgages, home equity loans, auto loans, business banking loans, and student and other loans, with a primary focus on serving the prime consumer credit market. The portfolio also includes home equity loans secured by junior liens and mortgage loans with interest-only payment options to predominantly prime borrowers, as well as certain payment-option loans originated by Washington Mutual that may result in negative amortization.
The table below provides information about consumer retained loans by class, excluding the credit card loan portfolio segment.

| December 31, (in millions) | $\mathbf{2 0 1 0}$ | 2009 |
| :--- | ---: | ---: |
| Residential real estate - excluding PCI |  |  |
| Home equity: | $\mathbf{5 2 4 , 3 7 6}$ | $\$ 27,376$ |
| Senior lien(a) | $\mathbf{6 4 , 0 0 9}$ | 74,049 |
| Junior lien(b) |  |  |
| Mortgages: | $\mathbf{7 4 , 5 3 9}$ | 75,428 |
| Prime, including option ARMs(c) | $\mathbf{1 1 , 2 8 7}$ | 12,526 |
| Subprime(c) |  |  |
| Other consumer loans | $\mathbf{4 8 , 3 6 7}$ | 46,031 |
| Auto(c) | $\mathbf{1 6 , 8 1 2}$ | 16,974 |
| Business banking | $\mathbf{1 5 , 3 1 1}$ | 14,726 |
| Student and other(c) | $\mathbf{2 4 , 4 5 9}$ | 26,520 |
| Residential real estate - PCI | $\mathbf{1 7 , 3 2 2}$ | 19,693 |
| Home equity | $\mathbf{5 , 3 9 8}$ | 5,993 |
| Prime mortgage | $\mathbf{2 5 , 5 8 4}$ | $\mathbf{2 9 , 0 3 9}$ |
| Subprime mortgage | $\mathbf{\$ 3 2 7 , 4 6 4}$ | $\$ 348,355$ |
| Option ARMs |  |  |

(a) Represents loans where JPMorgan Chase holds the first security interest on the property.
(b) Represents loans where JPMorgan Chase holds a security interest that is subordinate in rank to other liens.
(c) Effective January 1, 2010, the Firm adopted accounting guidance related to VIEs. Upon adoption of the guidance, the Firm consolidated $\$ 4.8$ billion of certain consumer loan securitization entities, primarily mortgage-related. For further information, see Note 16 on pages 244-259 of this Annual Report.
Delinquency rates are a primary credit quality indicator for consumer loans. Loans that are more than 30 days past due provide an early warning of borrowers that may be experiencing financial difficulties and/or who may be unable or unwilling to repay the loan. As the loan continues to age, it becomes more clear that the borrower is likely either unable or unwilling to pay. In the case of residential real estate loans, late-stage delinquencies (greater than 150 days past due) are a strong indicator of loans
that will ultimately result in a short sale or foreclosure. In addition to delinquency rates, other credit quality indicators for consumer loans vary based on the class of loan, as follows:

- For residential real estate loans, including both non- PCI and PCI portfolios, the current estimated loan-to-value ("LTV") ratio, or the combined LTV ratio in the case of loans with a junior lien, is an indicator of the potential loss severity in the event of default. Additionally, LTV or combined LTV can provide insight into a borrower's continued willingness to pay, as the delinquency rate of high-LTV loans tends to be greater than that for loans where the borrower has equity in the collateral. The geographic distribution of the loan collateral also provides in-sight as to the credit quality of the portfolio, as factors such as the regional economy, home price changes and specific events such as hurricanes, earthquakes, etc. will affect credit quality. The borrowers' current or "refreshed" FICO score is a secondary credit-quality indicator for certain loans, as FICO scores are an indication of the borrower's credit payment history. Thus, a loan to a borrower with a low FICO score (660 or below) is considered to be of higher risk than a loan to a borrower with a high FICO score. Further, a loan to a borrower with a high LTV ratio and a low FICO score is at greater risk of default than a loan to a borrower that has both a high LTV ratio and a high FICO score.
- For auto, scored business banking and student loans, geographic distribution is an indicator of the credit performance of the portfolio. Similar to residential real estate loans, geographic distribution provides insights into the portfolio performance based on regional economic activity and events.
- Risk-rated business banking and auto loans are similar to wholesale loans in that the primary credit quality indicators are the risk rating that is assigned to the loan and whether the loans are considered to be criticized and/or nonaccrual. Risk ratings are reviewed on a regular and ongoing basis by Credit Risk Management and are adjusted as necessary for updated information affecting borrowers' ability to fulfill their obligations. Consistent with other classes of consumer loans, the geographic distribution of the portfolio provides insights into portfolio performance based on regional economic activity and events.


## Notes to consolidated financial statements

## Residential real estate - excluding PCI loans

The tables below provide information by class for residential real estate (excluding PCl ) retained loans in the consumer, excluding credit card portfolio segment.

| As of or for the year ended December 31, (in millions, except ratios) | Home equity |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Senior lien |  |  |  | Junior lien |  |  |  |
|  | 2010 |  | 2009 |  | 2010 |  | 2009 |  |
| Net charge-offs | \$ | 262 | \$ | 234 | \$ | 3,182 | \$ | 4,448 |
| \% of net charge-offs to retained loans |  | 1.00\% |  | 0.80\% |  | 4.63\% |  | 5.62\% |
| Loan delinquency |  |  |  |  |  |  |  |  |
| Current and less than 30 days past due | \$ | 23,615 | \$ | 26,543 | \$ | 62,315 | \$ | 71,534 |
| 30-149 days past due |  | 414 |  | 512 |  | 1,508 |  | 2,224 |
| 150 or more days past due |  | 347 |  | 321 |  | 186 |  | 291 |
| Total retained loans | \$ | 24,376 | \$ | 27,376 | \$ | 64,009 | \$ | 74,049 |
| \% of 30+ days past due to total retained loans |  | 3.12\% |  | 3.04\% |  | 2.65\% |  | 3.40\% |
| 90 or more days past due and still accruing | \$ | - | \$ | - | \$ | - | \$ | - |
| Nonaccrual loans(a) |  | 479 |  | 477 |  | 784 |  | 1,188 |
| Current estimated LTV ratios(b)(c)(d) |  |  |  |  |  |  |  |  |
| Greater than 125\% and refreshed FICO scores: |  |  |  |  |  |  |  |  |
| Equal to or greater than 660 | \$ | 528 | \$ | 472 | \$ | 6,928 | \$ | 6,788 |
| Less than 660 |  | 238 |  | 235 |  | 2,495 |  | 2,703 |
| 101\% to 125\% and refreshed FICO scores: |  |  |  |  |  |  |  |  |
| Equal to or greater than 660 |  | 974 |  | 933 |  | 9,403 |  | 10,616 |
| Less than 660 |  | 325 |  | 319 |  | 2,873 |  | 3,277 |
| 80\% to 100\% and refreshed FICO scores: |  |  |  |  |  |  |  |  |
| Equal to or greater than 660 |  | 2,860 |  | 3,038 |  | 13,333 |  | 16,098 |
| Less than 660 |  | 738 |  | 825 |  | 3,155 |  | 3,657 |
| Less than 80\% and refreshed FICO scores: |  |  |  |  |  |  |  |  |
| Equal to or greater than 660 |  | 15,994 |  | 18,591 |  | 22,527 |  | 27,225 |
| Less than 660 |  | 2,719 |  | 2,963 |  | 3,295 |  | 3,685 |
| U.S. government-guaranteed |  | - |  | - |  | - |  | - |
| Total retained loans | \$ | 24,376 | \$ | 27,376 | \$ | 64,009 | \$ | 74,049 |
| Geographic region |  |  |  |  |  |  |  |  |
| California | \$ | 3,348 | \$ | 3,658 | \$ | 14,656 | \$ | 16,990 |
| New York |  | 3,272 |  | 3,438 |  | 12,278 |  | 13,456 |
| Texas |  | 3,594 |  | 4,306 |  | 2,239 |  | 2,711 |
| Florida |  | 1,088 |  | 1,198 |  | 3,470 |  | 4,123 |
| Illinois |  | 1,635 |  | 1,795 |  | 4,248 |  | 4,849 |
| Ohio |  | 2,010 |  | 2,338 |  | 1,568 |  | 1,865 |
| New Jersey |  | 732 |  | 777 |  | 3,617 |  | 4,090 |
| Michigan |  | 1,176 |  | 1,329 |  | 1,618 |  | 1,900 |
| Arizona |  | 1,481 |  | 1,648 |  | 2,979 |  | 3,582 |
| Washington |  | 776 |  | 868 |  | 2,142 |  | 2,481 |
| All other(e) |  | 5,264 |  | 6,021 |  | 15,194 |  | 18,002 |
| Total retained loans | \$ | 24,376 | \$ | 27,376 | \$ | 64,009 | \$ | 74,049 |

(a) At December 31, 2010 and 2009, nonaccrual loans excluded mortgage loans insured by U.S. government agencies of $\$ 10.5$ billion and $\$ 9.0$ billion, respectively, that are 90 days past due and accruing at the guaranteed reimbursement rate. These amounts are excluded as reimbursement of insured amounts is proceeding normally.
(b) Represents the aggregate unpaid principal balance of loans divided by the estimated current property value. Current property values are estimated, at a minimum, quarterly, based on home valuation models utilizing nationally recognized home price index valuation estimates and do not represent actual appraised loan level collateral values; as such, the resulting ratios are necessarily imprecise and should be viewed as estimates.
(c) Junior lien represents combined LTV, which considers all available lien positions related to the property. All other products are presented without consideration of subordinate liens on the property.
(d) Refreshed FICO scores represent each borrower's most recent credit score obtained by the Firm; current FICO scores are obtained at least quarterly.
(e) At December 31, 2010 and 2009, includes prime mortgage loans insured by U.S. government agencies of $\$ 12.9$ billion and $\$ 10.8$ billion, respectively.
(f) At December 31, 2010 and 2009, includes 30+ day delinquent mortgage loans that are insured by U.S. government agencies of $\$ 11.4$ billion and $\$ 9.7$ billion, respectively. These amounts are considered current as reimbursement of insured amounts is proceeding normally.
(table continued from previous page)


## Notes to consolidated financial statements

## Residential real estate impaired loans and loan modifications - excluding PCI loans

The Firm is participating in the U.S. Treasury's Making Home Affordable ("MHA") programs and is continuing to expand its other loss-mitigation efforts for financially distressed borrowers who do not qualify for the MHA programs.
MHA, as well as the Firm's other loss-mitigation programs, generally provide various concessions to financially troubled borrowers including, but not limited to, interest rate reductions, term or payment extensions and deferral of principal payments that would otherwise have been required under the terms of the original agreement. Principal forgiveness has been limited to a specific modification program for option ARMs.

Generally, borrowers must make at least three payments under the revised contractual terms during a trial modification and be successfully re-underwritten with income verification before a mortgage or home equity loan can be permanently modified. When the Firm modifies home equity lines of credit in troubled debt restructurings, future lending commitments related to the modified loans are canceled as part of the terms of the modification.

Modifications of residential real estate loans other than PCI loans are generally accounted for and reported as TDRs. For further discussion of the accounting for loan modifications and TDRs, see Loan modifications on pages 221-222 of this Note.

The tables below set forth information about the Firm's residential real estate impaired loans, excluding PCI. These loans are considered to be impaired as they have been modified in a TDR. All impaired loans are evaluated for an asset-specific allowance as described in Note 15 on pages 239-243 of this Annual Report.

| December 31, (in millions) | Home equity |  |  |  |  |  |  |  | Mortgages |  |  |  |  |  | Total residential real estate (excluding PCI) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Senior lien |  |  |  | Junior lien |  |  |  | Prime, including option ARMs |  |  |  | Subprime |  |  |  |  |
|  | 2010 |  | 2009 |  | 2010 |  | 2009 |  | 2010 |  | 2009 |  | 2010 | 2009 | 2010 | 2009 |  |
| Impaired loans(a)(b) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| With an allowance | \$ | 211 | \$ | 167 | \$ | 258 | \$ | 221 | \$ | 1,525 | \$ | 552 | \$ 2,563 | \$ 1,952 | \$ 4,557 |  | 2,892 |
| Without an allowance(c) |  | 15 |  | 1 |  | 25 |  | 1 |  | 559 |  | 90 | 188 | 46 | 787 |  | 138 |
| Total impaired loans(d) | \$ | 226 | \$ | 168 | \$ | 283 | \$ | 222 | \$ | 2,084 | \$ | 642 | \$ 2,751 | \$ 1,998 | \$ 5,344 |  | 3,030 |
| Allowance for loan losses related to impaired loans | \$ | 77 | \$ | 73 | \$ | 82 | \$ | 100 | \$ | 97 | \$ | 70 | \$ 555 | \$ 494 | \$ 811 |  | 737 |
| Unpaid principal balance of impaired loans(e) |  | 265 |  | 178 |  | 402 |  | 273 |  | 2,751 |  | 783 | 3,777 | 2,303 | 7,195 |  | 3,537 |
| Impaired loans on nonaccrual status |  | 38 |  | 30 |  | 63 |  | 43 |  | 534 |  | 249 | 632 | 598 | 1,267 |  | 920 |

(a) Represents loans modified in a TDR. These modifications generally provided interest rate concessions to the borrower or deferral of principal repayments.
(b) There are no additional commitments to lend to borrowers whose loans have been modified in TDRs as of December 31, 2010 and 2009.
(c) When discounted cash flows or collateral value equals or exceeds the recorded investment in the loan, then the loan does not require an allowance. This typically occurs when the impaired loans have been partially charged-off and/or there have been interest payments received and applied to the loan balance.
(d) At December 31, 2010 and 2009, $\$ 3.0$ billion and $\$ 296$ million, respectively, of loans modified subsequent to repurchase from Ginnie Mae were excluded from loans accounted for as TDRs. When such loans perform subsequent to modification they are generally sold back into Ginnie Mae loan pools. Modified loans that do not re-perform become subject to foreclosure. Substantially all amounts due under the terms of these loans continue to be insured and, where applicable, reimbursement of insured amounts is proceeding normally.
(e) Represents the contractual amount of principal owed at December 31, 2010 and 2009. The unpaid principal balance differs from the impaired loan balances due to various factors, including charge-offs; interest payments received and applied to the principal balance; net deferred loan fees or costs; and discounts or premiums on purchased loans.

The following table presents average impaired loans and the related interest income reported by the Firm.

| For the year ended December 31, (in millions) | Impaired loans (average) |  |  |  |  |  | Interest income on impaired loans(a) |  |  |  |  |  | Interest income on impaired loans on a cash basis(a) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 |  | 2009 |  | 2008 |  | 2010 |  | 2009 |  | 2008 |  | 2010 |  | 2009 |  | 2008 |  |
| Home equity |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Senior lien | \$ | 207 | \$ | 142 | \$ | 39 | \$ | 15 | \$ | 7 | \$ | 2 | \$ | 1 | \$ | 1 | \$ | - |
| Junior lien |  | 266 |  | 187 |  | 39 |  | 10 |  | 9 |  | 3 |  | 1 |  | 1 |  | - |
| Mortgages |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Prime, including option ARMs |  | 1,530 |  | 496 |  | 41 |  | 70 |  | 34 |  | 2 |  | 14 |  | 8 |  | - |
| Subprime |  | 2,539 |  | 1,948 |  | 690 |  | 121 |  | 98 |  | 47 |  | 19 |  | 6 |  | 2 |
| Total residential real estate (excluding PCI) | \$ | 4,542 | \$ | 2,773 | \$ | 809 | \$ | 216 | \$ | 148 | \$ | 54 | \$ | 35 | \$ | 16 | \$ | 2 |

 terms. As of December 31, 2010 and 2009, loans of $\$ 580$ million and $\$ 256$ million, respectively, are TDRs for which the borrowers have not yet made six payments under their modified terms.

## Other consumer loans

The tables below provide information for other consumer retained loan classes, including auto, business banking and student loans.

| As of or for the year ended December 31, (in millions, except ratios) | Auto(c) |  |  |  | Business banking |  |  |  | Student and other(c) |  |  |  | Total other consumer |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 |  | 2009 |  | 2010 |  | 2009 |  | 2010 |  | 2009 |  | 2010 |  | 2009 |  |
| Net charge-offs | \$ | 298 | \$ | 627 | \$ | 707 | \$ | 842 | \$ | 459 | \$ | 443 | \$ | 1,464 | \$ | 1,912 |
| \% of net charge-offs to retained loans |  | 0.63\% |  | 1.44\% |  | 4.23\% |  | 4.73\% |  | 2.85\% |  | 2.90\% |  | 1.82\% |  | 2.49\% |
| Loan delinquency |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Current and less than 30 days past due | \$ | 47,778 | \$ | 45,281 | \$ | 16,240 | \$ | 16,277 | \$ | 15,074(d) | \$ | 14,479(d) | \$ | 79,092 | \$ | 76,037 |
| 30-119 days past due |  | 579 |  | 720 |  | 351 |  | 427 |  | 232 |  | 240 |  | 1,162 |  | 1,387 |
| 120 or more days past due |  | 10 |  | 30 |  | 221 |  | 270 |  | 5 |  | 7 |  | 236 |  | 307 |
| Total retained loans | \$ | 48,367 | \$ | 46,031 | \$ | 16,812 | \$ | 16,974 | \$ | 15,311 | \$ | 14,726 | \$ | 80,490 | \$ | 77,731 |


| $\%$ of $30+$ days past due to total retained loans |  | 1.22\% |  | 1.63\% |  | 3.40\% |  | 4.11\% |  | 1.55\% |  | 1.68\% |  | 1.74\% |  | 2.18\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 90 or more days past due and still accruing | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 625 | \$ | 542 | \$ | 625 | \$ | 542 |
| Nonaccrual loans(a) |  | 141 |  | 177 |  | 832 |  | 826 |  | 67 |  | 74 |  | 1,040 |  | 1,077 |
| Geographic region |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| California | \$ | 4,307 | \$ | 4,440 | \$ | 851 | \$ | 515 | \$ | 1,330 | \$ | 1,304 | \$ | 6,488 | \$ | 6,259 |
| New York |  | 3,875 |  | 3,756 |  | 2,877 |  | 3,040 |  | 1,305 |  | 1,243 |  | 8,057 |  | 8,039 |
| Texas |  | 4,505 |  | 4,330 |  | 2,550 |  | 2,487 |  | 1,273 |  | 1,197 |  | 8,328 |  | 8,014 |
| Florida |  | 1,923 |  | 1,750 |  | 220 |  | 166 |  | 722 |  | 715 |  | 2,865 |  | 2,631 |
| Illinois |  | 2,608 |  | 2,440 |  | 1,320 |  | 1,380 |  | 940 |  | 868 |  | 4,868 |  | 4,688 |
| Ohio |  | 2,961 |  | 3,153 |  | 1,647 |  | 1,783 |  | 1,010 |  | 957 |  | 5,618 |  | 5,893 |
| New Jersey |  | 1,842 |  | 1,776 |  | 422 |  | 426 |  | 502 |  | 475 |  | 2,766 |  | 2,677 |
| Michigan |  | 2,434 |  | 2,108 |  | 1,401 |  | 1,613 |  | 729 |  | 686 |  | 4,564 |  | 4,407 |
| Arizona |  | 1,499 |  | 1,479 |  | 1,218 |  | 1,210 |  | 387 |  | 366 |  | 3,104 |  | 3,055 |
| Washington |  | 716 |  | 627 |  | 115 |  | 84 |  | 279 |  | 266 |  | 1,110 |  | 977 |
| All other |  | 21,697 |  | 20,172 |  | 4,191 |  | 4,270 |  | 6,834 |  | 6,649 |  | 32,722 |  | 31,091 |
| Total retained loans | \$ | 48,367 | \$ | 46,031 | \$ | 16,812 | \$ | 16,974 | \$ | 15,311 | \$ | 14,726 | \$ | 80,490 | \$ | 77,731 |
| Loans by risk ratings(b) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Noncriticized | \$ | 5,803 | \$ | 4,564 | \$ | 10,831 | \$ | 10,450 |  | NA |  | NA | \$ | 16,634 | \$ | 15,014 |
| Criticized performing |  | 265 |  | 448 |  | 502 |  | 517 |  | NA |  | NA |  | 767 |  | 965 |
| Criticized nonaccrual |  | 12 |  | 39 |  | 574 |  | 542 |  | NA |  | NA |  | 586 |  | 581 |

 $\$ 625$ million and $\$ 542$ million, respectively. These amounts are excluded as reimbursement of insured amounts is proceeding normally.
 and/or nonaccrual.
c) Effective January 1, 2010, the Firm adopted accounting guidance related to VIEs. Upon the adoption of the guidance, the Firm consolidated certain consumer loan securitization entities. For further information, see Note 16 on pages 244-259 of this Annual Report
 $\$ 942$ million at December 31, 2010 and 2009, respectively. These amounts are considered current as reimbursement of insured amounts is proceeding normally.

## Notes to consolidated financial statements

## Other consumer impaired loans

The tables below set forth information about the Firm's other consumer impaired loans, including risk-rated business banking and auto loans that have been placed on nonaccrual status, and any loan that has been modified in a troubled debt restructuring.

| December 31, (in millions) | Auto |  |  |  | Business banking |  |  |  | Total other consumer(c) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 |  | 2009 |  | 2010 |  | 2009 |  | 2010 |  | 2009 |  |
| Impaired loans |  |  |  |  |  |  |  |  |  |  |  |  |
| With an allowance | \$ | 102 | \$ | 118 | \$ | 774 | \$ | 500 | \$ | 876 | \$ | 618 |
| Without an allowance(a) |  | - |  | - |  | - |  | - |  | - |  | - |
| Total impaired loans | \$ | 102 | \$ | 118 | \$ | 774 | \$ | 500 | \$ | 876 | \$ | 618 |
| Allowance for loan losses related to impaired loans | \$ | 16 | \$ | 30 | \$ | 248 | \$ | 129 | \$ | 264 | \$ | 159 |
| Unpaid principal balance of impaired loans(b) |  | 132 |  | 137 |  | 899 |  | 577 |  | 1,031 |  | 714 |

(a) When discounted cash flows, collateral value or market price equals or exceeds the recorded investment in the loan, then the loan does not require an allowance. This typically occurs when the impaired loans have been partially charged-off and/or there have been interest payments received and applied to the loan balance.
b) Represents the contractual amount of principal owed at December 31, 2010 and 2009. The unpaid principal balance differs from the impaired loan balances due to various factors, including charge-offs; interest payments received and applied to the principal balance; net deferred loan fees or costs; and discounts or premiums on purchased loans.
(c) There were no student and other loans modified in TDRs at December 31, 2010 and 2009.

The following table presents average impaired loans.

| For the year ended December 31, <br> (in millions) | Impaired loans (average)(b) |  |
| :--- | :---: | :---: |
| Auto <br> Business banking | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 0 9}$ |
| Total other consumer(a) | $\mathbf{1 2 0}$ | $\mathbf{1 2 0 0 8}$ |

(a) There were no student and other loans modified in TDRs at December 31, 2010, 2009 and 2008.
(b) The related interest income on impaired loans, including those on cash basis, were not material for the years 2010, 2009 and 2008.

The following table provides information about the Firm's other consumer loans modified in troubled debt restructurings. These TDR loans are included as impaired loans in the tables above.

| December 31, (in millions) | Auto |  |  |  | Business banking |  |  |  | Total other consumer(c) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 |  | 2009 |  | 2010 |  | 2009 |  | 2010 |  | 2009 |  |
| Loans modified in troubled debt restructurings(a)(b) | \$ | 91 | \$ | 79 | \$ | 395 | \$ | 17 | \$ | 486 | \$ | 96 |
| TDRs on nonaccrual status |  | 39 |  | 30 |  | 268 |  | 16 |  | 307 |  | 46 |

(a) These modifications generally provided interest rate concessions to the borrower or deferral of principal repayments.
(b) Additional commitments to lend to borrowers whose loans have been modified in TDRs as of December 31, 2010 and 2009 are immaterial.
(c) There were no student and other loans modified in TDRs at December 31, 2010 and 2009.

## Purchased credit-impaired ("PCI") loans

PCI loans were determined to be credit-impaired upon acquisition based on specific risk characteristics of the loan, including product type, loan-to-value ratios, FICO scores, and past-due status. Upon acquisition, credit-impaired loans acquired in the same fiscal quarter may be aggregated into one or more pools, provided that the loans have common risk characteristics. A pool is then accounted for as a single asset with a single composite interest rate and an aggregate expectation of cash flows. With respect to the Washington Mutual transaction, all of the consumer loans were aggregated into pools of loans with common risk characteristics.
PCI loans are initially recorded at fair value upon acquisition. For each PCI loan, or pool of loans, the Firm is required to estimate the total cash flows (both principal and interest) expected to be collected over the remaining life of the loan or pool. These estimates incorporate assumptions regarding default rates, loss severities, the amounts and timing of prepayments and other factors that reflect then-current market conditions.

The excess of cash flows expected to be collected over the carrying value of the underlying loans is referred to as the accretable yield. This amount is not reported on the Firm's Consolidated Balance Sheets but is accreted into interest income at a level rate of return over the remaining estimated lives of the underlying pools of loans. For variable-rate loans, expected future cash flows were initially based on the rate in effect at acquisition; expected future cash flows are recalculated as rates change over the lives of the loans.

On a quarterly basis, the Firm updates the amount of loan principal and interest cash flows expected to be collected. Probable decreases in expected loan principal cash flows trigger the recognition of impairment, which is then measured as the present value of the expected principal loss plus any related foregone interest cash flows, discounted at the pool's effective interest rate. Impairments are recognized through the provision and allowance for loan losses. Probable and significant increases in expected cash flows (e.g., decreased principal credit losses, the net benefit of modifications) would first reverse any previously recorded allowance for loan losses with any remaining increases recognized prospectively as a yield adjustment over the remaining estimated lives of the underlying loans. The impacts of (i) pre-
payments, (ii) changes in variable interest rates, and (iii) any other changes in the timing of expected cash flows are recognized prospectively as adjustments to interest income. Disposals of loans which may include sales of loans, receipt of payments in full by the borrower, or foreclosure - result in removal of the loan from the PCI portfolio.

If the timing and/or amounts of expected cash flows on PCI loans were determined not to be reasonably estimable, no interest would be accreted and the loans would be reported as nonaccrual loans; however, since the timing and amounts of expected cash flows for the Firm's PCI consumer loans are reasonably estimable, interest is being accreted and the loans are being reported as performing loans.
Charge-offs are not recorded on PCI loans until actual losses exceed the estimated losses that were recorded as purchase accounting adjustments at acquisition date. To date, no charge-offs have been recorded for these consumer loans.

The PCI portfolio affects the Firm's results of operations primarily through: (i) contribution to net interest margin; (ii) expense related to defaults and servicing resulting from the liquidation of the loans; and (iii) any provision for loan losses. The PCI loans acquired in the Washington Mutual transaction were funded based on the interest rate characteristics of the loans. For example, variable-rate loans were funded with variable-rate liabilities and fixed-rate loans were funded with fixed-rate liabilities with a similar maturity profile. A net spread will be earned on the declining balance of the portfolio, which is estimated as of December 31, 2010, to have a remaining weightedaverage life of 7.0 years.
The Firm continues to modify certain PCI loans. The impact of these modifications is incorporated into the Firm's quarterly assessment of whether a probable and significant change in expected cash flows has occurred, and the loans continue to be accounted for and reported as PCI loans. The impact of modifications on expected cash flows is estimated using the Firm's experience with previously modified loans and other relevant data. Additionally, the Firm monitors the performance of modifications and updates and/or refines assumptions as experience and changes in circumstances or data warrant.

## Notes to consolidated financial statements

## Residential real estate - PCI loans

The table below sets forth information about the Firm's consumer PCI loans.

| December 31, (in millions, except ratios) | Home equity |  |  |  | Prime mortgage |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 |  | 2009 |  | 2010 |  | 2009 |  |
| Carrying value(a) | \$ | 24,459 | \$ | 26,520 | \$ | 17,322 | \$ | 19,693 |
| Related allowance for loan losses(b) |  | 1,583 |  | - |  | 1,766 |  | 1,090 |
| Loan delinquency (based on unpaid principal balance) |  |  |  |  |  |  |  |  |
| Current and less than 30 days past due | \$ | 25,783 | \$ | 29,697 | \$ | 13,035 | \$ | 15,404 |
| 30-149 days past due |  | 1,348 |  | 2,117 |  | 1,468 |  | 2,026 |
| 150 or more days past due |  | 1,181 |  | 1,144 |  | 4,425 |  | 4,542 |
| Total loans | \$ | 28,312 | \$ | 32,958 | \$ | 18,928 | \$ | 21,972 |
| \% of 30+ days past due to total loans |  | 8.93\% |  | 9.89\% |  | 31.13\% |  | 29.89\% |


| Current estimated LTV ratios <br> (based on unpaid principal balance)(c)(d) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Greater than 125\% and refreshed FICO scores: |  |  |  |  |  |  |  |  |
| Equal to or greater than 660 | \$ | 6,324 | \$ | 6,139 | \$ | 2,400 | \$ | 1,935 |
| Less than 660 |  | 4,052 |  | 4,401 |  | 2,744 |  | 2,244 |
| 101\% to 125\% and refreshed FICO scores: |  |  |  |  |  |  |  |  |
| Equal to or greater than 660 |  | 6,097 |  | 6,875 |  | 3,815 |  | 4,566 |
| Less than 660 |  | 2,701 |  | 3,141 |  | 3,011 |  | 3,213 |
| 80\% to 100\% and refreshed FICO scores: |  |  |  |  |  |  |  |  |
| Equal to or greater than 660 |  | 4,019 |  | 5,713 |  | 1,970 |  | 3,364 |
| Less than 660 |  | 1,483 |  | 1,930 |  | 1,857 |  | 2,594 |
| Lower than 80\% and refreshed FICO scores: |  |  |  |  |  |  |  |  |
| Equal to or greater than 660 |  | 2,539 |  | 3,330 |  | 1,443 |  | 1,832 |
| Less than 660 |  | 1,097 |  | 1,429 |  | 1,688 |  | 2,224 |
| Total unpaid principal balance | \$ | 28,312 | \$ | 32,958 | \$ | 18,928 | \$ | 21,972 |
| Geographic region (based on unpaid principal balance) |  |  |  |  |  |  |  |  |
| California | \$ | 17,012 | \$ | 19,749 | \$ | 10,891 | \$ | 12,657 |
| New York |  | 1,316 |  | 1,495 |  | 1,111 |  | 1,239 |
| Texas |  | 525 |  | 616 |  | 194 |  | 231 |
| Florida |  | 2,595 |  | 3,045 |  | 1,519 |  | 1,801 |
| Illinois |  | 627 |  | 723 |  | 562 |  | 650 |
| Ohio |  | 38 |  | 47 |  | 91 |  | 106 |
| New Jersey |  | 540 |  | 625 |  | 486 |  | 540 |
| Michigan |  | 95 |  | 113 |  | 279 |  | 307 |
| Arizona |  | 539 |  | 653 |  | 359 |  | 438 |
| Washington |  | 1,535 |  | 1,766 |  | 451 |  | 533 |
| All other |  | 3,490 |  | 4,126 |  | 2,985 |  | 3,470 |
| Total unpaid principal balance | \$ | 28,312 | \$ | 32,958 | \$ | 18,928 | \$ | 21,972 |

(a) Carrying value includes the effect of fair value adjustments that were applied to the consumer PCI portfolio at the date of acquisition.
(b) Management concluded as part of the Firm's regular assessment of the PCI loan pools that it was probable that higher expected principal credit losses would result in a decrease in expected cash flows. As a result, an allowance for loan losses for impairment of these pools has been recognized.
(c) Represents the aggregate unpaid principal balance of loans divided by the estimated current property value. Current property values are estimated, at a minimum quarterly, based on home valuation models utilizing nationally recognized home price index valuation estimates and do not represent actual appraised loan level collateral values; as such the resulting ratios are necessarily imprecise and should be viewed as estimates. Current estimated combined LTV for junior lien home equity loans considers all available lien positions related to the property.
(d) Refreshed FICO scores represent each borrower's most recent credit score obtained by the Firm; current FICO scores are obtained at least quarterly.
(table continued from previous page)

| Subprime mortgage |  |  |  | Option ARMs |  |  |  | Total PCI |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2010 |  |  | 2009 | 2010 |  |  | 2009 | 2010 |  |  | 2009 |
| \$ | 5,398 | \$ | 5,993 | \$ | 25,584 | \$ | 29,039 | \$ | 72,763 | \$ | 81,245 |
|  | 98 |  |  |  | 1,494 |  | 491 |  | 4,941 |  | 1,581 |
| \$ | 4,312 | \$ | 4,531 | \$ | 18,672 | \$ | 23,709 | \$ | 61,802 | \$ | 73,341 |
|  | 1,020 |  | 1,383 |  | 2,215 |  | 4,010 |  | 6,051 |  | 9,536 |
|  | 2,710 |  | 3,107 |  | 9,904 |  | 9,660 |  | 18,220 |  | 18,453 |
| \$ | 8,042 | \$ | 9,021 | \$ | 30,791 | \$ | 37,379 | \$ | 86,073 | \$ | 101,330 |
|  | 46.38\% |  | 49.77\% |  | 39.36\% |  | 36.57\% |  | 28.20\% |  | 27.62\% |
| \$ | 432 | \$ | 409 | \$ | 2,681 | \$ | 4,081 | \$ | 11,837 | \$ | 12,564 |
|  | 2,129 |  | 2,084 |  | 6,330 |  | 6,761 |  | 15,255 |  | 15,490 |
|  | 424 |  | 481 |  | 4,292 |  | 5,518 |  | 14,628 |  | 17,440 |
|  | 1,663 |  | 1,877 |  | 5,005 |  | 6,291 |  | 12,380 |  | 14,522 |
|  | 374 |  | 497 |  | 4,152 |  | 4,925 |  | 10,515 |  | 14,499 |
|  | 1,477 |  | 1,917 |  | 3,551 |  | 4,213 |  | 8,368 |  | 10,654 |
|  | 186 |  | 179 |  | 2,281 |  | 2,549 |  | 6,449 |  | 7,890 |
|  | 1,357 |  | 1,577 |  | 2,499 |  | 3,041 |  | 6,641 |  | 8,271 |
| \$ | 8,042 | \$ | 9,021 | \$ | 30,791 | \$ | 37,379 | \$ | 86,073 | \$ | 101,330 |
| \$ | 1,971 | \$ | 2,244 | \$ | 16,130 | \$ | 19,637 | \$ | 46,004 | \$ | 54,287 |
|  | 736 |  | 774 |  | 1,703 |  | 1,848 |  | 4,866 |  | 5,356 |
|  | 435 |  | 476 |  | 155 |  | 191 |  | 1,309 |  | 1,514 |
|  | 906 |  | 1,049 |  | 3,916 |  | 5,106 |  | 8,936 |  | 11,001 |
|  | 438 |  | 480 |  | 760 |  | 896 |  | 2,387 |  | 2,749 |
|  | 122 |  | 135 |  | 131 |  | 156 |  | 382 |  | 444 |
|  | 316 |  | 350 |  | 1,064 |  | 1,166 |  | 2,406 |  | 2,681 |
|  | 214 |  | 245 |  | 345 |  | 448 |  | 933 |  | 1,113 |
|  | 165 |  | 194 |  | 528 |  | 708 |  | 1,591 |  | 1,993 |
|  | 178 |  | 200 |  | 745 |  | 877 |  | 2,909 |  | 3,376 |
|  | 2,561 |  | 2,874 |  | 5,314 |  | 6,346 |  | 14,350 |  | 16,816 |
| \$ | 8,042 | \$ | 9,021 | \$ | 30,791 | \$ | 37,379 | \$ | 86,073 | \$ | 101,330 |

## Notes to consolidated financial statements

The table below sets forth the accretable yield activity for the Firm's PCI consumer loans for the years ended December 31, 2010, 2009 and 2008.

| Year ended December 31, (in millions, except ratios) | Total PCI |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 |  | 2009 |  | 2008 |  |
| Balance, January 1 | \$ | 25,544 | \$ | 32,619 | \$ | - |
| Washington Mutual acquisition |  |  |  | - |  | 39,454 |
| Accretion into interest income |  | $(3,232)$ |  | $(4,363)$ |  | $(1,292)$ |
| Changes in interest rates on variable rate loans |  | (819) |  | $(4,849)$ |  | $(5,543)$ |
| Other changes in expected cash flows(a) |  | $(2,396)$ |  | 2,137 |  | - |
| Balance, December 31 | \$ | 19,097 | \$ | 25,544 | \$ | 32,619 |
| Accretable yield percentage |  | 4.35\% |  | 5.14\% |  | 5.81\% |

(a) Other changes in expected cash flows may vary from period to period as the Firm continues to refine its cash flow model and periodically updates model assumptions. For the to the nonaccretable difference. Such changes are expected to have an insignificant impact on the accretable yield percentage.

The factors that most significantly affect estimates of gross cash flows expected to be collected, and accordingly the accretable yield balance, include: (i) changes in the benchmark interest rate indices for variable rate products such as option ARM and home equity loans; and (ii) changes in prepayment assumptions.

To date, the decrease in the accretable yield percentage has been primarily related to a decrease in interest rates on
variable-rate loans and, to a lesser extent, extended loan liquidation periods. Certain events, such as extended loan liquidation periods, affect the timing of expected cash flows but not the amount of cash expected to be received (i.e., the accretable yield balance). Extended loan liquidation periods reduce the accretable yield percentage because the same accretable yield balance is recognized against a higher-than-expected loan balance over a longer-than-expected period of time.

## Credit card loans

The credit card portfolio segment includes credit card loans originated and purchased by the Firm, including those acquired in the Washington Mutual transaction. Delinquency rates are the primary credit quality indicator for credit card loans as they provide an early warning that borrowers may be experiencing difficulties (30-days past due), as well as information on those borrowers that have been delinquent for a longer period of time ( 90 -days past due). In addition to delinquency rates, the geographic distribution of the loans provides insight as to the credit quality of the portfolio based on the regional economy.

The borrower's credit score is another general indicator of credit quality. Because the borrower's credit score tends to be a lagging indicator of credit quality, the Firm does not use credit scores as a primary indicator of credit quality. However, the distribution of such scores provides a general indicator of credit quality trends within the portfolio. Refreshed FICO score information for a random sample of the credit card portfolio is indicated in the table below, as FICO is considered to be the industry benchmark for credit scores.

The Firm generally originates new card accounts to prime consumer borrowers. However, certain cardholders' refreshed FICO scores may change over time, depending on the performance of the cardholder and changes in credit score technology.

The table below sets forth information about the Firm's Credit card loans.

| As of or for the year ended December 31, (in millions, except ratios) | Chase, excluding Washington Mutual portfolio(e) |  |  |  | Washington Mutual portfolio(e) |  |  |  | Total credit card |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 |  | 2009 |  | 2010 |  | $2009(\mathrm{f})$ |  | 2010 |  | 2009(f) |  |
| Net charge-offs | \$ | 11,191 | \$ | 6,466 | \$ | 2,846 | \$ | 3,168 | \$ | 14,037 | \$ | 9,634 |
| \% of net charge-offs to retained loans |  | 8.73\% |  | 9.76\% |  | 17.73\% |  | 15.26\% |  | 9.73\% |  | 11.07\% |
| Loan delinquency ${ }^{(a)(b)}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Current and less than 30 days past due and still accruing | \$ | 117,248 | \$ | 55,374 | \$ | 12,670 | \$ | 17,316 | \$ | 129,918 | \$ | 72,690 |
| $30-89$ days past due and still accruing |  | 2,092 |  | 1,638 |  | 459 |  | 974 |  | 2,551 |  | 2,612 |
| 90 or more days past due and still accruing |  | 2,449 |  | 2,118 |  | 604 |  | 1,363 |  | 3,053 |  | 3,481 |
| Nonaccrual loans |  | 2 |  | 3 |  | - |  | - |  | 2 |  | 3 |
| Total retained loans | \$ | 121,791 | \$ | 59,133 | \$ | 13,733 | \$ | 19,653 |  | 135,524 | \$ | 78,786 |
| Loan delinquency ratios |  |  |  |  |  |  |  |  |  |  |  |  |
| $\%$ of 30 plus days past due to total retained loans |  | 3.73\% |  | 6.35\% |  | 7.74\% |  | 11.89\% |  | 4.14\% |  | 7.73\% |
| $\%$ of 90 plus days past due to total retained loans |  | 2.01 |  | 3.58 |  | 4.40 |  | 6.94 |  | 2.25 |  | 4.42 |
| Credit card loans by geographic region |  |  |  |  |  |  |  |  |  |  |  |  |
| California | \$ | 15,454 | \$ | 7,115 | \$ | 2,650 | \$ | 3,873 | \$ | 18,104 | \$ | 10,988 |
| New York |  | 9,540 |  | 4,527 |  | 1,032 |  | 1,458 |  | 10,572 |  | 5,985 |
| Texas |  | 9,217 |  | 4,154 |  | 1,006 |  | 1,421 |  | 10,223 |  | 5,575 |
| Florida |  | 6,724 |  | 3,439 |  | 1,165 |  | 1,735 |  | 7,889 |  | 5,174 |
| Illinois |  | 7,077 |  | 3,166 |  | 542 |  | 771 |  | 7,619 |  | 3,937 |
| Ohio |  | 5,035 |  | 2,506 |  | 401 |  | 562 |  | 5,436 |  | 3,068 |
| New Jersey |  | 5,070 |  | 2,337 |  | 494 |  | 707 |  | 5,564 |  | 3,044 |
| Michigan |  | 3,956 |  | 1,977 |  | 273 |  | 397 |  | 4,229 |  | 2,374 |
| Virginia |  | 3,020 |  | 1,386 |  | 295 |  | 417 |  | 3,315 |  | 1,803 |
| Pennsylvania |  | 4,521 |  | 2,243 |  | 424 |  | 598 |  | 4,945 |  | 2,841 |
| Washington |  | 2,053 |  | 911 |  | 438 |  | 596 |  | 2,491 |  | 1,507 |
| Georgia |  | 2,834 |  | 1,477 |  | 398 |  | 562 |  | 3,232 |  | 2,039 |
| All other |  | 47,290 |  | 23,895 |  | 4,615 |  | 6,556 |  | 51,905 |  | 30,451 |
| Total retained loans(c) | \$ | 121,791 | \$ | 59,133 | \$ | 13,733 | \$ | 19,653 |  | 135,524 | \$ | 78,786 |

Percentage of portfolio based on carrying
value with estimated refreshed FICO
scores(d)

| Equal to or greater than 660 | $\mathbf{8 0 . 6 \%}$ | $72.6 \%$ | $\mathbf{5 6 . 4 \%}$ | $49.2 \%$ | $\mathbf{7 7 . 9 \%}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Less than 660 | $\mathbf{1 9 . 4}$ | 27.4 | $\mathbf{4 3 . 6}$ | 50.8 | $\mathbf{2 2 . 1}$ |

(a) Results reflect the impact of purchase accounting adjustments related to the Washington Mutual transaction and the consolidation of the WMMT in the second quarter of 2009.
(b) The Firm's policy is generally to exempt credit card loans from being placed on nonaccrual status as permitted by regulatory guidance. Under guidance issued by the FFIEC, credit card loans are charged off by the end of the month in which the account becomes 180 days past due or within 60 days from receiving notification about a specified event (e.g., bankruptcy of the borrower), whichever is earlier.
(c) Effective January 1, 2010, the Firm adopted accounting guidance related to VIEs. Upon adoption of the guidance, the Firm consolidated its Firm-sponsored credit card securitization trusts. For further information, see Note 16 on pages 244-259 of this Annual Report.
(d) Refreshed FICO scores are estimated based on a statistically significant random sample of credit card accounts in the credit card portfolio for the period shown. The Firm obtains refreshed FICO scores on a quarterly basis.
(e) Includes billed finance charges and fees net of an allowance for uncollectible amounts.
(f) Includes $\$ 1.0$ billion of loans at December 31, 2009, held by the WMMT, which were consolidated onto the Firm's Consolidated Balance Sheets at fair value during the second quarter of 2009. Such loans had been fully repaid or charged off as of December 31, 2010. For further discussion, see Note 16 on pages 244-259 of this Annual Report.

## Notes to consolidated financial statements

## Credit card impaired loans

JPMorgan Chase may offer one of a number of loan modification programs to credit card borrowers who are experiencing financial difficulty. The Firm has short-term programs for borrowers who may be in need of temporary relief, and long-term programs for borrowers who are experiencing a more fundamental level of financial difficulties. Most of the Firm's modified credit card loans have been modified under the long-term programs. Modifications under the Firm's long-term programs involve placing the customer on a fixed payment plan not exceeding 60 months. Modifications under all of these programs typically include reducing the interest rate on the card. Also in all cases, the Firm cancels the customer's available line of credit on the credit card. Substantially all of these modifications, both long-term and short-term are considered to be troubled debt restructurings.

If the cardholder does not comply with the modified payment terms, then the credit card loan agreement reverts back to its premodification payment terms. Assuming that the cardholder does not begin to perform in accordance with those payment terms, the loan continues to age and will ultimately be charged-off in accordance with the Firm's standard charge-off policy. In addition, if a borrower successfully completes a short-term modification program, then the loan reverts back to its pre-modification payment terms. However, in most cases, the Firm does not reinstate the borrower's line of credit.

The Firm measures the allowance for loans losses related to impaired credit card loans as the difference between the recorded investment in the loan and the present value of the cash flows expected to be collected, discounted at the loan's original contractual interest rate and, therefore, does not consider any incremental penalty rate in this measurement.

The tables below set forth information about the Firm's impaired credit card loans. All of these loans are considered to be impaired as they have been modified in troubled debt restructurings.

| December 31, (in millions) | Chase, excluding Washington Mutual portfolio |  |  |  | $\underset{\text { Washington Mutual }}{\text { portfolio }}$ |  |  |  | Total credit card |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 |  | 2009 |  | 2010 |  | 2009 |  | 2010 |  | 2009 |  |
| Impaired loans with an allowance(a)(b) |  |  |  |  |  |  |  |  |  |  |  |  |
| Credit card loans with modified payment terms(c) | \$ | 6,685 | \$ | 3,513 | \$ | 1,570 | \$ | 1,617 | \$ | 8,255 | \$ | 5,130 |
| Modified credit card loans that have reverted to pre-modification payment terms(d) |  | 1,439 |  | 812 |  | 311 |  | 303 |  | 1,750 |  | 1,115 |
| Total impaired loans(e) | \$ | 8,124 | \$ | 4,325 | \$ | 1,881 | \$ | 1,920 | \$ | 10,005 | \$ | 6,245 |
| Allowance for loan losses related to impaired loans | \$ | 3,175 | \$ | 2,038 | \$ | 894 | \$ | 1,079 | \$ | 4,069 | \$ | 3,117 |

(a) The carrying value and the unpaid principal balance are the same for credit card impaired loans.
(b) There are no impaired loans without an allowance.
(c) Represents credit card loans outstanding to borrowers then enrolled in a credit card modification program.
(d) Represents credit card loans that were modified in troubled debt restructurings but that have subsequently reverted back to the loans' pre-modification payment terms. Of the $\$ 1.8$ billion total loan amount at December 31, 2010, approximately $\$ 1.2$ billion of loans have reverted back to the pre-modification payment terms of the loans due to noncompliance with the terms of the modified loans. A substantial portion of these loans is expected to be charged-off in accordance with the Firm's standard charge-off policy. The remaining $\$ 590$ million of loans are to borrowers who have successfully completed a short-term modification program. The Firm continues to report these loans as troubled debt restructurings since the borrowers' credit lines remain closed. Prior-period amounts have been revised to conform to the current presentation.
(e) The increase in troubled debt restructurings from December 31, 2009 to December 31, 2010, is primarily attributable to previously-modified loans held in Firm-sponsored credit card securitization trusts being consolidated as a result of adopting the new accounting guidance related to VIEs.

The following table presents average balances of impaired credit card loans and interest income recognized on those loans.
For the year ended

| December 31, (in millions) | Impaired loans (average) |  |  |  |  |  | Interest income on impaired loans(a) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 |  | 2009 |  | 2008 |  | 2010 |  | 2009 |  | 2008 |  |
| Chase, excluding Washington Mutual portfolio | \$ | 8,747 | \$ | 3,059 | \$ | 2,386 | \$ | 479 | \$ | 181 | \$ | 167 |
| Washington Mutual portfolio |  | 1,983 |  | 991 |  | - |  | 126 |  | 70 |  | - |
| Total credit card | \$ | 10,730 | \$ | 4,050 | \$ | 2,386 | \$ | 605 | \$ | 251 | \$ | 167 |

 continue to accrue until the loan is charged off or paid in full. However, the Firm separately establishes an allowance for the estimated uncollectible portion of billed and accrued interest and fee income on credit card loans.

JPMorgan Chase's allowance for loan losses covers the wholesale and consumer, including credit card loan portfolios, and represents management's estimate of probable credit losses inherent in the Firm's loan portfolio. Management also computes an allowance for wholesale and consumer lending-related commitments using methodologies similar to those used to compute the allowance on the underlying loans. During 2010, the Firm did not make any significant changes to the methodologies or policies used to determine its allowance for credit losses, which policies are described in the following paragraphs.

The allowance for loan losses includes an asset-specific component, a formula-based component and a component related to PCI loans.

The asset-specific component relates to loans considered to be impaired, which includes loans that have been modified in a troubled debt restructuring as well as risk-rated loans that have been placed on nonaccrual status. An asset-specific allowance for impaired loans is established when the loan's discounted cash flows (or, in certain cases, the loan's observable market price) is lower than the recorded investment in the loan. To compute the asset-specific component of the allowance, larger loans are evaluated individually, while smaller loans are evaluated as pools using historical loss experience for the respective class of assets. Risk-rated loans (primarily wholesale loans) are pooled by risk rating, while scored loans (i.e., consumer loans) are pooled by product type.

The Firm generally measures the asset-specific allowance as the difference between the recorded investment in the loan and the present value of the cash flows expected to be collected, discounted at the loan's original effective interest rate. Subsequent changes in impairment due to the impact of discounting are reported as an adjustment to the provision for loan losses, not as an adjustment to interest income. An asset-specific allowance for an impaired loan that is determined using an observable market price is measured as the difference between the recorded investment in the loan and the loan's fair value.

Certain loans are deemed collateral-dependent because repayment of the loan is expected to be provided solely by the underlying collateral, rather than by cash flows from the borrower's operations, income or other resources. Impaired collateral-dependent loans are charged-off to the fair value of the collateral, less costs to sell, rather than being subject to an asset-specific reserve as for other impaired loans.

The determination of the fair value of the collateral depends on the type of collateral (e.g., securities, real estate). In cases where the collateral is in the form of liquid securities, the fair value is based on quoted market prices or broker quotes. For illiquid securities or other financial assets, the fair value of the collateral is estimated using a discounted cash flow model.

For residential real estate loans, collateral values are based upon external valuation sources. When it becomes likely that a borrower is either unable or unwilling to pay, the Firm obtains a broker's price opinion of the home based on an exterior-only valuation ("exterior opinions"). As soon as practicable after taking physical possession of the property through foreclosure, the Firm obtains an appraisal based on
an inspection that includes the interior of the home ("interior appraisals"). Exterior opinions and interior appraisals are discounted based upon the Firm's experience with actual liquidation values as compared to the estimated values provided by exterior opinions and interior appraisals, considering state- and product-specific factors.

For commercial real estate loans, the collateral value is generally based on appraisals from internal and external valuation sources. Collateral values are typically updated every six to twelve months, either by obtaining a new appraisal or by performing an internal analysis, in accordance with the Firm's policies. The Firm also considers both borrower- and market-specific factors, which may result in obtaining appraisal updates or broker price opinions at more frequent intervals.

See Note 3 on pages 170-187 of this Annual Report for further information on the fair value hierarchy for impaired collateraldependent loans.
The formula-based component is based on a statistical calculation to provide for probable principal losses inherent in performing risk-rated loans and consumer loans, except for loans restructured in troubled debt restructurings and PCl loans. See Note 14 on pages 220-238 of this Annual Report for more information on PCI loans.

For risk-rated loans, the statistical calculation is the product of an estimated probability of default and an estimated loss given default. These factors are differentiated by risk rating and expected maturity. In assessing the risk rating of a particular loan, among the factors considered are the obligor's debt capacity and financial flexibility, the level of the obligor's earnings, the amount and sources for repayment, the level and nature of contingencies, management strength, and the industry and geography in which the obligor operates. These factors are based on an evaluation of historical and current information, and involve subjective assessment and interpretation. Emphasizing one factor over another or considering additional factors could impact the risk rating assigned by the Firm to that loan. PD estimates are based on observable external through-the-cycle data, using credit-rating agency default statistics. LGD estimates are based on the Firm's history of actual credit losses over more than one credit cycle.

For scored loans, the statistical calculation is performed on pools of loans with similar risk characteristics (e.g., product type) and generally computed as the product of actual outstandings, an expected-loss factor and an estimated-loss coverage period. Expected-loss factors are statistically derived and consider historical factors such as loss frequency and severity. In developing loss frequency and severity assumptions, the Firm considers known and anticipated changes in the economic environment, including changes in housing prices, unemployment rates and other risk indicators.
A nationally recognized home price index measure is used to develop loss severity estimates on defaulted residential real estate loans at the metropolitan statistical areas ("MSA") level. These loss severity estimates are regularly validated by comparison to actual losses

## Notes to consolidated financial statements

recognized on defaulted loans, market-specific real estate appraisals and property sales activity. Real estate broker price opinions are obtained when the loan is being evaluated for charge-off and at least every six months thereafter. When foreclosure is determined to be probable, a third-party appraisal is obtained as soon as practicable. Forecasting methods are used to estimate expected-loss factors, including credit loss forecasting models and vintage-based loss forecasting.
The economic impact of potential modifications of residential real estate loans is not included in the formula-based allowance because of the uncertainty regarding the type and results of such modifications. As discussed in Note 14 on pages 220-238 of this Annual Report, modified residential real estate loans are generally accounted for as troubled debt restructurings upon contractual modification and are evaluated for an asset-specific allowance at and subsequent to modification. Assumptions regarding the loans' expected re-default rates are incorporated into the measurement of the asset-specific allowance.

Management applies judgment within an established framework to adjust the results of applying the statistical calculation described above. The determination of the appropriate adjustment is based on management's view of uncertainties that have occurred but are not yet reflected in the loss factors and that relate to current macroeconomic and political conditions, the quality of underwriting standards and other relevant internal and external factors affecting the credit quality of the portfolio. In addition, for the risk-rated portfolios, any adjustments made to the statistical calculation also consider concentrated and deteriorating industries. For the scored Ioan portfolios, adjustments to the statistical calculation are accomplished in part by analyzing the historical loss experience for each major product segment. Factors related to unemployment, housing prices, borrower behavior and lien position are incorporated into the calculation, where relevant.

Management establishes an asset-specific allowance for lendingrelated commitments that are considered impaired and computes a formula-based allowance for performing wholesale and consumer lending-related commitments. These are computed using a methodology similar to that used for the wholesale loan portfolio, modified for expected maturities and probabilities of drawdown.

## Allowance for credit losses and loans and lending-related commitments by impairment methodology

| $\begin{aligned} & \text { Year ended December 31, } \\ & \text { (in millions) } \end{aligned}$ | 2010 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wholesale |  | Consumer, excluding credit card |  | Credit Card |  | Total |  |
| Allowance for loan losses |  |  |  |  |  |  |  |  |
| Beginning balance at January 1, | \$ | 7,145 | \$ | 14,785 | \$ | 9,672 | \$ | 31,602 |
| Cumulative effect of change in accounting principles(a) |  | 14 |  | 127 |  | 7,353 |  | 7,494 |
| Gross charge-offs(a) |  | 1,989 |  | 8,383 |  | 15,410 |  | 25,782 |
| Gross (recoveries)(a) |  | (262) |  | (474) |  | $(1,373)$ |  | $(2,109)$ |
| Net charge-offs( ${ }^{\text {a }}$ |  | 1,727 |  | 7,909 |  | 14,037 |  | 23,673 |
| Provision for loan losses: |  |  |  |  |  |  |  |  |
| Excluding accounting conformity(a) |  | (673) |  | 9,458 |  | 8,037 |  | 16,822 |
| Accounting conformity(b) |  | - |  | - |  | - |  | - |
| Total provision for loan losses |  | (673) |  | 9,458 |  | 8,037 |  | 16,822 |
| Acquired allowance resulting from Washington Mutual transaction |  | - |  | - |  | - |  | - |
| Other(c) |  | 2 |  | 10 |  | 9 |  | 21 |
| Ending balance at December 31 | \$ | 4,761 | \$ | 16,471 | \$ | 11,034 | \$ | 32,266 |
| Allowance for loan losses by impairment methodology |  |  |  |  |  |  |  |  |
| Asset-specific(d)(e)(f) | \$ | 1,574 | \$ | 1,075 | \$ | 4,069 | \$ | 6,718 |
| Formula-based(a)(f) |  | 3,187 |  | 10,455 |  | 6,965 |  | 20,607 |
| PCI |  | - |  | 4,941 |  | - |  | 4,941 |
| Total allowance for loan losses | \$ | 4,761 | \$ | 16,471 | \$ | 11,034 | \$ | 32,266 |
| Loans by impairment methodology |  |  |  |  |  |  |  |  |
| Asset-specific(c) | \$ | 5,486 | \$ | 6,220 | \$ | 10,005 | \$ | 21,711 |
| Formula-based |  | 216,980 |  | 248,481 |  | 125,519 |  | 590,980 |
| PCI |  | 44 |  | 72,763 |  | - |  | 72,807 |
| Total retained loans | \$ | 222,510 | \$ | 327,464 | \$ | 135,524 | \$ | 685,498 |

Determining the appropriateness of the allowance is complex and requires judgment by management about the effect of matters that are inherently uncertain. Subsequent evaluations of the loan portfolio, in light of the factors then prevailing, may result in significant changes in the allowances for loan losses and lending-related commitments in future periods.

At least quarterly, the allowance for credit losses is reviewed by the Chief Risk Officer, the Chief Financial Officer and the Controller of the Firm and discussed with the Risk Policy and Audit Committees of the Board of Directors of the Firm. As of December 31, 2010, JPMorgan Chase deemed the allowance for credit losses to be appropriate (i.e., sufficient to absorb losses that are inherent in the portfolio, including those not yet identifiable).
(table continued from previous page)


## Notes to consolidated financial statements

| Year ended December 31, (in millions) | 2010 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wholesale |  | Consumer, excluding credit card |  | Credit Card |  | Total |  |
| Allowance for lending-related commitments |  |  |  |  |  |  |  |  |
| Beginning balance at January 1, | \$ | 927 | \$ | 12 | \$ | - | \$ | 939 |
| Cumulative effect of change in accounting principles(a) |  | (18) |  | - |  | - |  | (18) |
| Provision for lending-related commitments: |  |  |  |  |  |  |  |  |
| Excluding accounting conformity(a) |  | (177) |  | (6) |  | - |  | (183) |
| Accounting conformity(b) |  | - |  | - |  | - |  | - |
| Total provision for lending-related commitments |  | (177) |  | (6) |  | - |  | (183) |
| Acquired allowance resulting from Washington Mutual transaction |  | - |  | - |  | - |  | - |
| Other(c) |  | (21) |  | - |  | - |  | (21) |
| Ending balance at December 31 | \$ | 711 | \$ | 6 | \$ | - | \$ | 717 |
| Allowance for lending-related commitments by impairment methodology |  |  |  |  |  |  |  |  |
| Asset-specific | \$ | 180 | \$ | - | \$ | - | \$ | 180 |
| Formula-based |  | 531 |  | 6 |  | - |  | 537 |
| Total allowance for lending-related commitments | \$ | 711 | \$ | 6 | \$ | - | \$ | 717 |
| Lending-related commitments by impairment methodology |  |  |  |  |  |  |  |  |
| Asset-specific | \$ | 1,005 | \$ | - | \$ | - | \$ | 1,005 |
| Formula-based |  | 345,074 |  | 61,534 |  | 547,227 |  | 3,835 |
| Total lending-related commitments | \$ | 346,079 | \$ | 61,534 | \$ | 547,227 | \$ | 4,840 |
| Impaired collateral-dependent loans |  |  |  |  |  |  |  |  |
| Net charge-offs | \$ | 269 | \$ | 304 | \$ | - | \$ | 573 |
| Loans measured at fair value of collateral less cost to sell |  | 806 |  | 890 |  | - |  | 1,696 |

(a) Effective January 1, 2010, the Firm adopted accounting guidance related to VIEs. Upon adoption of the guidance, the Firm consolidated its Firm-sponsored credit card securitization trusts, its Firm-administered multi-seller conduits and certain other consumer loan securitization entities, primarily mortgage-related. As a result, $\$ 7.4$ billion, $\$ 14$ million and $\$ 127$ million, respectively, of allowance for loan losses were recorded on-balance sheet associated with the consolidation of these entities. For further discussion, see Note 16 on pages 244-259 of this Annual Report.
(b) Represents adjustments to the provision for credit losses recognized in Corporate/Private Equity related to the Washington Mutual transaction in 2008.
c) The 2009 amount predominantly represents a reclassification related to the issuance and retention of securities from the Chase Issuance Trust. For further information, see Note 16 on pages 244-259 of this Annual Report. The 2008 amount predominantly represents a transfer of allowance between Corporate/Private Equity and Credit card.
(d) Relates to risk-rated loans that have been placed on nonaccrual status and loans that have been modified in a troubled debt restructuring.
(e) At December 31, 2010, 2009 and 2008 the asset-specific consumer excluding card allowance for loan losses included troubled debt restructuring reserves of $\$ 985$ million, $\$ 754$ million and $\$ 258$ million respectively. The asset-specific credit card allowance for loan losses is related to loans modified in troubled debt restructurings.
(f) At December 31, 2010, the Firm's allowance for loan losses on all impaired credit card loans was reclassified to the asset-specific allowance. This reclassification had no incremental impact on the Firm's allowance for loan losses. Prior periods have been revised to reflect the current presentation.
(table continued from previous page)

| 2009 |  |  |  |  |  |  |  | 2008 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wholesale |  | Consumer, excluding credit card |  | Credit card |  | Total |  | Wholesale |  | Consumer, excluding credit card |  | Credit card |  | Total |  |
| \$ | 634 | \$ | 25 | \$ | - | \$ | 659 | \$ | 835 | \$ | 15 | \$ | - | \$ | 850 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
|  | 290 |  | (10) |  | - |  | 280 |  | (214) |  | (1) |  | - |  | (215) |
|  | - |  | - |  | - |  | - |  | 5 |  | (48) |  | - |  | (43) |
|  | 290 |  | (10) |  | - |  | 280 |  | (209) |  | (49) |  | - |  | (258) |
|  | - |  | - |  | - |  | - |  | - |  | 66 |  | - |  | 66 |
|  | 3 |  | (3) |  | - |  | - |  | 8 |  | (7) |  | - |  | 1 |
| \$ | 927 | \$ | 12 | \$ | - | \$ | 939 | \$ | 634 | \$ | 25 | \$ | - | \$ | 659 |
| \$ | 297 | \$ | - | \$ | - | \$ | 297 | \$ | 29 | \$ | - | \$ | - | \$ | 29 |
|  | 630 |  | 12 |  | - |  | 642 |  | 605 |  | 25 |  | - |  | 630 |
| \$ | 927 | \$ | 12 | \$ | - | \$ | 939 | \$ | 634 | \$ | 25 | \$ | - | \$ | 659 |
| \$ | 1,577 | \$ | - | \$ | - | \$ | 1,577 | \$ | 233 | \$ | - | \$ | - | \$ | 233 |
|  | 345,578 |  | 74,827 |  | 569,113 |  | 989,518 |  | 379,638 |  | 117,805 |  | 623,702 |  | 1,121,145 |
| \$ | 347,155 | \$ | 74,827 | \$ | 569,113 | \$ | 991,095 | \$ | 379,871 | \$ | 117,805 | \$ | 623,702 | \$ | 1,121,378 |
| \$ | 500 | \$ | 166 | \$ | - | \$ | 666 | \$ | 124 | \$ | 22 | \$ | - | \$ | 146 |
|  | 1,127 |  | 210 |  | - |  | 1,337 |  | 1,032 |  | 33 |  | - |  | 1,065 |

## Notes to consolidated financial statements

## Note 16 - Variable interest entities

For a further description of JPMorgan Chase's accounting policies regarding consolidation of VIEs, see Note 1 on pages 164-165 of this Annual Report.
The following table summarizes the most significant types of Firm-sponsored VIEs by business segment. The Firm considers a "sponsored" VIE to include any entity where: (1) JPMorgan Chase is the principal beneficiary of the structure; (2) the VIE is used by JPMorgan Chase to securitize Firm assets; (3) the VIE issues financial instruments with the JPMorgan Chase name; or (4) the entity is a JPMorgan Chase-administered assetbacked commercial paper ("ABCP") conduit.

| Line-of-Business | Transaction Type | Activity | Annual Report page reference |
| :---: | :---: | :---: | :---: |
| Card | Credit card securitization trusts | Securitization of both originated and purchased credit card receivables | 245-246 |
|  | Other securitization trusts | Securitization of originated automobile and student loans | 246-249 |
| RFS | Mortgage securitization trusts | Securitization of originated and purchased residential mortgages | 246-249 |
| IB | Mortgage and other securitization trusts | Securitization of both originated and purchased residential and commercial mortgages, automobile and student loans | 246-249 |
|  | Multi-seller conduits Investor intermediation activities: | Assist clients in accessing the financial markets in a cost-efficient manner and structures transactions to meet investor needs | 249-250 |
|  | Municipal bond vehicles Credit-related note vehicles Asset swap vehicles |  | $\begin{gathered} 250-251 \\ 252 \\ 252-253 \end{gathered}$ |

The Firm's other business segments are also involved with VIEs, but to a lesser extent, as follows:

- Asset Management ("AM"): Sponsors and manages a limited number of funds that are deemed VIEs. As asset manager of the funds, AM earns a fee based on assets managed; the fee varies with each fund's investment objective and is competitively priced. For the limited number of fund entities that qualify as VIEs, AM's interests are, in certain cases, considered to be significant variable interests that result in consolidation of the financial results of these entities.
- Treasury \& Securities Services ("TSS"): Provides services to a number of VIEs that are similar to those provided to non-VIEs. TSS earns market-based fees for the services it provides. TSS's interests are generally not considered to be significant variable interests and/or do not control these VIEs; therefore, TSS does not consolidate these VIEs.
- Commercial Banking ("CB"): CB makes investments in and provides lending to community development entities that may meet the definition of a VIE. In addition, CB provides financing and lending related services to certain client sponsored VIEs. In general, CB does not control the activities of these entities and does not consolidate these entities.
- Corporate/Private Equity: Corporate uses VIEs to issue guaranteed capital debt securities. See Note 22 on pages 265-266 of this Annual Report for further information. The Private Equity business, within Corporate/Private Equity, may be involved with entities that are deemed VIEs. However, the Firm's private equity business is subject to specialized investment company accounting, which does not require the consolidation of investments, including VIEs.
The Firm also invests in and provides financing and other services to VIEs sponsored by third parties, as described on page 253 of this Note.


## New consolidation accounting guidance for VIEs

On January 1, 2010, the Firm implemented consolidation accounting guidance related to VIEs. The following table summarizes the incremental impact at adoption.

| (in millions, except ratios) | U.S. GAAP assets |  | U.S. GAAP liabilities |  | Stockholders' equity |  | Tier 1 capital |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| As of December 31, 2009 | \$ | 2,031,989 | \$ | 1,866,624 | \$ | 165,365 | 11.10\% |
| Impact of new accounting guidance for consolidation of VIEs |  |  |  |  |  |  |  |
| Credit card(a) |  | 60,901 |  | 65,353 |  | $(4,452)$ | (0.30)\% |
| Multi-seller conduits(b) |  | 17,724 |  | 17,744 |  | (20) | - |
| Mortgage \& other(c)(d) |  | 9,059 |  | 9,107 |  | (48) | (0.04)\% |
| Total impact of new guidance |  | 87,684 |  | 92,204 |  | $(4,520)$ | (0.34)\%(e) |
| Beginning balance as of January 1, 2010 | \$ | 2,119,673 | \$ | 1,958,828 | \$ | 160,845 | 10.76\% |

(a) The assets and liabilities of the Firm-sponsored credit card securitization trusts that were consolidated were initially measured at their carrying values, primarily amortized cost, as this method is consistent with the approach that Card utilizes to manage its other assets. These assets were primarily recorded in loans on the Firm's Consolidated Balance Sheet. In addition, Card established an allowance for loan losses of $\$ 7.4$ billion (pretax), which was reported as a transition ad- taken on retained AFS securities that were eliminated in consolidation.
 this method is consistent with the business's intent to hold the assets for the longer-term. The assets are recorded primarily in loans and in other assets on the Firm's Consolidated Balance Sheets.
 related to residential mortgage securitizations and $\$ 1.2$ billion related to other consumer securitizations). These assets were initially measured at their unpaid principal balance and recorded primarily in loans on the Firm's Consolidated Balance Sheets. This method was elected as a practical expedient.
(d) IB consolidated certain mortgage and other consumer securitizations, which resulted in a net increase in both assets and liabilities of $\$ 4.3$ billion ( $\$ 3.7$ billion related to residential mortgage securitizations and $\$ 0.6$ billion related to other consumer securitizations). These assets were initially measured at their fair value, as this method is consistent with the approach that IB utilizes to manage similar assets. These assets were recorded primarily in trading assets on the Firm's Consolidated Balance Sheets.
(e) The U.S. GAAP consolidation of the credit card securitization trusts did not have a significant impact on risk-weighted assets on the adoption date because the Chase Issuance Trust (the Firm's primary credit card securitization trust) had been consolidated for regulatory capital purposes beginning in the second quarter of 2009, which added approximately $\$ 40.0$ billion of risk-weighted assets for regulatory capital purposes. In addition, the Firm elected a two-quarter regulatory implementation deferral of the effect of this accounting guidance on risk-weighted assets and risk-based capital requirements, as permitted for its Firm-administered multi-seller conduits and certain mortgagerelated and other securitization entities. The deferral period ended July 1, 2010, and the Firm consolidated, for regulatory capital purposes, the deferred amounts, which had a negligible impact on risk-weighted assets and risk-based capital ratios.

## Significant Firm-sponsored variable interest entities

## Credit card securitizations

The Card business securitizes originated and purchased credit card loans, primarily through the Chase Issuance Trust (the "Trust"). The Firm's continuing involvement in credit card securitizations includes servicing the receivables, retaining an undivided seller's interest in the receivables, retaining certain senior and subordinated securities and maintaining escrow accounts. As servicer, the Firm receives contractual servicing fees based on the securitized loan balance plus excess servicing fees, which are recorded in credit card income as discussed in Note 7 on page 200 of this Annual Report.

Effective January 1, 2010, the Firm consolidated the assets and liabilities of Firm-sponsored credit card securitization trusts, including its primary card securitization trust, Chase Issuance Trust, as a result of the implementation of new accounting guidance. The consolidation determination was based on the Firm's ability to direct the activities of these VIEs through its servicing responsibilities and other
duties, including making decisions as to the receivables that are transferred into those trusts and as to any related modifications and workouts. Additionally, the nature and extent of the Firm's other continuing involvement with the trusts, as indicated above, obligates the Firm to absorb losses and gives the Firm the right to receive certain benefits from these VIEs that could potentially be significant.
Upon consolidation at January 1, 2010, the Firm recorded a net increase in GAAP assets of $\$ 60.9$ billion on the Consolidated Balance Sheet, as follows: $\$ 84.7$ billion of loans; $\$ 7.4$ billion of allowance for loan losses; $\$ 4.4$ billion of other assets, partially offset by $\$ 20.8$ billion of previously recognized assets, consisting primarily of retained AFS securities that were eliminated upon consolidation. In addition, the Firm recognized $\$ 65.4$ billion of liabilities representing the trusts' beneficial interests issued to third parties.

The following table summarizes the assets and liabilities of the Firm-sponsored credit card securitization trusts at December 31, 2010.

| (in billions) | Loans |  | Other assets |  | Total assets held by Firm-sponsored credit card securitization trusts |  | Beneficial interests issued to third parties |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| December 31, 2010 | \$ | 67.2 | \$ | 1.3 | \$ | 68.5 | \$ | 44.3 |

The underlying securitized credit card receivables and other assets are available only for payment of the beneficial interests issued by the securitization trusts; they are not available to pay the Firm's other obligations or the claims of the Firm's other creditors.

The agreements with the credit card securitization trusts require the Firm to maintain a minimum undivided interest in the credit card trusts (which generally ranges from $4 \%$ to 12\%). As of December 31, 2010, the Firm held undivided interests in Firm-sponsored credit card securitization trusts of $\$ 17.2$ billion. The Firm maintained an average undivided interest in principal receivables owned by those trusts of approximately $19 \%$ for the year ended December 31, 2010. The Firm also retained $\$ 1.1$ billion of senior securities and $\$ 3.2$ billion of subordinated securities in certain of its credit card securitization trusts as of December 31, 2010. The Firm's undivided interests in the credit card trusts and securities retained are eliminated in consolidation.

## AccountingTreatment Prior to January 1, 2010

Prior to January 1, 2010, the Firm accounted for its credit card securitizations as QSPEs and therefore these entities were not consolidated. The Firm recorded only its retained interests in the entities on its Consolidated Balance Sheets.
As of December 31, 2009, the principal amount outstanding of total assets held by Firm-sponsored nonconsolidated credit card securitizations QSPEs was $\$ 109.6$ billion in which the Firm had continuing involvement.
At December 31, 2009, the Firm retained undivided interests in its Firm-sponsored credit card securitization trusts of $\$ 16.7$ billion, which were classified within loans on its Consolidated Balance Sheets. The Firm maintained an average undivided interest in principal receivables owned by those trusts of approximately $16 \%$ for the year ended December 31, 2009. The Firm also retained $\$ 7.2$ billion of senior securities and $\$ 6.6$ billion of subordinated

## Notes to consolidated financial statements

securities in certain of its credit card securitization trusts as of December 31, 2009, which were classified as AFS securities. Additionally, the Firm's interests included $\$ 1.0$ billion of escrow accounts and $\$ 3.2$ billion of retained subordinated interests in accrued interest and fees on securitized receivables, which were classified as "other assets."

During 2009, the Firm took certain actions permitted by the trust agreements with respect to two of the Firm's credit card securitization trusts.

- Chase Issuance Trust (the "Trust"): In 2009, the Firm consolidated, for regulatory capital purposes, the Chase Issuance Trust (the Firm's primary issuance trust) as a result of taking certain actions permitted by the Trust agreements, including increasing the required credit enhancement level of each tranche of outstanding notes issued by the Trust and increasing the excess spread for the Trust. These actions resulted in the addition of approximately $\$ 40$ billion of risk-weighted assets for regulatory capital purposes, which decreased the Firm's Tier 1 capital ratio by approximately 40 basis points, at that time, but did not have a material impact on the Firm's Consolidated Balance Sheets or results of operations .
- Washington Mutual Master Trust ("WMMT"): The Firm acquired an interest in the WMMT as part of the acquisition of the Washington Mutual banking operations. In 2009, the Firm removed all remaining credit card receivables originated by Washington Mutual, resulting in the consolidation of the WMMT for accounting and regulatory capital purposes. As a result, the Firm recorded, during the second quarter of 2009, additional assets with an initial fair value of $\$ 6.0$ billion, additional liabilities with an initial fair value of $\$ 6.1$ billion and a pretax loss of approximately $\$ 64$ million.


## Firm-sponsored mortgage and other securitization trusts

The Firm securitizes originated and purchased residential mortgages, commercial mortgages and other consumer loans (including automobile and student loans) primarily in its RFS, Card and IB businesses. Depending on the particular transaction, as well as the respective business involved, the Firm may act as the servicer of the loans and/or retain certain beneficial interests in the securitization trusts.

Effective January 1, 2010, the Firm consolidated certain mortgage securitization trusts (both residential and commercial) and Firmsponsored automobile and student loan trusts as a result of the implementation of the accounting guidance. The consolidation determination was based on the Firm's ability to direct the activities of these VIEs through its servicing responsibilities and duties, including making decisions related to loan modifications and workouts.
Additionally, the nature and extent of the Firm's continuing economic involvement with these trusts obligates the Firm to absorb losses and gives the Firm the right to receive benefits from the VIEs that could potentially be significant.
Prior to January 1, 2010, the Firm accounted for its residential and commercial mortgage, automobile, and certain student loan securitizations as QSPEs and therefore did not consolidate these entities; only the Firm's retained interests in these entities were recorded on its Consolidated Balance Sheets. In addition, the Firm previously consolidated certain other student loan securitizations in accordance with the accounting treatment under prior accounting guidance.

The following table presents the total unpaid principal amount of assets held in JPMorgan Chase-sponsored securitization entities in which the Firm has continuing involvement, including those that are consolidated by the Firm and those that are not consolidated by the Firm. Continuing involvement includes servicing the loans; holding senior interests or subordinated interests; recourse or guarantee arrangements; and derivative transactions. In certain instances, the Firm's only continuing involvement is servicing the loans. In the table below, the amount of beneficial interests held by JPMorgan Chase does not equal the assets held in nonconsolidated VIEs because of the existence of beneficial interests held by third parties, which are reflected at their current outstanding par amounts; and because a portion of the Firm's retained interests (trading assets and AFS securities) are reflected at their fair values. See Securitization activity on pages 255-258 of this Note for further information regarding the Firm's cash flows with and interests retained in nonconsolidated VIEs.

## Firm-sponsored mortgage and other consumer securitization trusts

|  | Principal amount outstanding |  |  |  |  |  | JPMorgan Chase interest in securitized assets in nonconsolidated VIEs(d)(e)(f)(g)(h) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| December 31, 2010(a) (in billions) | Total assetsheld bysecuritization VIEs |  | Assets held in consolidated securitization VIEs |  | Assets held innonconsolidatedsecuritization VIEswith continuinginvolvement |  | Trading assets |  | AFS securities |  | Other assets |  | Total interests held by JPMorgan Chase |  |
| Securitization-related Residential mortgage: Prime(b) | \$ | 153.1 | \$ | 2.2 | \$ | 143.8 | \$ | 0.7 | \$ | - | \$ | - | \$ | 0.7 |
| Subprime |  | 44.0 |  | 1.6 |  | 40.7 |  | - |  | - |  | - |  | - |
| Option ARMs |  | 36.1 |  | 0.3 |  | 35.8 |  | - |  | - |  | - |  | - |
| Commercial and other(c) |  | 153.4 |  | - |  | 106.2 |  | 2.0 |  | 0.9 |  | - |  | 2.9 |
| Student |  | 4.5 |  | 4.5 |  | - |  | - |  | - |  | - |  | - |
| Auto |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Total | \$ | 391.1 | \$ | 8.6 | \$ | 326.5 | \$ | 2.7 | \$ | 0.9 | \$ | - | \$ | 3.6 |


| December 31, 2009(a)(in billions) | Principal amount outstanding |  |  |  |  |  | JPMorgan Chase interest in securitized assets in nonconsolidated $\mathrm{VIEs}(\mathrm{d})(\mathrm{e})(\mathrm{f})(\mathrm{g})(\mathrm{h})$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total assetsheld bysecuritization VIEs |  | Assets held in consolidated securitization VIEs |  | Assets held in nonconsolidated securitization VIEs with continuing involvement |  | Trading assets |  | AFS securities |  | Other assets |  | Total interests held by JPMorgan Chase |  |
| Securitization-related Residential mortgage: Prime ${ }^{(b)}$ | \$ | 183.3 | \$ | - | \$ | 171.5 | \$ | 0.9 | \$ | 0.2 | \$ | - | \$ | 1.1 |
| Subprime |  | 50.0 |  | - |  | 47.3 |  | - |  |  |  | - |  |  |
| Option ARMs |  | 42.0 |  | - |  | 42.0 |  | - |  | 0.1 |  | - |  | 0.1 |
| Commercial and other(c) |  | 155.3 |  | - |  | 24.8 |  | 1.6 |  | 0.8 |  | - |  | 2.4 |
| Student |  | 4.8 |  | 3.8 |  | 1.0 |  | - |  | - |  | 0.1 |  | 0.1 |
| Auto |  | 0.2 |  | - |  | 0.2 |  | - |  | - |  | - |  | - |
| Total | \$ | 435.6 | \$ | 3.8 | \$ | 286.8 | \$ | 2.5 | \$ | 1.1 | \$ | 0.1 | \$ | 3.7 |

(a) Excludes loan sales to U.S. government agencies. See page 257 of this Note for information on the Firm's loan sales to U.S. government agencies.
(b) Includes Alt-A loans.
(c) Consists of securities backed by commercial loans (predominantly real estate) and non-mortgage-related consumer receivables purchased from third parties. The Firm generally does not retain a residual interest in its sponsored commercial mortgage securitization transactions. Includes co-sponsored commercial securitizations and therefore, includes non-JPMorgan Chase-originated commercial mortgage loans.
(d) Excludes retained servicing (for a discussion of MSRs, see Note 17 on pages 260-263 of this Annual Report) and securities retained from loan sales to U.S. government agencies.
(e) Excludes senior and subordinated securities of $\$ 182$ million and $\$ 18$ million, respectively, at December 31, 2010, and $\$ 729$ million and $\$ 146$ million, respectively, at December 31, 2009, which the Firm purchased in connection with IB's secondary market-making activities
(f) Includes investments acquired in the secondary market that are predominantly for held-for-investment purposes, of $\$ 315$ million and $\$ 139$ million as of December 31 , 2010 and 2009, respectively. This comprises $\$ 238$ million and $\$ 91$ million of AFS securities, related to commercial and other; and $\$ 77$ million and $\$ 48$ million of investments classified as trading assets-debt and equity instruments, including $\$ 39$ million and $\$ 47$ million of residential mortgages, and $\$ 38$ million and $\$ 1$ million of commercial and other, all respectively, at December 31, 2010 and 2009.
(g) Excludes interest rate and foreign exchange derivatives primarily used to manage the interest rate and foreign exchange risks of the securitization entities. See Note 6 on pages 191-199 of this Annual Report for further information on derivatives
(h) Includes interests held in re-securitization transactions.

## Notes to consolidated financial statements

## Residential mortgage

The Firm securitizes residential mortgage loans originated by RFS, as well as residential mortgage loans purchased from third parties by either RFS or IB. RFS generally retains servicing for all residential mortgage loans originated or purchased by RFS, and for certain mortgage loans purchased by IB.
For securitizations serviced by RFS, the Firm has the power to direct the significant activities of the VIE because it is responsible for decisions related to loan modifications and workouts. In a limited number of these securitizations, RFS also retains an interest in the VIE that could potentially be significant to the VIE. In these instances, the Firm is deemed to be the primary beneficiary. At December 31, 2010 , approximately $\$ 2.9$ billion of assets and $\$ 3.0$ billion of liabilities of Firm-sponsored residential mortgage securitization trusts were consolidated on balance sheet. For Firm-sponsored securitizations serviced by unrelated third parties, the Firm does not consolidate the VIE as the power to direct the significant activities resides with the third party servicer. At December 31, 2009, RFS did not consolidate any VIEs in accordance with the accounting treatment under prior accounting rules. RFS held retained interests of approximately $\$ 205$ million and $\$ 537$ million as of December 31, 2010 and 2009, respectively, in nonconsolidated residential mortgage securitization entities. See pages 257-258 of this Note for further information on retained interests held in nonconsolidated VIEs; these retained interests are classified as trading assets or AFS securities.

The Firm's mortgage loan sales are primarily nonrecourse, thereby effectively transferring the risk of future credit losses to the purchaser of the mortgage-backed securities issued by the trust. However, for a limited number of loan sales, the Firm is obligated to share a portion of the credit risk associated with the sold loans with the purchaser. See Note 30 on pages 275-280 of this Annual Report for additional information on loans sold with recourse, as well as information on indemnification liability for breaches of representations and warranties. See page 257 of this Note for further information on loans sold to U.S. government agencies.

IB engages in underwriting and trading activities involving securities issued by Firm-sponsored securitization trusts. As a result, IB at times retains senior and/or subordinated interests (including residual interests) in residential mortgage securitizations upon securitization, and/or reacquires positions in the secondary market in the normal course of business. In certain instances, as a result of the positions retained or reacquired by IB, when considered together with the servicing arrangements entered into by RFS, the Firm is deemed to be the primary beneficiary of certain securitization trusts. At December 31, 2010, $\$ 1.2$ billion of VIE assets and $\$ 702$ million of liabilities were consolidated due to IB's involvement with such trusts. IB did not consolidate any residential securitization VIEs at December 31, 2009, in accordance with the accounting treatment under prior accounting rules. IB held approximately $\$ 461$ million, and $\$ 479$ million of senior and subordinated interests at December 31, 2010 and 2009, respectively, in nonconsolidated residential mortgage securitization entities. This includes approximately $\$ 1$ million and $\$ 2$ million of residual interests at December

31, 2010 and 2009, respectively. See pages 257-258 of this Note for further information on interests held in nonconsolidated securitizations. These retained interests are accounted for at fair value and classified as trading assets.
Commercial mortgages and other consumer securitizations IB originates and securitizes commercial mortgage loans, and engages in underwriting and trading activities involving the securities issued by securitization trusts. IB may retain unsold senior and/or subordinated interests in commercial mortgage securitizations at the time of securitization but, generally, the Firm does not service commercial loan securitizations. For commercial mortgage securitizations the power to direct the significant activities of the VIE generally is held by the servicer or investors in a specified class of securities ("controlling class"). At December 31, 2010, approximately $\$ 84$ million of VIE assets and $\$ 82$ million of VIE liabilities of commercial mortgage securitization trusts were consolidated due to the Firm holding certain subordinated interests that give the Firm the power to direct the activities of these entities as well as a significant interest. IB did not consolidate any commercial mortgage securitization VIEs at December 31, 2009, in accordance with the accounting treatment under prior accounting rules. At December 31, 2010 and 2009, the Firm held $\$ 2.0$ billion and $\$ 1.6$ billion, respectively, of retained interests in nonconsolidated commercial mortgage securitizations. This included approximately zero and $\$ 22$ million of residual interests as of December 31, 2010 and 2009, respectively.

The Firm also securitizes automobile and student loans originated by Card and consumer loans (including automobile and student loans) purchased by IB. The Firm retains servicing responsibilities for all originated and certain purchased student and automobile loans and has the power to direct the activities of these VIEs through these servicing responsibilities. At December 31, 2010, $\$ 4.5$ billion of assets and $\$ 3.2$ billion of liabilities of student loan securitizations were consolidated due to the combination of retained interests held by the Firm and servicing responsibilities. Auto loans previously securitized were repurchased by the Firm during 2010 as these securitization entities were terminated. As of December 31, 2009, the Firm held $\$ 9$ million and $\$ 49$ million of retained interests in securitized automobile and student loan securitizations, respectively, which were not consolidated in accordance with the accounting treatment under prior accounting rules. These retained interests were reported in other assets. In addition, at December 31, 2009, the Firm held interests in other student loans which resulted in $\$ 3.8$ billion of other student loans being consolidated on the balance sheet in accordance with the accounting treatment under prior accounting rules.

## Re-securitizations

The Firm engages in re-securitization transactions in which securities are transferred to a VIE in exchange for new beneficial interests. Resecuritizations involve the repackaging of securities previously issued by both agency sponsored (Fannie Mae, Freddie Mac and Ginnie Mae) and nonagency (private-label) VIEs that are generally backed by either residential or commercial mortgages. A re-securitization entity receives principal and interest payments
from the securities held in the entity and passes them to the beneficial interest holders. These entities are not actively managed and are passive in nature. Re-securitization entities are often established to the specifications of the investors. In a re-securitization entity, the most significant power is in the design of the entity (i.e., the decision as to the specific security or securities to be repackaged and the terms of the beneficial interests issued). The power over a resecuritization entity is often considered to be shared between the sponsor and investor(s) that are significantly involved in the creation and design of the re-securitization entity. At December 31, 2010, the Firm did not consolidate any agency re-securitizations, as it did not have the unilateral power to direct the significant activities of the resecuritization entity. At December 31, 2010, the Firm consolidated $\$ 477$ million of assets and $\$ 230$ million of liabilities of private-label resecuritizations, as the Firm had both the unilateral power to direct the significant activities of, and retained a significant interest in, these resecuritization entities. As of December 31, 2009, the Firm did not consolidate any re-securitization entities (agency or private-label) in accordance with the accounting treatment under prior accounting rules.

During the years ended December 31, 2010, 2009, and 2008, the Firm transferred $\$ 33.9$ billion, $\$ 19.1$ billion and $\$ 16.8$ billion, respectively, of securities to agency re-securitization entities and $\$ 1.3$ billion, $\$ 4.0$ billion and $\$ 2.7$ billion to private-label resecuritization entities. At December 31, 2010 and 2009, the Firm held approximately $\$ 3.5$ billion and $\$ 1.6$ billion of both senior and subordinated interests in nonconsolidated agency re-securitization entities and $\$ 46$ million and $\$ 220$ million of both senior and subordinated interests, in nonconsolidated private-label resecuritization entities. See pages 257-258 of this Note for further information on interests held in nonconsolidated securitization VIEs.

## Multi-seller conduits

The Firm is an active participant in the asset-backed securities business, and it helps customers meet their financing needs by providing access to the commercial paper markets through VIEs known as multi-seller conduits. Multi-seller conduit entities are separate bankruptcy remote entities that purchase interests in, and make loans secured by, pools of receivables and other financial assets pursuant to agreements with customers of the Firm. The conduits fund their purchases and loans through the issuance of highly rated commercial paper to third-party investors. The primary source of repayment of the commercial paper is the cash flows from the pools of assets. In most instances, the assets are structured with deal-specific credit enhancements provided by the customers (i.e., sellers) to the conduits or other third parties. Deal-specific credit enhancements are generally structured to cover a multiple of historical losses expected on the pool of assets, and are typically in the form of overcollateralization provided by the seller, but also may include any combination of the following: recourse to the seller or originator, cash collateral accounts, letters of credit, excess spread, retention of subordinated interests or third-party guarantees. The deal-specific credit enhancements mitigate the Firm's potential losses on its agreements with the conduits.

To ensure timely repayment of the commercial paper, each asset pool financed by the conduits has a minimum 100\% deal-specific liquidity facility associated with it. Deal-specific liquidity facilities are the primary source of liquidity support for the conduits and are typically in the form of asset purchase agreements. They are generally structured so the liquidity that will be provided by the Firm (as liquidity provider) will be effected by the Firm purchasing, or lending against, a pool of nondefaulted, performing assets. In limited circumstances, the Firm may provide unconditional liquidity.
The conduit's administrative agent can require the liquidity provider to perform under its asset purchase agreement with the conduit at any time. These agreements may cause the liquidity provider, which is generally the Firm, to purchase an asset from the conduit at an amount above the asset's then current fair value - in effect, providing a guarantee of the asset's initial value.
The Firm also provides the multi-seller conduit vehicles with programwide liquidity facilities in the form of uncommitted short-term revolving facilities established to handle funding increments too small to be funded by commercial paper and that can be accessed by the conduits only in the event of short-term disruptions in the commercial paper market.
Because the majority of the deal-specific liquidity facilities will only fund nondefaulted assets, program-wide credit enhancement is required to absorb losses on defaulted receivables in excess of losses absorbed by any deal-specific credit enhancement. Programwide credit enhancement may be provided by JPMorgan Chase in the form of standby letters of credit or by third-party surety bond providers. The amount of program-wide credit enhancement required varies by conduit and ranges between $5 \%$ and $10 \%$ of the applicable commercial paper that is outstanding. The Firm provided $\$ 2.0$ billion and $\$ 2.4$ billion of program-wide credit enhancement at December 31, 2010 and 2009, respectively.

JPMorgan Chase receives fees for structuring multi-seller conduit transactions and compensation from the multi-seller conduits for its role as administrative agent, liquidity provider, and provider of program-wide credit enhancement.

Effective January 1, 2010, the Firm consolidated its Firmadministered multi-seller conduits, as the Firm has both the power to direct the significant activities of the conduits and a potentially significant economic interest in the conduits. The Firm directs the economic performance of the conduits as administrative agent and in its role in structuring transactions for the conduits. In these roles, the Firm makes decisions regarding concentration of asset types and credit quality of transactions, and is responsible for managing the commercial paper funding needs of the conduits. The Firm's interests that could potentially be significant to the VIEs include the fees received as administrative agent, liquidity provider and provider of program-wide credit enhancement, as well as the Firm's potential exposure as a result of the liquidity and credit enhancement facilities provided to the conduits.

| December 31, 2010 (in billions) | Loans | Other assets | Total assets held by Firmadministered multi-seller conduits | Commercial paper issued to third parties |
| :---: | :---: | :---: | :---: | :---: |
| Consolidated(a) | 21.1 | 0.6 | 21.7 | 21.6 |

(a) The Firm provided certain deal-specific liquidity facilities (primarily asset purchase agreements); program-wide liquidity facilities; and program-wide credit enhancements that were eliminated in consolidation.

## Accounting Treatment Prior to January 1, 2010

Prior to January 1, 2010, the Firm had consolidated one of its multiseller conduits; all other Firm-administered multi-seller conduits were not consolidated in accordance with prior accounting rules. Under prior accounting rules, the party that absorbed the majority of the entity's expected losses, received a majority of the entity's residual returns, or both, would consolidate. Each nonconsolidated multi-seller conduit administered by the Firm at December 31, 2009 had issued Expected Loss Notes ("ELNs"), the holders of which were committed to absorbing the majority of the expected loss of each respective conduit. The total amounts of ELNs outstanding for nonconsolidated conduits at December 31, 2009 was $\$ 96$ million.

At December 31, 2009, total assets funded and commercial paper issued by Firm-sponsored multi-seller conduits were as follows.

|  | Total <br> assets funded |  | Commercial <br> paper issued |  |
| :--- | ---: | ---: | ---: | ---: |
| December 31, 2009 (in billions) | $\$$ | 5.1 | $\$$ | 5.1 |
| Consolidated |  | 17.8 |  | 17.8 |
| Non-consolidated(a) |  |  |  |  |

(a) The Firm provided certain deal-specific liquidity facilities (primarily asset purchase agreements) of $\$ 24.2$ billion. Additionally, the Firm provided program-wide liquidity facilities of $\$ 13.0$ billion and program-wide credit enhancements of $\$ 2.0$ billion.

The Firm's maximum exposure to loss on nonconsolidated Firmadministered multi-seller conduits was $\$ 24.8$ billion at December 31, 2009. The maximum exposure to loss, calculated separately for each multi-seller conduit, included the Firm's exposure to both deal-specific liquidity facilities and program wide credit enhancements. For purposes of calculating maximum exposure to loss, Firm-provided program-wide credit enhancement was limited to deal-specific liquidity facilities provided to third parties.

## VIEs associated with investor intermediation activities

As a financial intermediary, the Firm creates certain types of VIEs and also structures transactions, typically using derivatives, with these VIEs to meet investor needs. The Firm may also provide liquidity and other support. The risks inherent in the derivative instruments or liquidity commitments are managed similarly to other credit, market or liquidity risks to which the Firm is exposed. The principal types of VIEs for which the Firm is engaged in on behalf of clients are municipal bond vehicles, credit-related note vehicles and asset swap vehicles.

## Municipal bond vehicles

The Firm has created a series of trusts that provide short-term investors with qualifying tax-exempt investments, and that allow investors in tax-exempt securities to finance their investments at short-term tax-exempt rates. In a typical transaction, the vehicle purchases fixed-rate longer-term highly rated municipal bonds and funds the purchase by issuing two types of securities: (1) putable floating-rate certificates and (2) inverse floating-rate residual interests ("residual interests"). The maturity of each of the putable floating-rate certificates and the residual interests is equal to the life of the vehicle, while the maturity of the underlying municipal bonds is longer. Holders of the putable floating-rate certificates may "put," or tender, the certificates if the remarketing agent cannot successfully remarket the floating-rate certificates to another investor. A liquidity facility conditionally obligates the liquidity provider to fund the purchase of the tendered floating-rate certificates. If funded, the liquidity facility would be repaid by the proceeds from the sale of the underlying municipal bonds upon termination of the vehicle. In certain transactions, if the proceeds from the sale of the underlying municipal bonds are not sufficient to repay the liquidity facility, the liquidity provider has recourse to the residual interest holders for reimbursement.

The holders of the residual interests in these vehicles could experience losses if the face amount of the putable floating-rate certificates exceeds the market value of the municipal bonds upon termination of the vehicle. Certain vehicles require a smaller initial investment by the residual interest holders and thus do not result in excess collateralization. For these vehicles there exists a reimbursement obligation which requires the residual interest holders to post, during the life of the vehicle, additional collateral to the Firm, as liquidity provider, on a daily basis should the market value of the municipal bonds decline.

JPMorgan Chase Bank, N.A. often serves as the sole liquidity provider, and J.P. Morgan Securities LLC as remarketing agent, of the putable floating-rate certificates. The liquidity provider's obligation to perform is conditional and is limited by certain termination events, which include bankruptcy or failure to pay by the municipal bond issuer or credit enhancement provider, an event of taxability on the municipal bonds or the immediate downgrade of the municipal bond to below investment grade. A downgrade of JPMorgan Chase Bank, N.A.'s short-term rating does not affect the Firm's obligation under the liquidity facility. However, in the event of a downgrade in the Firm's credit ratings, holders of the putable floating-rate certificates supported by those liquidity facility commitments might choose to sell their instruments, which could increase the likelihood that the liquidity commitments could be drawn. In vehicles in which third-party investors own the residual interests, in addition to the termination events, the Firm's exposure as liquidity provider is further limited by
the high credit quality of the underlying municipal bonds, the excess collateralization in the vehicle or in certain transactions the reimbursement agreements with the residual interest holders.
As remarketing agent, the Firm may hold putable floating-rate certificates of the municipal bond vehicles. At December 31, 2010 and 2009, respectively, the Firm held $\$ 248$ million and $\$ 72$ million of these certificates on its Consolidated Balance Sheets. The largest amount held by the Firm at any time during 2010 was $\$ 796$ million, or $6 \%$, of the municipal bond vehicles' aggregate outstanding putable floating-rate certificates. The Firm did not have and continues not to have any intent to protect any residual interest holder from potential losses on any of the municipal bond holdings.

The long-term credit ratings of the putable floating-rate certificates are directly related to the credit ratings of the underlying municipal bonds, and to the credit rating of any insurer of the underlying municipal bond. A downgrade of a bond insurer would result in a downgrade of the insured municipal bonds, which would affect the rating of the putable
floating-rate certificates. This could cause demand for these certificates by investors to decline or disappear, as putable floatingrate certificate holders typically require an "AA-" bond rating. At December 31, 2010 and 2009, $96 \%$ and $98 \%$, respectively, of the municipal bonds held by vehicles for which the Firm served as liquidity provider were rated "AA-" or better, based on either the rating of the underlying municipal bond itself or the bond rating including any credit enhancement. At December 31, 2010 and 2009, $\$ 3.4$ billion and $\$ 2.3$ billion, respectively, of the bonds were insured by monoline bond insurers.

The Firm consolidates municipal bond vehicles if it owns the residual interest. The residual interest generally allows the owner to make decisions that significantly impact the economic performance of the municipal bond vehicle, primarily by directing the sale of the municipal bonds owned by the vehicle. In addition, the residual interest owners have the right to receive benefits and bear losses that could potentially be significant to the municipal bond vehicle. The Firm does not consolidate municipal bond vehicles if it does not own the residual interests, since the Firm does not have the power to make decisions that significantly impact the economic performance of the municipal bond vehicle.

The Firm's exposure to nonconsolidated municipal bond VIEs at December 31, 2010 and 2009, including the ratings profile of the VIEs' assets, was as follows.

| December 31, (in billions) | Fair value of assets held by VIEs |  | Liquidity facilities(b) |  | Excess/(deficit)(c) |  | Maximum exposure |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nonconsolidated municipal bond vehicles(a) |  |  |  |  |  |  |  |  |
| 2010 | \$ | 13.7 | \$ | 8.8 | \$ | 4.9 | \$ | 8.8 |
| 2009 |  | 13.2 |  | 8.4 |  | 4.8 |  | 8.4 |


| December 31, (in billions, except where otherwise noted) | Ratings profile of VIE assets (d) |  |  |  |  |  |  |  |  |  | Fair value of assets held by VIEs |  | Wt. avg. expected life of assets (years) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Investment-grade |  |  |  |  |  |  |  | $\frac{\text { Noninvestment-grade }}{\text { BB }+}$ |  |  |  |  |
|  |  |  | $\begin{gathered} \mathrm{AA}+ \\ \text { to } \mathrm{AA}- \end{gathered}$ |  | A+ |  | $\begin{gathered} \text { BBB } \\ \text { to } \mathrm{BBB}- \end{gathered}$ |  | and below |  |  |  |  |
| Nonconsolidated municipal bond vehicles(a) |  |  |  |  |  |  |  |  |  |  | \$ |  |  |
| 2010 | \$ | 1.9 | \$ | 11.2 | \$ | 0.6 | \$ | - | \$ | - |  | 13.7 | 15.5 |
| 2009 |  | 1.6 |  | 11.4 |  | 0.2 |  | - |  | - |  | 13.2 | 10.1 |

[^4]
## Notes to consolidated financial statements

## Credit-related note vehicles

The Firm structures transactions with credit-related note vehicles in which the VIE purchases highly rated assets, such as asset-backed securities, and enters into a credit derivative contract with the Firm to obtain exposure to a referenced credit which the VIE otherwise does not hold. The VIE then issues credit-linked notes ("CLNs") with maturities predominantly ranging from one to 10 years in order to transfer the risk of the referenced credit to the VIE's investors. Clients and investors often prefer using a CLN vehicle since the CLNs issued by the VIE generally carry a higher credit rating than such notes would if issued directly by JPMorgan Chase. The Firm's exposure to the CLN vehicles is generally limited to its rights and obligations under the credit derivative contract with the VIE, as the Firm does not provide any additional contractual financial support to the VIE. In addition, the Firm has not historically provided any financial support to the CLN vehicles over and above its contractual obligations. Accordingly, the Firm typically does not consolidate the CLN vehicles. As a derivative counterparty in a credit-related note structure, the Firm has a senior claim on the collateral of the VIE and reports such derivatives on its balance sheet at fair value. The collateral purchased by such VIEs is largely investment-grade, with a significant amount being rated "AAA." The Firm divides its creditrelated note structures broadly into two types: static and managed.
In a static credit-related note structure, the CLNs and associated credit derivative contract either reference a single credit (e.g., a multinational corporation), or all or part of a fixed portfolio of credits. The Firm generally buys protection from the VIE under the
credit derivative. In a managed credit-related note structure, the CLNs and associated credit derivative generally reference all or part of an actively managed portfolio of credits. An agreement exists between a portfolio manager and the VIE that gives the portfolio manager the ability to substitute each referenced credit in the portfolio for an alternative credit. By participating in a structure where a portfolio manager has the ability to substitute credits within preagreed terms, the investors who own the CLNs seek to reduce the risk that any single credit in the portfolio will default. The Firm does not act as portfolio manager; its involvement with the VIE is generally limited to being a derivative counterparty. As a net buyer of credit protection, in both static and managed credit-related note structures, the Firm pays a premium to the VIE in return for the receipt of a payment (up to the notional of the derivative) if one or more of the credits within the portfolio defaults, or if the losses resulting from the default of reference credits exceed specified levels. Since each CLN is established to the specifications of the investors, the investors have the power over the activities of that VIE that most significantly affect the performance of the CLN. Accordingly, the Firm does not generally consolidate these credit-related note entities. Furthermore, the Firm does not have a variable interest that could potentially be significant. As a derivative counterparty, the Firm has a senior claim on the collateral of the VIE and reports such derivatives on its balance sheet at fair value. Substantially all of the assets purchased by such VIEs are investment-grade.

Exposure to nonconsolidated credit-related note VIEs at December 31, 2010 and 2009, was as follows.

| December 31, 2010 (in billions) | Net derivative receivables |  | Trading assets(b) |  | Total exposure(c) |  | Par value of collateral held by VIEs(d) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Credit-related notes ${ }^{(a)}$ |  |  |  |  |  |  |  |  |
| Static structure | \$ | 1.0 | \$ | - | \$ | 1.0 | \$ | 9.5 |
| Managed structure |  | 2.8 |  | - |  | 2.8 |  | 10.7 |
| Total | \$ | 3.8 | \$ | - | \$ | 3.8 | \$ | 20.2 |
| December 31, 2009 (in billions) |  | $\begin{aligned} & \text { ative } \\ & \text { les } \end{aligned}$ |  |  |  | $\mathrm{re}(\mathrm{c})$ |  | e of al Es(d) |
| Credit-related notes(a) |  |  |  |  |  |  |  |  |
| Static structure | \$ | 1.9 | \$ | 0.7 | \$ | 2.6 | \$ | 10.8 |
| Managed structure |  | 5.0 |  | 0.6 |  | 5.6 |  | 15.2 |
| Total | \$ | 6.9 | \$ | 1.3 | \$ | 8.2 | \$ | 26.0 |

(a) Excluded collateral with a fair value of $\$ 142$ million and $\$ 855$ million at December 31, 2010 and 2009, respectively, which was consolidated, as the Firm, in its role as secondary market-maker, held a majority of the issued credit-related notes of certain vehicles.
(b) Trading assets principally comprise notes issued by VIEs, which from time to time are held as part of the termination of a deal or to support limited market-making.
(c) On-balance sheet exposure that includes net derivative receivables and trading assets - debt and equity instruments.
 relies on the collateral held by the VIEs to pay any amounts due under the derivatives; the vehicles are structured at inception so that the par value of the collateral is expected to be sufficient to pay amounts due under the derivative contracts.

## Asset swap vehicles

The Firm structures and executes transactions with asset swap vehicles on behalf of investors. In such transactions, the VIE purchases a specific asset or assets and then enters into a derivative with the Firm in order to tailor the interest rate or foreign exchange currency risk, or both, according to investors' requirements. Generally, the assets are
held by the VIE to maturity, and the tenor of the derivatives would match the maturity of the assets. Investors typically invest in the notes issued by such VIEs in order to obtain exposure to the credit risk of the specific assets, as well as exposure to foreign exchange and interest rate risk that is tailored to their specific needs. The derivative transaction between the Firm and the VIE may include currency swaps
to hedge assets held by the VIE denominated in foreign currency into the investors' local currency or interest rate swaps to hedge the interest rate risk of assets held by the VIE; to add additional interest rate exposure into the VIE in order to increase the return on the issued notes; or to convert an interest-bearing asset into a zerocoupon bond.

The Firm's exposure to asset swap vehicles is generally limited to its rights and obligations under the interest rate and/or foreign exchange derivative contracts. The Firm historically has not provided
any financial support to the asset swap vehicles over and above its contractual obligations. The Firm does not generally consolidate these asset swap vehicles, since the Firm does not have the power to direct the significant activities of these entities and does not have a variable interest that could potentially be significant. As a derivative counterparty, the Firm has a senior claim on the collateral of the VIE and reports such derivatives on its balance sheet at fair value. Substantially all of the assets purchased by such VIEs are investment-grade.

Exposure to nonconsolidated asset swap VIEs at December 31, 2010 and 2009, was as follows.

| December 31, (in billions) | Net derivative receivables |  | Trading assets(b) |  | Total exposure(c) |  | Par value of collatera held by VIEs(d) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2010(a) | \$ | 0.3 | \$ | - | \$ | 0.3 | \$ | 7.6 |
| 2009(a) |  | 0.1 |  | - |  | 0.1 |  | 10.2 |

(a) Excluded the fair value of collateral of zero and $\$ 623$ million at December 31,2010 and 2009 , respectively, which was consolidated as the Firm, in its role as secondary market-maker, held a majority of the issued notes of certain vehicles.
(b) Trading assets principally comprise notes issued by VIEs, which from time to time are held as part of the termination of a deal or to support limited market-making.
(c) On-balance sheet exposure that includes net derivative receivables and trading assets - debt and equity instruments.
(d) The Firm's maximum exposure arises through the derivatives executed with the VIEs; the exposure varies over time with changes in the fair value of the derivatives. The Firm relies upon the collateral held by the VIEs to pay any amounts due under the derivatives; the vehicles are structured at inception so that the par value of the collateral is expected to be sufficient to pay amounts due under the derivative contracts.

## VIEs sponsored by third parties

Investment in a third-party credit card securitization trust
The Firm holds two interests in a third-party-sponsored VIE, which is a credit card securitization trust that owns credit card receivables issued by a national retailer. The Firm is not the primary beneficiary of the trust, as the Firm does not have the power to direct the activities of the VIE that most significantly impact the VIE's economic performance. The first note is structured so that the principal amount can float up to $47 \%$ of the principal amount of the receivables held by the trust, not to exceed $\$ 4.2$ billion. The Firm accounts for its investment at fair value within AFS securities. At December 31, 2010 and 2009, the amortized cost of the note was $\$ 3.0$ billion and $\$ 3.5$ billion, respectively, and the fair value was $\$ 3.1$ billion and $\$ 3.5$ billion, respectively. The Firm accounts for its other interest with the trust, which is not subject to the limits noted above, as a loan at amortized cost. This senior loan had an amortized cost and fair value of approximately $\$ 1.0$ billion at both December 31, 2010 and 2009. For more information on AFS securities and loans, see Notes 12 and 14 on pages 214-218 and 220-238, respectively, of this Annual Report.

## VIE used in FRBNY transaction

In conjunction with the Bear Stearns merger, in June 2008, the Federal Reserve Bank of New York ("FRBNY") took control, through an LLC formed for this purpose, of a portfolio of $\$ 30.0$ billion in assets, based on the value of the portfolio as of March 14, 2008. The assets of the LLC were funded by a $\$ 28.85$ billion term loan from the FRBNY and a $\$ 1.15$ billion subordinated loan from JPMorgan Chase. The JPMorgan Chase loan is subordinated to the

FRBNY loan and will bear the first $\$ 1.15$ billion of any losses of the portfolio. Any remaining assets in the portfolio after repayment of the FRBNY loan, repayment of the JPMorgan Chase loan and the expense of the LLC will be for the account of the FRBNY. The extent to which the FRBNY and JPMorgan Chase loans will be repaid will depend on the value of the assets in the portfolio and the liquidation strategy directed by the FRBNY. The Firm does not consolidate the LLC, as it does not have the power to direct the activities of the VIE that most significantly impact the VIE's economic performance. Prior to January 1, 2010, the Firm did not consolidate the LLC in accordance with the accounting treatment under prior consolidation accounting guidance since it did not have the obligation to absorb the majority of the vehicle's expected losses, receive a majority of the vehicle's residual returns, or both.

## Other VIEs sponsored by third parties

The Firm enters into transactions with VIEs structured by other parties. These include, for example, acting as a derivative counterparty, liquidity provider, investor, underwriter, placement agent, trustee or custodian. These transactions are conducted at arm's length, and individual credit decisions are based on the analysis of the specific VIE, taking into consideration the quality of the underlying assets. Where the Firm does not have the power to direct the activities of the VIE that most significantly impact the VIE's economic performance, or a variable interest that could potentially be significant, the Firm records and reports these positions on its Consolidated Balance Sheets similarly to the way it would record and report positions in respect of any other third-party transaction.

## Notes to consolidated financial statements

Consolidated VIE assets and liabilities
The following table presents information on assets and liabilities related to VIEs that are consolidated by the Firm as of December 31, 2010 and 2009.

| December 31, 2010 <br> (in billions) | Assets |  |  |  |  |  |  |  | Liabilities |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Trading assets debt and equity instruments |  | Loans |  | Other(a) |  | $\begin{array}{r} \text { Total } \\ \text { assets(b) } \end{array}$ |  | Beneficial interests in VIE assets(c) |  | Other(d) |  | Total liabilities |  |
| VIE program type |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Firm-sponsored credit card trusts | \$ | - | \$ | 67.2 | \$ | 1.3 | \$ | 68.5 | \$ | 44.3 | \$ | - | \$ | 44.3 |
| Firm-administered multi-seller conduits |  | - |  | 21.1 |  | 0.6 |  | 21.7 |  | 21.6 |  | 0.1 |  | 21.7 |
| Mortgage securitization entities |  | 1.8 |  | 2.9 |  | - |  | 4.7 |  | 2.4 |  | 1.6 |  | 4.0 |
| Other |  | 8.0 |  | 4.4 |  | 1.6 |  | 14.0 |  | 9.3 |  | 0.3 |  | 9.6 |
| Total | \$ | 9.8 | \$ | 95.6 | \$ | 3.5 | \$ | 108.9 | \$ | 77.6 | \$ | 2.0 | \$ | 79.6 |
|  | Assets |  |  |  |  |  |  |  | Liabilities |  |  |  |  |  |
| December 31, 2009 (in billions) | Trading assets debt and equity instruments |  | Loans |  | Other(a) |  | $\begin{array}{r} \text { Total } \\ \text { assets(b) } \\ \hline \end{array}$ |  | Beneficial interests in VIE assets(c) |  | Other(d) |  | Total liabilities |  |
| VIE program type |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Firm-sponsored credit card trusts(e) | \$ | - | \$ | 6.1 | \$ | 0.8 | \$ | 6.9 | \$ | 3.9 | \$ | - | \$ | 3.9 |
| Firm-administered multi-seller conduits |  | - |  | 2.2 |  | 2.9 |  | 5.1 |  | 4.8 |  | - |  | 4.8 |
| Mortgage securitization entities |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other |  | 6.4 |  | 4.7 |  | 1.3 |  | 12.4 |  | 6.5 |  | 2.2 |  | 8.7 |
| Total | \$ | 6.4 | \$ | 13.0 | \$ | 5.0 | \$ | 24.4 | \$ | 15.2 | \$ | 2.2 | $\Phi$ | 17.4 |

(a) Included assets classified as cash, resale agreements, derivative receivables, available-for-sale, and other assets within the Consolidated Balance Sheets.
(b) The assets of the consolidated VIEs included in the program types above are used to settle the liabilities of those entities. The difference between total assets and total liabilities recognized for consolidated VIEs represents the Firm's interest in the consolidated VIEs for each program type.
(c) The interest-bearing beneficial interest liabilities issued by consolidated VIEs are classified in the line item on the Consolidated Balance Sheets titled, "Beneficial interests issued by consolidated variable interest entities." The holders of these beneficial interests do not have recourse to the general credit of JPMorgan Chase. Included in beneficial interests in VIE assets are long-term beneficial interests of $\$ 52.6$ billion and $\$ 10.4$ billion at December 31, 2010 and 2009, respectively. The maturities of the longterm beneficial interests as of December 31, 2010, were as follows: $\$ 13.9$ billion under one year, $\$ 29.0$ billion between one and five years, and $\$ 9.7$ billion over five years.
(d) Included liabilities predominately classified as other liabilities as of December 31, 2010, and predominately classified as other liabilities and other borrowed funds as of December 31, 2009
(e) Includes the receivables and related liabilities of the WMMT. For further discussion, see page 246 of this Note.

## Supplemental information on loan securitizations

For loan securitizations in which the Firm is not required to consolidate the trust, the Firm records the transfer of the loan receivable to the trust as a sale when the accounting criteria for a sale are met. Those criteria are: (1) the transferred financial assets are legally isolated from the Firm's creditors; (2) the transferee or beneficial interest holder can pledge or exchange the transferred financial assets; and (3) the Firm does not maintain effective control over the transferred financial assets (e.g., the Firm cannot repurchase the transferred assets before their maturity and it does not have the ability to unilaterally cause the holder to return the transferred assets).

For loan securitizations accounted for as a sale, the Firm recognizes a gain or loss based on the difference between the value of proceeds received (including cash, beneficial interests, or servicing assets received) and the carrying value of the assets sold. Gains and losses on securitizations are reported in noninterest revenue. The value of the proceeds received is determined under the Firm's valuation policies described in Note 3 on pages 170-187 of this Annual Report.

The accounting for retained interests is dependent upon several factors, including the form and economic characteristics of the retained interest. Interests retained by IB are classified as trading assets. Interests retained in other business segments, including RFS, Card and Corporate Treasury, may be classified as AFS securities or trading assets. See Note 12 on pages 214-218 of this Annual Report for more information on AFS securities.

## Securitization activity

The following tables provide information related to the Firm's securitization activities for the years ended December 31, 2010, 2009 and 2008, related to assets held in JPMorgan Chase-
sponsored securitization entities that were not consolidated by the Firm for the periods presented. For the years ended December 31, 2009 and 2008, there were no residential mortgage loans that were securitized, and there were no cash flows from the Firm to the SPEs related to recourse or guarantee arrangements. Effective January 1, 2010, all of the Firm-sponsored credit card, student loan and auto securitization trusts were consolidated as a result of the accounting guidance related to VIEs and, accordingly, are not included in the securitization activity tables below for the year ended December 31, 2010.

| Year ended December 31, 2010 (in millions, except rates) | Residential mortgage |  |  |  |  |  | Commercial and other |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Prime(f)(h) |  | Subprime |  | Option ARMs |  |  |  |
| Principal securitized | \$ | 35 | \$ | - | \$ | - | \$ | 2,237 |
| Pretax gains |  | - |  | - |  | - |  | -(g) |
| All cash flows during the period(a) |  |  |  |  |  |  |  |  |
| Proceeds from new securitizations(b) | \$ | 36 | \$ | - | \$ | - | \$ | 2,369 |
| Servicing fees collected |  | 311 |  | 209 |  | 448 |  | 4 |
| Other cash flows received |  | - |  | - |  | - |  | - |
| Proceeds from collections reinvested in revolving securitizations |  | - |  | - |  | - |  | - |
| Purchases of previously transferred financial assets (or the underlying collateral)(c) |  | 211 |  | 109 |  | 1 |  | - |
| Cash flows received on the interests that continue to be held by the Firm(d) |  | 288 |  | 26 |  | 5 |  | 143 |
| Key assumptions used to measure retained interests originated during the year (rates per annum) |  |  |  |  |  |  |  |  |
| Prepayment rate(e) |  | - |  |  |  |  |  | $\begin{aligned} & \text { 100\% } \\ & \text { CPR } \end{aligned}$ |
| Weighted-average life (in years) |  | - |  |  |  |  |  | 7.1 |
| Expected credit losses |  | - |  |  |  |  |  | -\% |
| Discount rate |  | - |  |  |  |  |  | 7.7\% |

## Notes to consolidated financial statements



## Loans sold to U.S. government agencies and other third-party

 sponsored securitization entitiesIn addition to the amounts reported in the securitization activity tables above, the Firm, in the normal course of business, sells originated and purchased mortgage loans, predominantly to U.S. government agencies. These loans are sold primarily for the purpose of securitization by U.S. government agencies, which also provide credit enhancement of the loans through certain guarantee provisions. In connection with these loan sales, the Firm makes certain representations and warranties. For additional information about the Firm's loan sale- and securitization-related indemnifications, see Note 30 on pages 275-280 of this Annual Report.

The Firm generally retains the right to service the mortgage loans in accordance with the respective servicing guidelines and standards, and records a servicing asset at the time of sale.
The following table summarizes these loan sale activities.

| Year ended December 31,  <br>   <br> (in millions)  | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: |
| Carrying value of loans sold(a)(b) | $\mathbf{\$ 1 5 6 , 6 1 5}$ | $\$ 154,571$ | $\$ 132,111$ |
| Proceeds received from loan sales as cash | $\mathbf{3 , 8 8 7}$ | 1,702 | 7,112 |
| Proceeds received from loan sales as | $\mathbf{1 4 9 , 7 8 6}$ | 149,343 | 121,947 |
| securities(c) | $\mathbf{\$ 1 5 3 , 6 7 3}$ | $\$ 151,045$ | $\$ 129,059$ |
| Total proceeds received from loan sales | $\mathbf{2 1 2}$ | 89 | $\mathbf{3 0}$ |
| Gains on loan sales |  |  |  |

a) Predominantly to U.S. government agencies.
(b) MSRs were excluded from the above table. See Note 17 on pages 260-263 of this

Annual Report for further information on originated MSRs.
(c) Predominantly includes securities from U.S. government agencies that are generally sold shortly after receipt.

The Firm has the option to repurchase certain loans sold to U.S. government agencies (predominantly loans securitized in Ginnie Mae pools) if they reach certain delinquency triggers. Once the delinquency trigger has been met, regardless of whether the repurchase option has been exercised, the Firm recognizes the loan on the Consolidated Balance Sheet. The Firm also recognizes an offsetting liability in accounts payable and other liabilities for any loans subject to the repurchase option, but for which the option to repurchase has not been exercised. As of December 31, 2010 and 2009, loans repurchased or with the option to repurchase were $\$ 13.0$ billion and $\$ 10.8$ billion, respectively. Additionally, real estate owned resulting from repurchases of loans sold to U.S. government agencies was $\$ 1.9$ billion and $\$ 579$ million as of December 31, 2010 and 2009, respectively. Substantially all of these loans and real estate continue to be insured or guaranteed by U.S. government agencies and, where applicable, reimbursement is proceeding normally.

## JPMorgan Chase's interests in Firm-sponsored securitized assets

The following table summarizes the Firm's interests in Firm-sponsored non-consolidated securitizations, which are carried at fair value on the Firm's Consolidated Balance Sheets at December 31, 2010 and 2009. The risk ratings are periodically reassessed as information becomes available. As of December 31, 2010 and 2009, $66 \%$ and $76 \%$, respectively, of the Firm's retained securitization interests in Firm-sponsored securitizations were risk-rated "A" or better.

| December 31, (in billions) | Ratings profile of interests held(b)(c)(d) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 |  |  |  |  |  | 2009 |  |  |  |  |  |
|  | Investmentgrade |  | Noninvestmentgrade |  | Retained interests |  | Investmentgrade |  | Noninvestment-grade |  | Retainedinterests(e) |  |
| Asset types |  |  |  |  |  |  |  |  |  |  |  |  |
| Residential mortgage: |  |  |  |  |  |  |  |  |  |  |  |  |
| Prime(a) | \$ | 0.2 | \$ | 0.5 | \$ | 0.7 | \$ | 0.7 | \$ | 0.4 | \$ | 1.1 |
| Subprime |  | - |  | - |  | - |  | - |  | - |  | - |
| Option ARMs |  | - |  | - |  | - |  | 0.1 |  | - |  | 0.1 |
| Commercial and other |  | 2.6 |  | 0.3 |  | 2.9 |  | 2.2 |  | 0.2 |  | 2.4 |
| Total | \$ | 2.8 | \$ | 0.8 | \$ | 3.6 | \$ | 3.0 | \$ | 0.6 | \$ | 3.6 |

(a) Includes retained interests in Alt-A loans and re-securitization transactions.
(b) The ratings scale is presented on an S\&P-equivalent basis.
(c) Includes $\$ 315$ million and $\$ 139$ million of investments acquired in the secondary market, but predominantly held for investment purposes, as of December 31, 2010 and 2009, respectively. Of this amount, $\$ 276$ million and $\$ 108$ million is classified as investment-grade as of December 31, 2010 and 2009, respectively.
(d) Excludes senior and subordinated securities of $\$ 200$ million and $\$ 875$ million at December 31, 2010 and 2009, respectively, which the Firm purchased in connection with IB's secondary market-making activities.
(e) Excludes $\$ 49$ million of retained interests in student loans at December 31, 2009

## Notes to consolidated financial statements

The table below outlines the key economic assumptions used to determine the fair value as of December 31, 2010 and 2009, of certain of the Firm's retained interests in nonconsolidated Firm-sponsored securitizations, other than MSRs, that are valued using modeling techniques. The table below also outlines the sensitivities of those fair values to immediate $10 \%$ and $20 \%$ adverse changes in assumptions used to determine fair value. For a discussion of MSRs, see Note 17 on pages 260-263 of this Annual Report.

a) Effective January 1, 2010, all of the Firm-sponsored credit card, student loan and auto securitization trusts were consolidated as a result of the accounting guidance related to VIEs and, accordingly, are not included in the table above for the year ended December 31, 2010
(b) Includes retained interests in Alt-A and re-securitization transactions
(c) Includes certain investments acquired in the secondary market but predominantly held for investment purposes.
(d) PPR: principal payment rate; ABS: absolute prepayment speed; CPR: constant prepayment rate.
(e) Excludes the Firm's retained senior and subordinated AFS securities in its credit card securitization trusts, which are discussed on pages 245-246 of this Note.
(f) Expected losses for student loans securitizations are minimal and are incorporated into other assumptions.
(g) The anticipated credit losses, including expected static pool losses, are immaterial for the Firm's retained interests on commercial and other securitizations that had occurred during 2010, 2009 and 2008.
The sensitivity analysis in the preceding table is hypothetical. Changes in fair value based on a $10 \%$ or $20 \%$ variation in assumptions generally cannot be extrapolated easily, because the relationship of the change in the assumptions to the change in fair value may not be linear. Also, in the table, the effect that a change in a particular assumption may have on the fair value is calculated without changing any other assumption. In reality, changes in one factor may result in changes in another, which might counteract or magnify the sensitivities. The above sensitivities also do not reflect risk management practices the Firm may undertake to mitigate such risks.

## Loan delinquencies and net charge-offs

The table below includes information about delinquencies, net charge-offs and components of off-balance sheet securitized financial assets as of December 31, 2010 and 2009.

| As of or for the year ended December 31, (in millions) | Credit exposure |  |  |  | 90 days past due and still accruing |  |  |  | Nonaccrual loans |  |  |  | Net loan charge-offs(d) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 |  | 2009 |  | 2010 |  | 2009 |  | 2010 |  | 2009 |  | 2010 |  | 2009 |  |
| Securitized loans ${ }^{(a)}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Residential mortgage: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Prime mortgage(b) |  | 143,764 | \$ | 171,547 | \$ | - | \$ | - | \$ | 33,093 | \$ | 33,838 | \$ | 6,257 | \$ | 9,333 |
| Subprime mortgage |  | 40,721 |  | 47,261 |  | - |  | - |  | 15,456 |  | 19,505 |  | 3,598 |  | 7,123 |
| Option ARMs |  | 35,786 |  | 41,983 |  | - |  | - |  | 10,788 |  | 10,973 |  | 2,305 |  | 2,287 |
| Commercial and other |  | 106,245 |  | 24,799 |  | - |  | - |  | 5,791 |  | 1,244 |  | 618 |  | 15 |
| Credit card |  | NA |  | 84,626 |  | NA |  | 2,385 |  | NA |  | - |  | NA |  | 6,443 |
| Student |  | NA |  | 1,008 |  | NA |  | 64 |  | NA |  | - |  | NA |  | 1 |
| Automobile |  | NA |  | 218 |  | NA |  | - |  | NA |  | 1 |  | NA |  | 4 |
| Total loans securitized(c) |  | 326,516 |  | 371,442 | \$ | - | \$ | 2,449 | \$ | 65,128 | \$ | 65,561 | \$ | 12,778 |  | 25,206 |

(a) Total assets held in securitization-related SPEs, including credit card securitization trusts, were $\$ 391.1$ billion and $\$ 545.2$ billion at December 31, 2010 and 2009 , respectively. The $\$ 326.5$ billion and $\$ 371.4$ billion of loans securitized at December 31, 2010 and 2009, respectively, excludes: $\$ 56.0$ billion and $\$ 145.0$ billion of securitized loans in which the Firm has no continuing involvement, zero and $\$ 16.7$ billion of seller's interests in credit card master trusts, zero and $\$ 8.3$ billion of cash amounts on deposit and escrow accounts, and $\$ 8.6$ billion and $\$ 3.8$ billion of loan securitizations consolidated on the Firm's Consolidated Balance Sheets at December 31, 2010 and 2009 , respectively.
(b) Includes Alt-A loans
(c) Includes securitized loans that were previously recorded at fair value and classified as trading assets.
(d) Net charge-offs represent losses realized upon liquidation of the assets held by off-balance sheet securitization entities.

## Note 17 - Goodwill and other intangible assets

Goodwill and other intangible assets consist of the following.

| December 31, (in millions) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: |
| Goodwill | $\mathbf{\$ 4 8 , 8 5 4}$ | $\$ 48,357$ | $\$ 48,027$ |
| Mortgage servicing rights | $\mathbf{1 3 , 6 4 9}$ | 15,531 | 9,403 |
| Other intangible assets |  |  |  |
| Purchased credit card relationships | $\mathbf{8 9 7}$ | $\$ 1,246$ | $\$ 1,649$ |
| Other credit card-related intangibles | $\mathbf{5 9 3}$ | 691 | 743 |
| Core deposit intangibles | $\mathbf{8 7 9}$ | 1,207 | 1,597 |
| Other intangibles | $\mathbf{1 , 6 7 0}$ | 1,477 | 1,592 |
| Total other intangible assets | $\mathbf{\$ 4 , 0 3 9}$ | $\$ 4,621$ | $\$ 5,581$ |

## Goodwill

Goodwill is recorded upon completion of a business combination as the difference between the purchase price and the fair value of the net assets acquired. Subsequent to initial recognition, goodwill is not amortized but is tested for impairment during the fourth quarter of each fiscal year, or more often if events or circumstances, such as adverse changes in the business climate, indicate there may be impairment.
The goodwill associated with each business combination is allocated to the related reporting units, which are determined based on how the Firm's businesses are managed and how they are reviewed by the Firm's Operating Committee. The following table presents goodwill attributed to the business segments.

| December 31, (in millions) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: |
| Investment Bank | $\mathbf{\$ 5 , 2 7 8}$ | $\$ 4,959$ | $\$ 4,765$ |
| Retail Financial Services | $\mathbf{1 6 , 4 9 6}$ | 16,514 | 16,210 |
| Card Services \& Auto | $\mathbf{1 4 , 5 2 2}$ | 14,451 | 14,607 |
| Commercial Banking | $\mathbf{2 , 8 6 6}$ | 2,868 | 2,870 |
| Treasury \& Securities Services | $\mathbf{1 , 6 8 0}$ | 1,667 | 1,633 |
| Asset Management | $\mathbf{7 , 6 3 5}$ | $\mathbf{7 , 5 2 1}$ | 7,565 |
| Corporate/Private Equity | $\mathbf{3 7 7}$ | 377 | 377 |
| Total goodwill | $\mathbf{\$ 4 8 , 8 5 4}$ | $\$ 48,357$ | $\$ 48,027$ |

The following table presents changes in the carrying amount of goodwill.

| Year ended December 31, (in millions) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: |
| Beginning balance at January 1,(a): | $\$ 48,357$ | $\$ 48,027$ | $\$ 45,270$ |
| Changes from: |  |  |  |
| Business combinations | $\mathbf{5 5 6}$ | 271 | 2,481 |
| Dispositions | $\mathbf{( 1 9 )}$ | - | $(38)$ |
| Other(b) | $\mathbf{( 4 0 )}$ | 59 | 314 |
| Balance at December 31,(a) | $\$ 484$ | $\$ 48,357$ | $\$ 48,027$ |

(a) Reflects gross goodwill balances as the Firm has not recognized any impairment losses to date.
(b) Includes foreign currency translation adjustments and other tax-related adjustments.

The increase in goodwill during 2010 was largely due to the acquisition of the RBS Sempra Commodities business in IB, and the purchase of a majority interest in Gávea Investimentos, a leading alternative asset management company in Brazil, by AM. The increase in goodwill during 2009 was primarily due to final purchase accounting adjustments related to the Bear Stearns merger and the acquisition of a commodities business (each primarily allocated to IB), and foreign currency translation adjustments related to the Firm's credit card business, partially offset by accounting adjustments associated with the Bear Stearns and Bank One mergers. The increase in goodwill during 2008 was primarily due to the dissolution of the Chase Paymentech Solutions joint venture (allocated to Card), the merger with Bear Stearns, the purchase of an additional equity interest in Highbridge and tax-related purchase accounting adjustments
associated with the Bank One merger (which were primarily attributed to IB).
Impairment Testing
Goodwill was not impaired at December 31, 2010 or 2009, nor was any goodwill written off due to impairment during 2010, 2009 or 2008.
The goodwill impairment test is performed in two steps. In the first step, the current fair value of each reporting unit is compared with its carrying value, including goodwill. If the fair value is in excess of the carrying value (including goodwill), then the reporting unit's goodwill is considered not to be impaired. If the fair value is less than the carrying value (including goodwill), then a second step is performed. In the second step, the implied current fair value of the reporting unit's goodwill is determined by comparing the fair value of the reporting unit (as determined in step one) to the fair value of the net assets of the reporting unit, as if the reporting unit were being acquired in a business combination. The resulting implied current fair value of goodwill is then compared with the carrying value of the reporting unit's goodwill. If the carrying value of the goodwill exceeds its implied current fair value, then an impairment charge is recognized for the excess. If the carrying value of goodwill is less than its implied current fair value, then no goodwill impairment is recognized.
The primary method the Firm uses to estimate the fair value of its reporting units is the income approach. The models project cash flows for the forecast period and use the perpetuity growth method to calculate terminal values. These cash flows and terminal values are then discounted using an appropriate discount rate. Projections of cash flows are based on the reporting units' earnings forecasts, which include the estimated effects of regulatory and legislative changes (including, but not limited to the Dodd-Frank Act, the CARD Act, and limitations on non-sufficient funds and overdraft fees). These forecasts are also reviewed with the Operating Committee of the Firm. The Firm's cost of equity is determined using the Capital Asset Pricing Model, which is consistent with methodologies and assumptions the Firm uses when advising clients in third party transactions. The discount rate used for each reporting unit represents an estimate of the cost of equity capital for that reporting unit and is determined based on the Firm's overall cost of equity, as adjusted for the risk characteristics specific to each reporting unit (for example, for higher levels of risk or uncertainty associated with the business or management's forecasts and assumptions). To assess the reasonableness of the discount rates used for each reporting unit, management compares the discount rate to the estimated cost of equity for publicly traded institutions with similar businesses and risk characteristics. In addition, the weighted average cost of equity (aggregating the various reporting units) is compared with the Firms' overall cost of equity to ensure reasonableness.
The valuations derived from the discounted cash flow models are then compared with market-based trading and transaction multiples for relevant competitors. Precise conclusions generally can not be drawn from these comparisons due to the differences that naturally exist between the Firm's businesses and competitor insti-
tutions. However, trading and transaction comparables are used as general indicators to assess the general reasonableness of the estimated fair values. Management also takes into consideration a comparison between the aggregate fair value of the Firm's reporting units and JPMorgan Chase's market capitalization. In evaluating this comparison, management considers several factors, including (a) a control premium that would exist in a market transaction, (b) factors related to the level of execution risk that would exist at the firm-wide level that do not exist at the reporting unit level and (c) short-term market volatility and other factors that do not directly affect the value of individual reporting units.

While no impairment of goodwill was recognized during 2010, the Firm's consumer lending businesses in RFS and Card remain at elevated risk of goodwill impairment due to their exposure to U.S. consumer credit risk and the effects of regulatory and legislative changes. The valuation of these businesses is particularly dependent upon economic conditions (including new unemployment claims and home prices), and regulatory and legislative changes that may affect consumer credit card use. The assumptions used in the discounted cash flow model were determined using management's best estimates. The cost of equity reflected the related risk and uncertainty, and was evaluated in comparison to relevant market peers. Deterioration in these assumptions could cause the estimated fair values of these reporting units and their associated goodwill to decline, which may result in a material impairment charge to earnings in a future period related to some portion of the associated goodwill.

## Mortgage servicing rights

Mortgage servicing rights represent the fair value of future cash flows for performing specified mortgage servicing activities (predominantly with respect to residential mortgage) for others. MSRs are either purchased from third parties or retained upon sale or securitization of mortgage loans. Servicing activities include collecting principal, interest, and escrow payments from borrowers; making tax and insurance payments on behalf of borrowers; monitoring delinquencies and executing foreclosure proceedings; and accounting for and remitting principal and interest payments to the investors of the mortgage-backed securities.
JPMorgan Chase made the determination to treat its MSRs as one class of servicing assets based on the availability of market inputs used to measure its MSR asset at fair value and its treatment of MSRs as one aggregate pool for risk management purposes. As permitted by U.S. GAAP, the Firm elected to account for this one class of servicing assets at fair value. The Firm estimates the fair value of MSRs using an option-adjusted spread model ("OAS"), which projects MSR cash flows over multiple interest rate scenarios in conjunction with the Firm's prepayment model, and then discounts these cash flows at risk-adjusted rates. The model considers portfolio characteristics, contractually specified servicing fees, prepayment assumptions, delinquency rates, late charges, other ancillary revenue and costs to service, and other economic factors. The Firm reassesses and periodically adjusts the underlying inputs and assumptions used in the OAS model to reflect market conditions
and assumptions that a market participant would consider in valuing the MSR asset. During 2010 and 2009, the Firm continued to refine its proprietary prepayment model based on a number of marketrelated factors, including a downward trend in home prices, general tightening of credit underwriting standards and the associated impact on refinancing activity. The Firm compares fair value estimates and assumptions to observable market data where available, and to recent market activity and actual portfolio experience.

The fair value of MSRs is sensitive to changes in interest rates, including their effect on prepayment speeds. JPMorgan Chase uses combinations of derivatives and securities to manage changes in the fair value of MSRs. The intent is to offset any changes in the fair value of MSRs with changes in the fair value of the related risk management instruments. MSRs decrease in value when interest rates decline. Conversely, securities (such as mortgage-backed securities), principal-only certificates and certain derivatives (when the Firm receives fixed-rate interest payments) increase in value when interest rates decline.

The following table summarizes MSR activity for the years ended December 31, 2010, 2009 and 2008.

| Year ended December 31, <br> (in millions, except where otherwise noted) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: | ---: |
| Fair value at beginning of period | $\mathbf{\$ 1 5 , 5 3 1}$ | $\$ 9,403$ | $\$ 8,632$ |
| MSR activity |  |  |  |

(a) Represents MSR asset fair value adjustments due to changes in inputs, such as interest rates and volatility, as well as updates to assumptions used in the valuation model. "Total realized/unrealized gains/(losses)" columns in the Changes in level 3 recurring fair value measurements tables in Note 3 on pages 170-187 of this Annual Report include these amounts.
(b) Includes changes in MSR value due to modeled servicing portfolio runoff (or time decay). "Purchases, issuances, settlements, net" columns in the Changes in level 3 recurring fair value measurements tables in Note 3 on pages 170-187 of this Annual Report include these amounts.
(c) Includes changes related to commercial real estate of \$(1) million, \$(4) million and $\$(4)$ million for the years ended December 31, 2010, 2009 and 2008, respectively.
(d) Includes $\$ 40$ million, $\$ 41$ million and $\$ 55$ million related to commercial real estate at December 31, 2010, 2009 and 2008, respectively.
(e) Represents amounts the Firm pays as the servicer (e.g., scheduled principal and interest to a trust, taxes and insurance), which will generally be reimbursed within a short period of time after the advance from future cash flows from the trust or the underlying loans. The Firm's credit risk associated with these advances is minimal because reimbursement of the advances is senior to all cash payments to investors. In addition, the Firm maintains the right to stop payment if the collateral is insufficient to cover the advance.

## Notes to consolidated financial statements

f) Includes MSRs acquired as a result of the Washington Mutual transaction (of which $\$ 59$ million related to commercial real estate) and the Bear Stearns merger. For further discussion, see Note 2 on pages 166-170 of this Annual Report.
The following table presents the components of mortgage fees and related income (including the impact of MSR risk management activities) for the years ended December 31, 2010, 2009 and 2008.

| Year ended December 31, (in millions) | 2010 | 2009 | 2008 |
| :---: | :---: | :---: | :---: |
| RFS mortgage fees and related income |  |  |  |
| Net production revenue: |  |  |  |
| Production revenue | \$ 3,440 | \$ 2,115 | \$ 1,150 |
| Repurchase losses | $(2,912)$ | $(1,612)$ | (252) |
| Net production revenue | 528 | 503 | 898 |
| Net mortgage servicing revenue |  |  |  |
| Operating revenue: |  |  |  |
| Loan servicing revenue | 4,575 | 4,942 | 3,258 |
| Other changes in MSR asset fair value(a) | $(2,384)$ | $(3,279)$ | $(2,052)$ |
| Total operating revenue | 2,191 | 1,663 | 1,206 |
| Risk management: |  |  |  |
| Changes in MSR asset fair value due to inputs or assumptions in model(b) | $(2,268)$ | 5,804 | $(6,849)$ |
| Derivative valuation adjust- ments and other | 3,404 | $(4,176)$ | 8,366 |
| Total risk management | 1,136 | 1,628 | 1,517 |
| Total RFS net mortgage servicing revenue | 3,327 | 3,291 | 2,723 |
| All other(c) | 15 | (116) | (154) |
| Mortgage fees and related income | \$ 3,870 | \$ 3,678 | \$ 3,467 |

(a) Includes changes in the MSR value due to modeled servicing portfolio runoff (or time decay). "Purchases, issuances, settlements, net" columns in the Changes in level 3 recurring fair value measurements tables in Note 3 on pages 170-187 of this Annual Report include these amounts.
(b) Represents MSR asset fair value adjustments due to changes in inputs, such as interest rates and volatility, as well as updates to assumptions used in the valuation model. "Total realized/unrealized gains/(losses)" columns in the Changes in level 3 recurring fair value measurements tables in Note 3 on pages 170-187 of this Annual Report include these amounts.
(c) Primarily represents risk management activities performed by the Chief Investment Office ("CIO") in the Corporate sector.
The table below outlines the key economic assumptions used to determine the fair value of the Firm's MSRs at December 31, 2010 and 2009; and it outlines the sensitivities of those fair values to immediate adverse changes in those assumptions, as defined below.

| Year ended December 31, <br> (in millions, except rates) | 2010 | 2009 |
| :--- | :---: | :---: |
| Weighted-average prepayment speed assumption (CPR) | $\mathbf{1 1 . 2 9 \%}$ | $11.37 \%$ |
| Impact on fair value of 10\% adverse change | $\mathbf{\$ ( 8 0 9 )}$ | $\$(896)$ |
| Impact on fair value of 20\% adverse change | $\mathbf{( 1 , 5 6 8 )}$ | $(1,731)$ |
| Weighted-average option adjusted spread | $\mathbf{3 . 9 4 \%}$ | $4.63 \%$ |
| Impact on fair value of 100 basis points adverse change | $\mathbf{\$ ~ ( 5 7 8 )}$ | $\$(641)$ |
| Impact on fair value of 200 basis points adverse change | $(\mathbf{1 , 1 0 9 )}$ | $(1,232)$ |

CPR: Constant prepayment rate.
The sensitivity analysis in the preceding table is hypothetical and should be used with caution. Changes in fair value based on variation in assumptions generally cannot be easily extrapolated, because the relationship of the change in the assumptions to the change in fair value may not be linear. Also, in this table, the effect that a change in a particular assumption may have on the fair value is calculated without changing any other assumption. In reality, changes in one factor may result in changes in another, which might magnify or counteract the sensitivities.

## Other intangible assets

Other intangible assets are recorded at their fair value upon completion of a business combination or certain other transactions, and generally represent the value of customer relationships or arrangements. Subsequently, the Firm's intangible assets with finite lives, including core deposit intangibles, purchased credit card relationships, and other intangible assets, are amortized over their useful lives in a manner that best reflects the economic benefits of the intangible asset. The decrease in other intangible assets during 2010 was predominantly due to amortization, partially offset by an increase resulting from the aforementioned Gávea Investimentos transaction.
The components of credit card relationships, core deposits and other intangible assets were as follows.

| December 31, (in millions) | 2010 |  |  |  |  |  | 2009 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gross amount |  | Accumulated amortization |  | $\begin{gathered} \mathrm{Net} \\ \text { carrying } \\ \text { value } \\ \hline \end{gathered}$ |  | Gross amount |  | Accumulated amortization |  | Net carrying value |  |
| Purchased credit card relationships | \$ | 5,789 | \$ | 4,892 | \$ | 897 | \$ | 5,783 | \$ | 4,537 | \$ | 1,246 |
| Other credit card-related intangibles |  | 907 |  | 314 |  | 593 |  | 894 |  | 203 |  | 691 |
| Core deposit intangibles |  | 4,280 |  | 3,401 |  | 879 |  | 4,280 |  | 3,073 |  | 1,207 |
| Other intangibles |  | 2,515 |  | 845 |  | 1,670 |  | 2,200 |  | 723 |  | 1,477 |

## Amortization expense

Intangible assets of approximately $\$ 600$ million, consisting primarily of asset management advisory contracts, were determined to have an indefinite life and are not amortized.

The following table presents amortization expense related to credit card relationships, core deposits and all other intangible assets.

| Year ended December 31, (in millions) | 2010 |  | 2009 |  | 2008 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Purchased credit card relationships | \$ | 355 | \$ | 421 | \$ | 625 |
| All other intangibles: |  |  |  |  |  |  |
| Other credit card-related intangibles |  | 111 |  | 94 |  | 33 |
| Core deposit intangibles |  | 328 |  | 390 |  | 469 |
| Other intangibles |  | 142 |  | 145 |  | 136 |
| Total amortization expense | \$ | 936 | \$ | 1,050 | \$ | 1,263 |

## Future amortization expense

The following table presents estimated future amortization expense related to credit card relationships, core deposits and all other intangible assets at December 31, 2010.

| Year ended December 31, (in millions) | Purchased credit card relationships | Other credit card-related intangibles | Core deposit intangibles | All other intangible assets | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2011 | \$294 | \$103 | \$284 | \$116 | \$797 |
| 2012 | 254 | 106 | 240 | 111 | 711 |
| 2013 | 213 | 103 | 195 | 108 | 619 |
| 2014 | 109 | 102 | 100 | 94 | 405 |
| 2015 | 23 | 95 | 25 | 76 | 219 |

## Impairment testing

The Firm's intangible assets are tested for impairment if events or changes in circumstances indicate that the asset might be impaired, and, for intangible assets with indefinite lives, on an annual basis

The impairment test for a finite-lived intangible asset compares the undiscounted cash flows associated with the use or disposition of the intangible asset to its carrying value. If the sum of the undiscounted cash flows exceeds its carrying value, then no impairment charge is recorded. If the sum of the undiscounted cash flows is less than its carrying value, then an impairment charge is recognized to the extent the carrying amount of the asset exceeds its fair value.

The impairment test for indefinite-lived intangible assets compares the fair value of the intangible asset to its carrying amount. If the carrying value exceeds the fair value, then an impairment charge is recognized for the difference.

## Note 18 - Premises and equipment

Premises and equipment, including leasehold improvements, are carried at cost less accumulated depreciation and amortization. JPMorgan Chase computes depreciation using the straight-line method over the estimated useful life of an asset. For leasehold improvements, the Firm uses the straight-line method computed over the lesser of the remaining term of the leased facility or the estimated useful life of the leased asset. JPMorgan Chase has recorded immaterial asset retirement obligations related to asbestos remediation in those cases where it has sufficient information to estimate the obligations' fair value.

JPMorgan Chase capitalizes certain costs associated with the acquisition or development of internal-use software. Once the software is ready for its intended use, these costs are amortized on
a straight-line basis over the software's expected useful life and reviewed for impairment on an ongoing basis.

## Note 19 - Deposits

At December 31, 2010 and 2009, noninterest-bearing and interestbearing deposits were as follows.

| December 31, (in millions) | 2010 | 2009 |
| :---: | :---: | :---: |
| U.S. offices |  |  |
| Noninterest-bearing | \$228,555 | \$204,003 |
| Interest-bearing: |  |  |
| Demand(a) | 33,368 | 15,964 |
| Savings(b) | 334,632 | 297,949 |
| Time (included \$2,733 and \$1,463 at fair value at December 31, 2010 and 2009, respectively)(c) | 87,237 | 125,191 |
| Total interest-bearing deposits | 455,237 | 439,104 |
| Total deposits in U.S. offices | 683,792 | 643,107 |
| Non-U.S. offices |  |  |
| Noninterest-bearing | 10,917 | 8,082 |
| Interest-bearing: |  |  |
| Demand | 174,417 | 186,885 |
| Savings | 607 | 661 |
| Time (included \$1,636 and \$2,992 at fair value at December 31, 2010 and 2009, respectively)(c) | 60,636 | 99,632 |
| Total interest-bearing deposits | 235,660 | 287,178 |
| Total deposits in non-U.S. offices | 246,577 | 295,260 |
| Total deposits | \$930,369 | \$938,367 |

(a) 2010 and 2009 includes Negotiable Order of Withdrawal ("NOW") accounts. 2010 includes certain trust accounts.
(b) Includes Money Market Deposit Accounts ("MMDAs").
(c) See Note 4 on pages 187-189 of this Annual Report for further information on structured notes classified as deposits for which the fair value option has been elected.

## Notes to consolidated financial statements

At December 31, 2010 and 2009, time deposits in denominations of $\$ 100,000$ or more were as follows.

| December 31, (in millions) | $\mathbf{2 0 1 0}$ | 2009 |
| :--- | ---: | ---: |
| U.S. | $\$ 59,653$ | $\$ 90,552$ |
| Non-U.S. | $\mathbf{4 4 , 5 4 4}$ | 77,887 |
| Total | $\mathbf{\$ 1 0 4 , 1 9 7}$ | $\$ 168,439$ |

At December 31, 2010, the maturities of interest-bearing time deposits were as follows.

| December 31, 2010 <br> (in millions) | U.S. | Non-U.S. | Total |
| :--- | ---: | ---: | ---: |
| 2011 | $\$ 71,930$ | $\$ 60,043$ | $\$ 131,973$ |
| 2012 | 7,382 | 287 | 7,669 |
| 2013 | 4,281 | 153 | 4,434 |
| 2014 | 1,432 | 22 | 1,454 |
| 2015 | 2,074 | - | 2,074 |
| After 5 years | 138 | 131 | 269 |
| Total | $\$ 87,237$ | $\$ 60,636$ | $\$ 147,873$ |

On November 21, 2008, the FDIC released final rules on the FDIC Temporary Liquidity Guarantee Program (the "TLG Program"). One component of this program, the Transaction Account Guarantee Program (the "TAG Program"), provided unlimited deposit insurance through December 31, 2009, on certain noninterest-bearing transaction accounts at FDIC-insured participating institutions. The Firm elected to participate in the TLG Program and, as a result, was required to pay additional insurance premiums to the FDIC in an amount equal to an annualized 10 basis points on balances in noninterest-bearing transaction accounts that exceeded the $\$ 250,000$ FDIC deposit insurance limits. The expiration date of the program was extended to December 31, 2010, to provide continued support to those institutions most affected by the financial crisis and to enable the program to be phased-out in an orderly manner. Beginning January 1, 2010, the Firm no longer participated in the TAG Program. As a result, funds held in noninterest-bearing transaction accounts after December 31, 2009, were
no longer guaranteed in full. Instead, they are insured up to $\$ 250,000$ under the FDIC's general deposit rules.

## Note 20 - Other borrowed funds

The following table details the components of other borrowed funds.

| December 31, (in millions) | $\mathbf{2 0 1 0}$ | 2009 |
| :--- | ---: | ---: |
| Advances from Federal Home Loan Banks(a) | $\mathbf{\$ 2 5 , 2 3 4}$ | $\$ 27,847$ |
| Other | $\mathbf{3 2 , 0 7 5}$ | 27,893 |
| Total(b)(c) | $\mathbf{\$ 5 7 , 3 0 9}$ | $\$ 55,740$ |

(a) Advances from the FHLBs of $\$ 11.4$ billion, $\$ 1.5$ billion, $\$ 7.3$ billion, $\$ 1.0$ billion and $\$ 3.0$ billion matures in each of the 12-month periods ending December 31, 2011, 2012, 2013, 2014, and 2015, respectively, and $\$ 928$ million matures after December 31, 2015.
(b) Includes other borrowed funds of $\$ 9.9$ billion and $\$ 5.6$ billion accounted for at fair value at December 31, 2010 and 2009, respectively. See Note 3 on pages 170-187 of this Annual Report for further information.
c) Includes other borrowed funds of $\$ 37.8$ billion and $\$ 30.4$ billion secured by assets totaling $\$ 95.3$ billion and $\$ 144.1$ billion at December 31, 2010 and 2009 respectively.
As of December 31, 2010 and 2009, JPMorgan Chase had no significant lines of credit for general corporate purposes.

## Note 21 - Accounts payable and other liabilities

The following table details the components of accounts payable and other liabilities.

| December 31, (in millions) | $\mathbf{2 0 1 0}$ | 2009 |
| :--- | ---: | ---: |
| Brokerage payables(a) | $\mathbf{\$ 9 5 , 3 5 9}$ | $\$ 92,848$ |
| Accounts payable and other liabilities(b) | $\mathbf{7 4 , 9 7 1}$ | 69,848 |
| Total | $\mathbf{\$ 1 7 0 , 3 3 0}$ | $\$ 162,696$ |

(a) Includes payables to customers, brokers, dealers and clearing organizations, and securities fails.
(b) Includes $\$ 236$ million and $\$ 357$ million accounted for at fair value at December 31, 2010 and 2009, respectively.

## Note 22 - Long-term debt

JPMorgan Chase issues long-term debt denominated in various currencies, although predominantly U.S. dollars, with both fixed and variable interest rates. Included in senior and subordinated debt below are various equity-linked or other indexed instruments, which the Firm has elected to measure at fair value. These hybrid securities are classified in the line item of the host contract on the Consolidated Balance Sheets. Changes in fair value are recorded in principal transactions revenue in the Consolidated Statements of Income. The following table is a summary of longterm debt carrying values (including unamortized original issue discount, valuation adjustments and fair value adjustments, where applicable) by remaining contractual maturity as of December 31, 2010.

| By remaining maturity at December 31, 2010 (in millions, except rates) |  | 2010 |  |  |  |  |  |  |  | $\begin{array}{r} 2009 \\ \text { Total } \\ \hline \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Under 1 year |  | 1-5 years |  | After |  | Total |  |  |  |
|  |  |  |  |  | 5 years |  |  |  |  |
| Parent company |  |  |  |  |  |  |  |  |  |  |  |
| Senior debt: | Fixed rate ${ }^{(a)}$ | \$ | 20,384 |  |  | \$ | 47,031 | \$ | 31,372 | \$ | 98,787 | \$ | 93,729 |
|  | Variable rate(b) |  | 15,648 | 37,119 | 6,260 |  | 59,027 |  | 73,335 |  |  |
|  | Interest rates(c) | 0.36-6.00\% |  | 0.31-7.00\% |  | 0.24-7.25\% |  | 0.24-7.25\% |  | 0.22-7.50\% |  |  |
| Subordinated debt: | Fixed rate | \$ | 2,865 | \$ | 9,649 | \$ | 9,486 | \$ | 22,000 | \$ | $\begin{array}{r} \$ \quad 24,851 \\ 1,838 \end{array}$ |  |
|  | Variable rate |  |  |  | 1,987 |  | 9 |  | 1,996 |  |  |  |
|  | Interest rates(c) | 5.90-6.75\% |  | 1.37-6.63\% |  | 2.16-8.53\% |  | 1.37-8.53\% |  | 1.14-10.00\% |  |  |
|  | Subtotal | \$ | 38,897 | \$ | 95,786 | \$ | 47,127 | \$ | 181,810 | \$ | 193,753 |  |
| Subsidiaries |  |  |  |  |  |  |  |  |  |  |  |  |
| Senior debt: | Fixed rate | \$ | 546 | \$ | 1,782 | \$ | 2,900 | \$ | 5,228 | \$ | 3,310 |  |
|  | Variable rate |  | 6,435 |  | 17,199 |  | 6,911 |  | 30,545 |  | 39,835 |  |
|  | Interest rates(c) | 0.26-2.00\% |  |  | 21-3.75\% |  | -14.21\% |  | 1-14.21\% | 0.16-14.21\% |  |  |
| Subordinated debt: | Fixed rate | \$ | - | \$ | - | \$ | 8,605 | \$ | 8,605 | \$ | 8,655 |  |
|  | Variable rate |  | - |  | - |  | 1,150 |  | 1,150 |  | 1,150 |  |
|  | Interest rates(c) |  | -\% |  | -\% |  | 3-8.25\% |  | 63-8.25\% |  | 0.58-8.25\% |  |
|  | Subtotal | \$ | 6,981 | \$ | 18,981 | \$ | 19,566 | \$ | 45,528 | \$ | 52,950 |  |
| Junior subordinated debt: | Fixed rate | \$ | - | \$ | - | \$ | 15,249 |  | 15,249 | \$ | 16,349 |  |
|  | Variable rate |  | - |  | - |  | 5,082 |  | 5,082 |  | 3,266 |  |
|  | Interest rates(c) |  | -\% |  | -\% |  | 9-8.75\% |  | 79-8.75\% | 0.78-8.75\% |  |  |
|  | Subtotal | \$ | - | \$ | - | \$ | 20,331 | \$ | 20,331 | \$ | 19,615 |  |
| Total long-term debt(d)(e)(f) |  | \$ | 45,878 | \$ | 114,767 | \$ | 87,024 | \$ | 247,669(h)(i) | \$ | 266,318 |  |
| Long-term beneficial interests: |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Fixed rate | \$ | 3,095 |  | 4,328 | \$ | 2,372 | \$ | 9,795 | \$ | $\begin{gathered} 1,034 \\ 9,404 \\ 0.25-7.13 \% \\ \hline \end{gathered}$ |  |
|  | Variable rate |  | 10,798 |  | 24,691 |  | 7,270 |  | 42,759 |  |  |  |
|  | Interest rates | 0.28-7.00\% |  | 0.25-11.00\% |  |  | 0.05-7.47\% | 0.05-11.00\% |  |  |  |  |
| Total long-term beneficial interests(g) |  | \$ | 13,893 | \$ | 29,019 | \$ | 9,642 | \$ | 52,554 | \$ 10,438 |  |  |

(a) Included $\$ 18.5$ billion and $\$ 21.6$ billion as of December 31, 2010 and 2009, respectively, guaranteed by the FDIC under the TLG Program
(b) Included $\$ 17.9$ billion and $\$ 19.3$ billion as of December 31, 2010 and 2009, respectively, guaranteed by the FDIC under the TLG Program.
(c) The interest rates shown are the range of contractual rates in effect at year-end, including non-U.S. dollar fixed-and variable-rate issuances, which excludes the effects of the associated derivative instruments used in hedge accounting relationships, if applicable. The use of these derivative instruments modifies the Firm's exposure to the contractual interest rates disclosed in the table above. Including the effects of the hedge accounting derivatives, the range of modified rates in effect at December 31,2010 , for total long-term debt was $(0.12) \%$ to $14.21 \%$, versus the contractual range of $0.21 \%$ to $14.21 \%$ presented in the table above. The interest rate ranges shown exclude structured notes accounted for at fair value.
(d) Included long-term debt of $\$ 8.3$ billion and $\$ 8.1$ billion secured by assets totaling $\$ 11.7$ billion and $\$ 11.4$ billion at December 31, 2010 and 2009 , respectively. Excludes amounts related to hybrid instruments.
(e) Included $\$ 38.8$ billion and $\$ 49.0$ billion of outstanding structured notes accounted for at fair value at December 31, 2010 and 2009, respectively.
(f) Included $\$ 879$ million and $\$ 3.4$ billion of outstanding zero-coupon notes at December 31, 2010 and 2009, respectively. The aggregate principal amount of these notes at their respective maturities was $\$ 2.7$ billion and $\$ 6.6$ billion, respectively.
(g) Included on the Consolidated Balance Sheets in beneficial interests issued by consolidated VIEs. Also included $\$ 1.5$ billion and $\$ 1.4$ billion of outstanding structured notes accounted for at fair value at December 31, 2010 and 2009, respectively. Excluded short-term commercial paper and other short-term beneficial interests of $\$ 25.1$ billion and $\$ 4.8$ billion at December 31, 2010 and 2009, respectively.
(h) At December 31, 2010, long-term debt aggregating $\$ 35.6$ billion was redeemable at the option of JPMorgan Chase, in whole or in part, prior to maturity, based on the terms specified in the respective notes.
(i) The aggregate carrying values of debt that matures in each of the five years subsequent to 2010 is $\$ 45.9$ billion in 2011, $\$ 51.9$ billion in $2012, \$ 20.4$ billion in 2013 , $\$ 23.5$ billion in 2014 and $\$ 18.9$ billion in 2015.

The weighted-average contractual interest rates for total long-term debt excluding structured notes accounted for at fair value were $3.78 \%$ and $3.52 \%$ as of December 31, 2010 and 2009, respectively. In order to modify exposure to interest rate and currency exchange rate movements, JPMorgan Chase utilizes derivative instruments, primarily
interest rate and cross-currency interest rate swaps, in conjunction with some of its debt issues. The use of these instruments modifies the Firm's interest expense on the associated debt. The modified weighted-average interest rates for total long-term debt, including the effects of

## Notes to consolidated financial statements

related derivative instruments, were $2.52 \%$ and $1.86 \%$ as of December 31, 2010 and 2009, respectively.
The Firm participated in the TLG Program commencing in December 2008. The TLG Program was available to, among others, all U.S. depository institutions insured by the FDIC and all U.S. bank holding companies, unless they opted out or the FDIC terminated their participation. Under the TLG Program, the FDIC guaranteed through the earlier of maturity or June 30, 2012, certain senior unsecured debt issued though October 31, 2009, in return for a fee to be paid based on the amount and maturity of the debt. Under the TLG Program, the FDIC would pay the unpaid principal and interest on an FDIC-guaranteed debt instrument upon the failure of the participating entity to make a timely payment of principal or interest in accordance with the terms of the instrument.
JPMorgan Chase \& Co. (Parent Company) has guaranteed certain debt of its subsidiaries, including both long-term debt and structured notes sold as part of the Firm's market-making activities. These guarantees rank on parity with all of the Firm's other unsecured and unsubordinated indebtedness. Guaranteed liabilities totaled $\$ 3.7$ billion and $\$ 4.5$ billion at December 31, 2010 and 2009, respectively. For additional information, see Note 2 on pages 166170 of this Annual Report.

The Firm's unsecured debt does not contain requirements that would call for an acceleration of payments, maturities or changes in the structure of the existing debt, provide any limitations on future borrowings or require additional collateral, based on unfavorable changes in the Firm's credit ratings, financial ratios, earnings or stock price.

## Junior subordinated deferrable interest debentures held by trusts that issued guaranteed capital debt securities

At December 31, 2010, the Firm had established 26 wholly-owned Delaware statutory business trusts ("issuer trusts") that had issued guaranteed capital debt securities.
The junior subordinated deferrable interest debentures issued by the Firm to the issuer trusts, totaling $\$ 20.3$ billion and $\$ 19.6$ billion at December 31, 2010 and 2009, respectively, were reflected in the Firm's Consolidated Balance Sheets in long-term debt, and in the table on the preceding page under the caption "Junior subordinated debt" (i.e., trust preferred capital debt securities). The Firm also records the common capital securities issued by the issuer trusts in other assets in its Consolidated Balance Sheets at December 31, 2010 and 2009. The debentures issued to the issuer trusts by the Firm, less the common capital securities of the issuer trusts, qualified as Tier 1 capital as of December 31, 2010.

The following is a summary of the outstanding trust preferred capital debt securities, including unamortized original issue discount, issued by each trust, and the junior subordinated deferrable interest debenture issued to each trust, as of December 31, 2010.

(a) Represents the amount of trust preferred capital debt securities issued to the public by each trust, including unamortized original issue discount.
(b) Represents the principal amount of JPMorgan Chase debentures issued to each trust, including unamortized original-issue discount. The principal amount of debentures issued to the trusts includes the impact of hedging and purchase accounting fair value adjustments that were recorded on the Firm's Consolidated Financial Statements.

## Note 23 - Preferred stock

At December 31, 2010 and 2009, JPMorgan Chase was authorized to issue 200 million shares of preferred stock, in one or more series, with a par value of $\$ 1$ per share.

In the event of a liquidation or dissolution of the Firm, JPMorgan Chase's preferred stock then outstanding takes precedence over the Firm's common stock for the payment of dividends and the distribution of assets.

Generally, dividends on shares of each outstanding series of preferred stock are payable quarterly, except for the Fixed-to-Floating Rate Non-Cumulative Perpetual Preferred Stock, Series I ("Series I"), which is payable semiannually as discussed below.
On April 23, 2008, the Firm issued 600,000 shares of Series I preferred stock, for total proceeds of $\$ 6.0$ billion. Dividends on Series I shares are payable semiannually at a fixed annual dividend rate of $7.90 \%$ through April 2018, and then become payable quarterly at an annual dividend rate of three-month LIBOR plus 3.47\%.

On July 15, 2008, each series of Bear Stearns preferred stock then issued and outstanding was exchanged into a series of JPMorgan Chase preferred stock with substantially identical terms (6.15\% Cumulative Preferred Stock, Series E ("Series E"); 5.72\%

Cumulative Preferred Stock, Series F ("Series F"); and 5.49\%
Cumulative Preferred Stock, Series G ("Series G")). As a result of the exchange, these series ranked equally with other series of the Firm's preferred stock. On August 20, 2010, the Firm redeemed all of the outstanding shares of its Series E, Series F and Series G preferred stock at their stated redemption value.

On August 21, 2008, the Firm issued 180,000 shares of $8.625 \%$ NonCumulative Preferred Stock, Series J ("Series J"), for total proceeds of $\$ 1.8$ billion.

On October 28, 2008, pursuant to the U.S. Treasury's Capital Purchase Program, the Firm issued to the U.S. Treasury, for total proceeds of $\$ 25.0$ billion, (i) 2.5 million shares of the Firm's Fixed Rate Cumulative Perpetual Preferred Stock, Series K, par value \$1 per share and liquidation preference $\$ 10,000$ per share (the "Series K Preferred Stock"); and (ii) a warrant to purchase up to 88,401,697 shares of the Firm's common stock at an exercise price of $\$ 42.42$ per share (the "Warrant"), subject to certain antidilution and other adjustments. The Series K Preferred Stock was nonvoting, qualified as Tier 1 capital and ranked equally with other series of the Firm's preferred stock in terms of dividend payments and upon liquidation of the Firm. On June 17, 2009, the Firm redeemed all outstanding shares of the Series K Preferred Stock and repaid the full $\$ 25.0$ billion principal amount together with accrued but unpaid dividends. See Note 24 on page 268 for further discussion regarding the Warrant.

The following is a summary of JPMorgan Chase's preferred stock outstanding as of December 31, 2010 and 2009.

|  | Share value and redemption price per share(a) | Shares(b) |  | Carrying value (in millions) |  | Earliest redemption date | Contractual rate in effect at December 31, 2010 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| December 31, |  | 2010 | 2009 | 2010 | 2009 |  |  |
| Cumulative Preferred |  |  |  |  |  |  |  |
| Stock, Series E | \$ 200 | - | 818,113 | \$ - | \$ 164 | - | NA |
| Cumulative Preferred |  |  |  |  |  |  |  |
| Stock, Series F | 200 | - | 428,825 | - | 86 | - | NA |
| Cumulative Preferred |  |  |  |  |  |  |  |
| Stock, Series G | 200 | - | 511,169 | - | 102 | - | NA |
| Fixed-to-Floating Rate |  |  |  |  |  |  |  |
| Non-Cumulative |  |  |  |  |  |  |  |
| Perpetual Preferred |  |  |  |  |  |  |  |
| Stock, Series I | 10,000 | 600,000 | 600,000 | 6,000 | 6,000 | 4/30/2018 | 7.90\% |
| Non-Cumulative Perpetual |  |  |  |  |  |  |  |
| Preferred Stock, |  |  |  |  |  |  |  |
| Series J | 10,000 | 180,000 | 180,000 | 1,800 | 1,800 | 9/1/2013 | 8.63 |
| Total preferred stock |  | 780,000 | 2,538,107 | \$7,800 | \$8,152 |  |  |

(a) The redemption price includes the amount shown in the table plus any accrued but unpaid dividends.
(b) Represented by depositary shares.

## Notes to consolidated financial statements

## Dividend and stock repurchase restrictions

Prior to the redemption of the Series K Preferred Stock on June 17, 2009, the Firm was subject to certain restrictions regarding the declaration of dividends and share repurchases. As a result of the redemption of the Series K Preferred Stock, JPMorgan Chase is no longer subject to any of these restrictions.

## Note 24 - Common stock

At December 31, 2010 and 2009, JPMorgan Chase was authorized to issue 9.0 billion shares of common stock with a par value of $\$ 1$ per share. On June 5, 2009, the Firm issued $\$ 5.8$ billion, or 163 million new shares, of its common stock at $\$ 35.25$ per share. On September 30, 2008, the Firm issued $\$ 11.5$ billion, or 284 million new shares, of its common stock at $\$ 40.50$ per share.

On April 8, 2008, pursuant to the Share Exchange Agreement dated March 24, 2008, between JPMorgan Chase and Bear Stearns, 20.7 million newly issued shares of JPMorgan Chase common stock were issued to Bear Stearns in a transaction that was exempt from registration under the Securities Act of 1933, pursuant to Section 4(2) thereof, in exchange for 95.0 million newly issued shares of Bear Stearns common stock (or $39.5 \%$ of Bear Stearns common stock after giving effect to the issuance). Upon the consummation of the Bear Stearns merger, on May 30, 2008, the 20.7 million shares of JPMorgan Chase common stock and 95.0 million shares of Bear Stearns common stock were cancelled. For a further discussion of this transaction, see Note 2 on pages 166-170 of this Annual Report.

Common shares issued (newly issued or distributed from treasury) by JPMorgan Chase during the years ended December 31, 2010, 2009 and 2008 were as follows.

| Year ended December 31, (in millions) | 2010 | 2009 | 2008 |
| :---: | :---: | :---: | :---: |
| Issued - balance at January 1 | 4,104.9 | 3,941.6 | 3,657.7 |
| Newly issued: |  |  |  |
| Common stock: |  |  |  |
| Open market issuance | - | 163.3 | 283.9 |
| Bear Stearns Share Exchange Agreement | - | - | 20.7 |
| Total newly issued | - | 163.3 | 304.6 |
| Canceled shares | - | - | (20.7) |
| Total issued - balance at December 31 | 4,104.9 | 4,104.9 | 3,941.6 |
| Treasury - balance at January 1 | (162.9) | (208.8) | (290.3) |
| Purchase of treasury stock | (77.9) | - | - |
| Share repurchases related to employee stockbased awards(a) | (0.1) | (1.1) | (0.5) |
| Issued from treasury: |  |  |  |
| Net change from the Bear Stearns merger as a result of the reissuance of Treasury stock and the Share Exchange Agreement | - | - | 26.5 |
| Employee benefits and compensation plans | 45.3 | 45.7 | 54.4 |
| Employee stock purchase plans | 1.0 | 1.3 | 1.1 |
| Total issued from treasury | 46.3 | 47.0 | 82.0 |
| Total treasury - balance at December 31 | (194.6) | (162.9) | (208.8) |
| Outstanding | 3,910.3 | 3,942.0 | 3,732.8 |

(a) Participants in the Firm's stock-based incentive plans may have shares withheld to cover income taxes.

As noted in Note 23 on pages 267-268, pursuant to the U.S. Treasury's Capital Purchase Program, the Firm issued to the U.S. Treasury a Warrant to purchase up to $88,401,697$ shares of the Firm's common stock, at an exercise price of $\$ 42.42$ per share, subject to certain antidilution and other adjustments. The U.S. Treasury exchanged the Warrant for 88,401,697 warrants, each of which was a warrant to purchase a share of the Firm's common stock at an exercise price of $\$ 42.42$ per share and, on December 11, 2009, sold the warrants in a secondary public offering for $\$ 950$ million. The warrants are exercisable, in whole or in part, at any time and from time to time until October 28, 2018. The Firm did not purchase any of the warrants sold by the U.S. Treasury.
Under the stock repurchase program authorized by the Firm's Board of Directors, the Firm is authorized to repurchase up to $\$ 10.0$ billion of the Firm's common stock plus 88 million warrants sold by the U.S. Treasury in 2009. During 2009, the Firm did not repurchase any shares of its common stock or warrants. In the second quarter of 2010, the Firm resumed common stock repurchases, and during the year repurchased an aggregate of 78 million shares for $\$ 3.0$ billion at an average price per share of $\$ 38.49$. The Firm's share repurchase activities in 2010 were intended to offset sharecount increases resulting from employee stock-based incentive awards and were consistent with the Firm's goal of maintaining an appropriate sharecount. The Firm did not repurchase any of the warrants during 2010. As of December 31, 2010, $\$ 3.2$ billion of authorized repurchase capacity remained with respect to the common stock, and all of the authorized repurchase capacity remained with respect to the warrants.
The Firm may, from time to time, enter into written trading plans under Rule 10b5-1 of the Securities Exchange Act of 1934 to facilitate the repurchase of common stock and warrants in accordance with the repurchase program. A Rule 10b5-1 repurchase plan allows the Firm to repurchase its equity during periods when it would not otherwise be repurchasing common stock - for example during internal trading "black-out periods." All purchases under a Rule 10b5-1 plan must be made according to a predefined plan established when the Firm is not aware of material nonpublic information.

As of December 31, 2010, approximately 564 million unissued shares of common stock were reserved for issuance under various employee incentive, compensation, option and stock purchase plans, director compensation plans, and the warrants sold by the U.S. Treasury as discussed above.

## Note 25 - Earnings per share

Effective January 1, 2009, the Firm implemented accounting guidance for participating securities, which clarifies that unvested stock-based compensation awards containing nonforfeitable rights to dividends or dividend equivalents (collectively, "dividends") are participating securities and should be included in the earnings per share ("EPS") calculation using the two-class method. Under the twoclass method, all earnings (distributed and undistributed) are allocated to each class of common stock and participating securities, based on their respective rights to receive dividends. JPMorgan Chase grants restricted stock and RSUs to certain employees under its stock-based compensation programs, which entitle the recipients to receive nonforfeitable dividends during the vesting period on a basis equivalent to the dividends paid to holders of common stock; these unvested awards meet the definition of participating securities. EPS data for the prior periods were revised as required by the accounting guidance. Options issued under employee benefit plans that have an antidilutive effect are excluded from the computation of diluted EPS.
The following table presents the calculation of basic and diluted EPS for the years ended December 31, 2010, 2009 and 2008.

Year ended December 31,

| (in millions, except per share amounts) | 2010 | 2009 |  | 2008 |
| :---: | :---: | :---: | :---: | :---: |
| Basic earnings per share |  |  |  |  |
| Income before extraordinary gain | \$ 17,370 | \$ 11,652 | \$ | 3,699 |
| Extraordinary gain | - | 76 |  | 1,906 |
| Net income | 17,370 | 11,728 |  | 5,605 |
| Less: Preferred stock dividends | 642 | 1,327 |  | 674 |
| Less: Accelerated amortization from redemption of preferred stock issued to the U.S. Treasury | - | 1,112(c) |  |  |
| Net income applicable to common equity | 16,728 | 9,289(c) |  | 4,931 |
| Less: Dividends and undistributed earnings allocated to participating securities | 964 | 515 |  | 189 |
| Net income applicable to common |  |  |  |  |
| Total weighted-average basic shares outstanding | 3,956.3 | 3,862.8 |  | ,501.1 |
| Per share |  |  |  |  |
| Income before extraordinary gain | \$ 3.98 | \$ 2.25(c) | \$ | 0.81 |
| Extraordinary gain | - | 0.02 |  | 0.54 |
| Net income | \$ 3.98 | \$ 2.27(c) | \$ | 1.35 |

Year ended December 31,

| (in millions, except per share amounts) | 2010 | 2009 | 2008 |
| :---: | :---: | :---: | :---: |
| Diluted earnings per share |  |  |  |
| Net income applicable to common stockholders | \$ 15,764 | \$ 8,774 | \$ 4,742 |
| Total weighted-average basic shares |  |  |  |
| Add: Employee stock options, SARs and warrants(a) | 20.6 | 16.9 | 20.7 |
| Total weighted-average diluted shares outstanding(b) | 3,976.9 | 3,879.7 | 3,521.8 |
| Per share |  |  |  |
| Income before extraordinary gain | \$ 3.96 | \$ 2.24(c) | \$ 0.81 |
| Extraordinary gain | - | 0.02 | 0.54 |
| Net income per share | \$ 3.96 | \$ 2.26(c) | \$ 1.35 |

(a) Excluded from the computation of diluted EPS (due to their antidilutive effect) were options issued under employee benefit plans and the warrants originally issued in 2008 under the U.S. Treasury's Capital Purchase Program to purchase shares of the Firm's common stock aggregating 233 million, 266 million and 209 million for the full years ended December 31, 2010, 2009 and 2008, respectively.
(b) Participating securities were included in the calculation of diluted EPS using the two-class method, as this computation was more dilutive than the calculation using the treasury stock method.
(c) The calculation of basic and diluted EPS and net income applicable to common equity for full year 2009 includes a one-time, noncash reduction of $\$ 1.1$ billion, or $\$ 0.27$ per share, resulting from repayment of the U.S. Troubled Asset Relief Program ("TARP") preferred capital.

## Notes to consolidated financial statements

## Note 26 - Accumulated other comprehensive incomel(loss)

Accumulated other comprehensive income/(loss) includes the after-tax change in unrealized gains/(losses) on AFS securities, foreign currency translation adjustments (including the impact of related derivatives), cash flow hedging activities and net loss and prior service costs/(credit) related to the Firm's defined benefit pension and OPEB plans.

| As of or for the year ended December 31, (in millions) | Unrealized gains/(losses) on AFS securities(b) | Translation adjustments, net of hedges | Cash flow hedges | Net loss and prior service costs/(credit) of defined benefit pension and OPEB plans | Accumulated other comprehensive income/(loss) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Balance at December 31, 2007 | \$ 380 | \$ 8 | \$(802) | \$ (503) | \$ (917) |
| Net change | $(2,481)(\mathrm{c})$ | (606) | 600 | $(2,283)$ | $(4,770)$ |
| Balance at December 31, 2008 | $(2,101)$ | (598) | (202) | $(2,786)$ | $(5,687)$ |
| Net change | 4,133(d) | 582 | 383 | 498 | 5,596 |
| Balance at December 31, 2009 | 2,032(e) | (16) | 181 | $(2,288)$ | (91) |
| Cumulative effect of changes in accounting principles(a) | (144) | - | - | - | (144) |
| Net change | 610(f) | 269 | 25 | 332 | 1,236 |
| Balance at December 31, 2010 | \$ 2,498(e) | \$ 253 | \$ 206 | \$(1,956) | \$ 1,001 |

(a) Reflects the effect of adoption of accounting guidance related to the consolidation of VIEs, and to embedded credit derivatives in beneficial interests in securitized financial assets. AOCI decreased by $\$ 129$ million due to the adoption of the accounting guidance related to VIEs as a result of the reversal of the fair value adjustments taken on retained AFS securities that were eliminated in consolidation; for further discussion see Note 16 on pages 244-259 of this Annual Report. AOCI decreased by $\$ 15$ million due to the adoption of the new guidance related to credit derivatives embedded in certain of the Firm's AFS securities; for further discussion, see Note 6 on pages 191-199 of this Annual Report.
(b) Represents the after-tax difference between the fair value and amortized cost of the AFS securities portfolio and retained interests in securitizations recorded in other assets.
(c) The net change during 2008 was due primarily to spread widening related to credit card asset-backed securities, nonagency MBS and collateralized loan obligations.
d) The net change during 2009 was due primarily to overall market spread and market liquidity improvement as well as changes in the composition of investments.
(e) Includes after-tax unrealized losses of $\$(81)$ million and $\$(226)$ million not related to credit on debt securities for which credit losses have been recognized in income at December 31, 2010 and 2009, respectively.
(f) The net change during 2010 was due primarily to the narrowing of spreads on commercial and nonagency MBS as well as on collateralized loan obligations; also reflects increased market value on pass-through MBS due to narrowing of spreads and other market factors.

The following table presents the before- and after-tax changes in net unrealized gains/(losses); reclassification adjustments for realized (gains)/losses on AFS securities and cash flow hedges; changes resulting from foreign currency translation adjustments (including the impact of related derivatives); net gains/(losses) and prior service costs/(credits) from pension and OPEB plans; and amortization of pension and OPEB amounts into net income. Reclassification adjustments include amounts recognized in net income that had been recorded previously in other comprehensive income/(loss).

|  | 2010 |  |  | 2009 |  |  | 2008 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year ended December 31, (in millions) | Before tax | Tax effect | $\begin{aligned} & \text { After } \\ & \text { tax } \\ & \hline \end{aligned}$ | Before tax | Tax effect | $\begin{gathered} \hline \text { After } \\ \text { tax } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Before } \\ \operatorname{tax} \\ \hline \end{gathered}$ | Tax effect | $\begin{aligned} & \hline \text { After } \\ & \text { tax } \\ & \hline \end{aligned}$ |
| Unrealized gains/(losses) on AFS securities: |  |  |  |  |  |  |  |  |  |
| Net unrealized gains/(losses) arising during the period | \$ 3,982 | \$(1,540) | \$ 2,442 | \$ 7,870 | \$(3,029) | \$4,841 | \$(3,071) | \$1,171 | \$(1,900) |
| Reclassification adjustment for realized (gains)/losses included in net income | $(2,982)$ | 1,150 | $(1,832)$ | $(1,152)$ | 444 | (708) | (965) | 384 | (581) |
| Net change | 1,000 | (390) | 610 | 6,718 | $(2,585)$ | 4,133 | $(4,036)$ | 1,555 | $(2,481)$ |
| Translation adjustments: |  |  |  |  |  |  |  |  |  |
| Translation | 402 | (139) | 263 | 1,139 | (398) | 741 | $(1,781)$ | 682 | $(1,099)$ |
| Hedges | 11 | (5) | 6 | (259) | 100 | (159) | 820 | (327) | 493 |
| Net change | 413 | (144) | 269 | 880 | (298) | 582 | (961) | 355 | (606) |
| Cash flow hedges: |  |  |  |  |  |  |  |  |  |
| Net unrealized gains/(losses) arising during the period | 247 | (96) | 151 | 767 | (308) | 459 | 584 | (226) | 358 |
| Reclassification adjustment for realized (gains)/losses included in net income | (206) | 80 | (126) | (124) | 48 | (76) | 402 | (160) | 242 |
| Net change | 41 | (16) | 25 | 643 | (260) | 383 | 986 | (386) | 600 |
| Net loss and prior service cost/(credit) of defined benefit pension and OPEB plans: |  |  |  |  |  |  |  |  |  |
| Net gains/(losses) and prior service credits arising during the period | 294 | (96) | 198 | 494 | (200) | 294 | $(3,579)$ | 1,289 | $(2,290)$ |
| Reclassification adjustment for net loss and prior service credits included in net income | 224 | (90) | 134 | 337 | (133) | 204 | 14 | (7) | 7 |
| Net change | 518 | (186) | 332 | 831 | (333) | 498 | $(3,565)$ | 1,282 | $(2,283)$ |
| Total other comprehensive incomel(loss) | \$ 1,972 | \$ (736) | \$ 1,236 | \$ 9,072 | \$(3,476) | \$5,596 | \$ 7,576 ) | \$2,806 | \$(4,770) |

## Note 27 - Income taxes

JPMorgan Chase and its eligible subsidiaries file a consolidated U.S. federal income tax return. JPMorgan Chase uses the asset and liability method to provide income taxes on all transactions recorded in the Consolidated Financial Statements. This method requires that income taxes reflect the expected future tax consequences of temporary differences between the carrying amounts of assets or liabilities for book and tax purposes. Accordingly, a deferred tax asset or liability for each temporary difference is determined based on the tax rates that the Firm expects to be in effect when the underlying items of income and expense are realized. JPMorgan Chase's expense for income taxes includes the current and deferred portions of that expense. A valuation allowance is established to reduce deferred tax assets to the amount the Firm expects to realize.

Due to the inherent complexities arising from the nature of the Firm's businesses, and from conducting business and being taxed in a substantial number of jurisdictions, significant judgments and estimates are required to be made. Agreement of tax liabilities between JPMorgan Chase and the many tax jurisdictions in which the Firm files tax returns may not be finalized for several years. Thus, the Firm's final tax-related assets and liabilities may ultimately be different from those currently reported.

The components of income tax expense/(benefit) included in the Consolidated Statements of Income were as follows for each of the years ended December 31, 2010, 2009 and 2008.

| Year ended December 31, (in millions) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: |
| Current income tax expense |  |  |  |
| $\quad$ U.S. federal | $\mathbf{\$ 4 , 0 0 1}$ | $\$ 4,698$ | $\$ 395$ |
| Non-U.S. | $\mathbf{2 , 7 1 2}$ | 2,368 | 1,009 |
| U.S. state and local | $\mathbf{1 , 7 4 4}$ | 971 | 307 |
| Total current income tax expense |  | 8,037 | 1,711 |
| Deferred income tax expensel(benefit) | $\mathbf{( 7 5 3 )}$ | $(2,867)$ | $(3,015)$ |
| $\quad$ U.S. federal | $\mathbf{1 6 9}$ | $(454)$ | 1 |
| Non-U.S. | $\mathbf{( 3 8 4 )}$ | $(301)$ | 377 |
| $\quad$ U.S. state and local | $\mathbf{( 9 6 8 )}$ | $(3,622)$ | $(2,637)$ |
| Total deferred income tax expensel(benefit) |  |  |  |
| Total income tax expensel (benefit) before | $\mathbf{\$ 7 , 4 8 9}$ | $\$ 4,415$ | $\$(926)$ |

Total income tax expense includes $\$ 485$ million, $\$ 280$ million and $\$ 55$ million of tax benefits recorded in 2010, 2009 and 2008, respectively, as a result of tax audit resolutions.

The preceding table does not reflect the tax effect of certain items that are recorded each period directly in stockholders' equity and certain tax benefits associated with the Firm's employee stock-based compensation plans. The tax effect of all items recorded directly to stockholders' equity resulted in an increase of \$1.8
billion in 2010, a decrease of $\$ 3.7$ billion in 2009, and an increase of $\$ 3.0$ billion in 2008.
U.S. federal income taxes have not been provided on the undistributed earnings of certain non-U.S. subsidiaries, to the extent that such earnings have been reinvested abroad for an indefinite period of time. During 2008, as part of JPMorgan Chase's periodic review of the business requirements and capital needs of its non-U.S. subsidiaries, combined with the formation of specific strategies and steps taken to fulfill these requirements and needs, the Firm determined that the undistributed earnings of certain of its subsidiaries, for which U.S. federal income taxes had been provided, would be indefinitely reinvested to fund the current and future growth of the related businesses. As management does not intend to use the earnings of these subsidiaries as a source of funding for its U.S. operations, such earnings will not be distributed to the U.S. in the foreseeable future. This determination resulted in the release of deferred tax liabilities and the recognition of an income tax benefit of $\$ 1.1$ billion associated with these undistributed earnings in 2008. For 2010, pretax earnings of approximately $\$ 3.5$ billion were generated that will be indefinitely reinvested in these subsidiaries. At December 31, 2010, the cumulative amount of undistributed pretax earnings in these subsidiaries approximated $\$ 19.3$ billion. If the Firm were to record a deferred tax liability associated with these undistributed earnings, the amount would be $\$ 4.3$ billion at December 31, 2010.
Tax expense applicable to securities gains and losses for the years 2010, 2009 and 2008 was $\$ 1.1$ billion, $\$ 427$ million, and $\$ 608$ million, respectively.

A reconciliation of the applicable statutory U.S. income tax rate to the effective tax rate for each of the years ended December 31, 2010, 2009 and 2008, is presented in the following table.

| Year ended December 31, | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | :---: | :---: | :---: |
| Statutory U.S. federal tax rate | $\mathbf{3 5 . 0 \%}$ | $35.0 \%$ | $35.0 \%$ |
| Increase/(decrease) in tax rate resulting from: |  |  |  |
| U.S. state and local income taxes, net of U.S. |  |  |  |
| $\quad$ federal income tax benefit | $\mathbf{3 . 6}$ | 2.7 | 16.0 |
| Tax-exempt income | $\mathbf{( 2 . 4 )}$ | $(3.9)$ | $(14.8)$ |
| Non-U.S. subsidiary earnings(a) | $\mathbf{( 2 . 2 )}$ | $(1.7)$ | $(53.6)$ |
| Business tax credits | $\mathbf{( 3 . 7 )}$ | $(5.5)$ | $(24.5)$ |
| Bear Stearns equity losses | $\mathbf{-}$ | - | 5.7 |
| Other, net | $\mathbf{( 0 . 2 )}$ | 0.9 | 2.8 |
| Effective tax rate | $\mathbf{3 0 . 1 \%}$ | $27.5 \%$ | $\mathbf{( 3 3 . 4 ) \%}$ |

(a) Includes earnings deemed to be reinvested indefinitely in non-U.S. subsidiaries.

Deferred income tax expense/(benefit) results from differences between assets and liabilities measured for financial reporting versus income-tax return purposes. Deferred tax assets are recognized if, in management's judgment, their realizability is determined to be more likely than not. If a deferred tax asset is determined to be unrealizable, a valuation allowance is established. The significant components of deferred tax assets and liabilities are reflected in the following table as of December 31, 2010 and 2009.

| December 31, (in millions) | 2010 | 2009 |
| :---: | :---: | :---: |
| Deferred tax assets |  |  |
| Allowance for loan losses | \$12,287 | \$12,376 |
| Employee benefits | 4,279 | 4,424 |
| Allowance for other than loan losses | 6,029 | 3,995 |
| Non-U.S. operations | 956 | 1,926 |
| Tax attribute carryforwards | 1,370 | 912 |
| Fee income | 446 | - |
| Fair value adjustments(a) | 51 | - |
| Gross deferred tax assets | \$25,418 | \$23,633 |
| Deferred tax liabilities |  |  |
| Depreciation and amortization | \$ 3,500 | \$ 4,832 |
| Leasing transactions | 2,160 | 2,054 |
| Non-U.S. operations | 1,136 | 1,338 |
| Fee income | - | 670 |
| Fair value adjustments(a) | - | 328 |
| Other, net | 519 | 147 |
| Gross deferred tax liabilities | \$ 7,315 | \$ 9,369 |
| Valuation allowance | 1,784 | 1,677 |
| Net deferred tax asset | \$16,319 | \$12,587 |

(a) Includes fair value adjustments related to AFS securities, cash flows hedging activities and other portfolio investments.

JPMorgan Chase has recorded deferred tax assets of $\$ 1.4$ billion at December 31, 2010, in connection with U.S. federal, state and local and non-U.S. subsidiary net operating loss carryforwards and foreign tax credit carryforwards. At December 31, 2010, the U.S. federal net operating loss carryforward was approximately $\$ 1.2$ billion; the state and local net operating loss carryforward was approximately $\$ 1.0$ billion; the non-U.S. subsidiary net operating loss carryforward was $\$ 515$ million; and the U.S. foreign tax credit carryforward was approximately $\$ 750$ million.

If not utilized, the U.S. federal net operating loss carryforward and the state and local net operating loss carryforward will expire in 2027; and the U.S. foreign tax credit carryforward will expire in 2020. The non-U.S. subsidiary net operating loss carryforward has an unlimited carryforward period.
A valuation allowance has been recorded for losses associated with non-U.S. subsidiaries and certain portfolio investments, and certain state and local tax benefits.

At December 31, 2010, 2009 and 2008, JPMorgan Chase's unrecognized tax benefits, excluding related interest expense and penalties, were $\$ 7.8$ billion, $\$ 6.6$ billion and $\$ 5.9$ billion, respectively, of which $\$ 3.8$ billion, $\$ 3.5$ billion and $\$ 2.9$ billion, respectively, if recognized, would reduce the annual effective tax rate. As JPMorgan Chase is presently under audit by a number of tax authorities, it is reasonably possible that significant changes in the gross balance of unrecognized tax benefits may occur within the next 12 months. JPMorgan Chase does not expect that any changes over the next twelve months in its gross balance of unrecognized tax benefits caused by such audits would result in a significant change in its annual effective tax rate.

The following table presents a reconciliation of the beginning and ending amount of unrecognized tax benefits for the years ended December 31, 2010, 2009 and 2008.

Unrecognized tax benefits

| Year ended December 31, (in millions) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | ---: | ---: | ---: |
| Balance at January 1, | $\mathbf{\$ 6 , 6 0 8}$ | $\$ 5,894$ | $\$ 4,811$ |
| Increases based on tax positions related to the <br> current period | $\mathbf{8 1 3}$ | 584 | 890 |
| Decreases based on tax positions related to the <br> current period | $\mathbf{( 2 4 )}$ | $(6)$ | $(109)$ |
| Increases associated with the Bear Stearns merger <br> Increases based on tax positions related to prior <br> periods | - | - | 1,387 |
| Decreases based on tax positions related to prior <br> periods | $\mathbf{1 , 6 8 1}$ | 703 | 501 |
| Decreases related to settlements with taxing <br> authorities | $\mathbf{( 1 , 1 9 8 )}$ | $(322)$ | $(1,386)$ |
| Decreases related to a lapse of applicable statute <br> of limitations | $\mathbf{( 7 4 )}$ | $(203)$ | $(181)$ |
| Balance at December 31, | $\mathbf{\$ 7 , 7 6 7}$ | $\$ 6,608$ | $\$ 5,894$ |

After-tax interest expense/(benefit) and penalties related to income tax liabilities recognized in income tax expense were $\$(54)$ million, $\$ 101$ million and $\$ 346$ million in 2010, 2009 and 2008, respectively.
Included in accounts payable and other liabilities at December 31, 2010 and 2009, in addition to the Firm's liability for unrecognized tax benefits, was $\$ 1.6$ billion and $\$ 2.4$ billion, respectively, for income taxrelated interest and penalties.
JPMorgan Chase is subject to ongoing tax examinations by the tax authorities of the various jurisdictions in which it operates, including U.S. federal, state and local, and non-U.S. jurisdictions. The Firm's consolidated federal income tax returns are presently under examination by the Internal Revenue Service ("IRS") for the years 2003, 2004 and 2005. This examination is expected to conclude in 2011. The consolidated federal income tax returns of Bear Stearns for the years ended November 30, 2006, and November 30, 2007, and for the period December 1, 2007, through May 30, 2008, are presently under examination. This examination is expected to conclude in 2012.

The IRS audits of the consolidated federal income tax returns of JPMorgan Chase for the years 2006, 2007 and 2008 are expected to commence in 2011. Administrative appeals are pending with the IRS relating to prior periods that were examined for JPMorgan Chase and for certain of its predecessor entities. For 2002 and prior years, refund claims relating to income and credit adjustments, and to tax attribute carrybacks, for JPMorgan Chase have been filed. Refund claims have been filed for Bank One for the period January 1, 2004, through July 31, 2004, and for prior years primarily to reflect income adjustments. Amended returns to reflect refund claims primarily attributable to net operating losses and tax credit carrybacks are anticipated to be filed for the final Bear Stearns U.S. federal consolidated tax return for the period December 1, 2007, through May 30, 2008, and for prior years.

The following table presents the U.S. and non-U.S. components of income before income tax expense/(benefit) and extraordinary gain for the years ended December 31, 2010, 2009 and 2008.

| Year ended December 31, (in millions) | $\mathbf{2 0 1 0}$ | 2009 | $\mathbf{2 0 0 8}$ |
| :--- | ---: | ---: | ---: |
| U.S. | $\mathbf{\$ 1 6 , 5 6 8}$ | $\$ 6,263$ | $\$(2,094)$ |
| Non-U.S.(a) | $\mathbf{8 , 2 9 1}$ | 9,804 | 4,867 |
| Income before income tax expensel(benefit) <br> $\quad$ and extraordinary gain |  |  |  |

(a) For purposes of this table, non-U.S. income is defined as income generated from operations located outside the U.S.

## Note 28 - Restrictions on cash and intercompany funds transfers

The business of JPMorgan Chase Bank, National Association ("JPMorgan Chase Bank, N.A.") is subject to examination and regulation by the Office of the Comptroller of the Currency ("OCC"). The Bank is a member of the U.S. Federal Reserve System, and its deposits in the U.S. are insured by the FDIC.

The Board of Governors of the Federal Reserve System (the "Federal Reserve") requires depository institutions to maintain cash reserves with a Federal Reserve Bank. The average amount of reserve balances deposited by the Firm's bank subsidiaries with various Federal Reserve Banks was approximately $\$ 803$ million and $\$ 821$ million in 2010 and 2009, respectively.

Restrictions imposed by U.S. federal law prohibit JPMorgan Chase and certain of its affiliates from borrowing from banking subsidiaries unless the loans are secured in specified amounts. Such secured loans to the Firm or to other affiliates are generally limited to $10 \%$ of the banking subsidiary's total capital, as determined by the risk-based capital guidelines; the aggregate amount of all such loans is limited to $20 \%$ of the banking subsidiary's total capital.
The principal sources of JPMorgan Chase's income (on a parent company-only basis) are dividends and interest from JPMorgan Chase Bank, N.A., and the other banking and nonbanking subsidiaries of JPMorgan Chase. In addition to dividend restrictions set forth in statutes and regulations, the Federal Reserve, the OCC and the FDIC have authority under the Financial Institutions Supervisory Act to prohibit or to limit the payment of dividends by the banking organizations they supervise, including JPMorgan Chase and its subsidiaries that are banks or bank holding companies, if, in the banking regulator's opinion, payment of a dividend would constitute
an unsafe or unsound practice in light of the financial condition of the banking organization.

At January 1, 2011, JPMorgan Chase's banking subsidiaries could pay, in the aggregate, $\$ 2.0$ billion in dividends to their respective bank holding companies without the prior approval of their relevant banking regulators. The capacity to pay dividends in 2011 will be supplemented by the banking subsidiaries' earnings during the year.
In compliance with rules and regulations established by U.S. and non-U.S. regulators, as of December 31, 2010 and 2009, cash in the amount of $\$ 25.0$ billion and $\$ 24.0$ billion, respectively, and securities with a fair value of $\$ 9.7$ billion and $\$ 10.2$ billion, respectively, were segregated in special bank accounts for the benefit of securities and futures brokerage customers.

## Note 29 - Capital

The Federal Reserve establishes capital requirements, including wellcapitalized standards for the consolidated financial holding company. The OCC establishes similar capital requirements and standards for the Firm's national banks, including JPMorgan Chase Bank, N.A., and Chase Bank USA, N.A.
There are two categories of risk-based capital: Tier 1 capital and Tier 2 capital. Tier 1 capital consists of common stockholders' equity, perpetual preferred stock, noncontrolling interests in subsidiaries and trust preferred capital debt securities, less goodwill and certain other adjustments. Tier 2 capital consists of preferred stock not qualifying as Tier 1, subordinated long-term debt and other instruments qualifying as Tier 2, and the aggregate allowance for credit losses up to a certain percentage of risk-weighted assets. Total capital is Tier 1 capital plus Tier 2 capital. Under the risk-based capital guidelines of the Federal Reserve, JPMorgan Chase is required to maintain minimum ratios of Tier 1 and Total capital to risk-weighted assets, as well as minimum leverage ratios (which are defined as Tier 1 capital divided by adjusted quarterly average assets). Failure to meet these minimum requirements could cause the Federal Reserve to take action. Banking subsidiaries also are subject to these capital requirements by their respective primary regulators. As of December 31, 2010 and 2009, JPMorgan Chase and all of its banking subsidiaries were well-capitalized and met all capital requirements to which each was subject.

## Notes to consolidated financial statements

The following table presents the regulatory capital, assets and risk-based capital ratios for JPMorgan Chase and its significant banking subsidiaries at December 31, 2010 and 2009. These amounts are determined in accordance with regulations issued by the Federal Reserve and/or OCC.

| December 31, (in millions, except ratios) | JPMorgan Chase \& Co. ${ }^{\text {(e) }}$ |  |  |  | JPMorgan Chase Bank, N.A. ${ }^{(\mathrm{e})}$ |  |  |  | Chase Bank USA, N.A. ${ }^{(\mathrm{e})}$ |  |  |  | Wellcapitalized ratios ${ }^{(\mathrm{g})}$ | Minimum capital ratios ${ }^{(\mathrm{g})}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2010 |  | 2009 |  | 2010 |  | 2009 |  | 2010 |  | 2009 |  |  |
| Regulatory capital |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tier 1(a) | \$ | 142,450 | \$ | 132,971 | \$ | 91,764 | \$ | 96,372 | \$ | 12,966 | \$ | 15,534 |  |  |
| Total |  | 182,216 |  | 177,073 |  | 130,444 |  | 136,646 |  | 16,659 |  | 19,198 |  |  |
| Assets |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Risk-weighted(b)(c) |  | 1,174,978(f) |  | 1,198,006 |  | 965,897 |  | 1,011,995 |  | 116,992 |  | 114,693 |  |  |
| Adjusted average(d) |  | 2,024,515(f) |  | 1,933,767 |  | 1,611,486 |  | 1,609,081 |  | 117,368 |  | 74,087 |  |  |
| Capital ratios |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tier 1(a) |  | 12.1\%(f) |  | 11.1\% |  | 9.5\% |  | 9.5\% |  | 11.1\% |  | 13.5\% | 6.0\% | 4.0\% |
| Total |  | 15.5 |  | 14.8 |  | 13.5 |  | 13.5 |  | 14.2 |  | 16.7 | 10.0 | 8.0 |
| Tier 1 leverage |  | 7.0 |  | 6.9 |  | 5.7 |  | 6.0 |  | 11.0 |  | 21.0 | 5.0(h) | 3.0(i) |

 securities were excluded from the calculation at December 31, 2010, Tier 1 capital would be $\$ 122.7$ billion and $\$ 91.2$ billion, respectively, and the Tier 1 capital ratio would be $10.4 \%$ and $9.4 \%$, respectively. At December 31, 2010, Chase Bank USA, N.A. had no trust preferred capital debt securities.
 potential for default. On-balance sheet assets are risk-weighted based on the perceived credit risk associated with the obligor or counterparty, the nature of any collateral, and the guarantor, if any. Off-balance sheet assets such as lending-related commitments, guarantees, derivatives and other applicable off-balance sheet positions are riskweighted by multiplying the contractual amount by the appropriate credit conversion factor to determine the on-balance sheet credit-equivalent amount, which is then riskweighted based on the same factors used for on-balance sheet assets. Risk-weighted assets also incorporate a measure for the market risk related to applicable trading assets-debt and equity instruments, and foreign exchange and commodity derivatives. The resulting risk-weighted values for each of the risk categories are then aggregated to determine total risk-weighted assets.
(c) Includes off-balance sheet risk-weighted assets at December 31, 2010, of $\$ 282.9$ billion, $\$ 274.2$ billion and $\$ 31$ million, and at December 31 , 2009 , of $\$ 367.4$ billion, $\$ 312.3$ billion and $\$ 49.9$ billion, for JPMorgan Chase, JPMorgan Chase Bank, N.A. and Chase Bank USA, N.A., respectively.
(d) Adjusted average assets, for purposes of calculating the leverage ratio, include total quarterly average assets adjusted for unrealized gains/(losses) on securities, less deductions for disallowed goodwill and other intangible assets, investments in certain subsidiaries, and the total adjusted carrying value of nonfinancial equity investments that are subject to deductions from Tier 1 capital.
 elimination of intercompany transactions.
 34 basis points. See Note 16 on pages 244-259 of this Annual Report for further information.
(g) As defined by the regulations issued by the Federal Reserve, OCC and FDIC.
 a well-capitalized bank holding company.

 deductible goodwill. The Firm had deferred tax liabilities resulting from nontaxable business combinations totaling $\$ 647$ million and $\$ 812$ million at December 31,2010 and 2009, respectively; and deferred tax liabilities resulting from tax-deductible goodwill of $\$ 1.9$ billion and $\$ 1.7$ billion at December 31 , 2010 and 2009 , respectively.
A reconciliation of the Firm's Total stockholders' equity to Tier 1 capital and Total qualifying capital is presented in the table below.

| December 31, (in millions) | 2010 | 2009 |
| :---: | :---: | :---: |
| Tier 1 capital |  |  |
| Total stockholders' equity | \$ 176,106 | \$ 165,365 |
| Effect of certain items in accumulated other comprehensive income/(loss) excluded from Tier 1 capital | (748) | 75 |
| Qualifying hybrid securities and noncontrolling interests(a) | 19,887 | 19,535 |
| Less: Goodwill(b) | 46,915 | 46,630 |
| Fair value DVA on derivative and structured note liabilities related to the Firm's credit quality | 1,261 | 912 |
| Investments in certain subsidiaries and other | 1,032 | 802 |
| Other intangible assets(b) | 3,587 | 3,660 |
| Total Tier 1 capital | 142,450 | 132,971 |
| Tier 2 capital |  |  |
| Long-term debt and other instruments qualifying as Tier 2 | 25,018 | 28,977 |
| Qualifying allowance for credit losses | 14,959 | 15,296 |
| Adjustment for investments in certain subsidiaries and other | (211) | (171) |
| Total Tier 2 capital | 39,766 | 44,102 |
| Total qualifying capital | \$ 182,216 | \$ 177,073 |

(a) Primarily includes trust preferred capital debt securities of certain business trusts.
(b) Goodwill and other intangible assets are net of any associated deferred tax liabilities.

## Note 30 - Off-balance sheet lending-related financial instruments, guarantees and other commitments

JPMorgan Chase utilizes lending-related financial instruments (e.g., commitments and guarantees) to meet the financing needs of its customers. The contractual amount of these financial instruments represents the Firm's maximum possible credit risk should the counterparty draw upon the commitment or the Firm be required to fulfill its obligation under the guarantee, and should the counterparty subsequently fail to perform according to the terms of the contract. Most of these commitments and guarantees expire without being drawn or a default occurring. As a result, the total contractual amount of these instruments is not, in the Firm's view, representative of its actual future credit exposure or funding requirements.

To provide for the risk of loss inherent in wholesale and consumer (excluding credit card) related contracts, an allowance for credit losses on lending-related commitments is maintained. See Note 15
on pages 239-243 of this Annual Report for further discussion regarding the allowance for credit losses on lending-related commitments.

The following table summarizes the contractual amounts and carrying values of off-balance sheet lending-related financial instruments, guarantees and other commitments at December 31, 2010 and 2009. The amounts in the table below for credit card and home equity lending-related commitments represent the total available credit for these products. The Firm has not experienced, and does not anticipate, that all available lines of credit for these products will be utilized at the same time. The Firm can reduce or cancel credit card lines of credit by providing the borrower prior notice or, in some cases, without notice as permitted by law. The Firm may reduce or close home equity lines of credit when there are significant decreases in the value of the underlying property or when there has been a demonstrable decline in the creditworthiness of the borrower.

## Off-balance sheet lending-related financial instruments, guarantees and other commitments

| December 31, (in millions) | Contractual amount |  |  |  | Carrying value(l) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 |  | 2009 |  | 2010 |  | 2009 |  |
| Lending-related |  |  |  |  |  |  |  |  |
| Consumer, excluding credit card: |  |  |  |  |  |  |  |  |
| Home equity - senior lien | \$ | 16,060 |  | 19,246 | \$ | - | \$ | - |
| Home equity - junior lien |  | 28,681 |  | 37,231 |  | - |  | - |
| Prime mortgage |  | 1,266 |  | 1,654 |  | - |  | - |
| Subprime mortgage |  | - |  | - |  | - |  | - |
| Auto |  | 5,246 |  | 5,467 |  | 2 |  | 7 |
| Business banking |  | 9,702 |  | 9,040 |  | 4 |  | 5 |
| Student and other |  | 579 |  | 2,189 |  | - |  | - |
| Total consumer, excluding credit card |  | 61,534 |  | 74,827 |  | 6 |  | 12 |
| Credit card |  | 547,227 |  | 569,113 |  | - |  | - |
| Total consumer |  | 608,761 |  | 643,940 |  | 6 |  | 12 |
| Wholesale: |  |  |  |  |  |  |  |  |
| Other unfunded commitments to extend credit (a)(b)(c) |  | 199,859 |  | 192,145 |  | 364 |  | 356 |
| Asset purchase agreements(b) |  | - |  | 22,685 |  | - |  | 126 |
| Standby letters of credit and other financial guarantees(a)(c)(d)(e) |  | 94,837 |  | 91,485 |  | 705 |  | 919 |
| Unused advised lines of credit |  | 44,720 |  | 35,673 |  |  |  |  |
| Other letters of credit(a)(e) |  | 6,663 |  | 5,167 |  | 2 |  | 1 |
| Total wholesale |  | 346,079 |  | 347,155 |  | 1,071 |  | 1,402 |
| Total lending-related | \$ | 954,840 |  | 991,095 | \$ | 1,077 | \$ | 1,414 |
| Other guarantees and commitments |  |  |  |  |  |  |  |  |
| Securities lending indemnifications(f) | \$ | 181,717 |  | 170,777 | \$ | NA | \$ | NA |
| Derivatives qualifying as guarantees(g) |  | 87,768 |  | 98,052(k) |  | 294 |  | 896(k) |
| Unsettled reverse repurchase and securities borrowing agreements |  | 39,927 |  | 48,187 |  | - |  | - |
| Equity investment commitments( h ) |  | 2,468 |  | 2,374 |  | - |  | - |
| Building purchase commitments |  | 258 |  | 670 |  | - |  |  |
| Other guarantees and commitments(i) |  | 3,766 |  | 3,671 |  | 6 |  | 6 |
| Loan sale and securitization-related indemnifications: |  |  |  |  |  |  |  |  |
| Repurchase liability() |  | NA |  | NA |  | 3,285 |  | 1,705 |
| Loans sold with recourse |  | 10,982 |  | 13,544 |  | 153 |  | 271 |

(a) At December 31, 2010 and 2009, represents the contractual amount net of risk participations totaling $\$ 542$ million and $\$ 643$ million, respectively, for other unfunded commitments to extend credit; $\$ 22.4$ billion and $\$ 24.6$ billion, respectively, for standby letters of credit and other financial guarantees; and $\$ 1.1$ billion and $\$ 690$ million, respectively, for other letters of credit. In regulatory filings with the Federal Reserve Board these commitments are shown gross of risk participations.
 were eliminated upon consolidation. The decrease in lending-related commitments was partially offset by the addition of $\$ 6.5$ billion of unfunded commitments directly between the multi-seller conduits and clients; these unfunded commitments of the consolidated conduits are now included as off-balance sheet lending-related commitments of the Firm. The carrying value of asset purchase agreements of $\$ 126$ million at December 31, 2009 was comprised of $\$ 18$ million for the allowance for lending-related commitments; and \$108 million for the guarantee liability and corresponding asset.

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(c) Includes credit enhancements and bond and commercial paper liquidity commitments to U.S. states and municipalities, hospitals and other not-for-profit entities of $\$ 43.4$ billion and $\$ 44.1$ billion, at December 31, 2010 and 2009, respectively.
(d) At December 31, 2010 and 2009, includes unissued standby letters of credit commitments of $\$ 41.6$ billion and $\$ 38.4$ billion, respectively.
(e) At December 31, 2010 and 2009, JPMorgan Chase held collateral relating to $\$ 37.8$ billion and $\$ 31.5$ billion, respectively, of standby letters of credit; and $\$ 2.1$ billion and $\$ 1.3$ billion, respectively, of other letters of credit.
(f) At December 31, 2010 and 2009, collateral held by the Firm in support of securities lending indemnification agreements was $\$ 185.0$ billion and $\$ 173.2$ billion, respectively. Securities lending collateral comprises primarily cash, and securities issued by governments that are members of the Organisation for Economic Co-operation and Development ("OECD") and U.S. government agencies.
g) Represents notional amounts of derivatives qualifying as guarantees. The carrying value at December 31, 2010 and 2009, reflects derivative payables of $\$ 390$ million and $\$ 974$ million, respectively, less derivative receivables of $\$ 96$ million and $\$ 78$ million, respectively.
(h) At December 31, 2010 and 2009, includes unfunded commitments of $\$ 1.0$ billion and $\$ 1.5$ billion, respectively, to third-party private equity funds that are generally fair valued at net asset value as discussed in Note 3 on pages 170-187 of this Annual Report; and $\$ 1.4$ billion and $\$ 897$ million, respectively, to other equity investments.
(i) Amounts include letters of credit hedged by derivative transactions and managed on a market risk basis.
(j) Represents estimated repurchase liability related to indemnifications for breaches of representations and warranties in loan sale and securitization agreements. For additional information, see Loan sale and securitization-related indemnifications on pages 278-279 of this Note.
(k) The prior period has been revised to conform to current presentation.
(I) For lending-related products the carrying value represents the allowance for lending-related commitments and the fair value of the guarantee liability, for derivative-related products the carrying value represents the fair value. For all other products the carrying value represents the valuation reserve.

## Other unfunded commitments to extend credit

Other unfunded commitments to extend credit are generally comprised of commitments for working capital and general corporate purposes as well as extensions of credit to support commercial paper facilities and bond financings in the event that those obligations cannot be remarketed to new investors.

Also included in other unfunded commitments to extend credit are commitments to noninvestment-grade counterparties in connection with leveraged and acquisition finance activities which were $\$ 5.9$ billion and $\$ 7.0$ billion at December 31, 2010 and 2009, respectively. For further information, see Note 3 and Note 4 on pages 170-187 and 187-189 respectively, of this Annual Report.

## Guarantees

U.S. GAAP requires that a guarantor recognize, at the inception of a guarantee, a liability in an amount equal to the fair value of the obligation undertaken in issuing the guarantee. U.S. GAAP defines a guarantee as a contract that contingently requires the guarantor to pay a guaranteed party based upon: (a) changes in an underlying asset, liability or equity security of the guaranteed party; or (b) a third party's failure to perform under a specified agreement. The Firm considers the following off-balance sheet lending-related arrangements to be guarantees under U.S. GAAP: certain asset purchase agreements, standby letters of credit and financial guarantees, securities lending indemnifications, certain indemnification agreements included within third-party contractual arrangements and certain derivative contracts.
As required by U.S. GAAP, the Firm initially records guarantees at the inception date fair value of the obligation assumed (e.g., the amount of consideration received, the net present value of the premium receivable). For certain types of guarantees, the Firm records this fair value amount in other liabilities with an offsetting entry recorded in cash (for
premiums received), or other assets (for premiums receivable). Any premium receivable recorded in other assets is reduced as cash is received under the contract, and the fair value of the liability recorded at inception is amortized into income as lending- and deposit-related fees over the life of the guarantee contract. For indemnifications provided in sales agreements, a portion of the sale proceeds is allocated to the guarantee, which adjusts the gain or loss that would otherwise result from the transaction. For these indemnifications, the initial liability is amortized to income as the Firm's risk is reduced (i.e., over time or when the indemnification expires). Any contingent liability that exists as a result of issuing the guarantee or indemnification is recognized when it become probable and reasonably estimable. The contingent portion of the liability is not recognized if the estimated amount is less than the carrying amount of the liability recognized at inception (adjusted for any amortization). The recorded amounts of the liabilities related to guarantees and indemnifications at December 31, 2010 and 2009, excluding the allowance for credit losses on lending-related commitments, are discussed in footnote (b) to the table above and below in this Note on pages 276-280.

## Standby letters of credit

Standby letters of credit ("SBLC") and other financial guarantees are conditional lending commitments issued by the Firm to guarantee the performance of a customer to a third party under certain arrangements, such as commercial paper facilities, bond financings, acquisition financings, trade and similar transactions. The carrying values of standby and other letters of credit were $\$ 707$ million and $\$ 920$ million at December 31, 2010 and 2009, respectively, which were classified in accounts payable and other liabilities on the Consolidated Balance Sheets; these carrying values include $\$ 347$ million and $\$ 553$ million, respectively, for the allowance for lending-related commitments, and $\$ 360$ million and $\$ 367$ million, respectively, for the guarantee liability and corresponding asset.

The following table presents standby letters of credit and other letters of credit arrangements by the ratings profiles of the Firm's customers as of December 31, 2010 and 2009.

Standby letters of credit and other financial guarantees and other letters of credit

| December 31, (in millions) | 2010 |  | 2009 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Standby letters of credit and other financial guarantees | Other letters of credit | Standby letters of credit and other financial guarantees | Other letters of credit |
| Investment-grade(a) | \$70,236 | \$5,289 | \$66,786 | \$3,861 |
| Noninvestment-grade(a) | 24,601 | 1,374 | 24,699 | 1,306 |
| Total contractual amount(b) | 94,837(c) | 6,663 | 91,485(c) | 5,167 |
| Allowance for lending-related commitments | 345 | 2 | 552 | 1 |
| Commitments with collateral | 37,815 | 2,127 | 31,454 | 1,315 |

(a) The ratings scale is based on the Firm's internal ratings which generally correspond to ratings as defined by S\&P and Moody's.
 and other financial guarantees; and $\$ 1.1$ billion and $\$ 690$ million, respectively, for other letters of credit. In regulatory filings with the Federal Reserve these commitments are shown gross of risk participations.
(c) At December 31, 2010 and 2009, includes unissued standby letters of credit commitments of $\$ 41.6$ billion and $\$ 38.4$ billion, respectively.

## Indemnification agreements - general

In connection with issuing securities to investors, the Firm may enter into contractual arrangements with third parties that require the Firm to make a payment to them in the event of a change in tax law or an adverse interpretation of tax law. In certain cases, the contract also may include a termination clause, which would allow the Firm to settle the contract at its fair value in lieu of making a payment under the indemnification clause. The Firm may also enter into indemnification clauses in connection with the licensing of software to clients ("software licensees") or when it sells a business or assets to a third party ("third-party purchasers"), pursuant to which it indemnifies software licensees for claims of liability or damages that may occur subsequent to the licensing of the software, or third-party purchasers for losses they may incur due to actions taken by the Firm prior to the sale of the business or assets. It is difficult to estimate the Firm's maximum exposure under these indemnification arrangements, since this would require an assessment of future changes in tax law and future claims that may be made against the Firm that have not yet occurred. However, based on historical experience, management expects the risk of loss to be remote.

## Securities lending indemnification

Through the Firm's securities lending program, customers' securities, via custodial and non-custodial arrangements, may be lent to third parties. As part of this program, the Firm provides an indemnification in the lending agreements which protects the lender against the failure of the third-party borrower to return the lent securities in the event the Firm did not obtain sufficient collateral. To minimize its liability under these indemnification agreements, the Firm obtains cash or other highly liquid collateral with a market value exceeding $100 \%$ of the value of the securities on loan from the borrower. Collateral is marked to market daily to help assure that collateralization is adequate. Additional collateral is called from the borrower if a shortfall exists, or collateral may be released to the borrower in the event of overcollateralization. If a borrower defaults, the Firm would use the collateral held to purchase replacement securities in the market or to credit the lending customer with the cash equivalent thereof. Also, as part of this program, the

Firm invests cash collateral received from the borrower in accordance with approved guidelines.

## Derivatives qualifying as guarantees

In addition to the contracts described above, the Firm transacts certain derivative contracts that meet the characteristics of a guarantee under U.S. GAAP. These contracts include written put options that require the Firm to purchase assets upon exercise by the option holder at a specified price by a specified date in the future. The Firm may enter into written put option contracts in order to meet client needs, or for trading purposes. The terms of written put options are typically five years or less. Derivative guarantees also include contracts such as stable value derivatives that require the Firm to make a payment of the difference between the market value and the book value of a counterparty's reference portfolio of assets in the event that market value is less than book value and certain other conditions have been met. Stable value derivatives, commonly referred to as "stable value wraps", are transacted in order to allow investors to realize investment returns with less volatility than an unprotected portfolio and are typically longer-term or may have no stated maturity, but allow the Firm to terminate the contract under certain conditions.
Derivative guarantees are recorded on the Consolidated Balance Sheets at fair value in trading assets and trading liabilities. The total notional amount of the derivatives that the Firm deems to be guarantees was $\$ 87.8$ billion and $\$ 98.1$ billion at December 31, 2010 and 2009, respectively. The notional amount generally represents the Firm's maximum exposure to derivatives qualifying as guarantees. However, exposure to certain stable value derivatives is contractually limited to a substantially lower percentage of the notional amount; the notional amount on these stable value contracts was $\$ 25.9$ billion and $\$ 24.9$ billion and the maximum exposure to loss was $\$ 2.7$ billion and $\$ 2.5$ billion, at December 31, 2010 and 2009, respectively. The fair values of the contracts reflects the probability of whether the Firm will be required to perform under the contract. The fair value related to derivative guarantees were derivative payables of $\$ 390$ million and $\$ 974$ million and derivative receivables of $\$ 96$ million and $\$ 78$ million at December 31, 2010 and 2009, respec-

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tively. The Firm reduces exposures to these contracts by entering into offsetting transactions, or by entering into contracts that hedge the market risk related to the derivative guarantees.

In addition to derivative contracts that meet the characteristics of a guarantee, the Firm is both a purchaser and seller of credit protection in the credit derivatives market. For a further discussion of credit derivatives, see Note 6 on pages 191-199 of this Annual Report.

## Unsettled reverse repurchase and securities borrowing agreements

In the normal course of business, the Firm enters into reverse repurchase agreements and securities borrowing agreements that settle at a future date. At settlement, these commitments require that the Firm advance cash to and accept securities from the counterparty. These agreements generally do not meet the definition of a derivative, and therefore, are not recorded on the Consolidated Balance Sheets until settlement date. At December 31, 2010 and 2009, the amount of commitments related to forward starting reverse repurchase agreements and securities borrowing agreements were $\$ 14.4$ billion and $\$ 23.4$ billion, respectively. Commitments related to unsettled reverse repurchase agreements and securities borrowing agreements with regular way settlement periods were $\$ 25.5$ billion and $\$ 24.8$ billion at December 31, 2010 and 2009, respectively.

## Building purchase commitments

In connection with the Bear Stearns merger, the Firm succeeded to an operating lease arrangement for the building located at 383 Madison Avenue in New York City (the "Synthetic Lease"). Under the terms of the Synthetic Lease, the Firm was obligated to a maximum residual value guarantee of approximately $\$ 670$ million if the building were sold and the proceeds of the sale were insufficient to satisfy the lessor's debt obligation. Effective November 1, 2010, the lease expired and the Firm purchased the property recognizing the $\$ 670$ million purchase price in premises and equipment.
On December 15, 2010, the Firm entered into an agreement to purchase the leasehold property at 60 Victoria Embankment in London, a building the Firm has leased since 1991, for approximately $\$ 253$ million. The purchase of this building is expected to close in the second quarter of 2011.

## Loan sale and securitization-related indemnifications

Indemnifications for breaches of representations and warranties In connection with the Firm's loan sale and securitization activities with the GSEs and other loan sale and private-label securitization transactions, as described in Notes 14 and 16 on pages 220-238 and 244-259, respectively, of this Annual Report, the Firm has made representations and warranties that the loans sold meet certain requirements. For transactions with the GSEs, these representations include type of collateral, underwriting standards, validity of certain borrower representations in connection with the loan, that primary mortgage insurance is in force for any mortgage loan with an LTV ratio greater than $80 \%$, and the use of the GSEs' standard legal documentation. The Firm may be, and has been,
required to repurchase loans and/or indemnify the GSEs and other investors for losses due to material breaches of these representations and warranties; however, predominantly all of the repurchase demands received by the Firm and the Firm's losses realized to date are related to loans sold to the GSEs. Generally, the maximum amount of future payments the Firm would be required to make for breaches of these representations and warranties would be equal to the unpaid principal balance of such loans that are deemed to have defects sold to purchasers (including securitization-related SPEs) plus, in certain circumstances, accrued and unpaid interest on such loans and certain expense.

Subsequent to the Firm's acquisition of certain assets and liabilities of Washington Mutual from the FDIC in September 2008, the Firm resolved and/or limited certain current and future repurchase demands for loans sold to the GSEs by Washington Mutual, although it remains the Firm's position that such obligations remain with the FDIC receivership. Nevertheless, certain payments have been made with respect to certain of the then current and future repurchase demands, and the Firm will continue to evaluate and may pay certain future repurchase demands related to individual loans. In addition to the payments already made, the Firm has a remaining repurchase liability of approximately $\$ 190$ million as of December 31, 2010, relating to unresolved and future demands on the Washington Mutual portfolio.
The primary reasons for repurchase demands from the GSEs relate to alleged misrepresentations primarily driven by: (i) credit quality and/or undisclosed debt of the borrower; (ii) income level and/or employment status of the borrower; and (iii) appraised value of collateral. Ineligibility of the borrower for the particular product, mortgage insurance rescissions and missing documentation are other reasons for repurchase demands.

Beginning in 2009, mortgage insurers more frequently rescinded mortgage insurance coverage. The successful rescission of mortgage insurance typically results in a violation of representations and warranties made to the GSEs and, therefore, has been a significant cause of repurchase demands from the GSEs. The Firm actively reviews all rescission notices from mortgage insurers and contests them when appropriate. In addition, the Firm is engaged in discussions with various mortgage insurers on their rights and practices related to rescinding mortgage insurance coverage. The Firm has entered into agreements with two mortgage insurers to make processes more efficient and reduce exposure on claims on certain portfolios for which the Firm is a servicer. The impact of these agreements is reflected in the repurchase liability as of December 31, 2010.

When the Firm accepts a repurchase demand from one of the GSEs, the Firm may either (a) repurchase the loan or the underlying collateral from the GSE at the unpaid principal balance of the loan plus accrued interest, or (b) reimburse the GSE for its realized loss on a liquidated property (a "make-whole" payment).
To estimate the Firm's repurchase liability arising from breaches of representations and warranties, the Firm considers:
(i) the level of current unresolved repurchase demands and mortgage insurance rescission notices,
(ii) estimated probable future repurchase demands based upon loans that are or ever have been 90 days past due considering historical experience,
(iii) the potential ability of the Firm to cure the defects identified in the repurchase demands,
(iv) the estimated severity of loss upon repurchase of the loan or collateral, make-whole settlement, or indemnification,
(v) the Firm's potential ability to recover its losses from third-party originators, and
(vi) the terms of agreements with certain mortgage insurers and other parties.

Based on these factors, the Firm has recognized a repurchase liability of $\$ 3.3$ billion and $\$ 1.7$ billion, including the Washington Mutual liability described above, as of December 31, 2010 and 2009, respectively, which is reported in accounts payable and other liabilities net of probable recoveries from third parties.
Substantially all of the estimates and assumptions underlying the Firm's established methodology for computing its recorded repurchase liability - including factors such as the amount of probable future demands from purchasers, the ability of the Firm to cure identified defects, the severity of loss upon repurchase or foreclosure, and recoveries from third parties - require application of a significant level of management judgment. Estimating the repurchase liability is further complicated by limited and rapidly changing historical data and uncertainty surrounding numerous external factors, including: (i) macro-economic factors, and (ii) the level of future demands, which is dependent, in part, on actions taken by third parties such as the GSEs and mortgage insurers. While the Firm uses the best information available to it in estimating its repurchase liability, the estimation process is inherently uncertain and imprecise and, accordingly, losses in excess of the amounts accrued as of December 31, 2010 are reasonably possible.
The Firm believes the estimate of the range of reasonably possible losses, in excess of reserves established, for its repurchase liability is from $\$ 0$ to approximately $\$ 2$ billion at December 31, 2010. This estimated range of reasonably possible loss is based on an assumed peak to trough decline in home prices of $46 \%$, which is an additional 12 percentage point decline in home prices beyond the Firm's current assumptions. Such a decline could increase the level of loan delinquencies, thereby potentially increasing the repurchase demand rate from the GSEs and increasing loss severity on repurchased loans, each of which could affect the Firm's repurchase liability. The Firm does not consider such a further decline in home prices to be likely to occur, and actual repurchase losses could vary significantly from the Firm's recorded repurchase liability or this estimate of reasonably possible additional losses, depending on the outcome of various factors, including those considered above.

The following table summarizes the change in the repurchase liability for each of the periods presented.

## Summary of changes in repurchase liability

| Year ended December 31, |  |  |  |
| :--- | :---: | :---: | :---: |
| (in millions) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| Repurchase liability at beginning of period | $\mathbf{\$ 1 , 7 0 5}$ | $\$ 1,093$ | $\$ 15$ |
| Realized losses(a) | $\mathbf{( 1 , 4 2 3 )}$ | $(1,253)(\mathrm{c})$ | $(155)$ |
| Provision for repurchase losses | $\mathbf{3 , 0 0 3}$ | 1,865 | $1,233(\mathrm{~d})$ |
| Repurchase liability at end of period | $\mathbf{\$ 3 , 2 8 5 ( b )}$ | $\$ 1,705$ | $\$ 1,093$ |

(a) Includes principal losses and accrued interest on repurchased loans, "make-whole" settlements, settlements with claimants, and certain related expense. For the years ended December 31, 2010, 2009 and 2008, make-whole settlements were \$632 million, \$277 million and \$34 million, respectively.
(b) Includes $\$ 190$ million at December 31, 2010, related to future demands on loans sold by Washington Mutual to the GSEs.
(c) Includes the Firm's resolution of certain current and future repurchase demands for certain loans sold by Washington Mutual.
(d) Includes a repurchase liability assumed for certain loans sold by Washington Mutual; this assumed liability was reported as a reduction of the extraordinary gain rather than as a charge to the provision for credit losses.

## Loans sold with recourse

The Firm provides servicing for mortgages and certain commercial lending products on both a recourse and nonrecourse basis. In nonrecourse servicing, the principal credit risk to the Firm is the cost of temporary servicing advances of funds (i.e., normal servicing advances). In recourse servicing, the servicer agrees to share credit risk with the owner of the mortgage loans, such as Fannie Mae or Freddie Mac or a private investor, insurer or guarantor. Losses on recourse servicing predominantly occur when foreclosure sales proceeds of the property underlying a defaulted loan are less than the sum of the outstanding principal balance, plus accrued interest on the loan and the cost of holding and disposing of the underlying property. The Firm's securitizations are predominantly nonrecourse, thereby effectively transferring the risk of future credit losses to the purchaser of the mortgage-backed securities issued by the trust. At December 31, 2010 and 2009, the unpaid principal balance of loans sold with recourse totaled $\$ 11.0$ billion and $\$ 13.5$ billion, respectively. The carrying value of the related liability that the Firm has recorded, which is representative of the Firm's view of the likelihood it will have to perform under this guarantee, was $\$ 153$ million and $\$ 271$ million at December 31, 2010 and 2009, respectively.

## Credit card charge-backs

Prior to November 1, 2008, the Firm was a partner with one of the leading companies in electronic payment services in a joint venture operating under the name of Chase Paymentech Solutions, LLC (the "joint venture"). The joint venture provided merchant processing services in the U.S. and Canada. The dissolution of the joint venture was completed on November 1, 2008, and JPMorgan Chase retained approximately $51 \%$ of the business under the Chase Paymentech name.

## Notes to consolidated financial statements

Under the rules of Visa USA, Inc., and MasterCard International, JPMorgan Chase Bank, N.A., is liable primarily for the amount of each processed credit card sales transaction that is the subject of a dispute between a cardmember and a merchant. If a dispute is resolved in the cardmember's favor, Chase Paymentech will (through the cardmember's issuing bank) credit or refund the amount to the cardmember and will charge back the transaction to the merchant. If Chase Paymentech is unable to collect the amount from the merchant, Chase Paymentech will bear the loss for the amount credited or refunded to the cardmember. Chase Paymentech mitigates this risk by withholding future settlements, retaining cash reserve accounts or by obtaining other security. However, in the unlikely event that: (1) a merchant ceases operations and is unable to deliver products, services or a refund; (2) Chase Paymentech does not have sufficient collateral from the merchant to provide customer refunds; and (3) Chase Paymentech does not have sufficient financial resources to provide customer refunds, JPMorgan Chase Bank, N.A., would be liable for the amount of the transaction. For the year ended December 31, 2010, Chase Paymentech incurred aggregate credit losses of $\$ 12$ million on $\$ 469.3$ billion of aggregate volume processed, and at December 31, 2010, it held $\$ 189$ million of collateral. For the year ended December 31, 2009, Chase Paymentech incurred aggregate credit losses of $\$ 11$ million on $\$ 409.7$ billion of aggregate volume processed, and at December 31, 2009, it held $\$ 213$ million of collateral. For the year ended December 31, 2008, Chase Paymentech incurred aggregate credit losses of $\$ 13$ million on $\$ 713.9$ billion of aggregate volume processed, and at December 31, 2008, it held $\$ 222$ million of collateral. The Firm believes that, based on historical experience and the collateral held by Chase Paymentech, the fair value of the Firm's charge back-related obligations, which are representative of the payment or performance risk to the Firm, is immaterial.

## Exchange and clearinghouse guarantees

The Firm is a member of several securities and futures exchanges and clearinghouses, both in the U.S. and other countries. Membership in some of these organizations requires the Firm to pay a pro rata share of the losses incurred by the organization as a result of the default of another member. Such obligations vary with different organizations. These obligations may be limited to members who dealt with the defaulting member or to the amount (or a multiple of the amount) of the Firm's contribution to a member's guarantee fund, or, in a few cases, the obligation may be unlimited. It is difficult to estimate the Firm's maximum exposure under these membership agreements, since this would require an assessment of future claims that may be made against the Firm that have not yet occurred. However, based on historical experience, management expects the risk of loss to be remote.

## Note 31 - Commitments, pledged assets, collateral and contingencies

## Lease commitments

At December 31, 2010, JPMorgan Chase and its subsidiaries were obligated under a number of noncancelable operating leases for premises and equipment used primarily for banking purposes, and for energy-related tolling service agreements. Certain leases contain renewal options or escalation clauses providing for increased rental payments based on maintenance, utility and tax increases, or they require the Firm to perform restoration work on leased premises. No lease agreement imposes restrictions on the Firm's ability to pay dividends, engage in debt or equity financing transactions or enter into further lease agreements.
The following table presents required future minimum rental payments under operating leases with noncancelable lease terms that expire after December 31, 2010.

| Year ended December 31, (in millions) |  |
| :--- | ---: |
| 2011 | 1,884 |
| 2012 | 1,804 |
| 2013 | 1,674 |
| 2014 | 1,497 |
| 2015 | 1,363 |
| After 2015 | 7,778 |
| Total minimum payments required(a) | 16,000 |
| Less: Sublease rentals under noncancelable subleases | $(1,848)$ |
| Net minimum payment required | $\$ 14,152$ |

(a) Lease restoration obligations are accrued in accordance with U.S. GAAP, and are not reported as a required minimum lease payment.

Total rental expense was as follows.

| Year ended December 31, <br> (in millions) | $\mathbf{2 0 1 0}$ | 2009 | 2008 |
| :--- | :---: | :---: | :---: |
| Gross rental expense | $\mathbf{\$ 2 , 2 1 2}$ | $\$ 1,884$ | $\$ 1,917$ |
| Sublease rental income | $\mathbf{( 5 4 5 )}$ | $(172)$ | $(415)$ |
| Net rental expense | $\mathbf{\$ 1 , 6 6 7}$ | $\$ 1,712$ | $\$ 1,502$ |

## Pledged assets

At December 31, 2010, assets were pledged to collateralize repurchase agreements, other securities financing agreements, derivative transactions and for other purposes, including to secure borrowings and public deposits. Certain of these pledged assets may be sold or repledged by the secured parties and are identified as financial instruments owned (pledged to various parties) on the Consolidated Balance Sheets. In addition, at December 31, 2010 and 2009, the Firm had pledged $\$ 288.7$ billion and $\$ 344.6$ billion, respectively, of financial instruments it owns that may not be sold or repledged by the secured parties. The significant components of the Firm's pledged assets were as follows.

| December 31, (in billions) | $\mathbf{2 0 1 0}$ | 2009 |
| :--- | ---: | ---: |
| Securities | $\mathbf{\$ 1 1 2 . 1}$ | $\$ 155.3$ |
| Loans | $\mathbf{2 1 4 . 8}$ | 285.5 |
| Trading assets and other | $\mathbf{1 2 3 . 2}$ | 84.6 |
| Total assets pledged(a) | $\mathbf{\$ 4 5 0 . 1}$ | $\$ 525.4$ |

[^5] VIEs.

## Collateral

At December 31, 2010 and 2009, the Firm had accepted assets as collateral that it could sell or repledge, deliver or otherwise use with a fair value of approximately $\$ 655.0$ billion and $\$ 635.6$ billion, respectively. This collateral was generally obtained under resale agreements, securities borrowing agreements, customer margin loans and derivative agreements. Of the collateral received, approximately $\$ 521.3$ billion and $\$ 472.7$ billion were sold or repledged, generally as collateral under repurchase agreements, securities lending agreements or to cover short sales and to collateralize deposits and derivative agreements. The reporting of collateral sold or repledged was revised in 2010 to include certain securities used to cover short sales and to collateralize deposits and derivative agreements. Prior period amounts have been revised to conform to the current presentation. This revision had no impact on the Firm's Consolidated Balance Sheets or its results of operations.

## Contingencies

In 2008, the Firm resolved with the IRS issues related to compliance with reporting and withholding requirements for certain accounts transferred to The Bank of New York Mellon Corporation ("BNYM") in connection with the Firm's sale to BNYM of its corporate trust business. The resolution of these issues did not have a material effect on the Firm.

## Note 32 - Litigation

As of December 31, 2010, the Firm and its subsidiaries are defendants or putative defendants in more than 10,000 legal proceedings, in the form of regulatory/government investigations as well as private, civil litigations. The litigations range from individual actions involving a single plaintiff to class action lawsuits with potentially millions of class members. Investigations involve both formal and informal proceedings, by both governmental agencies and self-regulatory organizations. These legal proceedings are at varying stages of adjudication, arbitration or investigation, and involve each of the Firm's lines of business and geographies and a wide variety of claims (including common law tort and contract claims and statutory antitrust, securities and consumer protection claims), some of which present novel claims or legal theories.
The Firm believes the estimate of the aggregate range of reasonably possible losses, in excess of reserves established, for its legal proceedings is from $\$ 0$ to approximately $\$ 4.5$ billion at December 31, 2010. This estimated aggregate range of reasonably possible losses is based upon currently available information for those proceedings in which the Firm is involved, taking into account the Firm's best estimate of such losses for those cases for which such estimate can be made. For certain cases, the Firm does not believe that an estimate can currently be made. The Firm's estimate involves significant judgment, given the varying stages of the proceedings (including the fact that many of them are currently in preliminary stages), the existence of multiple defendants (including the Firm) in many of such proceedings whose share of liability has yet to be determined, the numerous yet-unresolved issues in many of the proceedings (including issues regarding class certification and the scope of many of the claims), and the attendant uncertainty of the various potential outcomes of such proceedings. Accordingly, the Firm's estimate will change from time to time, and actual losses may be more than the current estimate.

Set forth below are descriptions of the Firm's material legal proceedings.

Auction-Rate Securities Investigations and Litigation. Beginning in March 2008, several regulatory authorities initiated investigations of a number of industry participants, including the Firm, concerning possible state and federal securities law violations in connection with the sale of auction-rate securities. The market for many such securities had frozen and a significant number of auctions for those securities began to fail in February 2008.
The Firm, on behalf of itself and affiliates, agreed to a settlement in principle with the New York Attorney General's Office which provided, among other things, that the Firm would offer to purchase at par certain auction-rate securities purchased from J.P. Morgan Securities LLC ("JPMorgan Securities"; formerly J.P. Morgan Securities Inc.), Chase Investment Services Corp. and Bear, Stearns \& Co. Inc. by individual investors, charities and small- to medium-sized businesses. The Firm also agreed to a substantively similar settlement in principle with the Office of Financial Regulation for the State of Florida and the North American Securities Administrator Association ("NASAA") Task Force, which agreed to recommend approval of the settlement to all remaining states, Puerto Rico and the U.S. Virgin Islands. The Firm has finalized the settlement agreements with the New York Attorney General's Office and the Office of Financial Regulation for the State of Florida. The
settlement agreements provide for the payment of penalties totaling $\$ 25$ million to all states. The Firm is currently in the process of finalizing consent agreements with NASAA's member states; over 40 of these consent agreements have been finalized to date.
The Firm also faces a number of civil actions relating to the Firm's sales of auction-rate securities, including a putative securities class action in the United States District Court for the Southern District of New York that seeks unspecified damages, and individual arbitrations and lawsuits in various forums brought by institutional and individual investors that, together, seek damages totaling more than $\$ 200$ million relating to the Firm's sales of auction-rate securities. One action is brought by an issuer of auction-rate securities. The actions generally allege that the Firm and other firms manipulated the market for auction-rate securities by placing bids at auctions that affected these securities' clearing rates or otherwise supported the auctions without properly disclosing these activities. Some actions also allege that the Firm misrepresented that auction-rate securities were short-term instruments. The Firm has filed motions to dismiss each of the actions, which are being coordinated before the Southern District. These motions are currently pending.
Additionally, the Firm was named in two putative antitrust class actions in the United States District Court for the Southern District of New York. The actions allege that the Firm, along with numerous other financial institution defendants, colluded to maintain and stabilize the auction-rate securities market and then to withdraw their support for the auction-rate securities market. In January 2010, the District Court dismissed both actions. The Second Circuit Court of Appeals consolidated the two appeals. That appeal is currently pending.

Bear Stearns Hedge Fund Matters. Bear Stearns, certain current or former subsidiaries of Bear Stearns, including Bear Stearns Asset Management, Inc. ("BSAM") and Bear, Stearns \& Co. Inc., and certain current or former Bear Stearns employees are named defendants (collectively the "Bear Stearns defendants") in multiple civil actions and arbitrations relating to alleged losses of more than $\$ 1$ billion resulting from the failure of the Bear Stearns High Grade Structured Credit Strategies Master Fund, Ltd. (the "High Grade Fund") and the Bear Stearns High Grade Structured Credit Strategies Enhanced Leverage Master Fund, Ltd. (the "Enhanced Leverage Fund") (collectively, the "Funds"). BSAM served as investment manager for both of the Funds, which were organized such that there were U.S. and Cayman Islands "feeder funds" that invested substantially all their assets, directly or indirectly, in the Funds. The Funds are in liquidation.
There are currently four civil actions pending in the United States District Court for the Southern District of New York relating to the Funds. Two of these actions involve derivative lawsuits brought on behalf of purchasers of partnership interests in the two U.S. feeder funds, alleging that the Bear Stearns defendants mismanaged the Funds and made material misrepresentations to and/or withheld information from investors in the feeder funds. These actions seek, among other things, unspecified compensatory damages based on alleged investor losses. The third action, brought by the Joint Vol-
untary Liquidators of the Cayman Islands feeder funds, makes allegations similar to those asserted in the derivative lawsuits related to the U.S. feeder funds, and seeks compensatory and punitive damages. Motions to dismiss in these three cases have been granted in part and denied in part. An agreement in principle has been reached, pursuant to which BSAM would pay a maximum of approximately $\$ 19$ million to settle the one derivative action relating to the feeder fund to the High Grade Fund. BSAM has reserved the right not to proceed with this settlement if plaintiff is unable to secure the participation of investors whose net contributions meet a prescribed percentage of the aggregate net contributions to the High Grade Fund. The agreement in principle remains subject to documentation and approval by the Court. Discovery in the other two actions is ongoing.
The fourth action was brought by Bank of America and Banc of America Securities LLC (together "BofA") alleging breach of contract and fraud in connection with a May $2007 \$ 4$ billion securitization, known as a "CDO-squared," for which BSAM served as collateral manager. This securitization was composed of certain collateralized debt obligation ("CDO") holdings that were purchased by BofA from the Funds. Bank of America seeks in excess of $\$ 3$ billion in damages. Defendants' motion to dismiss in this action was largely denied, an amended complaint was filed and discovery is ongoing.
Bear Stearns Shareholder Litigation and Related Matters. Various shareholders of Bear Stearns have commenced purported class actions against Bear Stearns and certain of its former officers and/or directors on behalf of all persons who purchased or otherwise acquired common stock of Bear Stearns between December 14, 2006 and March 14, 2008 (the "Class Period"). During the Class Period Bear Stearns had between 115 and 120 million common shares outstanding, and the price of those securities declined from a high of $\$ 172.61$ to a low of $\$ 30$ at the end of the period. The actions, originally commenced in several federal courts, allege that the defendants issued materially false and misleading statements regarding Bear Stearns' business and financial results and that, as a result of those false statements, Bear Stearns' common stock traded at artificially inflated prices during the Class Period. Separately, several individual shareholders of Bear Stearns have commenced or threatened to commence arbitration proceedings and lawsuits asserting claims similar to those in the putative class actions. In addition, Bear Stearns and certain of its former officers and/or directors have also been named as defendants in a number of purported class actions commenced in the United States District Court for the Southern District of New York seeking to represent the interests of participants in the Bear Stearns Employee Stock Ownership Plan ("ESOP") during the time period of December 2006 to March 2008. These actions, brought under the Employee Retirement Income Security Act ("ERISA"), allege that defendants breached their fiduciary duties to plaintiffs and to the other participants and beneficiaries of the ESOP by (a) failing to manage prudently the ESOP's investment in Bear Stearns securities; (b) failing to communicate fully and accurately about the risks of the ESOP's investment in Bear Stearns stock; (c) failing to avoid or address
alleged conflicts of interest; and (d) failing to monitor those who managed and administered the ESOP.

Bear Stearns, former members of Bear Stearns' Board of Directors and certain of Bear Stearns' former executive officers have also been named as defendants in two purported shareholder derivative suits, subsequently consolidated into one action, pending in the United States District Court for the Southern District of New York. Plaintiffs are asserting claims for breach of fiduciary duty, violations of federal securities laws, waste of corporate assets and gross mismanagement, unjust enrichment, abuse of control and indemnification and contribution in connection with the losses sustained by Bear Stearns as a result of its purchases of subprime loans and certain repurchases of its own common stock. Certain individual defendants are also alleged to have sold their holdings of Bear Stearns common stock while in possession of material nonpublic information. Plaintiffs seek compensatory damages in an unspecified amount. Plaintiffs later filed a second amended complaint asserting, for the first time, purported class action claims, as well as new allegations concerning events that took place in March 2008.
All of the above-described actions filed in federal courts were ordered transferred and joined for pre-trial purposes before the United States District Court for the Southern District of New York. Defendants moved to dismiss the purported securities class action, the shareholders' derivative action and the ERISA action. In January 2011, the District Court granted the motions to dismiss the derivative and ERISA actions, and denied the motion as to the securities action. Plaintiffs in the derivative action have filed a motion for reconsideration of the dismissal. Discovery will now commence in the securities action.
City of Milan Litigation and Criminal Investigation. In January 2009, the City of Milan, Italy (the "City") issued civil proceedings against (among others) JPMorgan Chase Bank, N.A. and J.P. Morgan Securities Ltd. (together, "JPMorgan Chase") in the District Court of Milan. The proceedings relate to (a) a bond issue by the City in June 2005 (the "Bond") and (b) an associated swap transaction, which was subsequently restructured on a number of occasions between 2005 and 2007 (the "Swap"). The City seeks damages and/or other remedies against JPMorgan Chase (among others) on the grounds of alleged "fraudulent and deceitful acts" and alleged breach of advisory obligations by JPMorgan Chase (among others) in connection with the Swap and the Bond, together with related swap transactions with other counterparties. The civil proceedings continue and there will be an initial hearing on March 9, 2011. JPMorgan Chase Bank, N.A. will seek an adjournment on the grounds that it has filed a challenge to the Italian Supreme Court's jurisdiction over JPMorgan Chase Bank, N.A., which has yet to be decided. The judge directed four current and former JPMorgan Chase personnel and JPMorgan Chase Bank, N.A. (as well as other individuals and three other banks) to go forward to a full trial that started in May 2010. Although the Firm is not charged with any crime and does not face criminal liability, if one or more of its employees were found guilty, the Firm could be subject to administrative sanctions, including restrictions on its ability to conduct

## Notes to consolidated financial statements

business in Italy and monetary penalties. In the initial hearings, the City successfully applied to join some of the claims in the civil proceedings against the individuals and JPMorgan Chase Bank, N.A. to the criminal proceedings. In addition, a consumer association has also been given leave to join the criminal proceedings to seek damages from the defendant banks.
Enron Litigation. JPMorgan Chase and certain of its officers and directors are involved in several lawsuits that together seek substantial damages arising out of the Firm's banking relationships with Enron Corp. and its subsidiaries ("Enron"). A number of actions and other proceedings against the Firm previously were resolved, including a class action lawsuit captioned Newby v. Enron Corp. and adversary proceedings brought by Enron's bankruptcy estate. The remaining Enron-related actions include individual actions by Enron investors, an action by an Enron counterparty, and a purported class action filed on behalf of JPMorgan Chase employees who participated in the Firm's 401(k) plan asserting claims under the ERISA for alleged breaches of fiduciary duties by JPMorgan Chase, its directors and named officers. That action has been dismissed, and is on appeal to the United States Court of Appeals for the Second Circuit.

Interchange Litigation. A group of merchants has filed a series of putative class action complaints in several federal courts. The complaints allege that VISA and MasterCard, as well as certain other banks and their respective bank holding companies, conspired to set the price of credit and debit card interchange fees, enacted respective association rules in violation of anti-trust laws, and engaged in tying/bundling and exclusive dealing. The complaint seeks unspecified damages and injunctive relief based on the theory that interchange would be lower or eliminated but for the challenged conduct. Based on publicly available estimates, Visa and MasterCard branded payment cards generated approximately $\$ 40$ billion of interchange fees industry-wide in 2009. All cases have been consolidated in the United States District Court for the Eastern District of New York for pretrial proceedings. The Court has dismissed all claims relating to periods prior to January 2004. The Court has not yet ruled on motions relating to the remainder of the case. Fact and expert discovery in the case have closed. The plaintiffs have filed a motion seeking class certification, and the defendants have opposed that motion. The Court has not yet ruled on the class certification motion.

In addition to the consolidated class action complaint, plaintiffs filed supplemental complaints challenging the initial public offerings ("IPOs") of MasterCard and Visa (the "IPO Complaints"). With respect to the MasterCard IPO, plaintiffs allege that the offering violated Section 7 of the Clayton Act and Section 1 of the Sherman Act and that the offering was a fraudulent conveyance. With respect to the Visa IPO, plaintiffs are challenging the Visa IPO on antitrust theories parallel to those articulated in the MasterCard IPO pleading. Defendants have filed motions to dismiss the IPO Complaints. The Court has not yet ruled on those motions.

Investment Management Litigation. Four cases have been filed claiming that investment portfolios managed by JPMorgan Investment

Management Inc. ("JPMorgan Investment Management") were inappropriately invested in securities backed by subprime residential real estate collateral. Plaintiffs claim that JPMorgan Investment Management and related defendants are liable for losses of more than $\$ 1$ billion in market value of these securities. The first case was filed by NM Homes One, Inc. in federal District Court in New York, and the Court granted JPMorgan Chase Bank, N.A.'s motion to dismiss nine of plaintiff's ten causes of action, leaving a breach of contract claim. The Court thereafter granted the plaintiff's motion for reconsideration and reinstated the common law non-fraud claims for breach of fiduciary duty, negligence, and gross negligence. The plaintiff withdrew its claim for negligent misrepresentation. The Firm has filed a renewed motion to dismiss the common law non-fraud claims and a motion for judgment on the pleadings as to the breach of contract claim. In the second case, which was filed by Assured Guaranty (U.K.) in New York state court, the New York State Appellate Division allowed plaintiff to proceed with its claims for breach of fiduciary duty and gross negligence, and for breach of contract based on alleged violations of the Delaware Insurance Code. The Firm sought and has obtained leave to appeal to the New York State Court of Appeals the decision by the Appellate Division to allow the breach of fiduciary duty and gross negligence claims to proceed. In the third case, filed by Ambac Assurance UK Limited in New York state court, the lower court granted JPMorgan Investment Management's motion to dismiss, and plaintiff has filed a notice of appeal. The fourth case was filed by CMMF LLP in New York state court; the lower court granted JPMorgan Investment Management's motion to dismiss the claims, other than claims for breach of contract and negligent misrepresentation. The Appellate Division affirmed the lower court's decision. Plaintiff has since filed an amended complaint seeking to assert claims under New York law for breach of fiduciary duty, gross negligence, breach of contract and negligent misrepresentation.
Lehman Brothers Bankruptcy Proceedings. In March 2010, the Examiner appointed by the Bankruptcy Court presiding over the Chapter 11 bankruptcy proceedings of Lehman Brothers Holdings Inc ("LBHI") and several of its subsidiaries (collectively, "Lehman") released a report as to his investigation into Lehman's failure and related matters. The Examiner concluded that one common law claim potentially could be asserted against the Firm for contributing to Lehman's failure, though he characterized the claim as "not strong." The Examiner also opined that certain cash and securities collateral provided by LBHI to the Firm in the weeks and days preceding LBHI's demise potentially could be challenged under the Bankruptcy Code's fraudulent conveyance or preference provisions, though the Firm is of the view that its right to such collateral is protected by the Bankruptcy Code's safe harbor provisions. In May 2010, LBHI and its Official Committee of Unsecured Creditors filed an adversary proceeding against JPMorgan Chase Bank, N.A. in the United States Bankruptcy Court for the Southern District of New York. The complaint asserts both federal bankruptcy law and state common law claims, and seeks, among other relief, to recover $\$ 8.6$ billion in collateral that was transferred to JPMorgan Chase Bank,
N.A. in the week preceding LBHI's bankruptcy. The complaint also seeks unspecified damages on the grounds that JPMorgan Chase Bank, N.A.'s collateral requests hastened LBHI's demise. The Firm has moved to dismiss plaintiffs' amended complaint in its entirety. The Firm also filed counterclaims against LBHI alleging that LBHI fraudulently induced the Firm to make large clearing advances to Lehman against inappropriate collateral, which left the Firm with more than $\$ 25$ billion in claims against the estate of Lehman's brokerdealer, which could be unpaid if the Firm is required to return any collateral to Lehman. The case is in the early stages, with a trial scheduled for 2012. In addition, the Firm may also face claims in the liquidation proceeding pending before the same Bankruptcy Court under the Securities Investor Protection Act ("SIPA") for LBHI's U.S. broker-dealer subsidiary, Lehman Brothers Inc. ("LBI"). The SIPA Trustee has advised the Firm that certain of the securities and cash pledged as collateral for the Firm's claims against LBI may be customer property free from any security interest in favor of the Firm. The Firm has also responded to various regulatory inquiries regarding the Lehman matter.
Madoff Litigation. JPMorgan Chase \& Co., JPMorgan Chase Bank, N.A., JPMorgan Securities LLC, and JPMorgan Securities Ltd. have been named as defendants in a lawsuit brought by the trustee for the liquidation of Bernard L. Madoff Investment Securities LLC (the "Trustee"). The Trustee asserts 28 causes of action against JPMorgan Chase, 16 of which seek to avoid certain transfers (direct or indirect) made to JPMorgan Chase that are alleged to have been preferential or fraudulent under the federal Bankruptcy Code and the New York Debtor and Creditor Law. The remaining causes of action are for, among other things, aiding and abetting fraud, aiding and abetting breach of fiduciary duty, conversion and unjust enrichment. The complaint generally alleges that JPMorgan Chase, as Madoff's long-time bank, facilitated the maintenance of Madoff's Ponzi scheme and overlooked signs of wrongdoing in order to obtain profits and fees. The complaint purports to seek approximately $\$ 6$ billion in damages from JPMorgan Chase, and to recover approximately $\$ 425$ million in transfers that JPMorgan Chase allegedly received directly or indirectly from Bernard Madoff's brokerage firm. JPMorgan Chase has filed a motion to return the case from the Bankruptcy Court to the District Court, and intends to seek the dismissal of all or most of the Trustee's claims once that motion is decided.
Separately, J.P. Morgan Trust Company (Cayman) Limited, JPMorgan (Suisse) SA, and J.P. Morgan Securities Ltd. have been named as defendants in several suits in Bankruptcy Court and state and federal courts in New York arising out of the liquidation proceedings of Fairfield Sentry Limited and Fairfield Sigma Limited (together, "Fairfield"), so-called Madoff feeder funds. These actions advance theories of mistake and restitution and seek to recover payments previously made to defendants by the funds totaling approximately $\$ 140$ million.

Mortgage-Backed Securities Litigation and Regulatory Investigations. JPMorgan Chase and affiliates, Bear Stearns and affiliates and Washington Mutual and affiliates have been named as defendants in a number of cases in their various roles as issuer and/or
underwriter in mortgage-backed securities ("MBS") offerings. These cases include purported class action suits, actions by individual purchasers of securities and actions by insurance companies that guaranteed payments of principal and interest for particular tranches. Although the allegations vary by lawsuit, these cases generally allege that the offering documents for more than $\$ 100$ billion of securities issued by dozens of securitization trusts contained material misrepresentations and omissions, including statements regarding the underwriting standards pursuant to which the underlying mortgage loans were issued.

In the actions against the Firm as an MBS issuer (and, in some cases, also as an underwriter of its own MBS offerings), three purported class actions are pending against JPMorgan Chase and Bear Stearns, and/or certain of their affiliates and current and former employees, in the United States District Courts for the Eastern and Southern Districts of New York. Defendants have moved to dismiss these actions. In addition, Washington Mutual affiliates, WaMu Asset Acceptance Corp. and WaMu Capital Corp., are defendants, along with certain former officers or directors of WaMu Asset Acceptance Corp., have been named as defendants in three now-consolidated purported class action cases pending in the Western District of Washington. Defendants' motion to dismiss was granted in part to dismiss all claims relating to MBS offerings in which a named plaintiff was not a purchaser. Discovery is ongoing.
In other actions brought against the Firm as an MBS issuer (and, in some cases, also as an underwriter) certain JPMorgan Chase entities, several Bear Stearns entities, and certain Washington Mutual affiliates are defendants in nine separate individual actions commenced by the Federal Home Loan Banks of Pittsburgh, Seattle, San Francisco, Chicago, Indianapolis and Atlanta in various state courts around the country; and certain JPMorgan Chase, Bear Stearns and Washington Mutual entities are also among the defendants named in separate individual actions commenced by Cambridge Place Investment Management Inc. in Massachusetts state court, by The Charles Schwab Corporation in state court in California and by Allstate in state court in New York.
EMC Mortgage Corporation ("EMC"), a subsidiary of JPMorgan Chase, is a defendant in four pending actions commenced by bond insurers that guaranteed payments of principal and interest on approximately $\$ 3.6$ billion of certain classes of seven different MBS offerings sponsored by EMC. Three of those actions, commenced by Assured Guaranty Corp., Ambac Assurance Corporation and Syncora Guarantee, Inc., respectively, are pending in the United States District Court for the Southern District of New York. The fourth action, commenced by CIFG Assurance North America, Inc., is pending in state court in Texas. In each action, plaintiff claims that the underlying mortgage loans had origination defects that purportedly violate certain representations and warranties given by EMC to plaintiffs, and that EMC has breached the relevant agreements between the parties by failing to repurchase allegedly defective mortgage loans. Each action seeks unspecified damages and an order compelling EMC to repurchase those loans.

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In the actions against the Firm solely as an underwriter of other issuers' MBS offerings, the Firm has contractual rights to indemnification from the issuers, but those indemnity rights may prove effectively unenforceable where the issuers are now defunct, such as affiliates of IndyMac Bancorp ("IndyMac Trusts") and Thornburg Mortgage ("Thornburg"). With respect to the IndyMac Trusts, JPMorgan Securities, along with numerous other underwriters and individuals, is named as a defendant, both in its own capacity and as successor to Bear Stearns in a purported class action pending in the United States District Court for the Southern District of New York brought on behalf of purchasers of securities in various IndyMac Trust MBS offerings. The Court in that action has dismissed claims as to certain such securitizations, including all offerings in which no named plaintiff purchased securities, and allowed claims as to other offerings to proceed. Plaintiffs' motion to certify a class of investors in certain offerings is pending, and discovery is ongoing. In addition, JPMorgan Securities and JPMorgan Chase are named as defendants in an individual action filed by the Federal Home Loan Bank of Pittsburgh in connection with a single offering by an affiliate of IndyMac Bancorp. Discovery in that action is ongoing. Separately, JPMorgan Securities, as successor to Bear, Stearns \& Co. Inc., along with other underwriters and certain individuals, are defendants in an action pending in state court in California brought by MBIA Insurance Corp. ("MBIA"). The action relates to certain securities issued by IndyMac trusts in offerings in which Bear Stearns was an underwriter, and as to which MBIA provided guaranty insurance policies. MBIA purports to be subrogated to the rights of the MBS holders, and seeks recovery of sums it has paid and will pay pursuant to those policies. Discovery is ongoing. With respect to Thornburg, a Bear Stearns subsidiary is a named defendant in a purported class action pending in the United States District Court for the District of New Mexico along with a number of other financial institutions that served as depositors and/or underwriters for three Thornburg MBS offerings.

In addition to the above-described litigation, the Firm has also received, and responded to, a number of subpoenas and informal requests for information from federal authorities concerning mortgage-related matters, including inquiries concerning a number of transactions involving the Firm's underwriting and issuance of MBS and its participation in offerings of certain collateralized debt obligations.

In addition to the above mortgage-related matters, the Firm is now a defendant in an action commenced by Deutsche Bank, described in more detail below with respect to the Washington Mutual Litigations.

Mortgage Foreclosure Investigations and Litigation. Multiple state and federal officials have announced investigations into the procedures followed by mortgage servicing companies and banks, including JPMorgan Chase \& Co. and its affiliates, relating to foreclosure and loss mitigation processes. The Firm is cooperating with these investigations, and these investigations could result in material fines, penalties, equitable remedies (including requiring default servicing or other process changes), or other enforcement actions, as well as significant legal costs in responding to governmental investigations and additional litigation. Three purported class action lawsuits have also been filed against the Firm relating to its mortgage foreclosure procedures.
These investigations and actions follow the Firm's decision in late September 2010 to commence a temporary suspension of obtaining
mortgage foreclosure judgments in the states and territories that require a judicial foreclosure process. Subsequently, the Firm extended this temporary suspension to foreclosure sales in those states and territories that require a judicial foreclosure process, and to foreclosures and foreclosure sales in the majority of remaining states where a judicial process is not required, but where affidavits signed by Firm personnel may have been used as part of the foreclosure process. In mid-October, the Firm also temporarily suspended evictions in the states and territories in which it had suspended foreclosures and foreclosure sales, as well as in certain additional states in which an affidavit signed by Firm personnel may have been used in connection with eviction proceedings.
The Firm's temporary suspension arose out of certain questions about affidavits of indebtedness prepared by local foreclosure counsel, signed by Firm employees and filed or used in mortgage foreclosure proceedings in certain states. Although the Firm believes, based on its work to date, that the statements in those affidavits of indebtedness regarding the fact of default and amount of indebtedness were materially accurate, in certain instances, the underlying review and verification of this information was performed by Firm personnel other than the affiants, or the affidavits may not have been properly notarized.
As of January 2011, the Firm has resumed initiation of new foreclosure proceedings in nearly all states in which it had previously suspended such proceedings, utilizing revised procedures in connection with the execution of affidavits and other documents used by Firm employees in the foreclosure process. The Firm is also in the process of reviewing pending foreclosure matters in these states to determine whether remediation of specific documentation is necessary, and intends to resume pending foreclosures as the review, and if necessary, remediation, of each pending matter is completed. The Firm intends to begin taking these same actions in all remaining states in the near future.

Municipal Derivatives Investigations and Litigation. The Department of Justice (in conjunction with the Internal Revenue Service), the Securities and Exchange Commission ("SEC"), a group of state attorneys general and the Office of the Comptroller of the Currency ("OCC") have been investigating JPMorgan Chase and Bear Stearns for possible antitrust, securities and tax-related violations in connection with the bidding or sale of guaranteed investment contracts and derivatives to municipal issuers. The Philadelphia Office of the SEC provided notice to JPMorgan Securities that it intends to recommend that the SEC bring civil charges in connection with its investigation. JPMorgan Securities has responded to that notice, as well as to a separate notice that that Philadelphia Office of the SEC provided to Bear, Stearns \& Co. Inc. The Firm has been cooperating with all of these investigations, and is seeking to resolve them on a negotiated basis.
Purported class action lawsuits and individual actions (the "Municipal Derivatives Actions") have been filed against JPMorgan Chase and Bear Stearns, as well as numerous other providers and brokers, alleging antitrust violations in the reportedly $\$ 100$ billion to $\$ 300$ billion annual market for financial instruments related to municipal
bond offerings referred to collectively as "municipal derivatives." The Municipal Derivatives Actions have been consolidated in the United States District Court for the Southern District of New York. The Court denied in part and granted in part defendants' motions to dismiss the purported class and individual actions, permitting certain claims to proceed against the Firm and others under federal and California state antitrust laws and under the California false claims act. Subsequently, a number of additional individual actions asserting substantially similar claims, including claims under New York and West Virginia state antitrust statutes, were filed against JPMorgan Chase, Bear Stearns and numerous other defendants. Most of these cases have been coordinated for pretrial purposes in the United States District Court for the Southern District of New York. The Firm is seeking to have the balance of these cases coordinated before the same court. Discovery is ongoing.

Following JPMorgan Securities' settlement with the SEC in connection with certain Jefferson County, Alabama (the "County") warrant underwritings and swap transactions, the County filed a complaint against the Firm and several other defendants in the Circuit Court of Jefferson County, Alabama. The suit alleges that the Firm made payments to certain third parties in exchange for being chosen to underwrite more than $\$ 3$ billion in warrants issued by the County and chosen as the counterparty for certain swaps executed by the County. In its complaint, Jefferson County alleges that the Firm concealed these third-party payments and that, but for this concealment, the County would not have entered into the transactions. The County further alleges that the transactions increased the risks of its capital structure and that, following the downgrade of certain insurers that insured the warrants, the County's interest obligations increased and the principal due on a portion of its outstanding warrants was accelerated. The Court denied the Firm's motion to dismiss the complaint. The Firm filed a mandamus petition with the Alabama Supreme Court, seeking immediate appellate review of this decision. The petition is now fully briefed and all proceedings have been stayed pending adjudication of the petition.

A putative class action was filed on behalf of sewer ratepayers against JPMorgan Chase and Bear Stearns and numerous other defendants, based on substantially the same alleged conduct described above. The Firm's motion to dismiss the complaint for lack of standing was denied in January 2011.
Two insurance companies that guaranteed the payment of principal and interest on warrants issued by Jefferson County have filed separate actions against JPMorgan Chase (and one of the insurers has also named Jefferson County) in New York state court asserting that defendants fraudulently misled them into issuing the insurance coverage, based upon substantially the same alleged conduct described above and other alleged non-disclosures. One insurer claims that it insured an aggregate principal amount of nearly \$1.2 billion in warrants, and seeks unspecified damages in excess of $\$ 400$ million, as well as unspecified punitive damages. The other insurer claims that it insured an aggregate principal amount of more than $\$ 378$ million and seeks recovery of $\$ 4$ million that it alleges it paid under the
policies to date as well as any payments it will make in the future and unspecified punitive damages. In December 2010, the court denied the Firm's motions to dismiss each of the complaints and the parties are currently engaged in discovery.

The Alabama Public Schools and College Authority ("APSCA") brought a declaratory judgment action in the United States District Court for the Northern District of Alabama claiming that certain interest rate swaption transactions entered into with JPMorgan Chase Bank, N.A. are void on the grounds that the APSCA purportedly did not have the authority to enter into the transactions or, alternatively, are voidable at the APSCA's option because of its alleged inability to issue refunding bonds in relation to the swaption. The action was settled in December 2010 for a payment by APSCA to the Firm and, pursuant to the settlement, the court dismissed the action by order dated December 27, 2010.
Overdraft Fee/Debit Posting Order Litigation. JPMorgan Chase Bank, N.A. has been named as a defendant in several purported class actions relating to its practices in posting debit card transactions to customers' deposit accounts. Plaintiffs allege that the Firm improperly re-ordered debit card transactions from the highest amount to lowest amount before processing these transactions in order to generate unwarranted overdraft fees. Plaintiffs contend that the Firm should have processed such transactions in the chronological order they were authorized. Plaintiffs seek the disgorgement of all overdraft fees paid to the Firm by plaintiffs, since approximately 2003, as a result of the re-ordering of debit card transactions. The claims against the Firm have been consolidated with numerous complaints against other national banks in Multi-District Litigation pending in the United States District Court for the Southern District of Florida. The Firm's motion to compel arbitration of certain plaintiffs' claims was denied by the District Court. That ruling is currently on appeal. Discovery is proceeding in the District Court. Plaintiffs' motion for class certification is due to be filed in April 2011.
Petters Bankruptcy and Related Matters. JPMorgan Chase and certain of its affiliates, including One Equity Partners, LLC ("OEP"), have been named as defendants in several actions filed in connection with the receivership and bankruptcy proceedings pertaining to Thomas J. Petters and certain entities affiliated with Petters (collectively, "Petters") and the Polaroid Corporation. The principal actions against JPMorgan Chase and its affiliates have been brought by the receiver and bankruptcy trustee for Petters and generally seek to avoid, on fraudulent transfer and preference grounds, certain purported transfers in connection with (i) the 2005 acquisition of Polaroid by Petters, which at the time was majority-owned by OEP; (ii) two credit facilities that JPMorgan Chase and other financial institutions entered into with Polaroid; and (iii) a credit line and investment accounts held by Petters. The actions collectively seek recovery of approximately $\$ 450$ million.
Securities Lending Litigation. JPMorgan Chase Bank, N.A. has been named as a defendant in four putative class actions asserting ERISA and other claims pending in the United States District Court for the Southern District of New York brought by participants in the Firm's securities lending business. A fifth lawsuit was filed in New York

## Notes to consolidated financial statements

state court by an individual participant in the program. Three of the purported class actions, which have been consolidated, relate to investments of approximately $\$ 500$ million in medium-term notes of Sigma Finance Inc. ("Sigma"). In August 2010, the Court certified a plaintiff class consisting of all securities lending participants that held Sigma medium-term notes on September 30, 2008, including those that held the notes by virtue of participation in the investment of cash collateral through a collective fund, as well as those that held the notes by virtue of the investment of cash collateral through individual accounts. All discovery has been completed. The Court has set a schedule for filing summary judgment briefs, pursuant to which the Firm's motion is to be fully briefed by April 2011.
The fourth putative class action concerns investments of approximately $\$ 500$ million in Lehman Brothers medium-term notes. The Firm has moved to dismiss the amended complaint and is awaiting a decision. The Magistrate Judge ordered discovery to proceed while the motion is pending, but this ruling is on appeal to the District Judge and also is awaiting a decision. The New York state court action, which is not a class action, concerns the plaintiff's alleged loss of money in both Sigma and Lehman Brothers mediumterm notes. The Firm has answered the complaint. The Court denied the Firm's motion to stay this action pending resolution of the proceedings in federal court, and discovery has commenced.

## Service Members Civil Relief Act and Housing and Economic

 Recovery Act Investigations and Litigation. Multiple government officials have announced their intent to commence, or have commenced, inquiries into the Firm's procedures related to the Service Members Civil Relief Act ("SCRA") and the Housing and Economic Recovery Act of 2008 ("HERA"). These inquiries have been prompted by the Firm's public statements about its SCRA and HERA compliance and actions to remedy certain instances in which the Firm mistakenly charged active or recently-active military personnel mortgage interest and fees in excess of that permitted by SCRA and HERA, and in a number of instances, foreclosed on borrowers protected by SCRA and HERA. The Firm has implemented a number of procedural enhancements and controls to strengthen its SCRA and HERA compliance and is still reviewing the circumstances under which these issues arose. In addition, an individual borrower has filed a purported nationwide class action in United States District Court for South Carolina against the Firm alleging violations of the SCRA.Washington Mutual Litigations. Subsequent to JPMorgan Chase's acquisition from the Federal Deposit Insurance Corporation ("FDIC") of substantially all of the assets and certain specified liabilities of Washington Mutual Bank, Henderson Nevada ("Washington Mutual Bank"), in September 2008, Washington Mutual Bank's parent holding company, Washington Mutual, Inc. ("WMI") and its whollyowned subsidiary, WMI Investment Corp. (together, the "Debtors"), both commenced voluntary cases under Chapter 11 of Title 11 of the United States Code in the United States Bankruptcy Court for the District of Delaware (the "Bankruptcy Case"). In the Bankruptcy Case, the Debtors have asserted rights and interests in certain assets. The assets in dispute include principally
the following: (a) approximately $\$ 4$ billion in trust securities contributed by WMI to Washington Mutual Bank (the "Trust Securities"); (b) the right to tax refunds arising from overpayments attributable to operations of Washington Mutual Bank and its subsidiaries; (c) ownership of and other rights in approximately $\$ 4$ billion that WMI contends are deposit accounts at Washington Mutual Bank and one of its subsidiaries; and (d) ownership of and rights in various other contracts and other assets (collectively, the "Disputed Assets").

WMI, JPMorgan Chase and the FDIC have since been involved in litigations over these and other claims pending in the Bankruptcy Court and the United States District Court for the District of Columbia.
In May 2010, WMI, JPMorgan Chase and the FDIC announced a global settlement agreement among themselves and significant creditor groups (the "Global Settlement Agreement"). The Global Settlement Agreement is incorporated into WMI's proposed Chapter 11 plan ("the Plan") that has been submitted to the Bankruptcy Court. If approved by the Bankruptcy Court, the Global Settlement would resolve numerous disputes among WMI, JPMorgan Chase, the FDIC in its capacity as receiver for Washington Mutual Bank and the FDIC in its corporate capacity, as well as those of significant creditor groups, including disputes relating to the Disputed Assets.

Other proceedings related to Washington Mutual's failure are also pending before the Bankruptcy Court. Among other actions, in July 2010, certain holders of the Trust Securities commenced an adversary proceeding in the Bankruptcy Court against JPMorgan Chase, WMI, and other entities seeking, among other relief, a declaratory judgment that WMI and JPMorgan Chase do not have any right, title or interest in the Trust Securities. In early January 2011, the Bankruptcy Court granted summary judgment to JPMorgan Chase and denied summary judgment to the plaintiffs in the Trust Securities adversary proceeding.

The Bankruptcy Court considered confirmation of the Plan, including the Global Settlement Agreement, in hearings in early
December 2010. In early January 2011, the Bankruptcy Court issued an opinion in which it concluded that the Global Settlement Agreement is fair and reasonable, but that the Plan cannot be confirmed until the parties correct certain deficiencies, which include the scope of releases. None of these deficiencies relate to the Disputed Assets. The Equity Committee has filed a petition seeking a direct appeal to the United States Court of Appeals for the Third Circuit from so much of the Bankruptcy Court's ruling that found the settlement to be fair and reasonable. A revised Plan was filed with the Bankruptcy Court in February 2011, and the Bankruptcy Court has scheduled a hearing for May 2, 2011. If the Global Settlement is effected and the Plan is confirmed, the Firm currently estimates it will not incur additional obligations beyond those already reflected in its liabilities for the numerous disputes covered by the Global Settlement.
Other proceedings related to Washington Mutual's failure are pending before the United States District Court for the District of Columbia include a lawsuit brought by Deutsche Bank National Trust Company, initially against the FDIC, asserting an estimated $\$ 6$ billion to $\$ 10$ billion in damages based upon alleged breach of
various mortgage securitization agreements and alleged violation of certain representations and warranties given by certain WMI subsidiaries in connection with those securitization agreements. Deutsche Bank filed an amended complaint in August 2010, adding JPMorgan Chase Bank, N.A. as a party. The amended complaint includes assertions that JPMorgan Chase may have assumed liabilities relating to the mortgage securitization agreements. In November 2010, JPMorgan Chase and the FDIC moved to dismiss the complaint. JPMorgan Chase also moved for a partial summary judgment holding that the FDIC retained liability for Deutsche Bank's claims.
In addition, JPMorgan Chase was sued in an action originally filed in State District Court in Texas (the "Texas Action") by certain holders of WMI common stock and debt of WMI and Washington Mutual Bank who seek unspecified damages alleging that JPMorgan Chase acquired substantially all of the assets of Washington Mutual Bank from the FDIC at an allegedly too-low price. The Texas Action was transferred to the United States District Court for the District of Columbia, which ultimately granted JPMorgan Chase's and the FDIC's motions to dismiss the complaint. Plaintiffs have appealed this dismissal to the United States Court of Appeals for the District of Columbia Circuit. Oral argument is currently scheduled for April 5, 2011.

In addition to the various legal proceedings discussed above, JPMorgan Chase and its subsidiaries are named as defendants or otherwise involved in a substantial number of other legal proceedings. The Firm believes it has meritorious defenses to the claims asserted against it in its currently outstanding legal proceedings and it intends to defend itself vigorously in all such matters. Additional legal proceedings may be initiated from time to time in the future.

The Firm has established reserves for several hundred of its currently outstanding legal proceedings. The Firm accrues for potential liability arising from such proceedings when it is probable that such liability has been incurred and the amount of the loss can be reasonably estimated. The Firm evaluates its outstanding legal proceedings each quarter to assess its litigation reserves, and makes adjustments in such reserves, upwards or downwards, as appropriate, based on management's best judgment after consultation with counsel. During the years ended December 31, 2010 and 2009, the Firm incurred $\$ 7.4$ billion and $\$ 161$ million, respectively, of litigation expense. During the year ended December 31, 2008, the Firm recorded a net benefit of $\$ 781$ million to litigation expense. There is no assurance that the Firm's litigation reserves will not need to be adjusted in the future.

In view of the inherent difficulty of predicting the outcome of legal proceedings, particularly where the claimants seek very large or indeterminate damages, or where the matters present novel legal theories, involve a large number of parties or are in early stages of discovery, the Firm cannot state with confidence what the eventual outcome of the currently pending matters will be, what the timing of the ultimate resolution of these pending matters will be or what the eventual loss, fines, penalties or impact related to each currently pending matter may be. JPMorgan Chase believes, based upon its current knowledge, after consultation with counsel and after taking into account its current litigation reserves, that the legal proceedings currently pending against it should not have a material adverse effect on the Firm's consolidated financial condition. The Firm notes, however, that in light of the uncertainties involved in such proceedings, there is no assurance the ultimate resolution of these matters will not significantly exceed the reserves currently accrued by the Firm; as a result, the outcome of a particular matter may be material to JPMorgan Chase's operating results for a particular period, depending on, among other factors, the size of the loss or liability imposed and the level of JPMorgan Chase's income for that period.

## Notes to consolidated financial statements

## Note 33 - International operations

The following table presents income statement-related information for JPMorgan Chase by major international geographic area. The Firm defines international activities as business transactions that involve customers residing outside of the U.S., and the information presented below is based primarily upon the domicile of the customer, the location from which the customer relationship is managed or the location of the trading desk. However, many of the Firm's U.S. operations serve international businesses.

As the Firm's operations are highly integrated, estimates and subjective assumptions have been made to apportion revenue and expense between U.S. and international operations. These estimates and assumptions are consistent with the allocations used for the Firm's segment reporting as set forth in Note 34 on pages 290-293 of this Annual Report.
The Firm's long-lived assets for the periods presented are not considered by management to be significant in relation to total assets. The majority of the Firm's long-lived assets are located in the United States.

| Year ended December 31, (in millions) | Revenue(a) | Expense(b) | Income (loss) before income tax expense/(benefit) and extraordinary gain | Net income | Average assets |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2010 |  |  |  |  |  |
| Europe/Middle East and Africa | \$ 14,113 | \$ 8,712 | \$ 5,401 | \$ 3,655 | \$ 425,374 |
| Asia and Pacific | 5,791 | 3,577 | 2,214 | 1,470 | 134,787 |
| Latin America and the Caribbean | 1,810 | 1,152 | 658 | 395 | 30,021 |
| Other | 510 | 413 | 97 | 59 | 6,579 |
| Total international | 22,224 | 13,854 | 8,370 | 5,579 | 596,761 |
| Total U.S. | 80,470 | 63,981 | 16,489 | 11,791 | 1,456,490 |
| Total | \$102,694 | \$77,835 | \$24,859 | \$17,370 | \$2,053,251 |
| 2009 |  |  |  |  |  |
| Europe/Middle East and Africa | \$ 16,915 | \$ 8,610 | \$ 8,305 | \$ 5,485 | \$ 383,003 |
| Asia and Pacific | 5,088 | 3,438 | 1,650 | 1,119 | 100,932 |
| Latin America and the Caribbean | 1,982 | 1,112 | 870 | 513 | 23,227 |
| Other | 659 | 499 | 160 | 105 | 7,074 |
| Total international | 24,644 | 13,659 | 10,985 | 7,222 | 514,236 |
| Total U.S. | 75,790 | 70,708 | 5,082 | 4,506 | 1,509,965 |
| Total | \$100,434 | \$84,367 | \$16,067 | \$11,728 | \$2,024,201 |
| 2008 |  |  |  |  |  |
| Europe/Middle East and Africa | \$ 11,449 | \$ 8,403 | \$ 3,046 | \$ 2,483 | \$ 352,558 |
| Asia and Pacific | 4,097 | 3,580 | 517 | 672 | 108,751 |
| Latin America and the Caribbean | 1,353 | 903 | 450 | 274 | 30,940 |
| Other | 499 | 410 | 89 | 21 | 6,553 |
| Total international | 17,398 | 13,296 | 4,102 | 3,450 | 498,802 |
| Total U.S. | 49,854 | 51,183 | $(1,329)$ | 2,155 | 1,292,815 |
| Total | \$ 67,252 | \$64,479 | \$ 2,773 | \$ 5,605 | \$1,791,617 |

(a) Revenue is composed of net interest income and noninterest revenue.
(b) Expense is composed of noninterest expense and the provision for credit losses.

## Note 34 - Business segments

The Firm is managed on a line-of-business basis. There are six major reportable business segments - Investment Bank, Retail Financial Services, Card Services \& Auto, Commercial Banking, Treasury \& Securities Services and Asset Management, as well as a Corporate/Private Equity segment. The business segments are determined based on the products and services provided, or the type of customer served, and they reflect the manner in which financial information is currently evaluated by management. Results of these lines of business are presented on a managed basis. For a definition of managed basis, see Explanation and Reconciliation of the Firm's use of non-GAAP financial measures, on pages 64-65 of this Annual Report. For a further discussion concerning JPMorgan Chase's business segments, see Business segment results on pages 67-68 of this Annual Report.

The following is a description of each of the Firm's business segments:

## Investment Bank

J.P. Morgan is one of the world's leading investment banks, with deep client relationships and broad product capabilities. The clients of IB are corporations, financial institutions, governments and institutional investors. The Firm offers a full range of investment banking products and services in all major capital markets, including advising on corporate strategy and structure, capital-raising in equity and debt markets, sophisticated risk management, market-making in cash securities and derivative instruments, prime brokerage, and research.

## Retail Financial Services

RFS serves consumers and businesses through personal service at bank branches and through ATMs, online banking and telephone banking. Customers can use more than 5,200 bank branches (thirdlargest nationally) and 16,100 ATMs (second-largest nationally), as well as online and mobile banking around the clock. More than 28,900 branch salespeople assist customers with checking and savings accounts, mortgages, home equity and business loans, and investments across the 23-state footprint from New York and Florida to California.

## Card Services \& Auto

Card is one of the nation's largest credit card issuers, with over $\$ 137$ billion in credit card loans and over 90 million open credit card accounts. Customers used Chase credit cards to meet $\$ 313$ billion of their spending needs in 2010. Through its merchant acquiring business, Chase Paymentech Solutions, Card is a global leader in payment processing and merchant acquiring. Consumers also can obtain loans through more than 16,200 auto dealerships and 2,200 schools and universities nationwide.

## Commercial Banking

CB delivers extensive industry knowledge, local expertise and dedicated service to nearly 24,000 clients nationally, including corporations, municipalities, financial institutions and not-for-profit entities with annual revenue generally ranging from $\$ 10$ million to $\$ 2$ billion, and nearly 35,000 real estate investors/owners. CB partners with the Firm's other businesses to provide comprehensive solutions, including lending, treasury services, investment banking and asset management to meet its clients' domestic and international financial needs.

## Treasury \& Securities Services

TSS is a global leader in transaction, investment and information services. TSS is one of the world's largest cash management providers and a leading global custodian. Treasury Services ("TS") provides cash management, trade, wholesale card and liquidity products and services to small- and mid-sized companies, multinational corporations, financial institutions and government entities. TS partners with IB, CB, RFS and AM businesses to serve clients firmwide. Certain TS revenue is included in other segments' results.

Worldwide Securities Services holds, values, clears and services securities, cash and alternative investments for investors and brokerdealers, and manages depositary receipt programs globally.

## Asset Management

AM, with assets under supervision of $\$ 1.8$ trillion, is a global leader in investment and wealth management. AM clients include institutions, retail investors and high-net-worth individuals in every major market throughout the world. AM offers global investment management in equities, fixed income, real estate, hedge funds, private equity and liquidity products, including money-market instruments and bank deposits. AM also provides trust and estate, banking and brokerage services to high-net-worth clients, and retirement services for corporations and individuals. The majority of AM's client assets are in actively managed portfolios.

## Corporate/Private Equity

The Corporate/Private Equity sector comprises Private Equity, Treasury, the Chief Investment Office, corporate staff units and expense that is centrally managed. Treasury and the Chief Investment Office manage capital, liquidity, and structural risks of the Firm. The corporate staff units include Central Technology and Operations, Internal Audit, Executive Office, Finance, Human Resources, Marketing \& Communications, Legal \& Compliance, Corporate Real Estate and General Services, Risk Management, Corporate Responsibility and Strategy \& Development. Other centrally managed expense includes the Firm's occupancy and pension-related expense, net of allocations to the business.
Effective January 1, 2010, the Firm enhanced its line-of-business equity framework to better align equity assigned to each line of business with changes anticipated to occur in the business and in the competitive and regulatory landscape. The lines of business are now capitalized based on the Tier 1 common standard, rather than the Tier 1 capital standard. Line-of-business equity increased during the second quarter of 2008 in IB and AM due to the Bear Stearns merger and for AM , the purchase of the additional equity interest in Highbridge. At the end of the third quarter of 2008, equity was increased for each line of business with a view toward the future implementation of the new Basel II capital rules. In addition, equity allocated to RFS, Card and CB was increased as a result of the Washington Mutual transaction.

## Subsequent business segment changes

Commencing July 1, 2011, the Firm's business segments have been reorganized as follows:

Auto and Student Lending transferred from the RFS segment and are reported with Card in a single segment. RFS continues as a segment, organized in two components: Consumer \& Business Banking (formerly Retail Banking) and Mortgage Banking (including Mortgage Production and Servicing, and Real Estate Portfolios).

The business segment information associated with RFS and Card that is included in the following Segment results section has been revised to reflect the business reorganization retroactive to January 1, 2008.

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## Segment results

The following table provides a summary of the Firm's segment results for 2010, 2009 and 2008 on a managed basis. Prior to the January 1, 2010, adoption of the accounting guidance related to VIEs, the impact of credit card securitization adjustments had been included in reconciling items so that the total Firm results are on a reported basis. Finally, total net revenue (noninterest revenue and net interest income) for each of the segments is presented on a tax-equivalent basis. Accordingly, revenue from tax-exempt securities and investments that receive tax credits are presented in the managed results on a basis comparable to taxable securities and investments. This approach allows management to assess the comparability of revenue arising from both taxable and tax-exempt sources. The corresponding income tax impact related to these items is recorded within income tax expense/(benefit).

Segment results and reconciliation(a) (table continued on next page)

| Year ended December 31, (in millions, except ratios) | Investment Bank |  |  |  |  |  | Retail Financial Services |  |  |  |  |  | Card Services \& Auto(f) |  |  |  |  |  | Commercial Banking |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 |  | 2009 |  | 2008 |  | 2010 |  | 2009 |  | 2008 |  | 2010 |  | 2009 |  | 2008 |  | 2010 |  | 2009 |  | 2008 |  |
| Noninterest revenue | \$ | 18,253 | \$ | 18,522 | \$ | 2,051 | \$ | 11,227 | \$ | 11,414 | \$ | 8,745 | \$ | 4,278 | \$ | 3,706 | \$ | 3,329 | \$ | 2,200 | \$ | 1,817 | \$ | 1,481 |
| Net interest income |  | 7,964 |  | 9,587 |  | 10,284 |  | 17,220 |  | 18,383 |  | 12,410 |  | 16,194 |  | 19,493 |  | 15,510 |  | 3,840 |  | 3,903 |  | 3,296 |
| Total net revenue |  | 26,217 |  | 28,109 |  | 12,335 |  | 28,447 |  | 29,797 |  | 21,155 |  | 20,472 |  | 23,199 |  | 18,839 |  | 6,040 |  | 5,720 |  | 4,777 |
| Provision for credit losses |  | $(1,200)$ |  | 2,279 |  | 2,015 |  | 8,919 |  | 14,754 |  | 9,033 |  | 8,570 |  | 19,648 |  | 10,931 |  | 297 |  | 1,454 |  | 464 |
| Credit reimbursement <br> (to)/from TSS(b) |  | - |  |  |  |  |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Noninterest expense(c) |  | 17,265 |  | 15,401 |  | 13,844 |  | 16,483 |  | 15,512 |  | 10,877 |  | 7,178 |  | 6,617 |  | 6,340 |  | 2,199 |  | 2,176 |  | 1,946 |
| Incomel(loss) before income tax expense/(benefit) and extraordinary gain |  | 10,152 |  | 10,429 |  | $(3,524)$ |  | 3,045 |  | (469) |  | 1,245 |  | 4,724 |  | $(3,066)$ |  | 1,568 |  | 3,544 |  | 2,090 |  | 2,367 |
| Income tax expense/(benefit) |  | 3,513 |  | 3,530 |  | $(2,349)$ |  | 1,317 |  | (134) |  | 542 |  | 1,852 |  | $(1,273)$ |  | 611 |  | 1,460 |  | 819 |  | 928 |
| Income/(loss) before extraordinary gain Extraordinary gain(d) |  | 6,639 |  | 6,899 |  | $(1,175)$ |  | 1,728 |  | (335) |  | 703 |  | 2,872 |  | $(1,793)$ |  | 957 |  | 2,084 |  | 1,271 |  | 1,439 |
| Extraordinary gain(d) |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Net income/(loss) | \$ | 6,639 | \$ | 6,899 | \$ | $(1,175)$ | \$ | 1,728 | \$ | (335) | \$ | 703 | \$ | 2,872 | \$ | $(1,793)$ | \$ | 957 | \$ | 2,084 | \$ | 1,271 | \$ | 1,439 |
| Average common equity | \$ | 40,000 | \$ | 33,000 | \$ | 26,098 |  | 24,600 | \$ | 22,457 | \$ | 16,070 | \$ | 18,400 | \$ | 17,543 | \$ | 17,267 | \$ | 8,000 | \$ | 8,000 | \$ | 7,251 |
| Average assets |  | 731,801 |  | 699,039 |  | 832,729 |  | 314,046 |  | 344,727 |  | 243,792 |  | 213,041 |  | 255,519 |  | 234,361 |  | 133,654 |  | 135,408 |  | 114,299 |
| Return on average equity(e) |  | 17\% |  | 21\% |  | (5)\% |  | 7\% |  | (1)\% |  | 4\% |  | 16\% |  | (10)\% |  | 6\% |  | 26\% |  | 16\% |  | 20\% |
| Overhead ratio |  | 66 |  | 55 |  | 112 |  | 58 |  | 52 |  | 51 |  | 35 |  | 29 |  | 34 |  | 36 |  | 38 |  | 41 |

(a) In addition to analyzing the Firm's results on a reported basis, management reviews the Firm's lines of business results on a "managed basis," which is a non-GAAP financial measure. The Firm's definition of managed basis starts with the reported U.S. GAAP results and includes certain reclassifications that do not have any impact on net income as reported by the lines of business or by the Firm as a whole.
(b) TSS was charged a credit reimbursement related to certain exposures managed within IB credit portfolio on behalf of clients shared with TSS. IB recognizes this credit reimbursement in its credit portfolio business in all other income.
(c) Includes merger costs, which are reported in the Corporate/Private Equity segment. There were no merger costs in 2010. Merger costs attributed to the business segments for 2009 and 2008 were as follows.

| Year ended December 31, (in millions) | 2009 | 2008 |
| :---: | :---: | :---: |
| Investment Bank | \$ 27 | \$ 183 |
| Retail Financial Services | 228 | 90 |
| Card Services \& Auto | 40 | 20 |
| Commercial Banking | 6 | 4 |
| Treasury \& Securities Services | 11 | - |
| Asset Management | 6 | 3 |
| Corporate/Private Equity | 163 | 132 |

 exceeded the purchase price, which resulted in negative goodwill. In accordance with U.S. GAAP for business combinations, nonfinancial assets that are not held-for-sale, such as premises and equipment and other intangibles, acquired in the Washington Mutual transaction were written down against that negative goodwill. The negative goodwill that remained after writing down nonfinancial assets was recognized as an extraordinary gain.
(e) Ratio is based on income/(loss) before extraordinary gain for 2009 and 2008.
 impact of credit card securitizations on total net revenue, provision for credit losses and average assets, as JPMorgan Chase treated the sold receivables as if they were still on the balance sheet in evaluating the credit performance of the entire managed credit card portfolio, as operations are funded, and decisions are made about allocating resources, such as employees and capital, based on managed information. These adjustments are eliminated in reconciling items to arrive at the Firm's reported U.S. GAAP results. The related securitization adjustments were as follows.

| Year ended December 31, (in millions) | 2010 | 2009 | 2008 |
| :---: | :---: | :---: | :---: |
| Noninterest revenue | NA | \$ $(1,494)$ | \$ $(3,333)$ |
| Net interest income | NA | 7,937 | 6,945 |
| Provision for credit losses | NA | 6,443 | 3,612 |
| Average assets | NA | 82,233 | 76,904 |

(g) Included a $\$ 1.5$ billion charge to conform Washington Mutual's credit loss reserve to JPMorgan Chase's allowance methodology.
(table continued from previous page)

(h) In November 2008, the Firm transferred $\$ 5.8$ billion of higher quality credit card loans from the legacy Chase portfolio to a securitization trust previously established by WMMT. As a result of converting higher credit quality Chase-originated on-book receivables to the Trust's seller's interest which has a higher overall loss rate reflective of the total assets within the Trust, approximately $\$ 400$ million of incremental provision for credit losses was recorded during the fourth quarter of 2008. This incremental provision for credit losses was recorded in the Corporate/Private Equity segment as the action related to the acquisition of Washington Mutual's banking operations. For further discussion of credit card securitizations, see Note 16 on pages 244-259 of this Annual Report.
(i) Segment managed results reflect revenue on a tax-equivalent basis with the corresponding income tax impact recorded within income tax expense/(benefit). These adjustments are eliminated in reconciling items to arrive at the Firm's reported U.S. GAAP results. Tax-equivalent adjustments for the years ended December 31, 2010, 2009 and 2008 were as follows.

| Year ended December 31, (in millions) | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 0 9}$ |
| :--- | ---: | ---: |
| Noninterest revenue | $\mathbf{\$ 1 , 7 4 5}$ | $\$ 1,440$ |
| Net interest income | $\mathbf{4 0 3}$ | $\mathbf{3 3 0}$ |
| Income tax expense | $\mathbf{2 , 1 4 8}$ | 579 |

## Notes to consolidated financial statements

| Note 35 - Parent company |  |  |  |
| :---: | :---: | :---: | :---: |
| Parent company - statements of income |  |  |  |
| Year ended December 31, (in millions) | 2010 | 2009 | 2008 |
| Income |  |  |  |
| Dividends from subsidiaries: |  |  |  |
| Bank and bank holding company | \$16,554 | \$15,235 | \$ 3,085 |
| Nonbank(a) | 932 | 1,036 | 1,687 |
| Interest income from subsidiaries | 985 | 1,501 | 4,539 |
| Other interest income | 294 | 266 | 212 |
| Other income from subsidiaries, primarily fees: |  |  |  |
| Bank and bank holding company | 680 | 233 | 244 |
| Nonbank | 312 | 742 | 95 |
| Other income/(loss) | 157 | 844 | $(1,038)$ |
| Total income | 19,914 | 19,857 | 8,824 |
| Expense |  |  |  |
| Interest expense to subsidiaries(a) | 1,263 | 1,118 | 1,302 |
| Other interest expense | 3,782 | 4,696 | 6,879 |
| Compensation expense | 177 | 574 | 43 |
| Other noninterest expense | 363 | 414 | 732 |
| Total expense | 5,585 | 6,802 | 8,956 |
| Income/(loss) before income tax benefit and undistributed net income of subsidiaries | 14,329 | 13,055 | (132) |
| Income tax benefit | 511 | 1,269 | 2,582 |
| Equity in undistributed net income of subsidiaries | 2,530 | $(2,596)$ | 3,155 |
| Net income | \$17,370 | \$11,728 | \$ 5,605 |
| Parent company - balance sheets |  |  |  |
| December 31, (in millions) |  | 2010 | 2009 |
| Assets |  |  |  |
| Cash and due from banks |  | \$ 96 | \$ 102 |
| Deposits with banking subsidiaries |  | 80,201 | 87,893 |
| Trading assets |  | 16,038 | 14,808 |
| Available-for-sale securities |  | 3,176 | 2,647 |
| Loans |  | 1,849 | 1,316 |
| Advances to, and receivables from, subsidiaries: |  |  |  |
| Bank and bank holding company |  | 54,887 | 54,152 |
| Nonbank |  | 72,080 | 81,365 |
| Investments (at equity) in subsidiaries: 12,080 |  |  |  |
| Bank and bank holding company |  | 150,876 | 157,412 |
| Nonbank(a) |  | 38,000 | 32,547 |
| Goodwill and other intangibles |  | 1,050 | 1,104 |
| Other assets |  | 17,171 | 14,793 |
| Total assets |  | \$435,424 | \$448,139 |
| Liabilities and stockholders' equity |  |  |  |
| Borrowings from, and payables to, subsidiaries(a) |  | \$ 28,332 | \$ 39,532 |
| Other borrowed funds, primarily commercial paper |  | 41,874 | 41,454 |
| Other liabilities |  | 7,302 | 8,035 |
| Long-term debt(b) |  | 181,810 | 193,753 |
| Total liabilities |  | 259,318 | 282,774 |
| Total stockholders' equity |  | 176,106 | 165,365 |
| Total liabilities and stockholders' equity |  | \$435,424 | \$448,139 |


| Parent company - statements of cash flows |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Operating activities |  |  |  |  |
| Net income | \$ 17,370 | \$ 11,728 | \$ | 5,605 |
| Less: Net income of subsidiaries(a) | 20,016 | 13,675 |  | 7,927 |
| Parent company net loss | $(2,646)$ | $(1,947)$ |  | $(2,322)$ |
| Cash dividends from subsidiaries(a) | 17,432 | 16,054 |  | 4,648 |
| Other, net | 1,685 | 1,852 |  | 1,920 |
| Net cash provided by operating activities | 16,471 | 15,959 |  | 4,246 |
| Investing activities |  |  |  |  |
| Net change in: |  |  |  |  |
| Deposits with banking subsidiaries | 7,692 | $(27,342)$ |  | $(7,579)$ |
| Available-for-sale securities: |  |  |  |  |
| Purchases | $(1,387)$ | $(1,454)$ |  | $(1,475)$ |
| Proceeds from sales and maturities | 745 | 522 |  |  |
| Loans, net | (90) | 209 |  | (102) |
| Advances to subsidiaries, net | 8,051 | 28,808 |  | $(82,725)$ |
| Investments (at equity) in subsidiaries, net(a) | (871) | $(6,582)$ |  | $(26,212)$ |
| Net cash provided byl(used in) investing activities | 14,140 | $(5,839)$ |  | $(118,093)$ |
| Financing activities |  |  |  |  |
| Net change in borrowings from subsidiaries(a) | $(2,039)$ | $(4,935)$ |  | 20,529 |
| Net change in other borrowed funds | $(11,843)$ | 1,894 |  | $(12,880)$ |
| Proceeds from the issuance of long-term debt | 21,610 | 32,304 |  | 50,013 |
| Proceeds from the assumption of subsidiaries long-term debt(c) | - | 15,264 | Proceeds from the assumption of subsidiaries | 39,778 |
| Repayments of long-term debt | $(32,893)$ | $(31,964)$ |  | $(22,972)$ |
| Proceeds from issuance of common stock |  | 5,756 |  | 11,500 |
| Excess tax benefits related to stock-based compensation | 26 | 17 | Excess tax benefits related to stock-based | 148 |
| Proceeds from issuance of preferred stock and |  |  |  | 25,000 |
| Proceeds from issuance of other preferred stock(d) | - | - |  | 8,098 |
| Redemption of preferred stock issued to the U.S. |  |  |  |  |
| Redemption of other preferred stock | (352) | - |  | - |
| Treasury stock repurchased | $(2,999)$ |  |  |  |
| Dividends paid | $(1,486)$ | $(3,422)$ |  | $(5,911)$ |
| All other financing activities, net | (641) | 33 |  | 469 |
| Net cash (used in)/provided by financing |  |  |  |  |
| Net increase/(decrease) in cash and due from banks <br> (6) <br> 67 |  |  |  |  |
| Cash and due from banks at the beginning of the |  |  |  |  |
| Cash and due from banks at the end of the |  |  |  |  |
| Cash interest paid | \$ 5,090 | \$ 5,629 | \$ | 7,485 |
| Cash income taxes paid, net | 7,001 | 3,124 |  | 156 |

[^6]
## Supplementary information

## Selected quarterly financial data (unaudited)

| As of or for the period ended <br> (in millions, except per share, ratio and headcount data) | 2010 |  |  |  |  |  |  |  | 2009 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 4th quarter |  | 3rd quarter |  | 2nd quarter |  | 1st quarter |  | 4th quarter |  | 3rd quarter |  | 2nd quarter |  | 1st quarter |  |
| Selected income statement data |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Noninterest revenue | \$ | 13,996 | \$ | 11,322 | \$ | 12,414 | \$ | 13,961 | \$ | 10,786 | \$ | 13,885 | \$ | 12,953 | \$ | 11,658 |
| Net interest income |  | 12,102 |  | 12,502 |  | 12,687 |  | 13,710 |  | 12,378 |  | 12,737 |  | 12,670 |  | 13,367 |
| Total net revenue |  | 26,098 |  | 23,824 |  | 25,101 |  | 27,671 |  | 23,164 |  | 26,622 |  | 25,623 |  | 25,025 |
| Total noninterest expense |  | 16,043 |  | 14,398 |  | 14,631 |  | 16,124 |  | 12,004 |  | 13,455 |  | 13,520 |  | 13,373 |
| Pre-provision profit(a) |  | 10,055 |  | 9,426 |  | 10,470 |  | 11,547 |  | 11,160 |  | 13,167 |  | 12,103 |  | 11,652 |
| Provision for credit losses |  | 3,043 |  | 3,223 |  | 3,363 |  | 7,010 |  | 7,284 |  | 8,104 |  | 8,031 |  | 8,596 |
| Income before income tax expense and |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Income tax expense |  | 2,181 |  | 1,785 |  | 2,312 |  | 1,211 |  | 598 |  | 1,551 |  | 1,351 |  | 915 |
| Income before extraordinary gain |  | 4,831 |  | 4,418 |  | 4,795 |  | 3,326 |  | 3,278 |  | 3,512 |  | 2,721 |  | 2,141 |
| Extraordinary gain(b) |  | - |  | - |  | - |  | - |  | - |  | 76 |  | - |  | - |
| Net income | \$ | 4,831 | \$ | 4,418 | \$ | 4,795 | \$ | 3,326 | \$ | 3,278 | \$ | 3,588 | \$ | 2,721 | \$ | 2,141 |
| Per common share data |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Basic earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Income before extraordinary gain | \$ | 1.13 | \$ | 1.02 | \$ | 1.10 | \$ | 0.75 | \$ | 0.75 | \$ | 0.80 | \$ | 0.28 | \$ | 0.40 |
| Net income |  | 1.13 |  | 1.02 |  | 1.10 |  | 0.75 |  | 0.75 |  | 0.82 |  | 0.28 |  | 0.40 |
| Diluted earnings(c) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Income before extraordinary gain | \$ | 1.12 | \$ | 1.01 | \$ | 1.09 | \$ | 0.74 | \$ | 0.74 | \$ | 0.80 | \$ | 0.28 | \$ | 0.40 |
| Net income |  | 1.12 |  | 1.01 |  | 1.09 |  | 0.74 |  | 0.74 |  | 0.82 |  | 0.28 |  | 0.40 |
| Cash dividends declared per share |  | 0.05 |  | 0.05 |  | 0.05 |  | 0.05 |  | 0.05 |  | 0.05 |  | 0.05 |  | 0.05 |
| Book value per share |  | 43.04 |  | 42.29 |  | 40.99 |  | 39.38 |  | 39.88 |  | 39.12 |  | 37.36 |  | 36.78 |
| Common shares outstanding |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Average: Basic |  | 3,917.0 |  | 3,954.3 |  | 3,983.5 |  | 3,970.5 |  | 3,946.1 |  | 3,937.9 |  | 3,811.5 |  | 3,755.7 |
| Diluted |  | 3,935.2 |  | 3,971.9 |  | 4,005.6 |  | 3,994.7 |  | 3,974.1 |  | 3,962.0 |  | 3,824.1 |  | 3,758.7 |
| Common shares at period-end |  | 3,910.3 |  | 3,925.8 |  | 3,975.8 |  | 3,975.4 |  | 3,942.0 |  | 3,938.7 |  | 3,924.1 |  | 3,757.7 |
| Share price(d) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| High | \$ | 43.12 | \$ | 41.70 | \$ | 48.20 | \$ | 46.05 | \$ | 47.47 | \$ | 46.50 | \$ | 38.94 | \$ | 31.64 |
| Low |  | 36.21 |  | 35.16 |  | 36.51 |  | 37.03 |  | 40.04 |  | 31.59 |  | 25.29 |  | 14.96 |
| Close |  | 42.42 |  | 38.06 |  | 36.61 |  | 44.75 |  | 41.67 |  | 43.82 |  | 34.11 |  | 26.58 |
| Market capitalization |  | 165,875 |  | 149,418 |  | 145,554 |  | 177,897 |  | 164,261 |  | 172,596 |  | 133,852 |  | 99,881 |
| Financial ratios |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Return on common equity(c) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Income before extraordinary gain |  | 11\% |  | 10\% |  | 12\% |  | 8\% |  | 8\% |  | 9\% |  | 3\% |  | 5\% |
| Net income |  | 11 |  | 10 |  | 12 |  | 8 |  | 8 |  | 9 |  | 3 |  | 5 |
| Return on tangible common equity(c) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Income before extraordinary gain |  | 16 |  | 15 |  | 17 |  | 12 |  | 12 |  | 13 |  | 5 |  | 8 |
| Net income |  | 16 |  | 15 |  | 17 |  | 12 |  | 12 |  | 14 |  | 5 |  | 8 |
| Return on assets |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Income before extraordinary gain |  | 0.92 |  | 0.86 |  | 0.94 |  | 0.66 |  | 0.65 |  | 0.70 |  | 0.54 |  | 0.42 |
| Net income |  | 0.92 |  | 0.86 |  | 0.94 |  | 0.66 |  | 0.65 |  | 0.71 |  | 0.54 |  | 0.42 |
| Overhead ratio |  | 61 |  | 60 |  | 58 |  | 58 |  | 52 |  | 51 |  | 53 |  | 53 |
| Deposits-to-loans ratio |  | 134 |  | 131 |  | 127 |  | 130 |  | 148 |  | 133 |  | 127 |  | 128 |
| Tier 1 capital ratio(e) |  | 12.1 |  | 11.9 |  | 12.1 |  | 11.5 |  | 11.1 |  | 10.2 |  | 9.7 |  | 11.4 |
| Total capital ratio |  | 15.5 |  | 15.4 |  | 15.8 |  | 15.1 |  | 14.8 |  | 13.9 |  | 13.3 |  | 15.2 |
| Tier 1 leverage ratio |  | 7.0 |  | 7.1 |  | 6.9 |  | 6.6 |  | 6.9 |  | 6.5 |  | 6.2 |  | 7.1 |
| Tier 1 common capital ratio(f) |  | 9.8 |  | 9.5 |  | 9.6 |  | 9.1 |  | 8.8 |  | 8.2 |  | 7.7 |  | 7.3 |
| Selected balance sheet data (period-end)(e) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Trading assets | \$ | 489,892 | \$ | 475,515 | \$ | 397,508 | \$ | 426,128 | \$ | 411,128 | \$ | 424,435 | \$ | 395,626 | \$ | 429,700 |
| Securities |  | 316,336 |  | 340,168 |  | 312,013 |  | 344,376 |  | 360,390 |  | 372,867 |  | 345,563 |  | 333,861 |
| Loans |  | 692,927 |  | 690,531 |  | 699,483 |  | 713,799 |  | 633,458 |  | 653,144 |  | 680,601 |  | 708,243 |
| Total assets |  | 2,117,605 |  | 2,141,595 |  | 2,014,019 |  | 2,135,796 |  | 2,031,989 |  | 2,041,009 |  | 2,026,642 |  | 2,079,188 |
| Deposits |  | 930,369 |  | 903,138 |  | 887,805 |  | 925,303 |  | 938,367 |  | 867,977 |  | 866,477 |  | 906,969 |
| Long-term debt |  | 247,669 |  | 255,589 |  | 248,618 |  | 262,857 |  | 266,318 |  | 272,124 |  | 271,939 |  | 261,845 |
| Common stockholders' equity |  | 168,306 |  | 166,030 |  | 162,968 |  | 156,569 |  | 157,213 |  | 154,101 |  | 146,614 |  | 138,201 |
| Total stockholders' equity |  | 176,106 |  | 173,830 |  | 171,120 |  | 164,721 |  | 165,365 |  | 162,253 |  | 154,766 |  | 170,194 |
| Headcount |  | 239,831 |  | 236,810 |  | 232,939 |  | 226,623 |  | 222,316 |  | 220,861 |  | 220,255 |  | 219,569 |

## Supplementary information

| As of or for the period ended (in millions, except ratio data) | 2010 |  |  |  | 2009 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 4th quarter | 3rd quarter | 2nd quarter | 1st quarter | 4th quarter | 3rd quarter | 2nd quarter | 1st quarter |
| Credit quality metrics |  |  |  |  |  |  |  |  |
| Allowance for credit losses | \$32,983 | \$35,034 | \$36,748 | \$39,126 | \$32,541 | \$31,454 | \$29,818 | \$28,019 |
| Allowance for loan losses to total retained loans | 4.71\% | 4.97\% | 5.15\% | 5.40\% | 5.04\% | 4.74\% | 4.33\% | 3.95\% |
| Allowance for loan losses to retained loans excluding purchased creditimpaired loans(g) | 4.46 | 5.12 | 5.34 | 5.64 | 5.51 | 5.28 | 5.01 | 4.53 |
| Nonperforming assets | \$16,557 | \$17,656 | \$18,156 | \$19,019 | \$19,741 | \$20,362 | \$17,517 | \$14,654 |
| Net charge-offs | 5,104 | 4,945 | 5,714 | 7,910 | 6,177 | 6,373 | 6,019 | 4,396 |
| Net charge-off rate | 2.95\% | 2.84\% | 3.28\% | 4.46\% | 3.85\% | 3.84\% | 3.52\% | 2.51\% |
| Wholesale net charge-off rate | 0.49 | 0.49 | 0.44 | 1.84 | 2.31 | 1.93 | 1.19 | 0.32 |
| Consumer net charge-off rate(h) | 4.12 | 3.90 | 4.49 | 5.56 | 4.60 | 4.79 | 4.69 | 3.61 |

 generate income in excess of its provision for credit losses.
 with and into The Bear Stearns Companies, Inc. ("Bear Stearns"), and Bear Stearns became a wholly-owned subsidiary of JPMorgan Chase. The Washington Mutual acquisition resulted in negative goodwill, and accordingly, the Firm recorded an extraordinary gain. A preliminary gain of $\$ 1.9$ billion was recognized at December 31, 2008 The final total extraordinary gain that resulted from the Washington Mutual transaction was $\$ 2.0$ billion. For additional information of these transactions, see Note 2 on pages 166-170 of this Annual Report.
 share, resulting from repayment of U.S. Troubled Asset Relief Program ("TARP") preferred capital. Excluding this reduction, the adjusted return on common equity ("ROE") and Return on tangible common equity ("ROTCE") were $6 \%$ and $10 \%$, respectively, for second-quarter 2009 . The Firm views the adjusted ROE and ROTCE, both non-GAAP financial measures, as meaningful because they enable the comparability to prior periods. For further discussion, see "Explanation and reconciliation of the Firm's use of nonGAAP financial measures" on page 64-66 of this Annual Report.
 Stock Exchange and the Tokyo Stock Exchange.
 new guidance, the Firm consolidated its Firm-sponsored credit card securitization trusts, Firm-administered multi-seller conduits and certain other consumer loan securitization entities, primarily mortgage-related, adding $\$ 87.7$ billion and $\$ 92.2$ billion of assets and liabilities, respectively, and decreasing stockholders' equity and the Tier 1 capital ratio by $\$ 4.5$ billion and 34 basis points, respectively. The reduction to stockholders' equity was driven by the establishment of an allowance for loan losses of $\$ 7.5$ billion (pretax) primarily related to receivables held in credit card securitization trusts that were consolidated at the adoption date.
 weighted assets. For further discussion, see Regulatory capital on pages 102-104 of this Annual Report.
 141 of this Annual Report.
(h) The fourth quarter of 2010 includes an aggregate adjustment of $\$ 632$ million to increase net charge-offs related to the estimated net realizable value of the collateral underlying delinquent residential home loans. Because these losses were previously recognized in the provision and allowance for loan losses, this adjustment had no impact on the Firm's net income.

## Selected annual financial data (unaudited)

| As of or for the year ended December 31, (in millions, except per share, ratio and headcount data) | 2010 |  | 2009 |  | 2008(d) |  | 2007 |  | 2006 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Selected income statement data |  |  |  |  |  |  |  |  |  |  |
| Noninterest revenue | \$ | 51,693 | \$ | 49,282 | \$ | 28,473 | \$ | 44,966 | \$ | 40,757 |
| Net interest income |  | 51,001 |  | 51,152 |  | 38,779 |  | 26,406 |  | 21,242 |
| Total net revenue |  | 102,694 |  | 100,434 |  | 67,252 |  | 71,372 |  | 61,999 |
| Total noninterest expense |  | 61,196 |  | 52,352 |  | 43,500 |  | 41,703 |  | 38,843 |
| Pre-provision profit(a) |  | 41,498 |  | 48,082 |  | 23,752 |  | 29,669 |  | 23,156 |
| Provision for credit losses |  | 16,639 |  | 32,015 |  | 19,445 |  | 6,864 |  | 3,270 |
| Provision for credit losses - accounting conformity(b) |  | - |  | - |  | 1,534 |  | - |  | - |
| Income from continuing operations before income tax expense/ (benefit) and extraordinary gain |  | 24,859 |  | 16,067 |  | 2,773 |  | 22,805 |  | 19,886 |
| Income tax expense/(benefit) |  | 7,489 |  | 4,415 |  | (926) |  | 7,440 |  | 6,237 |
| Income from continuing operations |  | 17,370 |  | 11,652 |  | 3,699 |  | 15,365 |  | 13,649 |
| Income from discontinued operations(c) |  | - |  | - |  | - |  | - |  | 795 |
| Income before extraordinary gain |  | 17,370 |  | 11,652 |  | 3,699 |  | 15,365 |  | 14,444 |
| Extraordinary gain(d) |  | - |  | 76 |  | 1,906 |  | - |  | - |
| Net income | \$ | 17,370 | \$ | 11,728 | \$ | 5,605 | \$ | 15,365 | \$ | 14,444 |
| Per common share data |  |  |  |  |  |  |  |  |  |  |
| Basic earnings |  |  |  |  |  |  |  |  |  |  |
| Income from continuing operations | \$ | 3.98 | \$ | 2.25 | \$ | 0.81 | \$ | 4.38 | \$ | 3.83 |
| Net income |  | 3.98 |  | 2.27 |  | 1.35 |  | 4.38 |  | 4.05 |
| Diluted earnings(e) |  |  |  |  |  |  |  |  |  |  |
| Income from continuing operations | \$ | 3.96 | \$ | 2.24 | \$ | 0.81 | \$ | 4.33 | \$ | 3.78 |
| Net income |  | 3.96 |  | 2.26 |  | 1.35 |  | 4.33 |  | 4.00 |
| Cash dividends declared per share |  | 0.20 |  | 0.20 |  | 1.52 |  | 1.48 |  | 1.36 |
| Book value per share |  | 43.04 |  | 39.88 |  | 36.15 |  | 36.59 |  | 33.45 |
| Common shares outstanding |  |  |  |  |  |  |  |  |  |  |
| Average: Basic |  | 3,956.3 |  | 3,862.8 |  | 3,501.1 |  | 3,403.6 |  | 3,470.1 |
| Diluted |  | 3,976.9 |  | 3,879.7 |  | 3,521.8 |  | 3,445.3 |  | 3,516.1 |
| Common shares at period-end |  | 3,910.3 |  | 3,942.0 |  | 3,732.8 |  | 3,367.4 |  | 3,461.7 |
| Share price ${ }^{(f)}$ |  |  |  |  |  |  |  |  |  |  |
| High | \$ | 48.20 | \$ | 47.47 | \$ | 50.63 | \$ | 53.25 | \$ | 49.00 |
| Low |  | 35.16 |  | 14.96 |  | 19.69 |  | 40.15 |  | 37.88 |
| Close |  | 42.42 |  | 41.67 |  | 31.53 |  | 43.65 |  | 48.30 |
| Market capitalization |  | 165,875 |  | 164,261 |  | 117,695 |  | 146,986 |  | 167,199 |
| Financial ratios |  |  |  |  |  |  |  |  |  |  |
| Return on common equity(e) |  |  |  |  |  |  |  |  |  |  |
| Income from continuing operations |  | 10\% |  | 6\% |  | 2\% |  | 13\% |  | 12\% |
| Net income |  | 10 |  | 6 |  | 4 |  | 13 |  | 13 |
| Return on tangible common equity(e) |  |  |  |  |  |  |  |  |  |  |
| Income from continuing operations |  | 15 |  | 10 |  | 4 |  | 22 |  | 24 |
| Net income |  | 15 |  | 10 |  | 6 |  | 22 |  | 24 |
| Return on assets |  |  |  |  |  |  |  |  |  |  |
| Income from continuing operations |  | 0.85 |  | 0.58 |  | 0.21 |  | 1.06 |  | 1.04 |
| Net income |  | 0.85 |  | 0.58 |  | 0.31 |  | 1.06 |  | 1.10 |
| Overhead ratio |  | 60 |  | 52 |  | 65 |  | 58 |  | 63 |
| Deposits-to-loans ratio |  | 134 |  | 148 |  | 135 |  | 143 |  | 132 |
| Tier 1 capital ratio(g) |  | 12.1 |  | 11.1 |  | 10.9 |  | 8.4 |  | 8.7 |
| Total capital ratio |  | 15.5 |  | 14.8 |  | 14.8 |  | 12.6 |  | 12.3 |
| Tier 1 leverage ratio |  | 7.0 |  | 6.9 |  | 6.9 |  | 6.0 |  | 6.2 |
| Tier 1 common capital ratio(h) |  | 9.8 |  | 8.8 |  | 7.0 |  | 7.0 |  | 7.3 |
| Selected balance sheet data (period-end)(g) |  |  |  |  |  |  |  |  |  |  |
| Trading assets | \$ | 489,892 | \$ | 411,128 | \$ | 509,983 | \$ | 491,409 | \$ | 365,738 |
| Securities |  | 316,336 |  | 360,390 |  | 205,943 |  | 85,450 |  | 91,975 |
| Loans |  | 692,927 |  | 633,458 |  | 744,898 |  | 519,374 |  | 483,127 |
| Total assets |  | 2,117,605 |  | 2,031,989 |  | 2,175,052 |  | 1,562,147 |  | 1,351,520 |
| Deposits |  | 930,369 |  | 938,367 |  | 1,009,277 |  | 740,728 |  | 638,788 |
| Long-term debt |  | 247,669 |  | 266,318 |  | 270,683 |  | 199,010 |  | 145,630 |
| Common stockholders' equity |  | 168,306 |  | 157,213 |  | 134,945 |  | 123,221 |  | 115,790 |
| Total stockholders' equity |  | 176,106 |  | 165,365 |  | 166,884 |  | 123,221 |  | 115,790 |
| Headcount |  | 239,831 |  | 222,316 |  | 224,961 |  | 180,667 |  | 174,360 |

## Supplementary information

As of or for the year ended December 31,

| (in millions, except ratio data) |  | 2010 |  | 2009 |  | 2008(d) |  | 2007 |  | 2006 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Credit quality metrics |  |  |  |  |  |  |  |  |  |  |
| Allowance for credit losses | \$ | 32,983 | \$ | 32,541 | \$ | 23,823 | \$ | 10,084 | \$ | 7,803 |
| Allowance for loan losses to total retained loans |  | 4.71\% |  | 5.04\% |  | 3.18\% |  | 1.88\% |  | 1.70\% |
| Allowance for loan losses to retained loans, excluding PCI loans(i) |  | 4.46 |  | 5.51 |  | 3.62 |  | 1.88 |  | 1.70 |
| Nonperforming assets | \$ | 16,557 | \$ | 19,741 | \$ | 12,714 | \$ | 3,933 | \$ | 2,341 |
| Net charge-offs |  | 23,673 |  | 22,965 |  | 9,835 |  | 4,538 |  | 3,042 |
| Net charge-off rate |  | 3.39\% |  | 3.42\% |  | 1.73\% |  | 1.00\% |  | 0.73\% |
| Wholesale net charge-off/(recovery) rate |  | 0.81 |  | 1.40 |  | 0.18 |  | 0.04 |  | (0.01) |
| Consumer net charge-off rate |  | 4.53 |  | 4.41 |  | 2.71 |  | 1.61 |  | 1.17 |

(a) Pre-provision profit is total net revenue less noninterest expense. The Firm believes that this financial measure is useful in assessing the ability of a lending institution to generate income in excess of its provision for credit losses.
(b) Results for 2008 included an accounting conformity loan loss reserve provision related to the acquisition of Washington Mutual Bank's banking operations.
(c) On October 1, 2006, JPMorgan Chase \& Co. completed the exchange of selected corporate trust businesses for the consumer, business-banking and middle-market banking businesses of The Bank of New York Company Inc. The results of operations of these corporate trust businesses were reported as discontinued operations.
(d) On September 25, 2008, JPMorgan Chase acquired the banking operations of Washington Mutual. On May 30, 2008, a wholly-owned subsidiary of JPMorgan Chase merged with and into Bear Stearns, and Bear Stearns became a wholly-owned subsidiary of JPMorgan Chase. The Washington Mutual acquisition resulted in negative goodwill, and accordingly, the Firm recorded an extraordinary gain. A preliminary gain of $\$ 1.9$ billion was recognized at December 31, 2008. The final total extraordinary gain that resulted from the Washington Mutual transaction was $\$ 2.0$ billion. For additional information on these transactions, see Note 2 on pages 166-170 of this Annual Report.
(e) The calculation of 2009 earnings per share and net income applicable to common equity includes a one-time, noncash reduction of $\$ 1.1$ billion, or $\$ 0.27$ per share, resulting from repayment of TARP preferred capital in the second quarter of 2009. Excluding this reduction, the adjusted return on equity ("ROE") and return on tangible common equity ("ROTCE") were $7 \%$ and $11 \%$, respectively, for 2009. The Firm views the adjusted ROE and ROTCE, both non-GAAP financial measures, as meaningful because they enable the comparability to prior periods. For further discussion, see "Explanation and reconciliation of the Firm's use of non-GAAP financial measures" on pages 64-66 of this Annual Report.
(f) Share prices shown for JPMorgan Chase's common stock are from the New York Stock Exchange. JPMorgan Chase's common stock is also listed and traded on the London Stock Exchange and the Tokyo Stock Exchange.
(g) Effective January 1, 2010, the Firm adopted new guidance that amended the accounting for the transfer of financial assets and the consolidation of VIEs. Upon adoption of the new guidance, the Firm consolidated its Firm-sponsored credit card securitization trusts, Firm-administered multi-seller conduits and certain other consumer loan securitization entities, primarily mortgage-related, adding $\$ 87.7$ billion and $\$ 92.2$ billion of assets and liabilities, respectively, and decreasing stockholders' equity and the Tier 1 capital ratio by $\$ 4.5$ billion and 34 basis points, respectively. The reduction to stockholders' equity was driven by the establishment of an allowance for loan losses of $\$ 7.5$ billion (pretax) primarily related to receivables held in credit card securitization trusts that were consolidated at the adoption date.
(h) The Firm uses Tier 1 common along with the other capital measures to assess and monitor its capital position. The Tier 1 common ratio is Tier 1 common divided by riskweighted assets. For further discussion, see Regulatory capital on pages 102-104 of this Annual Report.
(i) Excludes the impact of home lending PCl loans and loans held by the Washington Mutual Master Trust. For further discussion, see Allowance for credit losses on pages 139 141 of this Annual Report.

## Short-term and other borrowed funds

The following table provides a summary of JPMorgan Chase's short-term and other borrowed funds for the years indicated.

| As of or for the year ending December 31, (in millions, except rates) | 2010 | 2009 | 2008 |
| :---: | :---: | :---: | :---: |
| Federal funds purchased and securities loaned or sold under repurchase agreements: |  |  |  |
| Balance at year-end | \$ 276,644 | \$ 261,413 | \$ 192,546 |
| Average daily balance during the year | 278,603 | 275,862 | 196,739 |
| Maximum month-end balance | 314,161 | 310,802 | 224,075 |
| Weighted-average rate at December 31 | 0.18\% | 0.04\% | 0.97\% |
| Weighted-average rate during the year | (0.07)(c) | 0.21 | 2.37 |
| Commercial paper: |  |  |  |
| Balance at year-end | \$ 35,363 | \$ 41,794 | \$ 37,845 |
| Average daily balance during the year | 36,000 | 39,055 | 45,734 |
| Maximum month-end balance | 50,554 | 53,920 | 54,480 |
| Weighted-average rate at December 31 | 0.21\% | 0.18\% | 0.82\% |
| Weighted-average rate during the year | 0.20 | 0.28 | 2.24 |
| Other borrowed funds:(a) |  |  |  |
| Balance at year-end | \$ 134,256 | \$ 120,686 | \$ 177,674 |
| Average daily balance during the year | 121,949 | 130,767 | 118,714 |
| Maximum month-end balance | 137,347 | 188,004 | 244,040 |
| Weighted-average rate at December 31 | 4.48\% | 3.37\% | 3.65\% |
| Weighted-average rate during the year | 2.34 | 2.92 | 4.29 |
| Short-term beneficial interests:(b) |  |  |  |
| Commercial paper and other borrowed funds: |  |  |  |
| Balance at year-end | \$ 25,095 | \$ 4,787 | \$ |
| Average daily balance during the year | 21,853 | 3,275 | 1,846 |
| Maximum month-end balance | 25,095 | 7,751 | 3,459 |
| Weighted-average rate at December 31 | 0.25\% | 0.17\% | NA |
| Weighted-average rate during the year | 0.27 | 0.24 | 2.49\% |

(a) Includes securities sold but not yet purchased.
(b) Included on the Consolidated Balance Sheets in beneficial interests issued by consolidated variable interest entities.
(c) Reflects a benefit from the favorable market environments for U.S. dollar-roll financings.

Federal funds purchased represent overnight funds. Securities loaned or sold under repurchase agreements generally mature between one day and three months. Commercial paper generally is issued in amounts not less than $\$ 100,000$, and with maturities of

270 days or less. Other borrowed funds consist of demand notes, term federal funds purchased, and various other borrowings that generally have maturities of one year or less.

## Glossary of terms

## ACH: Automated Clearing House.

Advised lines of credit: An authorization which specifies the maximum amount of a credit facility the Firm has made available to an obligor on a revolving but non-binding basis. The borrower receives written or oral advice of this facility. The Firm may cancel this facility at any time.
Allowance for loan losses to total loans: Represents period-end Allowance for loan losses divided by retained loans.

Assets under management: Represent assets actively managed by AM on behalf of Private Banking, Institutional and Retail clients. Includes "Committed capital not Called," on which AM earns fees. Excludes assets managed by American Century Companies, Inc., in which the Firm has a $41 \%$ ownership interest as of December 31, 2010.

Assets under supervision: Represent assets under management as well as custody, brokerage, administration and deposit accounts.

Average managed assets: Refers to total assets on the Firm's Consolidated Balance Sheets plus credit card receivables that have been securitized and removed from the Firm's Consolidated Balance Sheets, for periods ended prior to the January 1, 2010, adoption of new accounting guidance requiring the consolidation of the Firmsponsored credit card securitization trusts.

Bear Stearns merger: Effective May 30, 2008, JPMorgan Chase merged with The Bear Stearns Companies Inc. ("Bear Stearns"), and Bear Stearns became a wholly-owned subsidiary of JPMorgan Chase. The final total purchase price to complete the merger was $\$ 1.5$ billion. For additional information, see Note 2 on pages 166-170 of this Annual Report.

Beneficial interest issued by consolidated VIEs: Represents the interest of third-party holders of debt/equity securities, or other obligations, issued by VIEs that JPMorgan Chase consolidates. The underlying obligations of the VIEs consist of short-term borrowings, commercial paper and long-term debt. The related assets consist of trading assets, available-for-sale securities, loans and other assets.

Benefit obligation: Refers to the projected benefit obligation for pension plans and the accumulated postretirement benefit obligation for OPEB plans.

CAGR: Compound annual growth rate.
Corporate/Private Equity: Includes Private Equity, Treasury and Chief Investment Office, and Corporate Other, which includes other centrally managed expense and discontinued operations.

Credit card securitizations: For periods ended prior to the January 1, 2010, adoption of new guidance relating to the accounting for the transfer of financial assets and the consolidation of VIEs, Card's results were presented on a "managed" basis that assumed that credit card loans that had been securitized and sold in accordance with U.S. GAAP remained on the Consolidated Balance Sheets and that earnings on the securitized loans were classified in the same manner as the earnings on retained loans recorded on the

Consolidated Balance Sheets. "Managed" results excluded the impact of credit card securitizations on total net revenue, the provision for credit losses, net charge-offs and loans. Securitization did not change reported net income; however, it did affect the classification of items on the Consolidated Statements of Income and Consolidated Balance Sheets.
Credit derivatives: Contractual agreements that provide protection against a credit event on one or more referenced credits. The nature of a credit event is established by the protection buyer and protection seller at the inception of a transaction, and such events include bankruptcy, insolvency or failure to meet payment obligations when due. The buyer of the credit derivative pays a periodic fee in return for a payment by the protection seller upon the occurrence, if any, of a credit event.
Credit cycle: A period of time over which credit quality improves, deteriorates and then improves again. The duration of a credit cycle can vary from a couple of years to several years.

Deposit margin: Represents net interest income expressed as a percentage of average deposits.
Discontinued operations: A component of an entity that is classified as held-for-sale or that has been disposed of from ongoing operations in its entirety or piecemeal, and for which the entity will not have any significant, continuing involvement. A discontinued operation may be a separate major business segment, a component of a major business segment or a geographical area of operations of the entity that can be separately distinguished operationally and for financial reporting purposes.
FASB: Financial Accounting Standards Board.
FDIC: Federal Deposit Insurance Corporation.
FICO: Fair Isaac Corporation.
Forward points: Represents the interest rate differential between two currencies, which is either added to or subtracted from the current exchange rate (i.e., "spot rate") to determine the forward exchange rate.
FRBB: Federal Reserve Bank of Boston.
Headcount-related expense: Includes salary and benefits (excluding performance-based incentives), and other noncompensation costs related to employees.

Interchange income: A fee that is paid to a credit card issuer in the clearing and settlement of a sales or cash advance transaction.

Interests in purchased receivables: Represents an ownership interest in cash flows of an underlying pool of receivables transferred by a third-party seller into a bankruptcy-remote entity, generally a trust.

Investment-grade: An indication of credit quality based on JPMorgan Chase's internal risk assessment system. "Investment grade"
generally represents a risk profile similar to a rating of a
"BBB-"/"Baa3" or better, as defined by independent rating agencies.

## LLC: Limited Liability Company.

Loan-to-value ("LTV") ratio: For residential real estate loans, the relationship expressed as a percent, between the principal amount of a loan and the appraised value of the collateral (i.e., residential real estate) securing the loan.

## Origination date LTV ratio

The LTV ratio at the origination date of the loan. Origination date LTV ratios are calculated based on the actual appraised values of collateral (i.e., loan-level data) at the origination date.

## Current estimated LTV ratio

An estimate of the LTV as of a certain date. The current estimated LTV ratios are calculated using estimated collateral values derived from a nationally recognized home price index measured at the MSA level. These MSA-level home price indices comprise actual data to the extent available and forecasted data where actual data is not available. As a result, the estimated collateral values used to calculate these ratios do not represent actual appraised loan-level collateral values; as such, the resulting LTV ratios are necessarily imprecise and should therefore be viewed as estimates.

## Combined LTV ratio

The LTV ratio considering all lien positions related to the property. Combined LTV ratios are used for junior lien home equity products.

Managed basis: A non-GAAP presentation of financial results that includes reclassifications to present revenue on a fully taxableequivalent basis, and for periods ended prior to the January 1, 2010, adoption of accounting guidance relating to the accounting for the transfer of financial assets and the consolidation of VIEs related to credit card securitizations. Management uses this non-GAAP financial measure at the segment level, because it believes this provides information to enable investors to understand the underlying operational performance and trends of the particular business segment and facilitates a comparison of the business segment with the performance of competitors.

Managed credit card portfolio: Refers to credit card receivables on the Firm's Consolidated Balance Sheets plus credit card receivables that have been securitized and removed from the Firm's Consolidated Balance Sheets, for periods ended prior to the January 1, 2010, adoption of new guidance requiring the consolidation of the Firmsponsored credit card securitization trusts.

Mark-to-market exposure: A measure, at a point in time, of the value of a derivative or foreign exchange contract in the open market. When the MTM value is positive, it indicates the counterparty owes JPMorgan Chase and, therefore, creates credit risk for the Firm. When the MTM value is negative, JPMorgan Chase owes the counterparty; in this situation, the Firm has liquidity risk.

Master netting agreement: An agreement between two counterparties who have multiple derivative contracts with each other that provides for the net settlement of all contracts, as well as cash
collateral, through a single payment, in a single currency, in the event of default on or termination of any one contract.

Merger costs: Reflects costs associated with the Bear Stearns merger and the Washington Mutual transaction in 2008.

## Mortgage product types:

Alt-A
Alt-A loans are generally higher in credit quality than subprime loans but have characteristics that would disqualify the borrower from a traditional prime loan. Alt-A lending characteristics may include one or more of the following: (i) limited documentation; (ii) high combined-loan-to-value ("CLTV") ratio; (iii) loans secured by non-owner occupied properties; or (iv) debt-to-income ratio above normal limits. Perhaps the most important characteristic is limited documentation. A substantial proportion of traditional Alt-A loans are those where a borrower does not provide complete documentation of his or her assets or the amount or source of his or her income.

## Option ARMs

The option ARM real estate loan product is an adjustable-rate mortgage loan that provides the borrower with the option each month to make a fully amortizing, interest-only, or minimum payment. The minimum payment on an option ARM loan is based on the interest rate charged during the introductory period. This introductory rate is usually significantly below the fully indexed rate. The fully indexed rate is calculated using an index rate plus a margin. Once the introductory period ends, the contractual interest rate charged on the loan increases to the fully indexed rate and adjusts monthly to reflect movements in the index. The minimum payment is typically insufficient to cover interest accrued in the prior month, and any unpaid interest is deferred and added to the principal balance of the loan. Option ARM loans are subject to payment recast, which converts the loan to a variable-rate fully amortizing loan upon meeting specified loan balance and anniversary date triggers.

## Prime

Prime mortgage loans generally have low default risk and are made to borrowers with good credit records and a monthly income that is at least three to four times greater than their monthly housing expense (mortgage payments plus taxes and other debt payments). These borrowers provide full documentation and generally have reliable payment histories.

## Subprime

Subprime loans are designed for customers with one or more high risk characteristics, including but not limited to: (i) unreliable or poor payment histories; (ii) a high LTV ratio of greater than $80 \%$ (without borrower-paid mortgage insurance); (iii) a high debt-to-income ratio; (iv) an occupancy type for the loan is other than the borrower's primary residence; or ( v ) a history of delinquencies or late payments on the loan.

MSR risk management revenue: Includes changes in MSR asset fair value due to market-based inputs, such as interest rates and volatility, as well as updates to assumptions used in the MSR

## Glossary of terms

valuation model; and derivative valuation adjustments and other, which represents changes in the fair value of derivative instruments used to offset the impact of changes in the market-based inputs to the MSR valuation model.

Multi-asset: Any fund or account that allocates assets under management to more than one asset class (e.g., long-term fixed income, equity, cash, real assets, private equity, or hedge funds).

NA: Data is not applicable or available for the period presented.
Net charge-off ratio: Represents net charge-offs
(annualized) divided by average retained loans for the reporting period.
Net yield on interest-earning assets: The average rate for interestearning assets less the average rate paid for all sources of funds.
NM: Not meaningful.
Nonconforming mortgage loans: Mortgage loans that do not meet the requirements for sale to U.S. government agencies and U.S. government sponsored enterprises. These requirements include limits on loan-to-value ratios, loan terms, loan amounts, down payments, borrower creditworthiness and other requirements.

OPEB: Other postretirement employee benefits.
Overhead ratio: Noninterest expense as a percentage of total net revenue.
Participating securities: Represent unvested stock-based compensation awards containing nonforfeitable rights to dividends or dividend equivalents (collectively, "dividends"), which are included in the earnings per share calculation using the two-class method. JPMorgan Chase grants restricted stock and RSUs to certain employees under its stock-based compensation programs, which entitle the recipients to receive nonforfeitable dividends during the vesting period on a basis equivalent to the dividends paid to holders of common stock. These unvested awards meet the definition of participating securities. Under the two-class method, all earnings (distributed and undistributed) are allocated to each class of common stock and participating securities, based on their respective rights to receive dividends.

Personal bankers: Retail branch office personnel who acquire, retain and expand new and existing customer relationships by assessing customer needs and recommending and selling appropriate banking products and services.
Portfolio activity: Describes changes to the risk profile of existing lending-related exposures and their impact on the allowance for credit losses from changes in customer profiles and inputs used to estimate the allowances.
Pre-provision profit: The Firm believes that this financial measure is useful in assessing the ability of a lending institution to generate income in excess of its provision for credit losses.

Pretax margin: Represents income before income tax expense divided by total net revenue, which is, in management's view, a
comprehensive measure of pretax performance derived by measuring earnings after all costs are taken into consideration. It is, therefore, another basis that management uses to evaluate the performance of TSS and AM against the performance of their respective competitors.
Principal transactions: Realized and unrealized gains and losses from trading activities (including physical commodities inventories that are accounted for at the lower of cost or fair value) and changes in fair value associated with financial instruments held predominantly by IB for which the fair value option was elected. Principal transactions revenue also includes private equity gains and losses.
Purchased credit-impaired ("PCI") loans: Acquired loans deemed to be credit-impaired under the FASB guidance for PCI loans. The guidance allows purchasers to aggregate credit-impaired loans acquired in the same fiscal quarter into one or more pools, provided that the loans have common risk characteristics (e.g., FICO score, geographic location). A pool is then accounted for as a single asset with a single composite interest rate and an aggregate expectation of cash flows. Wholesale loans are determined to be credit-impaired if they meet the definition of an impaired loan under U.S. GAAP at the acquisition date. Consumer loans are determined to be creditimpaired based on specific risk characteristics of the loan, including product type, LTV ratios, FICO scores, and past due status.
Real estate investment trust ("REIT"): A special purpose investment vehicle that provides investors with the ability to participate directly in the ownership or financing of real-estate related assets by pooling their capital to purchase and manage income property (i.e., equity REIT) and/or mortgage loans (i.e., mortgage REIT). REITs can be publicly- or privately-held and they also qualify for certain favorable tax considerations.

Receivables from customers: Primarily represents margin loans to prime and retail brokerage customers which are included in accrued interest and accounts receivable on the Consolidated Balance Sheets for the wholesale lines of business.

Reported basis: Financial statements prepared under U.S. GAAP which excludes the impact of taxable-equivalent adjustments. For periods ended prior to the January 1, 2010, adoption of new guidance requiring the consolidation of the Firm-sponsored credit card securitization trusts, the reported basis included the impact of credit card securitizations.
Retained loans: Loans that are held for investment excluding loans held-for-sale and loans at fair value.
Sales specialists: Retail branch office personnel who specialize in the marketing of a single product, including mortgages, investments and business banking, by partnering with the personal bankers.

Seed capital: Initial JPMorgan capital invested in products, such as mutual funds, with the intention of ensuring the fund is of
sufficient size to represent a viable offering to clients, enabling pricing of its shares, and allowing the manager to develop a commercially attractive track record. After these goals are achieved, the intent is to remove the Firm's capital from the investment.

Stress testing: A scenario that measures market risk under unlikely but plausible events in abnormal markets.

TARP: Troubled Asset Relief Program.
Taxable-equivalent basis: Total net revenue for each of the business segments and the Firm is presented on a tax-equivalent basis. Accordingly, revenue from tax-exempt securities and investments that receive tax credits is presented in the managed results on a basis comparable to fully taxable securities and investments.

This non-GAAP financial measure allows management to assess the comparability of revenue arising from both taxable and tax-exempt sources. The corresponding income tax impact related to these items is recorded within income tax expense.

Troubled debt restructuring ("TDR"): Occurs when the Firm modifies the original terms of a loan agreement by granting a concession to a borrower that is experiencing financial difficulty.
Unaudited: Financial statements and information that have not been subjected to auditing procedures sufficient to permit an independent certified public accountant to express an opinion.
U.S. GAAP: Accounting principles generally accepted in the United States of America.

## Distribution of assets, liabilities and stockholders' equity; interest rates and interest differentials

Consolidated average balance sheet, interest and rates
Provided below is a summary of JPMorgan Chase's consolidated average balances, interest rates and interest differentials on a taxable-equivalent basis for the years 2008 through 2010. Income computed on a taxable-equivalent basis is the income reported in the Consolidated Statements of Income, adjusted to make income and earnings
(Table continued on next page)

| Year ended December 31, <br> (Taxable-equivalent interest and rates; in millions, except rates) |  | 2010 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Average balance |  | nterest | Average rate |
| Assets |  |  |  |  |  |
| Dep | its with banks | \$ 47,611 | \$ | 345 | 0.72\% |
|  | al funds sold and securities purchased under resale agreements | 188,394 |  | 1,786 | 0.95 |
|  | ies borrowed | 117,416 |  | 175 | 0.15 |
|  | g assets - debt instruments | 254,898 |  | 11,128 | 4.37 |
|  | ies | 330,166 |  | 9,729 | 2.95(e) |
| Loa |  | 703,540 |  | 40,481(c) | 5.75 |
|  | assets(a) | 35,496 |  | 541 | 1.52 |
|  | nterest-earning assets | 1,677,521 |  | 64,185 | 3.83 |
| Allo | nce for loan losses | $(36,588)$ |  |  |  |
| Cas | and due from banks | 30,318 |  |  |  |
| Tra | g assets - equity instruments | 99,543 |  |  |  |
| Tra | g assets - derivative receivables | 84,676 |  |  |  |
| Good |  | 48,618 |  |  |  |
| Other intangible assets: |  |  |  |  |  |
|  | rtgage servicing rights | 12,896 |  |  |  |
|  | chased credit card relationships | 1,061 |  |  |  |
|  | er intangibles | 3,117 |  |  |  |
| Oth | assets | 132,089 |  |  |  |
|  | assets | \$ 2,053,251 |  |  |  |
| Liabilities |  |  |  |  |  |
| Inte | t-bearing deposits | \$ 668,640 | \$ | 3,424 | 0.51\% |
|  | l funds purchased and securities loaned or sold under repurchase agreements | 278,603 |  | (192) ${ }^{(d)}$ | $(0.07)^{(d)}$ |
| Com | ercial paper | 36,000 |  | 72 | 0.20 |
| Tra | g liabilities - debt instruments | 71,987 |  | 1,926 | 2.68 |
| Oth | borrowings and liabilities | 131,071 |  | 902 | 0.69 |
| Ben | cial interests issued by consolidated VIEs | 87,493 |  | 1,145 | 1.31 |
| Lon | erm debt | 256,075 |  | 5,504 | 2.15 |
| Tot | nterest-bearing liabilities | 1,529,869 |  | 12,781 | 0.84 |
| Non | erest-bearing deposits | 212,414 |  |  |  |
| Tra | g liabilities - equity instruments | 6,172 |  |  |  |
| Tra | g liabilities - derivative payables | 65,714 |  |  |  |
| All | er liabilities, including the allowance for lending-related commitments | 69,539 |  |  |  |
| Tot | iabilities | 1,883,708 |  |  |  |
| Stockholders' equity |  |  |  |  |  |
| Pre | ed stock | 8,023 |  |  |  |
| Com | on stockholders' equity | 161,520 |  |  |  |
| Tot | stockholders' equity | 169,543(b) |  |  |  |
|  | iabilities and stockholders' equity | \$ 2,053,251 |  |  |  |
| Inte | t rate spread |  |  |  | 2.99\% |
| Net | erest income and net yield on interest-earning assets |  | \$ | 51,404 | 3.06 |
| (a) Includes margin loans and the Firm's investment in asset-backed commercial paper under the Federal Reserve Bank of Boston's Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility ("AML facility"). |  |  |  |  |  |
| (b) | The ratio of average stockholders' equity to average assets was $8.3 \%$ for $2010,8.1 \%$ for 2009 and $7.7 \%$ for 2008. The return on average stockholders' equity, based on net income, was $10.2 \%$ for 2010, $7.1 \%$ for 2009 and $4.1 \%$ for 2008. |  |  |  |  |
|  |  |  |  |  |  |
| (d) Reflects a benefit from the favorable market environments for dollar-roll financings. |  |  |  |  |  |
| (e) | The annualized rate for available-for-sale securities based on amortized cost was $3.00 \%$ in 2010, 3.66\% in 2009, and $5.17 \%$ in 2008, and does not give effect to changes in fair value that are reflected in accumulated other comprehensive income/(loss). |  |  |  |  |
| (f) | On September 25, 2008, JPMorgan Chase \& Co. acquired the banking operations of Washington Mutual Bank. On May 30, 2008, the Bear Stearns merger was consummated. Each of these transactions was accounted for as a purchase and their respective results of operations are included in the Firm's results from each respective transaction date. For additional information on these transactions, see Note 2 on pages 166-170. |  |  |  |  |

Within the Consolidated average balance sheets, interest and rates summary, the principal amounts of nonaccrual loans have been included in the average loan balances used to determine the average
interest rate earned on loans. For additional information on nonaccrual loans, including interest accrued, see Note 14 on pages 220-238.
(Table continued from previous page)

| 2009 |  |  | $2008{ }^{(f)}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Average balance | Interest | Average rate | Average balance | Interest | Average rate |
| \$ 67,015 | \$ 938 | 1.40\% | \$ 54,666 | \$ 1,916 | 3.51\% |
| 152,926 | 1,750 | 1.14 | 170,006 | 5,983 | 3.52 |
| 124,462 | 4 | - | 110,598 | 2,297 | 2.08 |
| 251,035 | 12,283 | 4.89 | 298,266 | 17,556 | 5.89 |
| 342,655 | 12,506 | 3.65(e) | 123,551 | 6,447 | 5.22(e) |
| 682,885 | 38,720(c) | 5.67 | 588,801 | 38,503(c) | 6.54 |
| 29,510 | 479 | 1.62 | 27,404 | 895 | 3.27 |
| 1,650,488 | 66,680 | 4.04 | 1,373,292 | 73,597 | 5.36 |
| $(27,635)$ |  |  | $(13,477)$ |  |  |
| 24,873 |  |  | 30,323 |  |  |
| 67,028 |  |  | 85,836 |  |  |
| 110,457 |  |  | 121,417 |  |  |
| 48,254 |  |  | 46,068 |  |  |
| 12,898 |  |  | 11,229 |  |  |
| 1,436 |  |  | 1,976 |  |  |
| 3,659 |  |  | 3,803 |  |  |
| 132,743 |  |  | 131,150 |  |  |
| \$ 2,024,201 |  |  | \$ 1,791,617 |  |  |
| \$ 684,016 | \$ 4,826 | 0.71\% | \$ 645,058 | \$14,546 | 2.26\% |
| 275,862 | 573 | 0.21 | 196,739 | 4,668 | 2.37 |
| 39,055 | 108 | 0.28 | 45,734 | 1,023 | 2.24 |
| 48,530 | 1,918 | 3.95 | 62,783 | 3,068 | 4.89 |
| 152,652 | 1,246 | 0.82 | 98,772 | 2,174 | 2.20 |
| 14,930 | 218 | 1.46 | 13,220 | 405 | 3.06 |
| 268,238 | 6,309 | 2.35 | 234,909 | 8,355 | 3.56 |
| 1,483,283 | 15,198 | 1.02 | 1,297,215 | 34,239 | 2.64 |
| 197,989 |  |  | 140,749 |  |  |
| 11,694 |  |  | 16,058 |  |  |
| 77,901 |  |  | 93,200 |  |  |
| 88,377 |  |  | 106,141 |  |  |
| 1,859,244 |  |  | 1,653,363 |  |  |
| 19,054 |  |  | 9,138 |  |  |
| 145,903 |  |  | 129,116 |  |  |
| 164,957(b) |  |  | 138,254(b) |  |  |
| \$ 2,024,201 |  |  | \$ 1,791,617 |  |  |
|  |  | 3.02\% |  |  | 2.72\% |
|  | \$51,482 | 3.12 |  | \$39,358 | 2.87 |

## Interest rates and interest differential analysis of net interest income - U.S. and non-U.S.

Presented below is a summary of interest rates and interest differentials segregated between U.S. and non-U.S. operations for the years 2008 through 2010. The segregation of U.S. and non-U.S.
components is based on the location of the office recording the transaction. Intracompany funding generally comprises dollardenominated deposits originated in various locations that are
(Table continued on next page)

| Year ended December 31, (Taxable-equivalent interest and rates; in millions, except rates) | 2010 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Average balance | Interest |  | Average rate |
| Interest-earning assets |  |  |  |  |
| Deposits with banks, primarily non-U.S. | \$ 47,611 | \$ | 345 | 0.72\% |
| Federal funds sold and securities purchased under resale agreements: |  |  |  |  |
| U.S. | 89,619 |  | 830 | 0.93 |
| Non-U.S. | 98,775 |  | 956 | 0.97 |
| Securities borrowed: |  |  |  |  |
| U.S. | 67,031 |  | (237) | (0.35) |
| Non-U.S. | 50,385 |  | 412 | 0.82 |
| Trading assets - debt instruments: |  |  |  |  |
| U.S. | 119,660 |  | 5,513 | 4.61 |
| Non-U.S. | 135,238 |  | 5,615 | 4.15 |
| Securities: |  |  |  |  |
| U.S. | 226,345 |  | 7,210 | 3.19 |
| Non-U.S. | 103,821 |  | 2,519 | 2.43 |
| Loans: |  |  |  |  |
| U.S. | 644,504 |  | 38,800 | 6.02 |
| Non-U.S. | 59,036 |  | 1,681 | 2.85 |
| Other assets, primarily U.S. | 35,496 |  | 541 | 1.52 |
| Total interest-earning assets | 1,677,521 |  | 64,185 | 3.83 |
| Interest-bearing liabilities |  |  |  |  |
| Interest-bearing deposits: |  |  |  |  |
| U.S. | 433,227 |  | 2,156 | 0.50 |
| Non-U.S. | 235,413 |  | 1,268 | 0.54 |
| Federal funds purchased and securities loaned or sold under repurchase agreements: |  |  |  |  |
| U.S. | 231,710 |  | (635) ${ }^{\text {(b) }}$ | $(0.27){ }^{(b)}$ |
| Non-U.S. | 46,893 |  | 443 | 0.95 |
| Other borrowings and liabilities: |  |  |  |  |
| U.S. | 162,421 |  | 1,026 | 0.63 |
| Non-U.S. | 76,637 |  | 1,874 | 2.45 |
| Beneficial interests issued by consolidated VIEs, primarily U.S. | 87,493 |  | 1,145 | 1.31 |
| Long-term debt, primarily U.S. | 256,075 |  | 5,504 | 2.15 |
| Intracompany funding: |  |  |  |  |
| U.S. | $(88,286)$ |  | (359) | - |
| Non-U.S. | 88,286 |  | 359 | - |
| Total interest-bearing liabilities | 1,529,869 |  | 12,781 | 0.84 |
| Noninterest-bearing liabilities(a) | 147,652 |  |  |  |
| Total investable funds | \$ 1,677,521 | \$ | 12,781 | 0.76\% |
| Net interest income and net yield: |  | \$ | 51,404 | 3.06\% |
| U.S. |  |  | 44,059 | 3.65 |
| Non-U.S. |  |  | 7,345 | 1.56 |
| Percentage of total assets and liabilities attributable to non-U.S. operations: |  |  |  |  |
| Assets |  |  |  | 31.9 |
| Liabilities |  |  |  | 25.2 |

(a) Represents the amount of noninterest-bearing liabilities funding interest-earning assets.
(b) Reflects a benefit from the favorable market environments for dollar-roll financings.
(c) On September 25, 2008, JPMorgan Chase \& Co. acquired the banking operations of Washington Mutual Bank. On May 30, 2008, the Bear Stearns merger was consummated. Each of these transactions was accounted for as a purchase, and their respective results of operations are included in the Firm's results from each respective transaction date. For additional information on these transactions, see Note 2 on pages 166-170.
centrally managed by JPMorgan Chase's Treasury unit. U.S. Net interest income was $\$ 44.1$ billion in 2010, a decrease of $\$ 39$ million from the prior year. Net interest income from non-U.S. operations was $\$ 7.3$ billion for 2010, a decrease of $\$ 39$ million
from $\$ 7.4$ billion in 2009. For further information, see the "Net interest income" discussion in Consolidated Results of Operations on pages 60-61.
(Table continued from previous page)

| 2009 |  |  | 2008 ${ }^{(\mathrm{c})}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Average balance | Interest | Average rate | Average balance | Interest | Average rate |
| \$ 67,015 | \$ 938 | 1.40\% | \$ 54,666 | \$ 1,916 | 3.51\% |
| 72,619 | 997 | 1.37 | 95,301 | 3,084 | 3.24 |
| 80,307 | 753 | 0.94 | 74,705 | 2,899 | 3.88 |
| 75,301 | (354) | (0.47) | 60,592 | 985 | 1.63 |
| 49,161 | 358 | 0.73 | 50,006 | 1,312 | 2.62 |
| 130,558 | 6,742 | 5.16 | 169,447 | 9,614 | 5.67 |
| 120,477 | 5,541 | 4.60 | 128,819 | 7,942 | 6.17 |
| 275,601 | 11,015 | 4.00 | 108,663 | 5,859 | 5.39 |
| 67,054 | 1,491 | 2.22 | 14,888 | 588 | 3.95 |
| 620,716 | 36,476 | 5.88 | 506,513 | 33,570 | 6.63 |
| 62,169 | 2,244 | 3.61 | 82,288 | 4,933 | 5.99 |
| 29,510 | 479 | 1.62 | 27,404 | 895 | 3.27 |
| 1,650,488 | 66,680 | 4.04 | 1,373,292 | 73,597 | 5.36 |
| 440,326 | 3,781 | 0.86 | 407,699 | 8,420 | 2.07 |
| 243,690 | 1,045 | 0.43 | 237,359 | 6,126 | 2.58 |
| 238,691 | 296 | 0.12 | 158,054 | 3,326 | 2.10 |
| 37,171 | 277 | 0.75 | 38,685 | 1,342 | 3.47 |
| 201,025 | 1,505 | 0.75 | 161,509 | 3,390 | 2.10 |
| 39,212 | 1,767 | 4.51 | 45,780 | 2,875 | 6.28 |
| 14,930 | 218 | 1.46 | 13,220 | 405 | 3.06 |
| 268,238 | 6,309 | 2.35 | 234,909 | 8,355 | 3.56 |
| $(42,711)$ | (510) | - | $(17,637)$ | (927) | - |
| 42,711 | 510 | - | 17,637 | 927 | - |
| 1,483,283 | 15,198 | 1.02 | 1,297,215 | 34,239 | 2.64 |
| 167,205 |  |  | 76,077 |  |  |
| \$ 1,650,488 | \$ 15,198 | 0.92\% | \$ 1,373,292 | \$34,239 | 2.49\% |
|  | \$ 51,482 | 3.12\% |  | \$39,358 | 2.87\% |
|  | 44,098 | 3.61 |  | 31,651 | 3.24 |
|  | 7,384 | 1.72 |  | 7,707 | 1.95 |
|  |  | 28.9 |  |  | 30.4 |
|  |  | 25.1 |  |  | 28.0 |

## Changes in net interest income, volume and rate analysis

The table presents an analysis of the effect of net interest income of volume and rate changes for the periods 2010 versus 2009 and 2009 versus 2008. In this analysis, the change due to the volume/rate has been allocated to volume.

| Year ended December 31, (On a taxable-equivalent basis: in millions) | 2010 versus 2009 |  |  |  |  |  | 2009 versus 2008 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Increase/(decrease) due to change in: |  |  |  | Net change |  | Increase/(decrease) due to change in: |  |  |  | Net change |  |
|  |  | Volume |  | Rate |  |  |  | Volume |  | Rate |  |  |
| Interest-earning assets |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Federal funds sold and securities purchased under resale agreements: |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S. |  | 153 |  | (320) |  | (167) |  | (305) |  | $(1,782)$ |  | $(2,087)$ |
| Non-U.S. |  | 179 |  | 24 |  | 203 |  | 50 |  | $(2,196)$ |  | $(2,146)$ |
| Securities borrowed: |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S. |  | 27 |  | 90 |  | 117 |  | (67) |  | $(1,272)$ |  | $(1,339)$ |
| Non-U.S. |  | 10 |  | 44 |  | 54 |  | (9) |  | (945) |  | (954) |
| Trading assets - debt instruments: |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S. |  | (511) |  | (718) |  | $(1,229)$ |  | $(2,008)$ |  | (864) |  | $(2,872)$ |
| Non-U.S. |  | 616 |  | (542) |  | 74 |  | (379) |  | $(2,022)$ |  | $(2,401)$ |
| Securities: |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S. |  | $(1,573)$ |  | $(2,232)$ |  | $(3,805)$ |  | 6,666 |  | $(1,510)$ |  | 5,156 |
| Non-U.S. |  | 887 |  | 141 |  | 1,028 |  | 1,161 |  | (258) |  | 903 |
| Loans: |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S. |  | 1,455 |  | 869 |  | 2,324 |  | 6,705 |  | $(3,799)$ |  | 2,906 |
| Non-U.S. |  | (91) |  | (472) |  | (563) |  | (731) |  | $(1,958)$ |  | $(2,689)$ |
| Other assets, primarily U.S. |  | 92 |  | (30) |  | 62 |  | 36 |  | (452) |  | (416) |
| Change in interest income |  | 1,107 |  | $(3,602)$ |  | $(2,495)$ |  | 11,294 |  | $(18,211)$ |  | $(6,917)$ |
| Interest-bearing liabilities |  |  |  |  |  |  |  |  |  |  |  |  |
| Interest-bearing deposits: |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S. |  | (40) |  | $(1,585)$ |  | $(1,625)$ |  | 294 |  | $(4,933)$ |  | $(4,639)$ |
| Non-U.S. |  | (45) |  | 268 |  | 223 |  | 22 |  | $(5,103)$ |  | $(5,081)$ |
| Federal funds purchased and securities loaned |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S. |  | - |  | (931) |  | (931) |  | 99 |  | $(3,129)$ |  | $(3,030)$ |
| Non-U.S. |  | 92 |  | 74 |  | 166 |  | (13) |  | $(1,052)$ |  | $(1,065)$ |
| Other borrowings and liabilities: |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S. |  | (238) |  | (241) |  | (479) |  | 295 |  | $(2,180)$ |  | $(1,885)$ |
| Non-U.S. |  | 915 |  | (808) |  | 107 |  | (298) |  | (810) |  | $(1,108)$ |
| Beneficial interests issued by consolidated VIEs, |  |  |  |  |  |  |  |  |  |  |  |  |
| Long-term debt, primarily U.S. |  | (269) |  | (536) |  | (805) |  | 796 |  | $(2,842)$ |  | $(2,046)$ |
| Intracompany funding: |  |  |  |  |  |  |  |  |  |  |  |  |
| U.S. |  | (182) |  | 333 |  | 151 |  | (301) |  | 718 |  | 417 |
| Non-U.S. |  | 182 |  | (333) |  | (151) |  | 301 |  | (718) |  | (417) |
| Change in interest expense |  | 1,364 |  | $(3,781)$ |  | $(2,417)$ |  | 1,220 |  | $(20,261)$ |  | $(19,041)$ |
| Change in net interest income | \$ | (257) | \$ | 179 | \$ | (78) | \$ | 10,074 | \$ | 2,050 | \$ | 12,124 |

## Securities portfolio

For information regarding the securities portfolio as of December 31, 2010 and 2009, and for the years ended December 31, 2010 and 2009, see Note 12 on pages 214-218. For the available-for-sale securities portfolio, at December 31, 2008, the fair value and amortized cost of U.S. Treasury and government agency obligations was $\$ 127.7$ billion and $\$ 125.6$ billion, respectively; the fair value and amortized cost of all other securities was $\$ 78.2$ billion and $\$ 83.7$ billion, respectively; and the total fair value and amortized cost of the total portfolio was $\$ 205.9$ billion and $\$ 209.3$ billion respectively.
At December 31, 2008, the fair value and amortized cost of U.S. Treasury and government agency obligations in held-to-maturity securities portfolio was $\$ 35$ million and $\$ 34$ million, respectively. There were no other held-to-maturity securities at December 31, 2008.

## Loan portfolio

The table below presents loans with the line-of-business basis that is presented in Credit Risk Management on pages 119, 120 and 130, and in Note 14 on pages 220-238, at the periods indicated.

| December 31, (in millions) | 2010 |  | 2009 |  | 2008 |  | 2007 |  | 2006 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| U.S. wholesale loans: |  |  |  |  |  |  |  |  |  |  |
| Commercial and industrial | \$ | 50,912 | \$ | 51,113 | \$ | 74,153 | \$ | 70,081 | \$ | 48,500 |
| Real estate |  | 51,734 |  | 54,970 |  | 61,890 |  | 15,977 |  | 18,047 |
| Financial institutions |  | 12,120 |  | 13,557 |  | 20,953 |  | 15,113 |  | 15,632 |
| Government agencies |  | 6,408 |  | 5,634 |  | 5,919 |  | 5,770 |  | 4,148 |
| Other |  | 38,298 |  | 23,811 |  | 23,861 |  | 26,312 |  | 32,359 |
| Total U.S. wholesale loans |  | 159,472 |  | 149,085 |  | 186,776 |  | 133,253 |  | 118,686 |
| Non-U.S. wholesale loans: |  |  |  |  |  |  |  |  |  |  |
| Commercial and industrial |  | 19,053 |  | 20,188 |  | 35,291 |  | 33,829 |  | 22,378 |
| Real estate |  | 1,973 |  | 2,270 |  | 2,811 |  | 3,632 |  | 2,325 |
| Financial institutions |  | 20,043 |  | 11,848 |  | 17,552 |  | 17,245 |  | 19,174 |
| Government agencies |  | 870 |  | 1,707 |  | 602 |  | 720 |  | 2,543 |
| Other |  | 26,222 |  | 19,077 |  | 19,012 |  | 24,397 |  | 18,636 |
| Total non-U.S. wholesale loans |  | 68,161 |  | 55,090 |  | 75,268 |  | 79,823 |  | 65,056 |
| Total wholesale loans: |  |  |  |  |  |  |  |  |  |  |
| Commercial and industrial |  | 69,965 |  | 71,301 |  | 109,444 |  | 103,910 |  | 70,878 |
| Real estate |  | 53,707 |  | 57,240 |  | 64,701 |  | 19,609 |  | 20,372 |
| Financial institutions |  | 32,163 |  | 25,405 |  | 38,505 |  | 32,358 |  | 34,806 |
| Government agencies |  | 7,278 |  | 7,341 |  | 6,521 |  | 6,490 |  | 6,691 |
| Other |  | 64,520 |  | 42,888 |  | 42,873 |  | 50,709 |  | 50,995 |
| Total wholesale loans |  | 227,633 |  | 204,175 |  | 262,044 |  | 213,076 |  | 183,742 |
| Total consumer loans: |  |  |  |  |  |  |  |  |  |  |
| Home equity |  | 112,844 |  | 127,945 |  | 142,890 |  | 94,832 |  | 85,730 |
| Mortgage |  | 134,284 |  | 143,129 |  | 157,078 |  | 56,031 |  | 59,668 |
| Auto |  | 48,367 |  | 46,031 |  | 42,603 |  | 42,350 |  | 41,009 |
| Credit card |  | 137,676 |  | 78,786 |  | 104,746 |  | 84,352 |  | 85,881 |
| Other |  | 32,123 |  | 33,392 |  | 35,537 |  | 28,733 |  | 27,097 |
| Total consumer loans |  | 465,294 |  | 429,283 |  | 482,854 |  | 306,298 |  | 299,385 |
| Total loans(a) | \$ | 692,927 | \$ | 633,458 | \$ | 744,898 | \$ | 519,374 |  | 483,127 |
| Memo: |  |  |  |  |  |  |  |  |  |  |
| Loans held-for-sale | \$ | 5,453 | \$ | 4,876 | \$ | 8,287 | \$ | 18,899 | \$ | 55,251 |
| Loans at fair value |  | 1,976 |  | 1,364 |  | 7,696 |  | 8,739 |  | - |
| Total loans held-for-sale and loans at fair value | \$ | 7,429 | \$ | 6,240 | \$ | 15,983 | \$ | 27,638 | \$ | 55,251 |

(a) Loans (other than purchased credit-impaired loans and those for which the fair value option have been elected) are presented net of unearned income, unamortized discounts and premiums, and net deferred loan costs of $\$ 1.9$ billion, $\$ 1.4$ billion, $\$ 2.0$ billion, $\$ 1.3$ billion and $\$ 3.0$ billion at December 31, 2010, 2009, 2008, 2007 and 2006, respectively.

## Maturities and sensitivity to changes in interest rates

The table below shows, at December 31, 2010, wholesale loan maturity and distribution between fixed and floating interest rates based on the stated terms of the wholesale loan agreements. The table below also reflects the line-of-business basis that is presented in Credit Risk Management on pages 119, 120 and 130, and in Note 14 on pages 220-238. The table does not include the impact of derivative instruments.

| December 31, 2010 (in millions) | Within 1 year (a) |  | $\begin{array}{r} 1-5 \\ \text { years } \\ \hline \end{array}$ |  | After 5 years |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| U.S. |  |  |  |  |  |  |  |  |
| Commercial and industrial | \$ | 12,975 | \$ | 31,688 | \$ | 6,249 | \$ | 50,912 |
| Real estate |  | 6,446 |  | 8,397 |  | 36,891 |  | 51,734 |
| Financial institutions |  | 4,548 |  | 5,188 |  | 2,384 |  | 12,120 |
| Government agencies |  | 2,397 |  | 1,659 |  | 2,352 |  | 6,408 |
| Other |  | 13,090 |  | 21,471 |  | 3,737 |  | 38,298 |
| Total U.S. |  | 39,456 |  | 68,403 |  | 51,613 |  | 159,472 |
| Non-U.S. |  |  |  |  |  |  |  |  |
| Commercial and industrial |  | 6,670 |  | 9,422 |  | 2,961 |  | 19,053 |
| Real estate |  | 1,024 |  | 826 |  | 123 |  | 1,973 |
| Financial institutions |  | 17,924 |  | 1,972 |  | 147 |  | 20,043 |
| Government agencies |  | 735 |  | 58 |  | 77 |  | 870 |
| Other |  | 13,649 |  | 7,302 |  | 5,271 |  | 26,222 |
| Total non-U.S. |  | 40,002 |  | 19,580 |  | 8,579 |  | 68,161 |
| Total wholesale loans | \$ | 79,458 | \$ | 87,983 | \$ | 60,192 |  | 227,633 |
| Loans at fixed interest rates |  |  | \$ | 11,760 | \$ | 33,414 |  |  |
| Loans at variable interest rates |  |  |  | 76,223 |  | 26,778 |  |  |
| Total wholesale loans |  |  | \$ | 87,983 | \$ | 60,192 |  |  |

(a) Includes demand loans and overdrafts.

## Risk elements

The following table sets forth nonperforming assets, contractually past-due assets, and accruing restructured loans with the line-of-business basis that is presented in Credit Risk Management on pages 119, 120, and 130, at the periods indicated.

| $\frac{\text { December 31, (in millions) }}{\text { Nonperforming assets }}$ | 2010 |  | 2009 |  | 2008 |  | 2007 |  | 2006 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Nonperforming assets |  |  |  |  |  |  |  |  |  |
| U.S. nonaccrual loans: |  |  |  |  |  |  |  |  |  |  |
| Wholesale: |  |  |  |  |  |  |  |  |  |  |
| Commercial and industrial | \$ | 1,745 | \$ | 2,182 | \$ | 1,052 | \$ | 63 | \$ | 238 |
| Real estate |  | 2,390 |  | 2,647 |  | 806 |  | 216 |  | 18 |
| Financial institutions |  | 111 |  | 663 |  | 60 |  | 10 |  | 5 |
| Government agencies |  | - |  | 4 |  | - |  | 1 |  | - |
| Other |  | 267 |  | 348 |  | 205 |  | 200 |  | 49 |
| Consumer |  | 8,835 |  | 10,660 |  | 6,571 |  | 2,768 |  | 1,686 |
| Total U.S. nonaccrual loans |  | 13,348 |  | 16,504 |  | 8,694 |  | 3,258 |  | 1,996 |
| Non-U.S. nonaccrual loans: |  |  |  |  |  |  |  |  |  |  |
| Wholesale: |  |  |  |  |  |  |  |  |  |  |
| Commercial and industrial |  | 234 |  | 281 |  | 45 |  | 14 |  | 41 |
| Real estate |  | 585 |  | 241 |  | - |  | - |  | - |
| Financial institutions |  | 30 |  | 118 |  | 115 |  | 8 |  | 24 |
| Government agencies |  | 22 |  | - |  | - |  | - |  |  |
| Other |  | 622 |  | 420 |  | 99 |  | 2 |  | 16 |
| Consumer |  | - |  | - |  | - |  | - |  | - |
| Total non-U.S. nonaccrual loans |  | 1,493 |  | 1,060 |  | 259 |  | 24 |  | 81 |
| Total nonaccrual loans |  | 14,841 |  | 17,564 |  | 8,953 |  | 3,282 |  | 2,077 |
| Derivative receivables |  | 34 |  | 529 |  | 1,079 |  | 29 |  | 36 |
| Assets acquired in loan satisfactions |  | 1,682 |  | 1,648 |  | 2,682 |  | 622 |  | 228 |
| Nonperforming assets | \$ | 16,557 | \$ | 19,741 | \$ | 12,714 | \$ | 3,933 | \$ | 2,341 |
| Memo: |  |  |  |  |  |  |  |  |  |  |
| Loans held-for-sale | \$ | 341 | \$ | 234 | \$ | 12 | \$ | 45 | \$ | 120 |
| Loans at fair value |  | 155 |  | 111 |  | 20 |  | 5 |  | - |
| Total loans held-for-sale and loans at fair value | \$ | 496 | \$ | 345 | \$ | 32 | \$ | 50 | \$ | 120 |
| Contractually past-due assets(a): |  |  |  |  |  |  |  |  |  |  |
| U.S. Ioans: |  |  |  |  |  |  |  |  |  |  |
| Wholesale: |  |  |  |  |  |  |  |  |  |  |
| Commercial and industrial | \$ | 7 | \$ | 23 | \$ | 30 | \$ | 7 | \$ | 5 |
| Real estate |  | 109 |  | 114 |  | 76 |  | 34 |  | 1 |
| Financial institutions |  | 2 |  | 6 |  | - |  | - |  | - |
| Government agencies |  | - |  | - |  | - |  | - |  | - |
| Other |  | 171 |  | 75 |  | 54 |  | 28 |  | 23 |
| Consumer |  | 3,640 |  | 3,985 |  | 3,084 |  | 1,945 |  | 1,708 |
| Total U.S. loans |  | 3,929 |  | 4,203 |  | 3,244 |  | 2,014 |  | 1,737 |
| Non-U.S. loans: |  |  |  |  |  |  |  |  |  |  |
| Wholesale: |  |  |  |  |  |  |  |  |  |  |
| Commercial and industrial |  | - |  | 5 |  | - |  | - |  | - |
| Real estate |  | - |  | - |  | - |  | - |  | - |
| Financial institutions |  | - |  | - |  | - |  | - |  | - |
| Government agencies |  | - |  | - |  | - |  | - |  | - |
| Other |  | 70 |  | 109 |  | 3 |  | 6 |  | - |
| Consumer |  | 38 |  | 38 |  | 28 |  | 23 |  | 16 |
| Total non-U.S. loans |  | 108 |  | 152 |  | 31 |  | 29 |  | 16 |
| Total | \$ | 4,037 | \$ | 4,355 | \$ | 3,275 | \$ | 2,043 | \$ | 1,753 |
| Accruing restructured loans(b) |  |  |  |  |  |  |  |  |  |  |
| U.S.: |  |  |  |  |  |  |  |  |  |  |
| Commercial and industrial | \$ | - | \$ | - | \$ | - | \$ | 8 | \$ | - |
| Real estate |  | 76 |  | 5 |  | - |  | - |  | - |
| Other |  | - |  | - |  | - |  | - |  | - |
| Consumer(c) |  | 14,261 |  | 8,405 |  | 4,029 |  | 1,867 |  | - |
| Total U.S. |  | 14,337 |  | 8,410 |  | 4,029 |  | 1,875 |  | - |
| Non-U.S.: |  |  |  |  |  |  |  |  |  |  |
| Commercial and industrial |  | 49 |  | 31 |  | 5 |  | - |  | - |
| Real estate |  | - |  | 582 |  | - |  | - |  | - |
| Consumer |  | - |  | - |  | - |  | - |  | - |
| Total non-U.S. |  | 49 |  | 613 |  | 5 |  | - |  | - |
| Total | \$ | 14,386 | \$ | 9,023 | \$ | 4,034 | \$ | 1,875 | \$ | - |

(a) Represents accruing loans past-due 90 days or more as to principal and interest, which are not characterized as nonaccrual loans.
(b) Represents performing loans modified in troubled debt restructurings in which an economic concession was granted by the Firm and the borrower has demonstrated its ability to repay the loans according to the terms of the restructuring. As defined in U.S. GAAP, concessions include the reduction of interest rates or the deferral of interest or principal payments, resulting from deterioration in the borrowers' financial condition. Excludes nonaccrual assets and contractually past-due assets, which are included in the sections above.
(c) Includes credit card loans that have been modified in a troubled debt restructuring. Prior periods excluding 2006 have been revised to reflect the current presentation.

For a discussion of nonperforming loans, past-due loan accounting policies, and accruing restructured loans see Credit Risk Management on pages 116-141, and Note 14 on pages 220-238.

Impact of nonaccrual loans and accruing restructured loans on interest income
The negative impact on interest income from nonaccrual loans represents the difference between the amount of interest income that would have been recorded on such nonaccrual loans according to their original contractual terms had they been performing and the amount of interest that actually was recognized on a cash basis. The negative impact on interest income from accruing restructured loans represents the difference between the amount of interest income that would have been recorded on such loans according to their original contractual terms and the amount of interest that actually was recognized under the modified terms. The following table sets forth this data for the years specified. The change in foregone interest income from 2008 through 2010 was primarily driven by the change in the levels of nonaccrual loans.

| Year ended December 31, (in millions) | 2010 |  | 2009 |  | 2008 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nonaccrual loans |  |  |  |  |  |  |
| U.S.: |  |  |  |  |  |  |
| Wholesale: |  |  |  |  |  |  |
| Gross amount of interest that would have been recorded at the original terms | \$ | 110 | \$ | 88 | \$ | 87 |
| Interest that was recognized in income |  | (21) |  | (13) |  | (7) |
| Total U.S. wholesale |  | 89 |  | 75 |  | 80 |
| Consumer: |  |  |  |  |  |  |
| Gross amount of interest that would have been recorded at the original terms |  | 860 |  | 932 |  | 584 |
| Interest that was recognized in income |  | (139) |  | (208) |  | (193) |
| Total U.S. consumer |  | 721 |  | 724 |  | 391 |
| Negative impact - U.S. |  | 810 |  | 799 |  | 471 |
| Non-U.S.: |  |  |  |  |  |  |
| Wholesale: |  |  |  |  |  |  |
| Gross amount of interest that would have been recorded at the original terms |  | 26 |  | 58 |  | 11 |
| Interest that was recognized in income |  | (17) |  | (7) |  | (2) |
| Total non-U.S. wholesale |  | 9 |  | 51 |  | 9 |
| Consumer: |  |  |  |  |  |  |
| Gross amount of interest that would have been recorded at the original terms |  | - |  | - |  | - |
| Interest that was recognized in income |  | - |  | - |  | - |
| Total non-U.S. consumer |  | - |  | - |  | - |
| Negative impact - non-U.S. |  | 9 |  | 51 |  | 9 |
| Total negative impact on interest income | \$ | 819 | \$ | 850 | \$ | 480 |
| Year ended December 31, (in millions) |  | 2010 |  | 2009 |  | 2008 |
| Accruing restructured loans |  |  |  |  |  |  |
| U.S.: |  |  |  |  |  |  |
| Wholesale(a): |  |  |  |  |  |  |
| Gross amount of interest that would have been recorded at the original terms | \$ | 5 | \$ | - | \$ | - |
| Interest that was recognized in income |  | (2) |  | - |  | - |
| Total U.S. wholesale |  | 3 |  | - |  | - |
| Consumer: |  |  |  |  |  |  |
| Gross amount of interest that would have been recorded at the original terms |  | 2,022 |  | 819 |  | 416 |
| Interest that was recognized in income |  | (797) |  | (386) |  | (222) |
| Total U.S. consumer |  | 1,225 |  | 433 |  | 194 |
| Negative impact - U.S. |  | 1,228 |  | 433 |  | 194 |
| Non-U.S.: |  |  |  |  |  |  |
| Wholesale(a): |  |  |  |  |  |  |
| Gross amount of interest that would have been recorded at the original terms |  | 3 |  | 38 |  | - |
| Interest that was recognized in income |  | (2) |  | (15) |  | - |
| Total non-U.S. wholesale |  | , |  | 23 |  | - |
| Consumer: |  |  |  |  |  |  |
| Gross amount of interest that would have been recorded at the original terms |  | - |  | - |  | - |
| Interest that was recognized in income |  | - |  | - |  | - |
| Total non-U.S. consumer |  | - |  | - |  | - |
| Negative impact - non-U.S. |  | 1 |  | 23 |  | - |
| Total negative impact on interest income | \$ | 1,229 | \$ | 456 | \$ | 194 |

(a) Predominantly real estate-related.

## Cross-border outstandings

Cross-border disclosure is based on the Federal Financial Institutions Examination Council's ("FFIEC") guidelines governing the determination of cross-border risk. Based on rules from the FFIEC, securities purchased under resale agreements are allocated to a country based on the domicile of the counterparty. Additionally, local foreign office commitments are now included in commitments; previously they were excluded.

The following table lists all countries in which JPMorgan Chase's cross-border outstandings exceed $0.75 \%$ of consolidated assets as of any of the dates specified. The disclosure includes certain exposures that are not required under the disclosure requirements of the SEC. The most significant differences between the FFIEC and SEC
methodologies are: the FFIEC methodology includes mark-to-market exposures of foreign exchange and derivatives; net local country assets are reduced by local country liabilities (regardless of currency denomination); and securities purchased under resale agreements are reported based on the counterparty, without regard to the underlying security collateral.

JPMorgan Chase's total cross-border exposure tends to fluctuate greatly, and the amount of exposure at year-end tends to be a function of timing rather than representing a consistent trend. For a further discussion of JPMorgan Chase's emerging markets crossborder exposure, see Country exposure on pages 128-129.

## Cross-border outstandings exceeding $0.75 \%$ of total assets

| (in millions) | December 31, | Governments |  | Banks |  | Other(a) |  | Net local country assets |  | Total cross-border outstandings(b) |  | Commitments(c) |  | Total exposure |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United Kingdom | 2010 | \$ | 787 | \$ | 12,133 | \$ | 10,770 | \$ | - | \$ | 23,690 | \$ | 668,610 |  | 692,300 |
|  | 2009 |  | 347 |  | 15,822 |  | 11,565 |  | - |  | 27,734 |  | 624,754 |  | 652,488 |
|  | 2008 |  | 1,173 |  | 23,490 |  | 19,624 |  | - |  | 44,287 |  | 562,980 |  | 607,267 |
| Germany | 2010 | \$ | 15,339 | \$ | 9,900 | \$ | 17,759 | \$ | - | \$ | 42,998 | \$ | 108,141 |  | 151,139 |
|  | 2009 |  | 13,291 |  | 10,704 |  | 10,718 |  | - |  | 34,713 |  | 175,323 |  | 210,036 |
|  | 2008 |  | 8,437 |  | 24,312 |  | 10,297 |  | 3,660 |  | 46,706 |  | 348,635 |  | 395,341 |
| France | 2010 | \$ | 4,699 | \$ | 16,541 | \$ | 26,374 | \$ | 1,473 | \$ | 49,087 | \$ | 101,141 |  | 150,228 |
|  | 2009 |  | 9,505 |  | 16,428 |  | 19,642 |  | 1,377 |  | 46,952 |  | 160,536 |  | 207,488 |
|  | 2008 |  | 6,666 |  | 25,479 |  | 24,665 |  | 28 |  | 56,838 |  | 353,074 |  | 409,912 |
| Japan | 2010 | \$ | 233 | \$ | 24,386 | \$ | 4,231 | \$ | 25,050 | \$ | 53,900 | \$ | 63,980 |  | 117,880 |
|  | 2009 |  | 404 |  | 22,022 |  | 8,984 |  | 4,622 |  | 36,032 |  | 66,487 |  | 102,519 |
|  | 2008 |  | 687 |  | 17,401 |  | 18,568 |  | 2,174 |  | 38,830 |  | 64,583 |  | 103,413 |
| Netherlands | 2010 | \$ | 506 | \$ | 8,093 | \$ | 36,060 | \$ | - | \$ | 44,659 | \$ | 47,015 |  | 91,674 |
|  | 2009 |  | 690 |  | 9,037 |  | 22,770 |  | - |  | 32,497 |  | 74,789 |  | 107,286 |
|  | 2008 |  | 1,360 |  | 8,645 |  | 19,356 |  | - |  | 29,361 |  | 132,574 |  | 161,935 |
| Italy | 2010 | \$ | 5,292 | \$ | 3,490 | \$ | 2,543 | \$ | 832 | \$ | 12,157 | \$ | 70,522 |  | 82,679 |
|  | 2009 |  | 12,912 |  | 2,065 |  | 3,643 |  | 128 |  | 18,748 |  | 86,790 |  | 105,538 |
|  | 2008 |  | 7,680 |  | 6,804 |  | 3,742 |  | 448 |  | 18,674 |  | 134,851 |  | 153,525 |
| Spain | 2010 | \$ | 936 | \$ | 5,877 | \$ | 4,390 | \$ | 785 | \$ | 11,988 | \$ | 40,147 |  | 52,135 |
|  | 2009 |  | 2,705 |  | 8,724 |  | 4,884 |  | 1,189 |  | 17,502 |  | 52,363 |  | 69,865 |
|  | 2008 |  | 906 |  | 11,867 |  | 4,466 |  | 1,161 |  | 18,400 |  | 104,956 |  | 123,356 |
| Cayman Islands | 2010 | \$ | 73 | \$ | 136 | \$ | 38,278 | \$ | - | \$ | 38,487 | \$ | 7,926 | \$ | \$ 46,413 |
|  | 2009 |  | 243 |  | 216 |  | 30,830 |  | - |  | 31,289 |  | 8,218 |  | 39,507 |
|  | 2008 |  | 87 |  | 115 |  | 30,869 |  | - |  | 31,071 |  | 6,843 |  | 37,914 |
| Canada | 2010 | \$ | 4,995 | \$ | 4,482 | \$ | 6,599 | \$ | - | \$ | 16,076 | \$ | 23,434 | \$ | 39,510 |
|  | 2009 |  | 5,119 |  | 2,057 |  | 4,836 |  | - |  | 12,012 |  | 24,719 |  | 36,731 |
|  | 2008 |  | 3,043 |  | 2,793 |  | 7,547 |  | - |  | 13,383 |  | 33,266 |  | 46,649 |
| Ireland | 2010 | \$ | 189 | \$ | 6,300 | \$ | 12,307 | \$ | - | \$ | 18,796 | \$ | 11,453 | \$ | 3 30,249 |
|  | 2009 |  | 700 |  | 5,584 |  | 8,413 |  | - |  | 14,697 |  | 13,075 |  | 27,772 |
|  | 2008 |  | - |  | 2,847 |  | 10,249 |  | - |  | 13,096 |  | 16,403 |  | 29,499 |
| Brazil | 2010 | \$ | 2,611 | \$ | 5,302 | \$ | 4,252 | \$ | 4,750 | \$ | 16,915 | \$ | 11,139 | \$ | - 28,054 |
|  | 2009 |  | 2,082 |  | 2,165 |  | 3,681 |  | 1,793 |  | 9,721 |  | 11,727 |  | 21,448 |
|  | 2008 |  | 2,665 |  | 1,253 |  | 2,846 |  | 874 |  | 7,638 |  | 20,398 |  | 28,036 |
| Norway | 2010 | \$ | 2,868 | \$ | 678 | \$ | 261 | \$ | - | \$ | 3,807 | \$ | 5,396 | \$ | 9,203 |
|  | 2009 |  | 4,329 |  | 259 |  | 222 |  | - |  | 4,810 |  | 7,448 |  | 12,258 |
|  | 2008 |  | 15,944 |  | 616 |  | 718 |  | - |  | 17,278 |  | 11,393 |  | 28,671 |

(a) Consists primarily of commercial and industrial.
(b) Outstandings includes loans and accrued interest receivable, interest-bearing deposits with banks, acceptances, resale agreements, other monetary assets, cross-border trading debt and equity instruments, mark-to-market exposure of foreign exchange and derivative contracts, and local country assets, net of local country liabilities. The amounts associated with foreign exchange and derivative contracts are presented after taking into account the impact of legally enforceable master netting agreements.
(c) Commitments include outstanding letters of credit, undrawn commitments to extend credit, and the notional value of credit derivatives where JPMorgan Chase is a protection seller.

## Summary of loan and lending-related commitments loss experience

The tables below summarize the changes in the allowance for loan losses and the allowance for lending-related commitments during the periods indicated. For a further discussion, see Allowance for credit losses on pages 139-141, and Note 15 on pages 239-243.

## Allowance for loan losses

| Year ended December 31, (in millions) | 2010 |  | 2009 |  | 2008 |  | 2007 |  | 2006 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Balance at beginning of year | \$ | 31,602 | \$ | 23,164 | \$ | 9,234 | \$ | 7,279 | \$ | 7,090 |
| Addition resulting from mergers and acquisitions(a) |  | - |  | - |  | 2,535 |  | - |  | - |
| Provision for loan losses |  | 16,822 |  | 31,735 |  | 21,237 |  | 6,538 |  | 3,153 |
| U.S. charge-offs |  |  |  |  |  |  |  |  |  |  |
| Commercial and industrial |  | 467 |  | 1,233 |  | 183 |  | 34 |  | 80 |
| Real estate |  | 698 |  | 700 |  | 217 |  | 46 |  | 10 |
| Financial institutions |  | 146 |  | 671 |  | 17 |  | 9 |  | 1 |
| Government agencies |  | 3 |  | - |  | - |  | 10 |  | 2 |
| Other |  | 102 |  | 151 |  | 35 |  | 81 |  | 36 |
| Consumer |  | 23,630 |  | 20,638 |  | 10,140 |  | 5,181 |  | 3,635 |
| Total U.S. charge-offs |  | 25,046 |  | 23,393 |  | 10,592 |  | 5,361 |  | 3,764 |
| Non-U.S. charge-offs |  |  |  |  |  |  |  |  |  |  |
| Commercial and industrial |  | 23 |  | 64 |  | 40 |  | 2 |  | 43 |
| Real estate |  | 239 |  | - |  |  |  | - |  |  |
| Financial institutions |  | - |  | 66 |  | 29 |  | - |  | - |
| Government agencies |  | - |  | - |  | - |  | - |  |  |
| Other |  | 311 |  | 341 |  | - |  | 3 |  | 14 |
| Consumer |  | 163 |  | 154 |  | 103 |  | 1 |  | 63 |
| Total non-U.S. charge-offs |  | 736 |  | 625 |  | 172 |  | 6 |  | 120 |
| Total charge-offs |  | 25,782 |  | 24,018 |  | 10,764 |  | 5,367 |  | 3,884 |
| U.S. recoveries |  |  |  |  |  |  |  |  |  |  |
| Commercial and industrial |  | (86) |  | (53) |  | (60) |  | (48) |  | (89) |
| Real estate |  | (75) |  | (12) |  | (5) |  | (1) |  | (4) |
| Financial institutions |  | (74) |  | (3) |  | (2) |  | (3) |  | (4) |
| Government agencies |  | (1) |  |  |  | - |  | - |  |  |
| Other |  | (25) |  | (25) |  | (29) |  | (40) |  | (48) |
| Consumer |  | $(1,819)$ |  | (941) |  | (793) |  | (716) |  | (622) |
| Total U.S. recoveries |  | $(2,080)$ |  | $(1,034)$ |  | (889) |  | (808) |  | (767) |
| Non-U.S. recoveries |  |  |  |  |  |  |  |  |  |  |
| Commercial and industrial |  | (1) |  | (1) |  | (16) |  | (8) |  | (26) |
| Real estate |  |  |  | - |  | - |  |  |  | - |
| Financial institutions |  | - |  | - |  | - |  | (1) |  | (11) |
| Government agencies |  | - |  | - |  | - |  | - |  | - |
| Other |  | - |  | - |  | (7) |  | (12) |  | (26) |
| Consumer |  | (28) |  | (18) |  | (17) |  | - |  | (12) |
| Total non-U.S. recoveries |  | (29) |  | (19) |  | (40) |  | (21) |  | (75) |
| Total recoveries |  | $(2,109)$ |  | $(1,053)$ |  | (929) |  | (829) |  | (842) |
| Net charge-offs |  | 23,673 |  | 22,965 |  | 9,835 |  | 4,538 |  | 3,042 |
| Allowance related to purchased portfolios |  | - |  | - |  | 6 |  | - |  | 75 |
| Change in accounting principles(b) |  | 7,494 |  | - |  | - |  | (56) |  | - |
| Other |  | 21 |  | (332)(c) |  | (13) |  | 11 |  | 3 |
| Balance at year-end | \$ | 32,266 | \$ | 31,602 | \$ | 23,164 | \$ | 9,234 | \$ | 7,279 |

(a) The 2008 amount relates to the Washington Mutual transaction.
(b) Effective January 1, 2010, the Firm adopted accounting guidance related to VIEs. Upon adoption of the guidance, the Firm consolidated its Firm-sponsored credit card securitization trusts, its Firm-administered multi-seller conduits and certain other consumer loan securitization entities, primarily mortgage-related. As a result $\$ 7.4$ million, $\$ 14$ million and $\$ 127$ million of allowance for loan losses were recorded on-balance sheet associated with the Firm-sponsored credit card securitization trusts, Firmadministered multi-seller conduits, and certain other consumer loan securitization entities, primarily mortgage-related, respectively. For further discussion, see Note 16 on pages 244-259 of this Annual Report.
(c) Predominantly includes a reclassification in 2009 related to the issuance and retention of securities from the Chase Issuance Trust.

## Allowance for lending-related commitments

| Year ended December 31, (in millions) | 2010 |  | 2009 |  | 2008 |  | 2007 |  | 2006 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Balance at beginning of year | \$ | 939 | \$ | 659 | \$ | 850 | \$ | 524 | \$ | 400 |
| Addition resulting from mergers and acquisitions(a) |  | - |  | - |  | 66 |  | - |  | - |
| Provision for lending-related commitments |  | (183) |  | 280 |  | (258) |  | 326 |  | 117 |
| Net charge-offs |  | - |  | - |  | - |  | - |  | - |
| Change in accounting principles(b) |  | (18) |  | - |  | - |  | - |  | - |
| Other |  | (21) |  | - |  | 1 |  | - |  | 7 |
| Balance at year-end | \$ | 717 | \$ | 939 | \$ | 659 | \$ | 850 | \$ | 524 |

(a) The 2008 amount relates to the Washington Mutual transaction.
(b) Relates to the adoption of the new accounting guidance related to VIEs.

## Loan loss analysis

As of or for the year ended December 31,

| (in millions, except ratios) | 2010 |  | 2009 |  | 2008(c) |  | 2007 |  | 2006 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Balances |  |  |  |  |  |  |  |  |  |  |
| Loans - average | \$ | 703,540 | \$ | 682,885 | \$ | 588,801 |  | 479,679 |  | 454,535 |
| Loans - year-end |  | 692,927 |  | 633,458 |  | 744,898 |  | 519,374 |  | 483,127 |
| Net charge-offs(a) |  | 23,673 |  | 22,965 |  | 9,835 |  | 4,538 |  | 3,042 |
| Allowance for loan losses: |  |  |  |  |  |  |  |  |  |  |
| U.S. |  | 31,111 |  | 29,802 |  | 21,830 |  | 8,454 |  | 6,654 |
| Non-U.S. |  | 1,155 |  | 1,800 |  | 1,334 |  | 780 |  | 625 |
| Total allowance for loan losses |  | 32,266 |  | 31,602 |  | 23,164 |  | 9,234 |  | 7,279 |
| Nonperforming loans |  | 14,841 |  | 17,564 |  | 8,953 |  | 3,282 |  | 2,077 |
| Ratios |  |  |  |  |  |  |  |  |  |  |
| Net charge-offs to: |  |  |  |  |  |  |  |  |  |  |
| Loans retained - average |  | 3.39\% |  | 3.42\% |  | 1.73\% |  | 1.00\% |  | 0.73\% |
| Allowance for loan losses |  | 73.37 |  | 72.67 |  | 42.46 |  | 49.14 |  | 41.79 |
| Allowance for loan losses to: |  |  |  |  |  |  |  |  |  |  |
| Loans retained - year-end(b) |  | 4.71 |  | 5.04 |  | 3.18 |  | 1.88 |  | 1.70 |
| Nonaccrual loans retained |  | 225 |  | 184 |  | 260 |  | 286 |  | 372 |

(a) There were no net charge-offs/(recoveries) on lending-related commitments in 2010, 2009, 2008, 2007 or 2006.
(b) The allowance for loan losses as a percentage of retained loans declined from 2009 to 2010, due to an improvement in credit quality of the wholesale and consumer credit portfolios. Deteriorating credit conditions from 2007 to 2009, primarily within consumer lending, resulted in increasing losses and correspondingly higher loan loss provisions for those periods. During 2006, the credit environment remained relatively benign. For a more detailed discussion of the 2008 through 2010 provision for credit losses, see Provision for Credit Losses on page 141.
(c) On September 25, 2008, JPMorgan Chase acquired the banking operations of Washington Mutual Bank. On May 30, 2008, the Bear Stearns merger was consummated. Each of these transactions was accounted for as a purchase, and their respective results of operations are included in the Firm's results from each respective transaction.

## Deposits

The following table provides a summary of the average balances and average interest rates of JPMorgan Chase's various deposits for the years indicated.

| Year ended December 31, (in millions, except interest rates) | Average balances |  |  |  |  |  | Average interest rates |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 |  | 2009 |  | 2008(a) |  | 2010 | 2009 | 2008(a) |
| U.S. |  |  |  |  |  |  |  |  |  |
| Noninterest-bearing demand |  | 54,305 | \$ | 48,865 | \$ | 39,476 | -\% | -\% | -\% |
| Interest-bearing demand |  | 18,881 |  | 14,873 |  | 13,165 | 0.04 | 0.44 | 0.59 |
| Savings |  | 455,856 |  | 412,363 |  | 313,939 | 0.19 | 0.22 | 1.13 |
| Time |  | 106,644 |  | 154,420 |  | 175,117 | 1.22 | 1.82 | 2.74 |
| Total U.S. deposits |  | 635,686 |  | 630,521 |  | 541,697 | 0.34 | 0.60 | 1.55 |
| Non-U.S. |  |  |  |  |  |  |  |  |  |
| Noninterest-bearing demand |  | 9,955 |  | 7,794 |  | 6,751 | - | - | - |
| Interest-bearing demand |  | 163,550 |  | 163,512 |  | 155,015 | 0.35 | 0.25 | 2.37 |
| Savings |  | 605 |  | 559 |  | 480 | 0.28 | 0.18 | 0.58 |
| Time |  | 71,258 |  | 79,619 |  | 81,864 | 0.97 | 0.80 | 3.00 |
| Total non-U.S. deposits |  | 245,368 |  | 251,484 |  | 244,110 | 0.52 | 0.42 | 2.51 |
| Total deposits | \$ | 881,054 | \$ | 882,005 | \$ | 785,807 | 0.39\% | 0.55\% | 1.85\% |

(a) On September 25, 2008, JPMorgan Chase acquired the banking operations of Washington Mutual. On May 30, 2008, the Bear Stearns merger was consummated. Each of these transactions was accounted for as a purchase, and their respective results of operations are included in the Firm's results from each respective transaction date. For additional information on these transactions, see Note 2 on pages 166-170

At December 31, 2010, other U.S. time deposits in denominations of $\$ 100,000$ or more totaled $\$ 39.1$ billion, substantially all of which mature in three months or less. In addition, the table below presents the maturities for U.S. time certificates of deposit in denominations of $\$ 100,000$ or more.

| By remaining maturity at December 31, 2010 (in millions) | Three months or less |  | Over three months but within six months |  | Over six months but within 12 months |  | Over 12 months |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| U.S. time certificates of deposit (\$100,000 or more) | \$ | 5,187 | \$ | 3,688 | \$ | 5,925 | \$ | 5,765 | \$ | 20,565 |


[^0]:    (a) Includes fees for custody, securities lending, funds services and securities clearance.

[^1]:    JPMorgan Chase \& Co. / 2010 Annual Report

[^2]:    a) There were no merger costs for 2010.

[^3]:    (a) These modifications generally provided interest rate concessions to the borrower or deferral of principal repayments.

[^4]:    (a) Excluded $\$ 4.6$ billion and $\$ 2.8$ billion, as of December 31, 2010 and 2009, respectively, which were consolidated due to the Firm owning the residual interests.
     bonds, in the form of letters of credit, of $\$ 10$ million at both December 31, 2010 and 2009.
    (c) Represents the excess/(deficit) of the fair values of municipal bond assets available to repay the liquidity facilities, if drawn
    (d) The ratings scale is based on the Firm's internal risk ratings and is presented on an S\&P-equivalent basis.

[^5]:    (a) Total assets pledged do not include assets of consolidated VIEs; these assets are used to settle the liabilities of those entities. See Note 16 on pages 244-259 of this Annual Report for additional information on assets and liabilities of consolidated

[^6]:    (a) Subsidiaries include trusts that issued guaranteed capital debt securities ("issuer trusts"). The Parent received dividends of $\$ 13$ million, $\$ 14$ million and $\$ 15$ million from the issuer trusts in 2010, 2009 and 2008, respectively. For further discussion on these issuer trusts, see Note 22 on pages 265-266 of this Annual Report.
    (b) At December 31, 2010, long-term debt that contractually matures in 2011 through 2015 totaled $\$ 38.9$ billion, $\$ 42.4$ billion, $\$ 17.6$ billion, $\$ 19.0$ billion and $\$ 16.8$ billion, respectively.
    (c) Represents the assumption of Bear Stearns long-term debt by JPMorgan Chase \& Co.
    (d) 2008 included the conversion of Bear Stearns' preferred stock into JPMorgan Chase preferred stock.

