

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

Quarterly report pursuant to Section 13 or 15(d) of
the Securities Exchange Act of 1934

For the quarterly period ended
June 30, 2023

Commission file
number 1-5805

JPMorgan Chase & Co.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

13-2624428
(I.R.S. employer
identification no.)

383 Madison Avenue,
New York, New York
(Address of principal executive offices)

10179
(Zip Code)

Registrant's telephone number, including area code: (212) 270-6000
Securities registered pursuant to Section 12(b) of the Act:

| <u>Title of each class</u> | <u>Trading Symbol(s)</u> | <u>Name of each exchange on which registered</u> |
|---|--------------------------|--|
| Common stock | JPM | The New York Stock Exchange |
| Depositary Shares, each representing a one-four hundredth interest in a share of 5.75% Non-Cumulative Preferred Stock, Series DD | JPM PR D | The New York Stock Exchange |
| Depositary Shares, each representing a one-four hundredth interest in a share of 6.00% Non-Cumulative Preferred Stock, Series EE | JPM PR C | The New York Stock Exchange |
| Depositary Shares, each representing a one-four hundredth interest in a share of 4.75% Non-Cumulative Preferred Stock, Series GG | JPM PR J | The New York Stock Exchange |
| Depositary Shares, each representing a one-four hundredth interest in a share of 4.55% Non-Cumulative Preferred Stock, Series JJ | JPM PR K | The New York Stock Exchange |
| Depositary Shares, each representing a one-four hundredth interest in a share of 4.625% Non-Cumulative Preferred Stock, Series LL | JPM PR L | The New York Stock Exchange |
| Depositary Shares, each representing a one-four hundredth interest in a share of 4.20% Non-Cumulative Preferred Stock, Series MM | JPM PR M | The New York Stock Exchange |
| Alerian MLP Index ETNs due May 24, 2024 | AMJ | NYSE Arca, Inc. |
| Guarantee of Callable Fixed Rate Notes due June 10, 2032 of JPMorgan Chase Financial Company LLC | JPM/32 | The New York Stock Exchange |

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer
Non-accelerated filer Smaller reporting company
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

Number of shares of common stock outstanding as of June 30, 2023: 2,906,085,273

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JPMorgan Chase & Co.
Consolidated financial highlights (unaudited)

| As of or for the period ended, (in millions, except per share, ratio, headcount data and where otherwise noted) | 2Q23 | 1Q23 | 4Q22 | 3Q22 | 2Q22 | Six months ended June 30, | |
|---|------------------|------------------------|------------|------------|------------|---------------------------|------------------------|
| | | | | | | 2023 | 2022 |
| Selected income statement data | | | | | | | |
| Total net revenue | \$ 41,307 | \$ 38,349 | \$ 34,547 | \$ 32,716 | \$ 30,715 | \$ 79,656 | \$ 61,432 |
| Total noninterest expense | 20,822 | 20,107 | 19,022 | 19,178 | 18,749 | 40,929 | 37,940 |
| Pre-provision profit^(a) | 20,485 | 18,242 | 15,525 | 13,538 | 11,966 | 38,727 | 23,492 |
| Provision for credit losses | 2,899 | 2,275 | 2,288 | 1,537 | 1,101 | 5,174 | 2,564 |
| Income before income tax expense | 17,586 | 15,967 | 13,237 | 12,001 | 10,865 | 33,553 | 20,928 |
| Income tax expense | 3,114 | 3,345 | 2,229 | 2,264 | 2,216 | 6,459 | 3,997 |
| Net income | \$ 14,472 | \$ 12,622 | \$ 11,008 | \$ 9,737 | \$ 8,649 | \$ 27,094 | \$ 16,931 |
| Earnings per share data | | | | | | | |
| Net income: Basic | \$ 4.76 | \$ 4.11 | \$ 3.58 | \$ 3.13 | \$ 2.77 | \$ 8.86 | \$ 5.40 |
| Diluted | 4.75 | 4.10 | 3.57 | 3.12 | 2.76 | 8.85 | 5.39 |
| Average shares: Basic | 2,943.8 | 2,968.5 | 2,962.9 | 2,961.2 | 2,962.2 | 2,956.1 | 2,969.6 |
| Diluted | 2,948.3 | 2,972.7 | 2,967.1 | 2,965.4 | 2,966.3 | 2,960.5 | 2,973.7 |
| Market and per common share data | | | | | | | |
| Market capitalization | 422,661 | 380,803 | 393,484 | 306,520 | 330,237 | 422,661 | 330,237 |
| Common shares at period-end | 2,906.1 | 2,922.3 | 2,934.3 | 2,933.2 | 2,932.6 | 2,906.1 | 2,932.6 |
| Book value per share | 98.11 | 94.34 | 90.29 | 87.00 | 86.38 | 98.11 | 86.38 |
| Tangible book value per share ("TBVPS") ^(a) | 79.90 | 76.69 | 73.12 | 69.90 | 69.53 | 79.90 | 69.53 |
| Cash dividends declared per share | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 |
| Selected ratios and metrics | | | | | | | |
| Return on common equity ("ROE") ^(b) | 20 % | 18 % | 16 % | 15 % | 13 % | 19 % | 13 % |
| Return on tangible common equity ("ROTCE") ^{(a)(b)} | 25 | 23 | 20 | 18 | 17 | 24 | 16 |
| Return on assets ^(b) | 1.51 | 1.38 | 1.16 | 1.01 | 0.89 | 1.45 | 0.87 |
| Overhead ratio | 50 | 52 | 55 | 59 | 61 | 51 | 62 |
| Loans-to-deposits ratio | 54 | 47 | 49 | 46 | 45 | 54 | 45 |
| Firm Liquidity coverage ratio ("LCR") (average) ^(c) | 112 | 114 | 112 | 113 | 110 | 112 | 110 |
| JPMorgan Chase Bank, N.A. LCR (average) ^(c) | 129 | 140 | 151 | 165 | 169 | 129 | 169 |
| Common equity Tier 1 ("CET1") capital ratio ^(d) | 13.8 | 13.8 | 13.2 | 12.5 | 12.2 | 13.8 | 12.2 |
| Tier 1 capital ratio ^(d) | 15.4 | 15.4 | 14.9 | 14.1 | 14.1 | 15.4 | 14.1 |
| Total capital ratio ^(d) | 17.3 | 17.4 | 16.8 | 16.0 | 15.7 | 17.3 | 15.7 |
| Tier 1 leverage ratio ^{(c)(d)} | 6.9 | 6.9 | 6.6 | 6.2 | 6.2 | 6.9 | 6.2 |
| Supplementary leverage ratio ("SLR") ^{(c)(d)} | 5.8 | 5.9 | 5.6 | 5.3 | 5.3 | 5.8 | 5.3 |
| Selected balance sheet data (period-end) | | | | | | | |
| Trading assets | \$ 636,996 | \$ 578,892 | \$ 453,799 | \$ 506,487 | \$ 465,577 | \$ 636,996 | \$ 465,577 |
| Investment securities, net of allowance for credit losses | 612,203 | 610,075 | 631,162 | 618,246 | 663,718 | 612,203 | 663,718 |
| Loans | 1,300,069 | 1,128,896 | 1,135,647 | 1,112,633 | 1,104,155 | 1,300,069 | 1,104,155 |
| Total assets | 3,868,240 | 3,744,305 | 3,665,743 | 3,773,884 | 3,841,314 | 3,868,240 | 3,841,314 |
| Deposits | 2,398,962 | 2,377,253 | 2,340,179 | 2,408,615 | 2,471,544 | 2,398,962 | 2,471,544 |
| Long-term debt | 364,078 | 295,489 | 295,865 | 287,473 | 288,212 | 364,078 | 288,212 |
| Common stockholders' equity | 285,112 | 275,678 | 264,928 | 255,180 | 253,305 | 285,112 | 253,305 |
| Total stockholders' equity | 312,516 | 303,082 | 292,332 | 288,018 | 286,143 | 312,516 | 286,143 |
| Headcount | 300,066 | ^(e) 296,877 | 293,723 | 288,474 | 278,494 | 300,066 | ^(e) 278,494 |
| Credit quality metrics | | | | | | | |
| Allowances for credit losses | \$ 24,288 | \$ 22,774 | \$ 22,204 | \$ 20,797 | \$ 20,019 | \$ 24,288 | \$ 20,019 |
| Allowance for loan losses to total retained loans | 1.75 % | 1.85 % | 1.81 % | 1.70 % | 1.69 % | 1.75 % | 1.69 % |
| Nonperforming assets | \$ 7,838 | \$ 7,418 | \$ 7,247 | \$ 7,243 | \$ 7,845 | \$ 7,838 | \$ 7,845 |
| Net charge-offs | 1,411 | 1,137 | 887 | 727 | 657 | 2,548 | 1,239 |
| Net charge-off rate | 0.47 % | 0.43 % | 0.33 % | 0.27 % | 0.25 % | 0.45 % | 0.24 % |

As of and for the period ended June 30, 2023, the results of the Firm include the impact of the First Republic acquisition. Refer to page 24 and Note 28 for additional information.

(a) Pre-provision profit, TBVPS and ROTCE are each non-GAAP financial measures. Tangible common equity ("TCE") is also a non-GAAP financial measure. Refer to Explanation and Reconciliation of the Firm's Use of Non-GAAP Financial Measures on pages 20-21 for a further discussion of these measures.

(b) Quarterly ratios are based upon annualized amounts.

(c) For the six months ended June 30, 2023 and 2022, the percentage represents average ratios for the three months ended June 30, 2023 and 2022.

(d) The ratios reflect the Current Expected Credit Losses ("CECL") capital transition provisions. Refer to Capital Risk Management on pages 48-53 of this Form 10-Q and pages 86-96 of JPMorgan Chase's 2022 Form 10-K for additional information.

(e) Excluded 5,132 individuals associated with the First Republic acquisition who became employees effective July 2, 2023.

INTRODUCTION

The following is Management's discussion and analysis of the financial condition and results of operations ("MD&A") of JPMorgan Chase & Co. ("JPMorgan Chase" or the "Firm") for the second quarter of 2023.

This Quarterly Report on Form 10-Q for the second quarter of 2023 ("Form 10-Q") should be read together with JPMorgan Chase's Annual Report on Form 10-K for the year ended December 31, 2022 ("2022 Form 10-K"). Refer to the Glossary of terms and acronyms and line of business metrics on pages 200-208 for definitions of terms and acronyms used throughout this Form 10-Q.

This Form 10-Q contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on the current beliefs and expectations of JPMorgan Chase's management, speak only as of the date of this Form 10-Q and are subject to significant risks and uncertainties. Refer to Forward-looking Statements on page 95 of this Form 10-Q; Part I, Item 1A, Risk Factors on pages 9-32 of the 2022 Form 10-K; and Part II, Item 1A, Risk Factors on page 209 of this Form 10-Q for a discussion of certain of those risks and uncertainties and the factors that could cause JPMorgan Chase's actual results to differ materially because of those risks and uncertainties. There is no assurance that actual results will be in line with any outlook information set forth herein, and the Firm does not undertake to update any forward-looking statements.

JPMorgan Chase & Co. (NYSE: JPM), a financial holding company incorporated under Delaware law in 1968, is a leading financial services firm based in the United States of America ("U.S."), with operations worldwide. JPMorgan Chase had \$3.9 trillion in assets and \$312.5 billion in stockholders' equity as of June 30, 2023. The Firm is a leader in investment banking, financial services for consumers and small businesses, commercial banking, financial transaction processing and asset management. Under the J.P. Morgan and Chase brands, the Firm serves millions of customers, predominantly in the U.S., and many of the world's most prominent corporate, institutional and government clients globally.

JPMorgan Chase's principal bank subsidiary is JPMorgan Chase Bank, National Association ("JPMorgan Chase Bank, N.A."), a national banking association with U.S. branches in 48 states and Washington, D.C. JPMorgan Chase's principal non-bank subsidiary is J.P. Morgan Securities LLC ("J.P. Morgan Securities"), a U.S. broker-dealer. The bank and non-bank subsidiaries of JPMorgan Chase operate nationally as well as through overseas branches and subsidiaries, representative offices and subsidiary foreign banks. The Firm's principal operating subsidiaries outside the U.S. are J.P. Morgan Securities plc and J.P. Morgan SE ("JPMSE"), which are subsidiaries of JPMorgan Chase Bank, N.A. and are based in the United Kingdom ("U.K.") and Germany, respectively.

For management reporting purposes, the Firm's activities are organized into four major reportable business segments, as well as a Corporate segment. The Firm's consumer business segment is Consumer & Community Banking ("CCB"). The Firm's wholesale business segments are the Corporate & Investment Bank ("CIB"), Commercial Banking ("CB"), and Asset & Wealth Management ("AWM"). Refer to Business Segment Results on pages 22-46 and Note 27 of this Form 10-Q, and Note 32 of JPMorgan Chase's 2022 Form 10-K, for a description of the Firm's business segments and the products and services they provide to their respective client bases. On May 1, 2023, JPMorgan Chase acquired certain assets and assumed certain liabilities of First Republic Bank (the "First Republic acquisition") from the Federal Deposit Insurance Corporation ("FDIC"). Refer to Note 28 for additional information.

The Firm's website is www.jpmorganchase.com. JPMorgan Chase makes available on its website, free of charge, annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as soon as reasonably practicable after it electronically files or furnishes such material to the U.S. Securities and Exchange Commission (the "SEC") at www.sec.gov. JPMorgan Chase makes new and important information about the Firm available on its website at <https://www.jpmorganchase.com>, including on the Investor Relations section of its website at <https://www.jpmorganchase.com/ir>. Information on the Firm's website is not incorporated by reference into this Form 10-Q or the Firm's other filings with the SEC.

EXECUTIVE OVERVIEW

This executive overview of the MD&A highlights selected information and does not contain all of the information that is important to readers of this Form 10-Q. For a complete description of the trends and uncertainties, as well as the risks and critical accounting estimates affecting the Firm, this Form 10-Q and the 2022 Form 10-K should be read together and in their entirety.

Financial performance of JPMorgan Chase

| (unaudited) As of or for the period ended, (in millions, except per share data and ratios) | Three months ended June 30, | | | Six months ended June 30, | | |
|--|-----------------------------|--------------|-----------|---------------------------|---------------|-----------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Selected income statement data | | | | | | |
| Noninterest revenue | \$ 19,528 | \$ 15,587 | 25% | \$ 37,166 | \$ 32,432 | 15% |
| Net interest income | 21,779 | 15,128 | 44 | 42,490 | 29,000 | 47 |
| Total net revenue | 41,307 | 30,715 | 34 | 79,656 | 61,432 | 30 |
| Total noninterest expense | 20,822 | 18,749 | 11 | 40,929 | 37,940 | 8 |
| Pre-provision profit | 20,485 | 11,966 | 71 | 38,727 | 23,492 | 65 |
| Provision for credit losses | 2,899 | 1,101 | 163 | 5,174 | 2,564 | 102 |
| Net income | 14,472 | 8,649 | 67 | 27,094 | 16,931 | 60 |
| Diluted earnings per share | 4.75 | 2.76 | 72 | 8.85 | 5.39 | 64 |
| Selected ratios and metrics | | | | | | |
| Return on common equity | 20 % | 13 % | | 19 % | 13 % | |
| Return on tangible common equity | 25 | 17 | | 24 | 16 | |
| Book value per share | \$ 98.11 | \$ 86.38 | 14 | \$ 98.11 | \$ 86.38 | 14 |
| Tangible book value per share | 79.90 | 69.53 | 15 | 79.90 | 69.53 | 15 |
| Capital ratios^(a) | | | | | | |
| CET1 capital | 13.8 % | 12.2 % | | 13.8 % | 12.2 % | |
| Tier 1 capital | 15.4 | 14.1 | | 15.4 | 14.1 | |
| Total capital | 17.3 | 15.7 | | 17.3 | 15.7 | |
| Memo: | | | | | | |
| NII excluding Markets ^(b) | \$ 22,370 | \$ 13,682 | 63 | \$ 43,306 | \$ 25,434 | 70 |
| NIR excluding Markets ^(b) | 13,013 | 10,158 | 28 | 23,031 | 21,243 | 8 |
| Markets ^(b) | 7,018 | 7,790 | (10) | 15,400 | 16,543 | (7) |
| Total net revenue - managed basis | \$ 42,401 | \$ 31,630 | 34 | \$ 81,737 | \$ 63,220 | 29 |

(a) The ratios reflect the CECL capital transition provisions. Refer to Capital Risk Management on pages 48-53 of this Form 10-Q and pages 86-96 of JPMorgan Chase's 2022 Form 10-K for additional information.

(b) NII and NIR refer to net interest income and noninterest revenue, respectively. Markets consists of CIB's Fixed Income Markets and Equity Markets businesses.

Comparisons noted in the sections below are for the second quarter of 2023 versus the second quarter of 2022, unless otherwise specified.

Firmwide overview

For the second quarter of 2023, JPMorgan Chase reported net income of \$14.5 billion, up 67%, earnings per share of \$4.75, ROE of 20% and ROTCE of 25%. The Firm's results for the second quarter of 2023 included an estimated bargain purchase gain of \$2.7 billion in Corporate and a net addition to the allowance for credit losses of \$1.2 billion associated with the First Republic acquisition. The Firm's results also included investment securities losses of \$900 million in Treasury and CIO.

- **Total net revenue** was \$41.3 billion, up 34%, reflecting:
 - Net interest income of \$21.8 billion, up 44%, driven by higher rates and, to a lesser extent, the impact of the First Republic acquisition, partially offset by lower Markets net interest income and lower average deposit

balances. Net interest income excluding Markets was \$22.4 billion, up 63%.

- Noninterest revenue was \$19.5 billion, up 25%, driven by the impact of the First Republic acquisition, higher Markets noninterest revenue and the absence of losses on equity investments in Payments in the prior year, partially offset by higher net investment securities losses in Treasury and CIO. The impact of the First Republic acquisition included a \$2.7 billion estimated bargain purchase gain in Corporate.
- Total Markets revenue declined reflecting lower Markets NII, largely offset by higher NIR.
- **Noninterest expense** was \$20.8 billion, up 11%, driven by higher compensation expense due to additional headcount and the impact of wage inflation, \$599 million expense associated with the First Republic acquisition, higher technology and marketing investments and higher legal expense.

- The **provision for credit losses** was \$2.9 billion, reflecting a \$1.5 billion net addition to the allowance for credit losses and \$1.4 billion of net charge-offs. The net addition to the allowance for credit losses included \$1.2 billion to establish the allowance for the First Republic loans and lending-related commitments. The net addition also reflected:

- \$233 million in **consumer** predominantly in Card Services, and
- \$79 million in **wholesale** reflecting \$389 million in CB, largely offset by a \$243 million reduction in Corporate.

Net charge-offs increased \$754 million, predominantly driven by CCB, primarily Card Services, as 30+ day delinquencies have returned to pre-pandemic levels.

The prior year included a \$428 million net addition to the allowance for credit losses and net charge-offs of \$657 million.

- The total **allowance for credit losses** was \$24.3 billion at June 30, 2023. The Firm had an allowance for loan losses to retained loans coverage ratio of 1.75%, compared with 1.69% in the prior year.
- The Firm's **nonperforming assets** totaled \$7.8 billion at June 30, 2023, relatively flat from the prior year, as lower consumer nonaccrual loans due to loan sales in the prior year were offset by higher wholesale nonaccrual loans, reflecting client-specific downgrades. Refer to Wholesale Credit Portfolio on pages 70-79 for additional information.
- Firmwide **average loans** of \$1.2 trillion were up 13%, driven by higher loans in CCB and CB, largely as a result of the First Republic acquisition.
- Firmwide **average deposits** of \$2.4 trillion were down 6%, driven by:
 - the continued migration into higher-yielding investments in AWM; declines in CIB and CB primarily due to continued deposit attrition, which for CIB included actions to reduce certain deposits; and a net decline in CCB primarily from existing accounts due to increased customer spending,
 partially offset by
 - the impact of the First Republic acquisition in CCB, and an increase in Corporate related to the Firm's international consumer initiatives.

Refer to Liquidity Risk Management on pages 54-61 for additional information.

Selected capital and other metrics

- **CET1 capital** was \$236 billion, and the Standardized and Advanced CET1 ratios were 13.8% and 13.9%, respectively.
- **SLR** was 5.8%.
- **TBVPS** grew 15%, ending the second quarter of 2023 at \$79.90.
- As of June 30, 2023, the Firm had eligible end-of-period **High Quality Liquid Assets** ("HQLA") of approximately \$792 billion and **unencumbered marketable securities** with a fair value of approximately \$620 billion, resulting in approximately \$1.4 trillion of liquidity sources. Refer to Liquidity Risk Management on pages 54-61 for additional information.

Refer to Consolidated Results of Operations and Consolidated Balance Sheets Analysis on pages 10-15 and pages 16-19, respectively, for a further discussion of the Firm's results; and Business Segment Results on page 24 and Note 28 for additional information on the First Republic acquisition.

Pre-provision profit, ROTCE, TCE, TBVPS, NII and NIR excluding Markets, and total net revenue on a managed basis are non-GAAP financial measures. Refer to Explanation and Reconciliation of the Firm's Use of Non-GAAP Financial Measures on pages 20-21 for a further discussion of each of these measures.

Business segment highlights

Selected business metrics for each of the Firm's four lines of business ("LOB") are presented below for the second quarter of 2023.

| | |
|----------------|---|
| CCB ROE 38% | <ul style="list-style-type: none"> Average deposits down 2%; client investment assets up 42% Average loans up 19% year-over-year ("YoY") and 15% quarter-over-quarter ("QoQ"); Card Services net charge-off rate of 2.41% Debit and credit card sales volume^(a) up 7% Active mobile customers^(b) up 10% |
| CIB ROE 15% | <ul style="list-style-type: none"> #1 ranking for Global Investment Banking fees with 8.4% wallet share year-to-date Total Markets revenue of \$7.0 billion, down 10%, with Fixed Income Markets down 3% and Equity Markets down 20% |
| CB ROE 16% | <ul style="list-style-type: none"> Gross Investment Banking and Markets revenue of \$767 million, down 3% Average loans up 23% YoY and 14% QoQ; average deposits down 8% |
| AWM ROE 29% | <ul style="list-style-type: none"> Assets under management ("AUM") of \$3.2 trillion, up 16% Average loans up 1% YoY and 4% QoQ; average deposits down 21% |

(a) Excludes Commercial Card.

(b) Users of all mobile platforms who have logged in within the past 90 days. As of June 30, 2023, excludes the impact of the First Republic acquisition.

Refer to the Business Segment Results on pages 22-46 for a detailed discussion of results by business segment.

Credit provided and capital raised

JPMorgan Chase continues to support consumers, businesses and communities around the globe. The Firm provided new and renewed credit and raised capital for wholesale and consumer clients during the first six months of 2023, consisting of:

| \$ 1.2 trillion | Total credit provided and capital raised (including loans and commitments) |
|-----------------|---|
| \$120 billion | Credit for consumers |
| \$17 billion | Credit for U.S. small businesses |
| \$520 billion | Credit for corporations |
| \$535 billion | Capital raised for corporate clients and non-U.S. government entities |
| \$24 billion | Credit and capital raised for nonprofit and U.S. government entities ^(a) |

(a) Includes states, municipalities, hospitals and universities.

Recent events

- **Basel III Finalization:** In July 2023, the Federal Reserve, the Office of the Comptroller of the Currency ("OCC") and the FDIC released a proposal to amend the risk-based capital framework, entitled "Regulatory capital rule: Amendments applicable to large banking organizations and to banking organizations with significant trading activity". Under the proposal, changes would include replacement of the advanced approach with an expanded risk-based approach, which would not permit the use of internal models for the calculation of risk-weighted assets, other than for Market risk. In addition, the stress capital buffer requirement would be applicable to both the expanded risk-based approach and the standardized approach. The proposal would significantly revise risk-based capital requirements for all banks with assets of \$100 billion or more, including the Firm and other U.S. global systemically important banks ("GSIBs"). The proposed effective date is July 1, 2025 with a three year transition period applicable to the expanded risk-based approach.
- **GSIB Surcharge:** In July 2023, the Federal Reserve also released a proposal to amend the calculation of the GSIB surcharge. If adopted as proposed, these amendments would require the Firm to assess its GSIB surcharge on an annual basis, using the average of the quarterly surcharge calculations throughout the calendar year, with daily averaging required for certain measures within the surcharge calculation. Surcharge increments would be reduced from 50bp to 10bp and there would also be other technical amendments to the Method 2 calculation. The proposed amendments would revise risk-based capital requirements for the Firm and other U.S. GSIBs, and would become effective on two calendar quarters after the adoption of the final rule.

Refer to Capital Risk Management on pages 48-53 for additional information.

Outlook

These current expectations are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements are based on the current beliefs and expectations of JPMorgan Chase's management, speak only as of the date of this Form 10-Q, and are subject to significant risks and uncertainties. Refer to Forward-Looking Statements on page 95 of this Form 10-Q; Part I, Item 1A, Risk Factors on pages 9-32 of the 2022 Form 10-K; and Part II, Item 1A, Risk Factors on page 209 of this Form 10-Q for a further discussion of certain of those risks and uncertainties and the other factors that could cause JPMorgan Chase's actual results to differ materially because of those risks and uncertainties. There is no assurance that actual results in 2023 will be in line with the outlook information set forth below, and the Firm does not undertake to update any forward-looking statements.

JPMorgan Chase's current outlook for full-year 2023 should be viewed against the backdrop of the global and U.S. economies, financial markets activity, the geopolitical environment, the competitive environment, client and customer activity levels, and regulatory and legislative developments in the U.S. and other countries where the Firm does business. Each of these factors will affect the performance of the Firm. The Firm will continue to make appropriate adjustments to its businesses and operations in response to ongoing developments in the business, economic, regulatory and legal environments in which it operates.

In May 2023, the FDIC issued a notice of proposed rulemaking recommending a special assessment related to the systemic risk determination made on March 12, 2023, to recover losses to the Deposit Insurance Fund ("DIF") arising from the protection of uninsured depositors resulting from recent bank resolutions. In its current form, the rule would impose a special assessment at an annual rate of 12.5 basis points on certain banks' estimated uninsured deposits reported as of December 31, 2022. If this rule is finalized as proposed, the Firm expects to recognize an estimated assessment expense of approximately \$3 billion (pre-tax) in the quarter in which the rule is finalized, which is expected to occur in the second half of 2023.

Full-year 2023

- Management expects both net interest income and net interest income excluding Markets to be approximately \$87 billion, market dependent.
- Management expects adjusted expense to be approximately \$84.5 billion, market dependent and excluding any FDIC special assessment.
- Management expects the net charge-off rate in Card Services to be approximately 2.6%.

Net interest income excluding Markets and adjusted expense are non-GAAP financial measures. Refer to Explanation and Reconciliation of the Firm's Use of Non-GAAP Financial Measures on pages 20-21.

Business Developments

First Republic acquisition

On May 1, 2023, JPMorgan Chase acquired certain assets and assumed certain liabilities of First Republic Bank (the "First Republic acquisition") from the Federal Deposit Insurance Corporation ("FDIC"), as receiver, for \$67.9 billion, resulting in an estimated bargain purchase gain of \$2.7 billion recorded in other income. In connection with the First Republic acquisition, the Firm issued a five-year, \$50 billion secured note to the FDIC (the "Purchase Money Note"), and entered into shared-loss agreements with the FDIC with respect to certain loans acquired and lending-related commitments assumed in the acquisition. Refer to Note 28 for additional information.

JPMorgan Chase's Consolidated Financial Statements as of and for the period ended June 30, 2023 reflect the impact of the First Republic acquisition. Where meaningful to the disclosure, the impact of the First Republic acquisition is disclosed in various sections of this Form 10-Q. The Firm continues to convert certain operations, and to integrate clients, products and services, associated with the First Republic acquisition, to align with the Firm's businesses and operations. The Firm also continues to evaluate to which segments certain clients, products and services associated with the First Republic acquisition, including deposits, should be allocated. Accordingly, reporting classifications and allocations may change in future periods, including across the Firm's segments.

Current market and economic conditions

Refer to Part I, Item 1A, Risk Factors on pages 9-32 of JPMorgan Chase's 2022 Form 10-K and Part II, Item 1A, Risk Factors on page 209 of this Form 10-Q for a discussion of material risk factors that could affect the Firm. These risk factors include potential impacts to the Firm associated with current market and economic conditions, including inflationary pressures, higher interest rates and geopolitical tensions (including secondary effects of the war in Ukraine), any or all of which could result in additional market disruption, government actions (including with respect to monetary policies), ongoing impacts to global supply chains, and other geopolitical risks.

Interbank Offered Rate ("IBOR") transition

The publication of the remaining principal tenors of U.S. dollar LIBOR (i.e., overnight, one-month, three-month, six-month and 12-month LIBOR) ceased on June 30, 2023 ("LIBOR Cessation"). The one-month, three-month and six-month tenors of U.S. dollar LIBOR will continue to be published on a "synthetic" basis, which will allow market participants to use such rates for certain legacy LIBOR-linked contracts through September 30, 2024.

In the second quarter of 2023, the Firm successfully converted predominantly all of its cleared derivatives contracts linked to U.S. dollar LIBOR to the Secured Overnight Financing Rate (SOFR) as part of initiatives by the principal central counterparties ("CCPs") to convert cleared derivatives prior to LIBOR Cessation. Nearly all of the Firm's other U.S. dollar LIBOR-linked products that remained outstanding at LIBOR Cessation will be remediated through contractual fallback provisions or through the framework provided by the Adjustable Interest Rate (LIBOR) Act ("LIBOR Act"). The Firm continues its client outreach activities with respect to the limited amount of contracts that continue to reference "synthetic" U.S. dollar LIBOR in order to complete remediation by September 30, 2024.

Refer to Business Developments on page 50 of JPMorgan Chase's 2022 Form 10-K for additional information.

CONSOLIDATED RESULTS OF OPERATIONS

This section provides a comparative discussion of JPMorgan Chase's Consolidated Results of Operations on a reported basis for the three and six months ended June 30, 2023 and 2022, unless otherwise specified. Factors that relate primarily to a single business segment are discussed in more detail within that business segment's results. Refer to pages 91-93 of this Form 10-Q and pages 149-152 of JPMorgan Chase's 2022 Form 10-K for a discussion of the Critical Accounting Estimates Used by the Firm that affect the Consolidated Results of Operations.

Revenue

| (in millions) | Three months ended June 30, | | | Six months ended June 30, | | |
|-----------------------------------|-----------------------------|------------------|-------------|---------------------------|------------------|-------------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Investment banking fees | \$ 1,513 | \$ 1,586 | (5)% | \$ 3,162 | \$ 3,594 | (12)% |
| Principal transactions | 6,910 | 4,990 | 38 | 14,525 | 10,095 | 44 |
| Lending- and deposit-related fees | 1,828 | 1,873 | (2) | 3,448 | 3,712 | (7) |
| Asset management fees | 3,774 | 3,517 | 7 | 7,239 | 7,169 | 1 |
| Commissions and other fees | 1,739 | 1,723 | 1 | 3,434 | 3,433 | – |
| Investment securities losses | (900) | (153) | (488) | (1,768) | (547) | (223) |
| Mortgage fees and related income | 278 | 378 | (26) | 499 | 838 | (40) |
| Card income | 1,094 | 1,133 | (3) | 2,328 | 2,108 | 10 |
| Other income ^{(a)(b)} | 3,292 | 540 | NM | 4,299 | 2,030 | 112 |
| Noninterest revenue | 19,528 | 15,587 | 25 | 37,166 | 32,432 | 15 |
| Net interest income | 21,779 | 15,128 | 44 | 42,490 | 29,000 | 47 |
| Total net revenue | \$ 41,307 | \$ 30,715 | 34 % | \$ 79,656 | \$ 61,432 | 30 % |

(a) Included operating lease income of \$716 million and \$945 million for the three months ended June 30, 2023 and 2022, respectively, and \$1.5 billion and \$2.0 billion for the six months ended June 30, 2023 and 2022, respectively, and an estimated bargain purchase gain of \$2.7 billion associated with the First Republic acquisition in Corporate for the three and six months ended June 30, 2023. Refer to Business Segment Results on page 24, and Notes 6 and 28 for additional information.

(b) Includes losses on tax-oriented investments. Refer to Note 6 for additional information.

Quarterly results

Investment banking fees decreased in CIB, reflecting:

- lower advisory fees due to a lower level of announced deals in prior periods amid a challenging environment, largely offset by
- higher equity underwriting fees primarily due to higher convertible securities offerings and, in the second half of the quarter, follow-on offerings that benefited from the lower equity market volatility.

Refer to CIB segment results on pages 30-36 and Note 6 for additional information.

Principal transactions revenue increased, reflecting:

- higher Equity Markets revenue in principal transactions, primarily in Prime Finance,
- higher Fixed Income Markets revenue in principal transactions, driven by Securitized Products and Fixed Income Financing, partially offset by lower revenue in Rates and Currencies & Emerging Markets,
 - the increase in Markets principal transactions revenue was more than offset by a decline in Markets NII, primarily due to higher funding costs
- the absence of \$337 million of markdowns in the prior year on held-for-sale positions, primarily unfunded commitments, in the bridge financing portfolio in CIB and CB,
- a gain of \$36 million in Credit Adjustments & Other in CIB, compared with a loss of \$218 million in the prior year, and

- higher revenue related to cash deployment transactions in Treasury and CIO, partially offset by

- net losses on certain legacy private equity investments in Corporate, compared with net gains in the prior year.

Principal transactions revenue in CIB generally has offsets across other revenue lines, including net interest income. The Firm assesses the performance of its Markets business on a total net revenue basis.

Refer to CIB, CB and Corporate segment results on pages 30-36, pages 37-40 and pages 45-46, respectively, and Note 6 for additional information.

Lending- and deposit-related fees decreased due to:

- lower cash management fees in CIB and CB associated with the higher level of credits earned by clients that reduce such fees,

largely offset by

- higher lending-related fees driven by the impact of the First Republic acquisition in AWM and CCB.

Refer to CIB, CB and AWM segment results on pages 30-36, pages 37-40 and pages 41-44, respectively, and Note 6 for additional information.

Asset management fees increased driven by:

- higher management fees on strong net inflows in AWM, and
- the impact of the First Republic acquisition in CCB.

Refer to CCB and AWM segment results on pages 25-29 and

pages 41-44, respectively, and Note 6 for additional information; and Business Segment Results on page 24 for additional information on the First Republic acquisition.

Investment securities losses reflected higher net losses on sales of U.S. Treasuries and U.S. GSE and government agency MBS, associated with repositioning the investment securities portfolio in Treasury and CIO. Refer to Corporate segment results on pages 45-46 and Note 10 for additional information.

Mortgage fees and related income decreased in Home Lending, reflecting lower production revenue due to a decline in volume, and lower net mortgage servicing revenue. Refer to CCB segment results on pages 25-29 and Notes 6 and 15 for additional information.

Card income decreased driven by:

- lower net interchange income as a result of an increase to the rewards liability due to adjustments to the terms of certain reward programs in CCB,

largely offset by

- higher payments-related revenue, reflecting growth in Commercial Card in CIB and CB.

Refer to CCB, CIB and CB segment results on pages 25-29, pages 30-36 and pages 37-40, respectively, Critical Accounting Estimates on pages 91-93, and Note 6 for additional information.

Other income increased, reflecting:

- the \$2.7 billion estimated bargain purchase gain associated with the First Republic acquisition in Corporate,
- the absence of losses on equity investments in Payments in the prior year, and
- the impact of net investment hedges in Treasury and CIO, partially offset by
- lower auto operating lease income in CCB due to a decline in volume, and
- the absence of a gain in the prior year on an equity-method investment received in partial satisfaction of a loan in CB.

Refer to Business Segment Results on page 24 and Note 28 for additional information on the First Republic acquisition; and Note 5 for additional information on net investment hedges.

Net interest income increased driven by higher rates and, to a lesser extent, the impact from the First Republic acquisition, partially offset by lower Markets net interest income and lower average deposit balances.

The Firm's average interest-earning assets were \$3.3 trillion, down \$42 billion, and the yield was 5.01%, up 279 basis points ("bps"). The net yield on these assets, on an FTE basis, was 2.62%, an increase of 82 bps. The net yield excluding Markets was 3.83%, up 157 bps.

Refer to the Consolidated average balance sheets, interest and rates schedule on page 198 for further information; and Business Segment Results on page 24 and Note 28 for

additional information on the First Republic acquisition.

Net yield excluding Markets is a non-GAAP financial measure. Refer to Explanation and Reconciliation of the Firm's Use of Non-GAAP Financial Measures on pages 20-21 for a further discussion of Net yield excluding Markets.

Year-to-date results

Investment banking fees decreased in CIB, reflecting:

- lower debt underwriting fees as challenging market conditions resulted in lower issuance activity in acquisition financing, and
- lower advisory fees due to a lower level of announced deals in prior periods amid a challenging environment, partially offset by
- higher equity underwriting fees primarily due to higher convertible securities offerings and, in the second half of the second quarter, follow-on offerings that benefited from the lower equity market volatility.

Principal transactions revenue increased, reflecting:

- higher Fixed Income Markets net revenue in principal transactions, driven by Securitized Products and Fixed Income Financing, partially offset by lower revenue in Currencies & Emerging Markets and Rates,
- higher Equity Markets revenue in principal transactions, primarily in Prime Finance,
 - the increase in Markets principal transactions revenue was more than offset by a decline in Markets NII, primarily due to higher funding costs
- losses of \$117 million in Credit Adjustments & Other in CIB, driven by losses on certain components of fair value option elected liabilities, compared with losses of \$742 million in the prior year, and
- higher revenue related to cash deployment transactions in Treasury and CIO.

Lending- and deposit-related fees decreased due to:

- lower cash management fees in CB and CIB associated with the higher level of credits earned by clients that reduce such fees,

partially offset by

- higher lending-related fees driven by the impact of the First Republic acquisition in AWM and CCB.

Asset management fees increased driven by the impact of the First Republic acquisition in CCB.

Asset management fees in AWM was relatively flat, as the decline in market levels was predominantly offset by the removal of most money market fund fee waivers and the impact of net inflows.

Commissions and other fees was relatively flat. Refer to CIB and AWM segment results on pages 30-36 and pages 41-44, respectively, and Note 6 for additional information.

Investment securities losses reflected higher net losses on sales of U.S. Treasuries and U.S. GSE and government agency MBS, associated with repositioning the investment securities portfolio in both periods in Treasury and CIO.

Mortgage fees and related income decreased driven by

Home Lending, reflecting lower production revenue due to a decline in volume, and lower net mortgage servicing revenue due to lower net gains in MSR risk management.

Card income increased driven by higher payments-related revenue, reflecting growth in Commercial Card in CIB and CB.

Net interchange income in CCB was relatively flat as the benefit in partner payments in the first quarter of 2023 related to a periodic tax refund on airline miles redeemed was offset by an increase to the rewards liability due to adjustments to the terms of certain reward programs.

Other income increased, reflecting:

- the \$2.7 billion estimated bargain purchase gain associated with the First Republic acquisition in Corporate,
- the impact of net investment hedges in Treasury and CIO, and
- a gain of \$339 million recognized in first quarter of 2023 in AWM on the original minority interest in CIFM upon the Firm's acquisition of the remaining 51% interest in the entity,

partially offset by

- lower auto operating lease income in CCB due to a decline in volume,
- the absence of proceeds in the prior year from an insurance settlement,
- the absence of a gain in the prior year on an equity-method investment received in partial satisfaction of a loan in CB, and
- lower net gains related to certain other Corporate investments.

Net interest income increased driven by higher rates and, to a lesser extent, higher revolving balances in Card Services and the impact from the First Republic acquisition, partially offset by lower Markets net interest income and lower average deposit balances.

The Firm's average interest-earning assets were \$3.3 trillion, down \$113 billion, and the yield was 4.85%, up 281 basis points ("bps"). The net yield on these assets, on an FTE basis, was 2.63%, an increase of 89 bps. The net yield excluding Markets was 3.82%, up 171 bps.

Provision for credit losses

| (in millions) | Three months ended June 30, | | | Six months ended June 30, | | |
|--|-----------------------------|-----------------|--------------|---------------------------|-----------------|--------------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Consumer, excluding credit card | \$ 555 | \$ 62 | NM | \$ 803 | \$ 235 | 242 % |
| Credit card | 1,324 | 730 | 81 % | 2,546 | 1,236 | 106 |
| Total consumer | 1,879 | 792 | 137 | 3,349 | 1,471 | 128 |
| Wholesale | 1,007 | 303 | 232 | 1,811 | 1,088 | 66 |
| Investment securities | 13 | 6 | 117 | 14 | 5 | 180 |
| Total provision for credit losses | \$ 2,899 | \$ 1,101 | 163 % | \$ 5,174 | \$ 2,564 | 102 % |

Quarterly results

The **provision for credit losses** was \$2.9 billion, reflecting a \$1.5 billion net addition to the allowance for credit losses and \$1.4 billion of net charge-offs.

The net addition to the allowance for credit losses included \$1.2 billion to establish the allowance for the First Republic loans and lending-related commitments, composed of \$763 million in **wholesale** and \$400 million in **consumer**.

The net addition also reflected:

- \$233 million in **consumer** predominantly in Card Services, and
- \$79 million in **wholesale** reflecting \$389 million in CB, largely offset by a \$243 million reduction in Corporate.

Net charge-offs increased \$754 million, predominantly driven by CCB, primarily Card Services, as 30+ day delinquencies have returned to pre-pandemic levels.

The prior year included a \$428 million net addition to the allowance for credit losses and net charge-offs of \$657 million.

Refer to CCB segment results on pages 25-29, CIB on pages 30-36, CB on pages 37-40, AWM on pages 41-44, Corporate on pages 45-46; Allowance for Credit Losses on pages 80-82; Notes 10 and 13 for additional information on the credit portfolio and the allowance for credit losses; and Business segment results on page 24 for additional information on the First Republic acquisition.

Year-to-date results

The **provision for credit losses** was \$5.2 billion, reflecting a \$2.6 billion net addition to the allowance for credit losses and \$2.5 billion of net charge-offs.

The net addition to the allowance for credit losses included \$1.5 billion, consisting of:

- \$800 million in **wholesale**, predominantly driven by net downgrade activity, updates to certain assumptions related to office real estate in CB in the second quarter of 2023, and the impact of the additional weight placed on the adverse scenarios in the first quarter of 2023, and
- \$649 million in **consumer**, predominantly driven by Card Services, reflecting loan growth, the net effect of changes in the Firm's macroeconomic outlook, including the impact from the weighted average U.S. unemployment rate peaking in the third quarter of 2024, and the additional weight placed on the adverse scenarios in the first quarter of 2023, partially offset by reduced borrower uncertainty.

The net addition also included \$1.2 billion to establish the allowance for the First Republic loans and lending-related commitments, in the second quarter of 2023.

Net charge-offs increased \$1.3 billion, predominantly driven by CCB, primarily Card Services, as 30+ day delinquencies have returned to pre-pandemic levels.

The prior year included a \$1.3 billion net addition to the allowance for credit losses and net charge-offs of \$1.2 billion.

Noninterest expense

| (in millions) | Three months ended June 30, | | | Six months ended June 30, | | |
|---|-----------------------------|------------------|-------------|---------------------------|------------------|------------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Compensation expense | \$ 11,216 | \$ 10,301 | 9 % | \$ 22,892 | \$ 21,088 | 9 % |
| Noncompensation expense: | | | | | | |
| Occupancy | 1,070 | 1,129 | (5) | 2,185 | 2,263 | (3) |
| Technology, communications and equipment ^(a) | 2,267 | 2,376 | (5) | 4,451 | 4,736 | (6) |
| Professional and outside services | 2,561 | 2,469 | 4 | 5,009 | 5,041 | (1) |
| Marketing | 1,122 | 881 | 27 | 2,167 | 1,801 | 20 |
| Other expense ^{(b)(c)} | 2,586 | 1,593 | 62 | 4,225 | 3,011 | 40 |
| Total noncompensation expense | 9,606 | 8,448 | 14 | 18,037 | 16,852 | 7 |
| Total noninterest expense | \$ 20,822 | \$ 18,749 | 11 % | \$ 40,929 | \$ 37,940 | 8 % |

(a) Includes depreciation expense associated with auto operating lease assets.

(b) Included Firmwide legal expense of \$420 million and \$73 million for the three months ended June 30, 2023 and 2022, respectively, and \$596 million and \$192 million for the six months ended June 30, 2023 and 2022, respectively; as well as FDIC-related expense of \$338 million and \$216 million for the three months ended June 30, 2023 and 2022, respectively, and \$655 million and \$414 million for the six months ended June 30, 2023 and 2022, respectively. Refer to Note 6 for additional information.

(c) Included expense associated with the First Republic acquisition of \$599 million for the three and six months ended June 30, 2023. Refer to Business Segment Results on page 24 for additional information.

Quarterly results

Compensation expense increased driven by:

- additional headcount, primarily in technology and front office, as well as the impact of wage inflation, and
- higher revenue-related compensation in AWM, partially offset by a decline in revenue-related compensation in CIB.

Noncompensation expense increased as a result of:

- \$599 million expense associated with the First Republic acquisition, substantially all of which is in Corporate,
- higher investments in the businesses, including marketing and technology,
- higher legal expense, largely in Corporate, and
- higher structural expense, including the impact of the increase in the FDIC assessment that was announced in October 2022,

partially offset by

- lower volume-related expense, reflecting lower depreciation expense on lower Auto lease assets.

Refer to Business Segment Results on page 24 for additional information on the First Republic acquisition.

Year-to-date results

Compensation expense increased driven by:

- additional headcount, primarily in technology and front office, as well as the impact of wage inflation, and
- higher revenue-related compensation in AWM, partially offset by a decline in revenue-related compensation in CIB.

Noncompensation expense increased as a result of:

- expense associated with the First Republic acquisition, substantially all of which is in Corporate,
- higher investments in the business, including marketing and technology,
- higher legal expense across the LOBs and Corporate, and
- higher structural expense, including the impact of the increase in the FDIC assessment that was announced in October 2022, and higher travel and entertainment expense,

partially offset by

- lower volume-related expense, reflecting lower depreciation expense on lower Auto lease assets.

Income tax expense

| (in millions) | Three months ended June 30, | | | Six months ended June 30, | | |
|----------------------------------|-----------------------------|-----------|--------|---------------------------|-----------|--------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Income before income tax expense | \$ 17,586 | \$ 10,865 | 62 % | \$ 33,553 | \$ 20,928 | 60 % |
| Income tax expense | 3,114 | 2,216 | 41 | 6,459 | 3,997 | 62 |
| Effective tax rate | 17.7 % | 20.4 % | | 19.3 % | 19.1 % | |

Quarterly results

The **effective tax rate** decreased, reflecting:

- the impact of the income tax expense associated with the First Republic acquisition that was reflected in the estimated bargain purchase gain, which resulted in a reduction in the Firm's effective tax rate of 3.4 percentage points,

partially offset by

- the higher level of pre-tax income and changes in the mix of income and expenses subject to U.S. federal and state and local taxes.

Year-to-date results

The **effective tax rate** was relatively flat, reflecting:

- the higher level of pre-tax income and changes in the mix of income and expenses subject to U.S. federal and state and local taxes, as well as the lower benefits related to vesting of employee stock based awards,

predominantly offset by

- the impact of the income tax expense associated with the First Republic acquisition that was reflected in the estimated bargain purchase gain, which resulted in a reduction in the Firm's effective tax rate.

CONSOLIDATED BALANCE SHEETS AND CASH FLOWS ANALYSIS

Consolidated balance sheets analysis

The following is a discussion of the significant changes between June 30, 2023, and December 31, 2022.

Selected Consolidated balance sheets data

| (in millions) | June 30, 2023 | December 31, 2022 | Change |
|---|---------------------|----------------------|------------|
| Assets | | | |
| Cash and due from banks | \$ 26,064 | \$ 27,697 | (6)% |
| Deposits with banks | 469,059 | 539,537 | (13) |
| Federal funds sold and securities purchased under resale agreements | 325,628 | 315,592 | 3 |
| Securities borrowed | 163,563 | 185,369 | (12) |
| Trading assets | 636,996 | 453,799 | 40 |
| Available-for-sale securities | 203,262 | 205,857 | (1) |
| Held-to-maturity securities | 408,941 | 425,305 | (4) |
| Investment securities, net of allowance for credit losses | 612,203 | 631,162 | (3) |
| Loans | 1,300,069 | 1,135,647 | 14 |
| Allowance for loan losses | (21,980) | (19,726) | (11) |
| Loans, net of allowance for loan losses | 1,278,089 | 1,115,921 | 15 |
| Accrued interest and accounts receivable | 111,561 | 125,189 | (11) |
| Premises and equipment | 29,493 | 27,734 | 6 |
| Goodwill, MSRs and other intangible assets | 64,238 | 60,859 | 6 |
| Other assets | 151,346 | 182,884 | (17) |
| Total assets | \$ 3,868,240 | \$ 3,665,743 | 6 % |

Cash and due from banks and deposits with banks

decreased primarily as a result of the First Republic acquisition, which included the impact of the repayment of deposits provided to First Republic Bank in March 2023 by the consortium of large U.S. banks and amounts paid to the FDIC, as well as CIB Markets activities. Deposits with banks reflect the Firm's placement of its excess cash with various central banks, including the Federal Reserve Banks.

Federal funds sold and securities purchased under resale agreements increased due to the impact of a lower level of netting on a reduced level of resale balances in Markets.

Securities borrowed decreased driven by Markets, reflecting lower client-driven activities and lower demand for securities to cover short positions.

Refer to Note 11 for additional information on securities purchased under resale agreements and securities borrowed.

Trading assets increased due to higher levels of debt and equity instruments in Markets, in response to demand from client-driven market-making activities, and when compared with the seasonally lower levels at year-end. Refer to Notes 2 and 5 for additional information.

Investment securities decreased due to:

- lower available-for-sale ("AFS") securities driven by paydowns, maturities and net sales, partially offset by \$25.8 billion of securities associated with the First Republic acquisition as well as the transfer of securities from held-to-maturity in the first quarter of 2023 ("HTM"), and
- lower HTM securities driven by paydowns, maturities and the transfer of securities to AFS.

Refer to Corporate segment results on pages 45-46,

Investment Portfolio Risk Management on page 83, and Notes 2 and 10 for additional information.

Loans increased, reflecting:

- \$150 billion of loans associated with the First Republic acquisition, primarily reflected in CCB, CB and AWM.

The increase also included:

- growth in new accounts and revolving balances which continued to normalize to pre-pandemic levels in Card Services, and
- higher revolver utilization and originations in CB, partially offset by
- lower securities-based lending in AWM.

The **allowance for loan losses** increased, reflecting:

- a net addition to the allowance for loan losses of \$1.8 billion, consisting of:
 - \$1.1 billion in **wholesale**, predominantly driven by net downgrade activity, updates to certain assumptions related to office real estate in CB in the second quarter of 2023, and the impact of the additional weight placed on the adverse scenarios in the first quarter of 2023, and
 - \$620 million in **consumer**, predominantly driven by Card Services, reflecting loan growth, the net effect of changes in the Firm's macroeconomic outlook, including the impact from the weighted average U.S. unemployment rate peaking in the third quarter of 2024, and the additional weight placed on the adverse scenarios in the first quarter of 2023, partially offset by reduced borrower uncertainty, and
- \$1.1 billion to establish the allowance for the First Republic loans in the second quarter of 2023.

The allowance for loan losses also reflected a reduction of \$587 million, on January 1, 2023, as a result of the adoption of the Financial Instruments - Credit Losses: Troubled Debt Restructurings accounting guidance. References in this Form 10-Q to "changes to the TDR accounting guidance" pertain to the Firm's adoption of this guidance.

There was also a \$196 million net reduction in the allowance for lending-related commitments recognized in other liabilities on the Consolidated balance sheets, which included a \$97 million addition to establish the allowance for the First Republic lending-related commitments.

Refer to Credit and Investment Risk Management on pages 62-83, and Notes 2, 3, 12 and 13 for additional information on loans and the total allowance for credit losses; and Business Segment Results on page 24 and Note 28 for additional information on the First Republic acquisition.

Selected Consolidated balance sheets data (continued)

| (in millions) | June 30, 2023 | December 31, 2022 | Change |
|---|---------------------|----------------------|------------|
| Liabilities | | | |
| Deposits | \$ 2,398,962 | \$ 2,340,179 | 3 % |
| Federal funds purchased and securities loaned or sold under repurchase agreements | 266,272 | 202,613 | 31 |
| Short-term borrowings | 41,022 | 44,027 | (7) |
| Trading liabilities | 178,809 | 177,976 | – |
| Accounts payable and other liabilities | 286,934 | 300,141 | (4) |
| Beneficial interests issued by consolidated variable interest entities ("VIEs") | 19,647 | 12,610 | 56 |
| Long-term debt | 364,078 | 295,865 | 23 |
| Total liabilities | 3,555,724 | 3,373,411 | 5 |
| Stockholders' equity | 312,516 | 292,332 | 7 |
| Total liabilities and stockholders' equity | \$ 3,868,240 | \$ 3,665,743 | 6 % |

Deposits increased, reflecting:

- increases in CIB due to deposit inflows related to client-driven activities and net issuances of structured notes as a result of client demand,
- \$68 billion of deposits in CCB associated with the First Republic acquisition, partially offset by a net decline primarily in existing accounts due to increased customer spending, and
- an increase in Corporate related to the Firm's international consumer initiatives,

partially offset by

- the continued migration into higher-yielding investments in AWM as a result of the rising interest rate environment, and
- ongoing attrition in CB driven by higher rates and seasonal outflows, predominantly offset by inflows as a result of disruptions in the market in the first quarter of 2023.

Federal funds purchased and securities loaned or sold under repurchase agreements increased due to higher secured financing of trading assets and the impact of a lower level of netting on client-driven market-making activities in Markets.

Accrued interest and accounts receivable decreased primarily due to lower client receivables related to client-driven activities in Markets.

Premises and equipment increased as a result of the First Republic acquisition, largely lease right-of-use assets, and the construction-in-process associated with the Firm's headquarters. Refer to Note 17 for information on leases.

Goodwill, MSRs and other intangible assets increased predominantly due to the other intangibles and goodwill related to the Firm's acquisition of the remaining 51% interest in CIFM, and the core deposit intangibles associated with the First Republic acquisition. Refer to Note 15 and 28 for additional information.

Other assets decreased reflecting lower cash collateral placed with central counterparties ("CCPs").

Short-term borrowings decreased predominantly as a result of lower financing requirements in Markets, partially offset by short-term FHLB advances associated with the First Republic acquisition in Treasury and CIO.

Refer to Liquidity Risk Management on pages 54-61 for additional information on deposits, federal funds purchased and securities loaned or sold under repurchase agreements, and short-term borrowings; Notes 2 and 16 for deposits and Note 11 for federal funds purchased and securities loaned or sold under repurchase agreements; Business Segment Results on page 24 and Note 28 for additional information on the First Republic acquisition.

Trading liabilities: refer to Notes 2 and 5 for additional information.

Accounts payable and other liabilities decreased primarily due to lower client payables related to client-driven activities in Markets.

Beneficial interests issued by consolidated VIEs increased driven by higher levels of Firm-administered multi-seller conduit commercial paper held by third parties, reflecting changes in the Firm's short-term liquidity management, and an increase in loans in the conduits in CIB. Refer to Liquidity Risk Management on pages 54-61 and Notes 14 and 24 for additional information, specifically Firm-sponsored VIEs and loan securitization trusts.

Long-term debt increased, reflecting the impact of the First Republic acquisition, which included the Purchase Money Note issued to the FDIC, and \$25 billion of FHLB advances, partially offset by maturities and redemptions in Treasury and CIO. Refer to Liquidity Risk Management on pages 54-61; and Note 28 for additional information on the First Republic acquisition.

Stockholders' equity: refer to Consolidated statements of changes in stockholders' equity on page 99, Capital Actions on page 52, and Note 21 for additional information.

Consolidated cash flows analysis

The following is a discussion of cash flow activities during the six months ended June 30, 2023 and 2022.

| (in millions) | Six months ended June 30, | |
|--|---------------------------|-------------|
| | 2023 | 2022 |
| Net cash provided by/(used in) | | |
| Operating activities | \$ (92,376) | \$ 24,101 |
| Investing activities | 5,551 | (125,811) |
| Financing activities | 14,642 | 48,970 |
| Effect of exchange rate changes on cash | 72 | (18,834) |
| Net increase/(decrease) in cash and due from banks and deposits with banks | \$ (72,111) | \$ (71,574) |

Operating activities

- In 2023, cash used resulted from higher trading assets and lower accounts payable, partially offset by lower other assets, securities borrowed and accrued interest and accounts receivable.
- In 2022, cash provided reflected higher accounts payable and other liabilities, trading liabilities, and net proceeds from loans held-for-sale, predominantly offset by higher trading assets and accrued interest and accounts receivable.

Investing activities

- In 2023, cash provided reflected net proceeds from investment securities, largely offset by higher net originations of loans, higher securities purchased under resale agreements, and net cash used in the First Republic acquisition.
- In 2022, cash used resulted from higher securities purchased under resale agreements, net originations of loans, and net purchases of investment securities.

Financing activities

- In 2023, cash provided reflected higher securities loaned or sold under repurchase agreements, largely offset by net activity in deposits, which included the impact of the repayment of the deposits provided to First Republic Bank by the consortium of large U.S. banks that the Firm assumed as part of the First Republic acquisition, as well as net payments on long- and short-term borrowings.
- In 2022, cash provided reflected higher securities loaned or sold under repurchase agreements and net proceeds from long- and short-term borrowings.
- For both periods, cash was used for repurchases of common stock and cash dividends on common and preferred stock.

* * *

Refer to Consolidated Balance Sheets Analysis on pages 16-19, Capital Risk Management on pages 48-53, and Liquidity Risk Management on pages 54-61, and the Consolidated Statements of Cash Flows on page 100 of this Form 10-Q, and pages 97-104 of JPMorgan Chase's 2022 Form 10-K for a further discussion of the activities affecting the Firm's cash flows.

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

The Firm prepares its Consolidated Financial Statements in accordance with U.S. GAAP and this presentation is referred to as “reported” basis; these financial statements appear on pages 96-100.

In addition to analyzing the Firm’s results on a reported basis, the Firm also reviews and uses certain non-GAAP financial measures at the Firmwide and segment level. These non-GAAP measures include:

- Firmwide “managed” basis results, including the overhead ratio, which include certain reclassifications to present total net revenue from investments that receive tax credits and tax-exempt securities on a basis comparable to taxable investments and securities (“FTE” basis);

- Pre-provision profit, which represents total net revenue less total noninterest expense;
- Net interest income, net yield, and noninterest revenue excluding Markets;
- TCE, ROTCE, and TBVPS;
- Adjusted expense, which represents noninterest expense excluding Firmwide legal expense; and
- Allowance for loan losses to period-end loans retained, excluding trade finance and conduits.

Refer to Explanation and Reconciliation of the Firm’s Use Of Non-GAAP Financial Measures and Key Performance Measures on pages 58-60 of JPMorgan Chase’s 2022 Form 10-K for a further discussion of management’s use of non-GAAP financial measures.

The following summary tables provide a reconciliation from the Firm’s reported U.S. GAAP results to managed basis.

| (in millions, except ratios) | Three months ended June 30, | | | | | |
|---|-----------------------------|---|------------------|-----------------|---|-----------------|
| | 2023 | | | 2022 | | |
| | Reported | Fully taxable-equivalent adjustments ^(a) | Managed basis | Reported | Fully taxable-equivalent adjustments ^(a) | Managed basis |
| Other income | \$ 3,292 | \$ 990 | \$ 4,282 | \$ 540 | \$ 812 | \$ 1,352 |
| Total noninterest revenue | 19,528 | 990 | 20,518 | 15,587 | 812 | 16,399 |
| Net interest income | 21,779 | 104 | 21,883 | 15,128 | 103 | 15,231 |
| Total net revenue | 41,307 | 1,094 | 42,401 | 30,715 | 915 | 31,630 |
| Total noninterest expense | 20,822 | NA | 20,822 | 18,749 | NA | 18,749 |
| Pre-provision profit | 20,485 | 1,094 | 21,579 | 11,966 | 915 | 12,881 |
| Provision for credit losses | 2,899 | NA | 2,899 | 1,101 | NA | 1,101 |
| Income before income tax expense | 17,586 | 1,094 | 18,680 | 10,865 | 915 | 11,780 |
| Income tax expense | 3,114 | 1,094 | 4,208 | 2,216 | 915 | 3,131 |
| Net income | \$ 14,472 | NA | \$ 14,472 | \$ 8,649 | NA | \$ 8,649 |
| Overhead ratio | 50 % | NM | 49 % | 61 % | NM | 59 % |

| (in millions, except ratios) | Six months ended June 30, | | | | | |
|---|---------------------------|---|------------------|------------------|---|------------------|
| | 2023 | | | 2022 | | |
| | Reported | Fully taxable-equivalent adjustments ^(a) | Managed basis | Reported | Fully taxable-equivalent adjustments ^(a) | Managed basis |
| Other income | \$ 4,299 | \$ 1,857 | \$ 6,156 | \$ 2,030 | \$ 1,587 | \$ 3,617 |
| Total noninterest revenue | 37,166 | 1,857 | 39,023 | 32,432 | 1,587 | 34,019 |
| Net interest income | 42,490 | 224 | 42,714 | 29,000 | 201 | 29,201 |
| Total net revenue | 79,656 | 2,081 | 81,737 | 61,432 | 1,788 | 63,220 |
| Total noninterest expense | 40,929 | NA | 40,929 | 37,940 | NA | 37,940 |
| Pre-provision profit | 38,727 | 2,081 | 40,808 | 23,492 | 1,788 | 25,280 |
| Provision for credit losses | 5,174 | NA | 5,174 | 2,564 | NA | 2,564 |
| Income before income tax expense | 33,553 | 2,081 | 35,634 | 20,928 | 1,788 | 22,716 |
| Income tax expense | 6,459 | 2,081 | 8,540 | 3,997 | 1,788 | 5,785 |
| Net Income | \$ 27,094 | NA | \$ 27,094 | \$ 16,931 | NA | \$ 16,931 |
| Overhead ratio | 51 % | NM | 50 % | 62 % | NM | 60 % |

(a) Predominantly recognized in CIB, CB and Corporate.

The following table provides information on net interest income, net yield, and noninterest revenue excluding Markets.

| (in millions, except rates) | Three months ended June 30, | | | Six months ended June 30, | | |
|---|-----------------------------|--------------|--------|---------------------------|--------------|--------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Net interest income - reported | \$ 21,779 | \$ 15,128 | 44 % | \$ 42,490 | \$ 29,000 | 47 % |
| Fully taxable-equivalent adjustments | 104 | 103 | 1 | 224 | 201 | 11 |
| Net interest income - managed basis^(a) | \$ 21,883 | \$ 15,231 | 44 | \$ 42,714 | \$ 29,201 | 46 |
| Less: Markets net interest income ^(b) | (487) | 1,549 | NM | (592) | 3,767 | NM |
| Net interest income excluding Markets^(a) | \$ 22,370 | \$ 13,682 | 63 | \$ 43,306 | \$ 25,434 | 70 |
| Average interest-earning assets | \$ 3,343,780 | \$ 3,385,894 | (1) | \$ 3,280,619 | \$ 3,393,879 | (3) |
| Less: Average Markets interest-earning assets ^(b) | 1,003,877 | 957,304 | 5 | 993,283 | 960,556 | 3 |
| Average interest-earning assets excluding Markets | \$ 2,339,903 | \$ 2,428,590 | (4)% | \$ 2,287,336 | \$ 2,433,323 | (6)% |
| Net yield on average interest-earning assets - managed basis | 2.62 % | 1.80 % | | 2.63 % | 1.74 % | |
| Net yield on average Markets interest-earning assets ^(b) | (0.19) | 0.65 | | (0.12) | 0.79 | |
| Net yield on average interest-earning assets excluding Markets | 3.83 % | 2.26 % | | 3.82 % | 2.11 % | |
| Noninterest revenue - reported | \$ 19,528 | \$ 15,587 | 25 % | \$ 37,166 | \$ 32,432 | 15 % |
| Fully taxable-equivalent adjustments | 990 | 812 | 22 | 1,857 | 1,587 | 17 |
| Noninterest revenue - managed basis | \$ 20,518 | \$ 16,399 | 25 | \$ 39,023 | \$ 34,019 | 15 |
| Less: Markets noninterest revenue ^(b) | 7,505 | 6,241 | 20 | 15,992 | 12,776 | 25 |
| Noninterest revenue excluding Markets | \$ 13,013 | \$ 10,158 | 28 | \$ 23,031 | \$ 21,243 | 8 |
| Memo: Total Markets net revenue^(b) | \$ 7,018 | \$ 7,790 | (10) | \$ 15,400 | \$ 16,543 | (7) |

(a) Interest includes the effect of related hedges. Taxable-equivalent amounts are used where applicable.

(b) Refer to page 35 for further information on Markets.

The following summary table provides a reconciliation from the Firm's common stockholders' equity to TCE.

| (in millions, except per share and ratio data) | Period-end | | Average | | | |
|--|-----------------|-----------------|-----------------------------|------------|---------------------------|------------|
| | Jun 30, 2023 | Dec 31, 2022 | Three months ended June 30, | | Six months ended June 30, | |
| | | | 2023 | 2022 | 2023 | 2022 |
| Common stockholders' equity | \$ 285,112 | \$ 264,928 | \$ 277,885 | \$ 247,986 | \$ 274,560 | \$ 250,234 |
| Less: Goodwill | 52,380 | 51,662 | 52,342 | 50,575 | 52,031 | 50,442 |
| Less: Other intangible assets | 3,629 | 1,224 | 2,191 | 1,119 | 1,746 | 1,007 |
| Add: Certain deferred tax liabilities ^(a) | 3,097 | 2,510 | 2,902 | 2,503 | 2,727 | 2,500 |
| Tangible common equity | \$ 232,200 | \$ 214,552 | \$ 226,254 | \$ 198,795 | \$ 223,510 | \$ 201,285 |
| Return on tangible common equity | NA | NA | 25 % | 17 % | 24 % | 16 % |
| Tangible book value per share | \$ 79.90 | \$ 73.12 | NA | NA | NA | NA |

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

BUSINESS SEGMENT RESULTS

The Firm is managed on an LOB basis. There are four major reportable business segments – Consumer & Community Banking, Corporate & Investment Bank, Commercial Banking and Asset & Wealth Management. In addition, there is a Corporate 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 the Firm’s Operating Committee. Segment results are presented on a managed basis. Refer to Explanation and Reconciliation of the Firm’s use of Non-GAAP Financial Measures on pages 20-21 for a definition of managed basis.

Description of business segment reporting methodology

Results of the business segments are intended to present each segment as if it were a stand-alone business. The management reporting process that derives business segment results includes the allocation of certain income and expense items. The Firm periodically assesses the assumptions, methodologies and reporting classifications used for segment reporting, and further refinements may be implemented in future periods. The Firm also assesses the level of capital required for each LOB on at least an annual basis. The Firm’s LOBs also provide various business metrics which are utilized by the Firm and its investors and analysts in assessing performance.

Revenue sharing

When business segments join efforts to sell products and services to the Firm’s clients and customers, the participating business segments may agree to share revenue from those transactions. Revenue is generally recognized in the segment responsible for the related product or service, with allocations to the other segment(s) involved in the transaction. The segment results reflect these revenue-sharing agreements.

Funds transfer pricing

Funds transfer pricing (“FTP”) is the process by which the Firm allocates interest income and expense to the LOBs and Other Corporate and transfers the primary interest rate risk and liquidity risk to Treasury and CIO.

The funds transfer pricing process considers the interest rate risk and liquidity risk characteristics of assets and liabilities and off-balance sheet products. Periodically the methodology and assumptions utilized in the FTP process are adjusted to reflect economic conditions and other factors, which may impact the allocation of net interest income to the segments.

Foreign exchange risk

Foreign exchange risk is transferred from the LOBs and Other Corporate to Treasury and CIO for certain revenues and expenses. Treasury and CIO manages these risks centrally and reports the impact of foreign exchange rate movements related to the transferred risk in its results. Refer to Market Risk Management on pages 84-89 for additional information.

Capital allocation

The amount of capital assigned to each business segment is referred to as equity. At least annually, the assumptions, judgments and methodologies used to allocate capital are reassessed and, as a result, the capital allocated to the LOBs may change. As of June 30, 2023, the Firm updated its line of business capital allocations to reflect the impact of the First Republic acquisition. Refer to Line of business equity on page 51, and page 93 of JPMorgan Chase’s 2022 Form 10-K for additional information on capital allocation.

Refer to Business Segment Results – Description of business segment reporting methodology on pages 61-62 and Note 32 of JPMorgan Chase’s 2022 Form 10-K for a further discussion of those methodologies.

Segment results - managed basis

The following tables summarize the Firm's results by segment for the periods indicated.

| Three months ended June 30, (in millions, except ratios) | Consumer & Community Banking | | | Corporate & Investment Bank | | | Commercial Banking | | |
|---|------------------------------|-----------|----------|-----------------------------|-----------|--------|--------------------|----------|--------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Total net revenue | \$ 17,233 | \$ 12,558 | (a) 37 % | \$ 12,519 | \$ 12,003 | (a) 4% | \$ 3,988 | \$ 2,683 | 49 % |
| Total noninterest expense | 8,313 | 7,658 | (a) 9 | 6,894 | 6,810 | (a) 1 | 1,300 | 1,156 | 12 |
| Pre-provision profit/(loss) | 8,920 | 4,900 | 82 | 5,625 | 5,193 | 8 | 2,688 | 1,527 | 76 |
| Provision for credit losses | 1,862 | 761 | 145 | 38 | 59 | (36) | 1,097 | 209 | 425 |
| Net income/(loss) | 5,306 | 3,108 | (a) 71 | 4,092 | 3,717 | (a) 10 | 1,208 | 994 | 22 |
| Return on equity ("ROE") | 38 % | 24 % | | 15 % | 14 % | | 16 % | 15 % | |

| Three months ended June 30, (in millions, except ratios) | Asset & Wealth Management | | | Corporate | | | Total | | |
|---|---------------------------|----------|--------|-----------|-------|--------|-----------|-----------|--------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Total net revenue | \$ 4,943 | \$ 4,306 | 15 % | \$ 3,718 | \$ 80 | NM | \$ 42,401 | \$ 31,630 | 34 % |
| Total noninterest expense | 3,163 | 2,919 | 8 | 1,152 | 206 | 459 | 20,822 | 18,749 | 11 |
| Pre-provision profit/(loss) | 1,780 | 1,387 | 28 | 2,566 | (126) | NM | 21,579 | 12,881 | 68 |
| Provision for credit losses | 145 | 44 | 230 | (243) | 28 | NM | 2,899 | 1,101 | 163 |
| Net income/(loss) | 1,226 | 1,004 | 22 | 2,640 | (174) | NM | 14,472 | 8,649 | 67 |
| ROE | 29 % | 23 % | | NM | NM | | 20 % | 13 % | |

| Six months ended June 30, (in millions, except ratios) | Consumer & Community Banking | | | Corporate & Investment Bank | | | Commercial Banking | | |
|---|------------------------------|-----------|----------|-----------------------------|-----------|--------|--------------------|----------|--------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Total net revenue | \$ 33,689 | \$ 24,740 | (a) 36 % | \$ 26,119 | \$ 25,579 | (a) 2% | \$ 7,499 | \$ 5,081 | 48 % |
| Total noninterest expense | 16,378 | 15,313 | (a) 7 | 14,377 | 14,173 | (a) 1 | 2,608 | 2,285 | 14 |
| Pre-provision profit/(loss) | 17,311 | 9,427 | 84 | 11,742 | 11,406 | 3 | 4,891 | 2,796 | 75 |
| Provision for credit losses | 3,264 | 1,439 | 127 | 96 | 504 | (81) | 1,514 | 366 | 314 |
| Net income/(loss) | 10,549 | 6,016 | (a) 75 | 8,513 | 8,089 | (a) 5 | 2,555 | 1,844 | 39 |
| ROE | 39 % | 23 % | | 15 % | 15 % | | 17 % | 14 % | |

| Six months ended June 30, (in millions, except ratios) | Asset & Wealth Management | | | Corporate | | | Total | | |
|---|---------------------------|----------|--------|-----------|----------|--------|-----------|-----------|--------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Total net revenue | \$ 9,727 | \$ 8,621 | 13 % | \$ 4,703 | \$ (801) | NM | \$ 81,737 | \$ 63,220 | 29 % |
| Total noninterest expense | 6,254 | 5,779 | 8 | 1,312 | 390 | 236 | 40,929 | 37,940 | 8 |
| Pre-provision profit/(loss) | 3,473 | 2,842 | 22 | 3,391 | (1,191) | NM | 40,808 | 25,280 | 61 |
| Provision for credit losses | 173 | 198 | (13) | 127 | 57 | 123 | 5,174 | 2,564 | 102 |
| Net income/(loss) | 2,593 | 2,012 | 29 | 2,884 | (1,030) | NM | 27,094 | 16,931 | 60 |
| ROE | 31 % | 23 % | | NM | NM | | 19 % | 13 % | |

(a) In the first quarter of 2023, the allocations of revenue and expense to CCB associated with a Merchant Services revenue sharing agreement were discontinued and are now retained in Payments in CIB. Prior-period amounts have been revised to conform with the current presentation.

The following sections provide a comparative discussion of the Firm's results by segment as of or for the three and six months ended June 30, 2023 versus the corresponding period in the prior year, unless otherwise specified.

Selected Firmwide Metrics

The following tables present key metrics for Wealth Management, which consists of the Global Private Bank in AWM and J.P. Morgan Wealth Management in CCB; and total revenue and key metrics for J.P. Morgan Payments, which consists of payments activities in CIB and CB. This presentation is intended to provide investors with additional information concerning Wealth Management and J.P. Morgan Payments, each of which consists of similar business activities conducted across LOBs to serve different types of clients and customers.

Selected metrics - Wealth Management

| | June 30, 2023 | June 30, 2022 |
|--|-------------------------|------------------|
| Client assets (in billions) ^(a) | \$ 2,862 ^(b) | \$ 2,177 |
| Number of client advisors | 8,367 | 7,756 |

(a) Consists of Global Private Bank in AWM and client investment assets in J.P. Morgan Wealth Management in CCB.

(b) As of June 30, 2023, included \$150.9 billion of client investment assets associated with the First Republic acquisition.

Selected metrics - J.P. Morgan Payments

| (in millions, except where otherwise noted) | Three months ended June 30, | | Six months ended June 30, | |
|---|-----------------------------|----------|---------------------------|----------|
| | 2023 | 2022 | 2023 | 2022 |
| Total net revenue ^(a) | \$ 4,729 | \$ 3,130 | \$ 9,187 | \$ 5,725 |
| Merchant processing volume (in billions) | 600.1 | 539.6 | 1,158.9 | 1,029.8 |
| Average deposits (in billions) | 720 | 816 | 714 | 819 |

(a) Excludes the net impact of equity investments.

Segment information related to the First Republic acquisition

The following table presents selected impacts to CCB, AWM and Corporate associated with the First Republic acquisition.

| (in millions) | As of or for the three and six months ended June 30, 2023 | | | | |
|---|--|-----------------------|------------------------------|----------------------|---------------------------|
| | Consumer & Community Banking | Commercial Banking | Asset & Wealth Management | Corporate | Total |
| Selected Income Statement Data | | | | | |
| Revenue | | | | | |
| Asset management fees | \$ 107 | \$ — | \$ — | \$ — | \$ 107 |
| All other income | 105 | — | 174 | 2,762 ^(a) | 3,041 |
| Noninterest revenue | 212 | — | 174 | 2,762 | 3,148 |
| Net interest income | 619 | 178 | 129 | (29) | 897 |
| Total net revenue | 831 | 178 | 303 | 2,733 | 4,045 |
| Provision for credit losses | 408 | 608 | 146 | — | 1,162 |
| Noninterest expense | 37 | — | — | 562 | 599 |
| Net income | 293 | (327) | 119 | 2,301 | 2,386 |
| Selected Balance Sheet Data (period-end) | | | | | |
| Loans | \$ 94,721 | \$ 39,500 | \$ 13,696 | \$ — | \$ 147,917 ^(b) |
| Deposits | 68,351 | — | — | — | 68,351 |

(a) Reflects the estimated bargain purchase gain of \$2.7 billion recorded in other income. Refer to Note 28 for additional information.

(b) Excluded \$1.9 billion of loans transferred to the CIB.

The following sections provide a comparative discussion of the Firm's results by segment as of or for the three and six months ended June 30, 2023 and 2022.

CONSUMER & COMMUNITY BANKING

Refer to pages 63-66 of JPMorgan Chase's 2022 Form 10-K and Line of Business Metrics on page 206 for a further discussion of the business profile of CCB.

Selected income statement data

| (in millions, except ratios) | Three months ended June 30, | | | Six months ended June 30, | | |
|--|-----------------------------|-------------------------|--------------|---------------------------|--------------------------|--------------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Revenue | | | | | | |
| Lending- and deposit-related fees | \$ 841 | \$ 855 | (2)% | \$ 1,664 | \$ 1,660 | – % |
| Asset management fees | 816 ^(d) | 684 | 19 | 1,492 ^(d) | 1,410 | 6 |
| Mortgage fees and related income | 274 | 377 | (27) | 497 | 833 | (40) |
| Card income | 483 | 621 ^(f) | (22) | 1,222 | 1,162 ^(f) | 5 |
| All other income ^(a) | 1,129 ^(d) | 1,313 ^(f) | (14) | 2,291 ^(d) | 2,640 ^(f) | (13) |
| Noninterest revenue | 3,543 | 3,850 | (8) | 7,166 | 7,705 | (7) |
| Net interest income | 13,690 ^(d) | 8,708 | 57 | 26,523 ^(d) | 17,035 | 56 |
| Total net revenue | 17,233 | 12,558 | 37 | 33,689 | 24,740 | 36 |
| Provision for credit losses | 1,862 ^(d) | 761 | 145 | 3,264 ^(d) | 1,439 | 127 |
| Noninterest expense | | | | | | |
| Compensation expense | 3,628 | 3,237 | 12 | 7,173 | 6,408 | 12 |
| Noncompensation expense ^(b) | 4,685 ^(d) | 4,421 ^(f) | 6 | 9,205 ^(d) | 8,905 ^(f) | 3 |
| Total noninterest expense | 8,313 | 7,658 | 9 | 16,378 | 15,313 | 7 |
| Income before income tax expense | 7,058 | 4,139 | 71 | 14,047 | 7,988 | 76 |
| Income tax expense | 1,752 | 1,031 ^(f) | 70 | 3,498 | 1,972 ^(f) | 77 |
| Net income | \$ 5,306 | \$ 3,108 | 71 | \$ 10,549 | \$ 6,016 | 75 |
| Revenue by line of business | | | | | | |
| Banking & Wealth Management | \$10,936 ^(e) | \$ 6,502 ^(f) | 68 | \$ 20,977 ^(e) | \$ 12,517 ^(f) | 68 |
| Home Lending | 1,007 ^(e) | 1,001 | 1 | 1,727 ^(e) | 2,170 | (20) |
| Card Services & Auto | 5,290 | 5,055 | 5 | 10,985 | 10,053 | 9 |
| Mortgage fees and related income details: | | | | | | |
| Production revenue | 102 | 150 | (32) | 177 | 361 | (51) |
| Net mortgage servicing revenue ^(c) | 172 | 227 | (24) | 320 | 472 | (32) |
| Mortgage fees and related income | \$ 274 | \$ 377 | (27)% | \$ 497 | \$ 833 | (40)% |
| Financial ratios | | | | | | |
| Return on equity | 38 % | 24 % | | 39 % | 23 % | |
| Overhead ratio | 48 | 61 | | 49 | 62 | |

(a) Primarily includes operating lease income and commissions and other fees. For the three months ended June 30, 2023 and 2022, operating lease income was \$704 million and \$929 million, respectively, and \$1.4 billion and \$2.0 billion for the six months ended June 30, 2023 and 2022, respectively.

(b) Included depreciation expense on leased assets of \$445 million and \$652 million for the three months ended June 30, 2023 and 2022, respectively, and \$852 million and \$1.3 billion for the six months ended June 30, 2023 and 2022, respectively.

(c) Included MSR risk management results of \$25 million and \$28 million for the three months ended June 30, 2023 and 2022, respectively, and \$13 million and \$137 million for the six months ended June 30, 2023 and 2022, respectively.

(d) Includes the impact of the First Republic acquisition. Refer to page 24 for additional information.

(e) For the three and six months ended June 30, 2023, included \$596 million and \$235 million for Banking & Wealth Management and Home Lending, respectively, associated with the First Republic acquisition.

(f) In the first quarter of 2023, the allocations of revenue and expense to CCB associated with a Merchant Services revenue sharing agreement were discontinued and are now retained in Payments in CIB. Prior-period amounts have been revised to conform with the current presentation.

Quarterly results

Net income was \$5.3 billion, up 71%.

Net revenue was \$17.2 billion, an increase of 37%.

Net interest income was \$13.7 billion, up 57%, driven by:

- deposit margin expansion on higher rates in Banking & Wealth Management ("BWM"), and
- higher NII in Card Services driven by increased revolving balances.

Noninterest revenue was \$3.5 billion, down 8%, driven by:

- lower auto operating lease income as a result of a decline in volume, and
- a decrease in card income driven by lower net interchange, as a result of an increase to the rewards liability due to adjustments to certain reward program terms,

partially offset by

- higher asset management fees in BWM predominantly driven by the impact of the First Republic acquisition.

Refer to Note 6 for additional information on card income, asset management fees, and commissions and other fees; and Critical Accounting Estimates on pages 91-93 for card income.

Refer to Note 15 for further information regarding changes in the value of the MSR asset and related hedges, and mortgage fees and related income.

Noninterest expense was \$8.3 billion, up 9%, driven by:

- higher compensation expense, including wage inflation and headcount growth, as well as higher marketing and technology,

partially offset by

- lower auto lease depreciation on lower auto lease assets.

The provision for credit losses was \$1.9 billion, and included:

- net charge-offs of \$1.3 billion, up \$640 million, predominantly driven by Card Services, as 30+ day delinquencies have returned to pre-pandemic levels, and
- a \$611 million net addition to the allowance for credit losses, reflecting \$408 million to establish the allowance for the First Republic loans and lending-related commitments. The net addition also included \$203 million driven by Card Services, reflecting loan growth, and the net effect of changes in the Firm's macroeconomic outlook, including the impact from the weighted average U.S. unemployment rate peaking in the third quarter of 2024, largely offset by reduced borrower uncertainty.

The prior year included a \$150 million addition to the allowance for credit losses in Card Services.

Refer to Credit and Investment Risk Management on pages 62-83 and Allowance for Credit Losses on pages 80-82 for a further discussion of the credit portfolios and the allowance for credit losses.

Year-to-date results

Net income was \$10.5 billion, up 75%.

Net revenue was \$33.7 billion, an increase of 36%.

Net interest income was \$26.5 billion, up 56%, driven by:

- deposit margin expansion on higher rates, partially offset by lower average deposits in BWM, and
- higher NII in Card Services driven by increased revolving balances,

partially offset by

- the impact of lower PPP loan forgiveness in BWM.

Noninterest revenue was \$7.2 billion, down 7%, driven by:

- lower auto operating lease income as a result of a decline in volume and
- in Home Lending, lower production revenue from a decline in volume and lower net mortgage servicing revenue predominantly driven by lower net gains on MSR risk management,

partially offset by

- higher travel-related commissions in Card Services,
- higher asset management fees in BWM driven by the impact of the First Republic acquisition.

Card income was relatively flat as the increase in net interchange in the first quarter of 2023 due to a reduction in rewards costs and partner payments related to a periodic tax refund on airline miles redeemed was offset by an increase to the rewards liability due to adjustments to certain reward program terms in the second quarter of 2023.

Noninterest expense was \$16.4 billion, up 7%, driven by:

- higher compensation expense, including wage inflation and headcount growth, as well as higher marketing and technology,

partially offset by

- lower auto lease depreciation on lower auto lease assets.

The provision for credit losses was \$3.3 billion, and included:

- net charge-offs of \$2.3 billion, up \$1.1 billion, predominantly driven by Card Services, as 30+ day delinquencies have returned to pre-pandemic levels, and
- a \$553 million net addition, predominantly driven by Card Services, reflecting loan growth, the net effect of changes in the Firm's macroeconomic outlook, including the impact from the weighted average U.S. unemployment rate peaking in the third quarter of 2024, and the additional weight placed on the adverse scenarios in the first quarter of 2023, partially offset by reduced borrower uncertainty, and
- a \$408 million net addition to the allowance for credit losses to establish the allowance for the First Republic loans and lending-related commitments, in the second quarter of 2023.

The prior year included a \$275 million addition to the allowance for credit losses in Card Services and Home Lending.

Selected metrics

| (in millions, except headcount) | As of or for the three months ended June 30, | | | As of or for the six months ended June 30, | | |
|---|--|----------------|------------|--|----------------|------------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Selected balance sheet data (period-end) | | | | | | |
| Total assets | \$ 620,193 | \$ 500,219 | 24 % | \$ 620,193 | \$ 500,219 | 24 % |
| Loans: | | | | | | |
| Banking & Wealth Management ^(a) | 30,959 ^(d) | 31,494 | (2) | 30,959 ^(d) | 31,494 | (2) |
| Home Lending ^(b) | 262,432 ^(d) | 176,939 | 48 | 262,432 ^(d) | 176,939 | 48 |
| Card Services | 191,353 | 165,494 | 16 | 191,353 | 165,494 | 16 |
| Auto | 73,587 | 67,842 | 8 | 73,587 | 67,842 | 8 |
| Total loans | 558,331 | 441,769 | 26 | 558,331 | 441,769 | 26 |
| Deposits | 1,173,514 ^(e) | 1,178,825 | – | 1,173,514 ^(e) | 1,178,825 | – |
| Equity | 55,500 | 50,000 | 11 | 55,500 | 50,000 | 11 |
| Selected balance sheet data (average) | | | | | | |
| Total assets | \$ 576,417 | \$ 496,177 | 16 | \$ 541,788 | \$ 492,592 | 10 |
| Loans: | | | | | | |
| Banking & Wealth Management | 30,628 ^(f) | 32,294 | (5) | 29,572 ^(f) | 33,014 | (10) |
| Home Lending ^(c) | 229,569 ^(f) | 177,330 | 29 | 201,005 ^(f) | 176,911 | 14 |
| Card Services | 187,028 | 158,434 | 18 | 183,758 | 153,941 | 19 |
| Auto | 71,083 | 68,569 | 4 | 69,920 | 68,908 | 1 |
| Total loans | 518,308 | 436,627 | 19 | 484,255 | 432,774 | 12 |
| Deposits | 1,157,309 ^(g) | 1,180,453 | (2) | 1,135,261 ^(g) | 1,167,057 | (3) |
| Equity | 54,346 | 50,000 | 9 | 53,180 | 50,000 | 6 |
| Headcount | 137,087 | 130,907 | 5 % | 137,087 | 130,907 | 5 % |

(a) At June 30, 2023 and 2022, included \$163 million and \$1.5 billion of loans, respectively, in Business Banking under the PPP. Refer to Credit Portfolio on pages 108-109 of JPMorgan Chase's 2022 Form 10-K for a further discussion of the PPP.

(b) At June 30, 2023 and 2022, Home Lending loans held-for-sale and loans at fair value were \$3.9 billion and \$5.2 billion, respectively.

(c) Average Home Lending loans held-for sale and loans at fair value were \$5.3 billion and \$8.1 billion for the three months ended June 30, 2023 and 2022, respectively, and \$4.4 billion and \$9.5 billion for the six months ended June 30, 2023 and 2022, respectively.

(d) As of June 30, 2023, included \$3.4 billion and \$91.3 billion for Banking & Wealth Management and Home Lending, respectively, associated with the First Republic acquisition.

(e) Includes the impact of the First Republic acquisition. Refer to page 24 for additional information.

(f) For the three months ended June 30, 2023, included \$2.7 billion and \$57.2 billion for Banking & Wealth Management and Home Lending, respectively, and for the six months ended June 30, 2023, included \$1.4 billion and \$28.7 billion for Banking & Wealth Management and Home Lending, respectively, associated with the First Republic acquisition.

(g) For the three and six months ended June 30, 2023, included \$47.2 billion and \$23.7 billion, respectively, associated with the First Republic acquisition.

Selected metrics

| (in millions, except ratio data) | As of or for the three months ended June 30, | | | As of or for the six months ended June 30, | | |
|---|--|------------------|-------------|--|------------------|-------------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Credit data and quality statistics | | | | | | |
| Nonaccrual loans ^{(a)(b)} | \$ 3,823 | \$ 4,217 | (9)% | \$ 3,823 | \$ 4,217 | (9)% |
| Net charge-offs/(recoveries) | | | | | | |
| Banking & Wealth Management | 92 | 81 | 14 | 171 | 170 | 1 |
| Home Lending | (28) | (68) | 59 | (46) | (137) | 66 |
| Card Services | 1,124 | 580 | 94 | 2,046 | 1,086 | 88 |
| Auto | 63 | 18 | 250 | 132 | 45 | 193 |
| Total net charge-offs/(recoveries) | \$ 1,251 | \$ 611 | 105 | \$ 2,303 | \$ 1,164 | 98 |
| Net charge-off/(recovery) rate | | | | | | |
| Banking & Wealth Management ^(c) | 1.20 % | 1.01 % | | 1.17 % | 1.04 % | |
| Home Lending | (0.05) | (0.16) | | (0.05) | (0.16) | |
| Card Services | 2.41 | 1.47 | | 2.25 | 1.42 | |
| Auto | 0.36 | 0.11 | | 0.38 | 0.13 | |
| Total net charge-off/(recovery) rate | 0.98 % | 0.57 % | | 0.97 % | 0.55 % | |
| 30+ day delinquency rate | | | | | | |
| Home Lending ^{(d)(e)} | 0.58 % | 0.85 % | | 0.58 % | 0.85 % | |
| Card Services | 1.70 | 1.05 | | 1.70 | 1.05 | |
| Auto | 0.92 | 0.69 | | 0.92 | 0.69 | |
| 90+ day delinquency rate - Card Services | | | | | | |
| | 0.84 % | 0.51 % | | 0.84 % | 0.51 % | |
| Allowance for loan losses | | | | | | |
| Banking & Wealth Management | \$ 731 | \$ 697 | 5 | \$ 731 | \$ 697 | 5 |
| Home Lending | 777 ^(f) | 785 | (1) | 777 ^(f) | 785 | (1) |
| Card Services | 11,600 | 10,400 | 12 | 11,600 | 10,400 | 12 |
| Auto | 717 | 740 | (3) | 717 | 740 | (3) |
| Total allowance for loan losses | \$ 13,825^(g) | \$ 12,622 | 10 % | \$ 13,825^(g) | \$ 12,622 | 10 % |

- (a) At June 30, 2023 and 2022, nonaccrual loans excluded mortgage loans 90 or more days past due and insured by U.S. government agencies of \$139 million and \$257 million, respectively. These amounts have been excluded based upon the government guarantee. In addition, the Firm's policy is generally to exempt credit card loans from being placed on nonaccrual status as permitted by regulatory guidance.
- (b) At June 30, 2023 and 2022, generally excludes loans that were under payment deferral programs offered in response to the COVID-19 pandemic. Refer to Credit Portfolio on pages 108-109 of JPMorgan Chase's 2022 Form 10-K for further information on consumer assistance.
- (c) At June 30, 2023 and 2022, included \$163 million and \$1.5 billion of loans, respectively, in Business Banking under the PPP. The Firm does not expect to realize material credit losses on PPP loans because the loans are guaranteed by the SBA. Refer to Credit Portfolio on pages 108-109 of JPMorgan Chase's 2022 Form 10-K for a further discussion of the PPP.
- (d) At June 30, 2023 and 2022, the principal balance of loans under payment deferral programs offered in response to the COVID-19 pandemic was \$177 million and \$513 million in Home Lending, respectively. Loans that are performing according to their modified terms are generally not considered delinquent. Refer to Credit Portfolio on pages 108-109 of JPMorgan Chase's 2022 Form 10-K for further information on consumer assistance.
- (e) At June 30, 2023 and 2022, excluded mortgage loans insured by U.S. government agencies of \$195 million and \$315 million, respectively, that are 30 or more days past due. These amounts have been excluded based upon the government guarantee.
- (f) As of June 30, 2023, included a \$377 million allowance established as part of the First Republic acquisition.
- (g) On January 1, 2023, the Firm adopted changes to the TDR accounting guidance. The adoption of this guidance resulted in a net decrease in the allowance for loan losses of \$591 million, driven by residential real estate and credit card. Refer to Note 1 for further information.

Selected metrics

| (in billions, except ratios and where otherwise noted) | As of or for the three months ended June 30, | | | As of or for the six months ended June 30, | | |
|---|--|----------------|-------------|--|----------------|-------------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Business Metrics | | | | | | |
| Number of branches | 4,874 | 4,822 | 1 % | 4,874 | 4,822 | 1 % |
| Active digital customers (in thousands) ^(a) | 65,559 ^(f) | 60,735 | 8 | 65,559 ^(f) | 60,735 | 8 |
| Active mobile customers (in thousands) ^(b) | 51,963 ^(f) | 47,436 | 10 | 51,963 ^(f) | 47,436 | 10 |
| Debit and credit card sales volume | \$ 424.0 | \$ 397.0 | 7 | \$ 811.3 | \$ 748.5 | 8 |
| Total payments transaction volume (in trillions) ^(c) | 1.5 ^(f) | 1.5 | – | 2.9 ^(f) | 2.8 | 4 |
| Banking & Wealth Management | | | | | | |
| Average deposits | \$ 1,142.8 ^(g) | \$ 1,163.4 | (2) | \$ 1,120.7 ^(g) | \$ 1,149.8 | (3) |
| Deposit margin | 2.83 % | 1.31 % | | 2.81 % | 1.27 % | |
| Business Banking average loans | \$ 19.6 | \$ 22.8 | (14) | \$ 19.8 | \$ 23.8 | (17) |
| Business banking origination volume | 1.3 | 1.2 | 7 | 2.3 | 2.2 | 4 |
| Client investment assets ^(d) | 892.9 | 628.5 | 42 | 892.9 | 628.5 | 42 |
| Number of client advisors | 5,153 | 4,890 | 5 | 5,153 | 4,890 | 5 |
| Home Lending | | | | | | |
| Mortgage origination volume by channel | | | | | | |
| Retail | \$ 7.3 ^(h) | \$ 11.0 | (34) | \$ 10.9 ^(h) | \$ 26.1 | (58) |
| Correspondent | 3.9 | 10.9 | (64) | 6.0 | 20.5 | (71) |
| Total mortgage origination volume^(e) | \$ 11.2 | \$ 21.9 | (49) | \$ 16.9 | \$ 46.6 | (64) |
| Third-party mortgage loans serviced (period-end) | \$ 604.5 | \$ 575.6 | 5 | 604.5 | \$ 575.6 | 5 |
| MSR carrying value (period-end) | 8.2 | 7.4 | 11 | 8.2 | 7.4 | 11 |
| Card Services | | | | | | |
| Sales volume, excluding commercial card | \$ 294.0 | \$ 271.2 | 8 | \$ 560.2 | \$ 507.6 | 10 |
| Net revenue rate | 9.11 % | 9.59 % | | 9.73 % | 9.72 % | |
| Net yield on average loans | 9.31 | 9.50 | | 9.60 | 9.73 | |
| Auto | | | | | | |
| Loan and lease origination volume | \$ 12.0 | \$ 7.0 | 71 | \$ 21.2 | \$ 15.4 | 38 |
| Average auto operating lease assets | 11.0 | 14.9 | (26)% | 11.3 | 15.6 | (28)% |

(a) Users of all web and/or mobile platforms who have logged in within the past 90 days.

(b) Users of all mobile platforms who have logged in within the past 90 days.

(c) Total payments transaction volume includes debit and credit card sales volume and gross outflows of ACH, ATM, teller, wires, BillPay, PayChase, Zelle, person-to-person and checks.

(d) Includes assets invested in managed accounts and J.P. Morgan mutual funds where AWM is the investment manager. Refer to AWM segment results on pages 41-44 for additional information. As of June 30, 2023, included \$150.9 billion of client investment assets associated with the First Republic acquisition.

(e) Firmwide mortgage origination volume was \$13.0 billion and \$27.9 billion for the three months ended June 30, 2023 and 2022, respectively, and \$19.8 billion and \$58.1 billion for the six months ended June 30, 2023 and 2022, respectively.

(f) Excludes the impact of the First Republic acquisition.

(g) For the three and six months ended June 30, 2023, included \$47.2 billion and \$23.7 billion, respectively, associated with the First Republic acquisition.

(h) For the three and six months ended June 30, 2023, included \$1.1 billion associated with the First Republic acquisition.

CORPORATE & INVESTMENT BANK

Refer to pages 67-72 of JPMorgan Chase's 2022 Form 10-K and Line of Business Metrics on page 206 for a further discussion of the business profile of CIB.

Selected income statement data

| (in millions, except ratios) | Three months ended June 30, | | | Six months ended June 30, | | |
|---|-----------------------------|-----------------|-------------------|---------------------------|-----------------|--------------------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Revenue | | | | | | |
| Investment banking fees ^(a) | \$ 1,557 | \$ 1,650 | (6)% | \$ 3,211 | \$ 3,700 | (13)% |
| Principal transactions | 6,697 | 5,048 | 33 | 14,105 | 10,271 | 37 |
| Lending- and deposit-related fees | 533 | 641 | (17) | 1,072 | 1,282 | (16) |
| Commissions and other fees | 1,219 | 1,328 | (8) | 2,453 | 2,660 | (8) |
| Card income | 400 | 337 | ^(c) 19 | 715 | 603 | ^(c) 19 |
| All other income | 396 | (199) | ^(c) NM | 769 | 293 | ^(c) 162 |
| Noninterest revenue | 10,802 | 8,805 | 23 | 22,325 | 18,809 | 19 |
| Net interest income | 1,717 | 3,198 | (46) | 3,794 | 6,770 | (44) |
| Total net revenue^(b) | 12,519 | 12,003 | 4 | 26,119 | 25,579 | 2 |
| Provision for credit losses | 38 | 59 | (36) | 96 | 504 | (81) |
| Noninterest expense | | | | | | |
| Compensation expense | 3,461 | 3,510 | (1) | 7,546 | 7,516 | – |
| Noncompensation expense | 3,433 | 3,300 | ^(c) 4 | 6,831 | 6,657 | ^(c) 3 |
| Total noninterest expense | 6,894 | 6,810 | 1 | 14,377 | 14,173 | 1 |
| Income before income tax expense | 5,587 | 5,134 | 9 | 11,646 | 10,902 | 7 |
| Income tax expense | 1,495 | 1,417 | ^(c) 6 | 3,133 | 2,813 | ^(c) 11 |
| Net income | \$ 4,092 | \$ 3,717 | 10 % | \$ 8,513 | \$ 8,089 | 5 % |
| Financial ratios | | | | | | |
| Return on equity | 15 % | 14 % | | 15 % | 15 % | |
| Overhead ratio | 55 | 57 | ^(c) | 55 | 55 | |
| Compensation expense as percentage of total net revenue | 28 | 29 | | 29 | 29 | ^(c) |

(a) Includes CB's share of revenue from investment banking products sold to CB clients through the CIB that is subject to a revenue sharing arrangement which is reported as a reduction in All other income.

(b) Includes tax-equivalent adjustments, predominantly due to income tax credits and other tax benefits related to alternative energy investments; income tax credits and amortization of the cost of investments in affordable housing projects; and tax-exempt income from municipal bonds of \$953 million and \$772 million for the three months ended June 30, 2023 and 2022, respectively and \$1.8 billion and \$1.5 billion for the six months ended June 30, 2023 and 2022, respectively.

(c) In the first quarter of 2023, the allocations of revenue and expense to CCB associated with a Merchant Services revenue sharing agreement were discontinued and are now retained in Payments in CIB. Prior-period amounts have been revised to conform with the current presentation.

Selected income statement data

| (in millions) | Three months ended June 30, | | | Six months ended June 30, | | |
|--|-----------------------------|------------------|-------------------|---------------------------|------------------|-------------------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Revenue by business | | | | | | |
| Investment Banking | \$ 1,494 | \$ 1,351 | 11 % | \$ 3,054 | \$ 3,408 | (10)% |
| Payments | 2,451 | 1,519 | ^(b) 61 | 4,847 | 3,420 | ^(b) 42 |
| Lending | 299 | 410 | (27) | 566 | 731 | (23) |
| Total Banking | 4,244 | 3,280 | 29 | 8,467 | 7,559 | 12 |
| Fixed Income Markets | 4,567 | 4,711 | (3) | 10,266 | 10,409 | (1) |
| Equity Markets | 2,451 | 3,079 | (20) | 5,134 | 6,134 | (16) |
| Securities Services | 1,221 | 1,151 | 6 | 2,369 | 2,219 | 7 |
| Credit Adjustments & Other ^(a) | 36 | (218) | NM | (117) | (742) | 84 |
| Total Markets & Securities Services | 8,275 | 8,723 | (5) | 17,652 | 18,020 | (2) |
| Total net revenue | \$ 12,519 | \$ 12,003 | 4 % | \$ 26,119 | \$ 25,579 | 2 % |

(a) Consists primarily of centrally managed credit valuation adjustments ("CVA"), funding valuation adjustments ("FVA") on derivatives, other valuation adjustments, and certain components of fair value option elected liabilities, which are primarily reported in principal transactions revenue. Results are presented net of associated hedging activities and net of CVA and FVA amounts allocated to Fixed Income Markets and Equity Markets.

(b) In the first quarter of 2023, the allocations of revenue and expense to CCB associated with a Merchant Services revenue sharing agreement were discontinued and are now retained in Payments in CIB. Prior-period amounts have been revised to conform with the current presentation.

Quarterly results

Net income was \$4.1 billion, up 10%.

Net revenue was \$12.5 billion, up 4%.

Banking revenue was \$4.2 billion, up 29%.

- Investment Banking revenue was \$1.5 billion, up 11%. Excluding \$257 million of markdowns on held-for-sale positions, primarily unfunded commitments, in the bridge financing portfolio recorded in the prior year, Investment Banking revenue was down 7%. Investment Banking fees were down 6%, driven by lower advisory fees. The Firm ranked #1 for Global Investment Banking fees, according to Dealogic.
 - Advisory fees were \$540 million, down 19%, due to a lower level of announced deals in prior periods amid a challenging environment.
 - Debt underwriting fees were \$699 million, down 6%, as challenging market conditions resulted in lower issuance activity in the leveraged loan market primarily related to acquisition financing.
 - Equity underwriting fees were \$318 million, up 30%, primarily due to higher convertible securities offerings and, in the second half of the quarter, follow-on offerings that benefited from the lower equity market volatility.
- Payments revenue was \$2.5 billion, up 61%. Excluding the net impact of equity investments, Payments revenue was up 32%, driven by deposit margin expansion on higher rates, partially offset by lower average deposits.
- Lending revenue was \$299 million, down 27%, and included \$80 million of fair value losses on hedges of retained loans.

Markets & Securities Services revenue was \$8.3 billion, down 5%. Markets revenue was \$7.0 billion, down 10%.

- Fixed Income Markets revenue was \$4.6 billion, down 3%, reflecting lower revenue in Currencies & Emerging Markets, Commodities and Rates as the macro businesses substantially normalized from the prior year's elevated levels of volatility and client activity, largely offset by higher revenue in the Securitized Products Group and Credit Trading.
- Equity Markets revenue was \$2.5 billion, down 20%, predominantly driven by lower revenue in Equity Derivatives, compared to a strong second quarter in the prior year.
- Securities Services revenue was \$1.2 billion, up 6%, driven by deposit margin expansion on higher rates, largely offset by lower fees and lower average deposits.
- Credit Adjustments & Other was a gain of \$36 million, compared with a loss of \$218 million in the prior year, largely driven by funding spread widening.

Noninterest expense was \$6.9 billion, up 1%, driven by higher non-compensation expense, as well as wage inflation and headcount growth, largely offset by lower revenue-related compensation.

The provision for credit losses was \$38 million, including net charge-offs of \$56 million.

The prior year provision was \$59 million.

Refer to Credit and Investment Risk Management on pages 62-83 and Allowance for Credit Losses on pages 80-82 for a further discussion of the credit portfolios and the allowance for credit losses.

Year-to-date results

Net income was \$8.5 billion, up 5%.

Net revenue was \$26.1 billion, up 2%.

Banking revenue was \$8.5 billion, up 12%.

- Investment Banking revenue was \$3.1 billion, down 10%. Excluding \$257 million of markdowns on held-for-sale positions, primarily unfunded commitments, in the bridge financing portfolio recorded in the second quarter of 2022, Investment Banking revenue was down 17%. Investment Banking fees were down 13%, driven by lower debt underwriting and advisory fees. The Firm ranked #1 for Global Investment Banking fees, according to Dealogic.
 - Debt underwriting fees were \$1.4 billion, down 22%, as challenging market conditions resulted in lower issuance activity in acquisition financing.
 - Advisory fees were \$1.3 billion, down 12%, due to a lower level of announced deals in prior periods amid a challenging environment.
 - Equity underwriting fees were \$553 million, up 12%, primarily due to higher convertible securities offerings and, in the second half of the second quarter, follow-on offerings that benefited from the lower equity market volatility.
 - Payments revenue was \$4.8 billion, up 42%, driven by deposit margin expansion on higher rates, partially offset by lower average deposits.
 - Lending revenue was \$566 million, down 23%, driven by \$183 million of fair value losses on hedges of retained loans, compared to \$112 million of gains in the prior year, partially offset by higher net interest income.
- Markets & Securities Services revenue was \$17.7 billion, down 2%. Markets revenue was \$15.4 billion, down 7%.
- Fixed Income Markets revenue was \$10.3 billion, down 1%, reflecting lower revenue in Currencies & Emerging Markets and Commodities, largely offset by higher revenue in Rates, the Securitized Products Group and Credit Trading.
 - Equity Markets revenue was \$5.1 billion, down 16%, predominantly driven by lower revenue in Equity Derivatives.
 - Securities Services revenue was \$2.4 billion, up 7%, driven by deposit margin expansion on higher rates, largely offset by lower fees and lower average deposits.
 - Credit Adjustments & Other was a loss of \$117 million, driven by losses on certain components of fair value option elected liabilities, compared with a loss of \$742 million in the prior year, which was predominantly driven

by funding spread widening, and to a lesser extent losses on exposure relating to commodities and Russia and Russia-associated counterparties.

Noninterest expense was \$14.4 billion, up 1%, driven by headcount growth, wage inflation and higher non-compensation expense, largely offset by lower revenue-related compensation.

The provision for credit losses was \$96 million, driven by net charge-offs of \$106 million.

The prior year provision was \$504 million.

Selected metrics

| (in millions, except headcount) | As of or for the three months ended June 30, | | | As of or for the six months ended June 30, | | |
|--|--|-------------------|------------|--|-------------------|------------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Selected balance sheet data (period-end) | | | | | | |
| Total assets | \$ 1,432,054 | \$ 1,403,558 | 2 % | \$ 1,432,054 | \$ 1,403,558 | 2 % |
| Loans: | | | | | | |
| Loans retained ^(a) | 194,450 | 171,219 | 14 | 194,450 | 171,219 | 14 |
| Loans held-for-sale and loans at fair value ^(b) | 38,959 | 46,032 | (15) | 38,959 | 46,032 | (15) |
| Total loans | 233,409 | 217,251 | 7 | 233,409 | 217,251 | 7 |
| Equity | 108,000 | 103,000 | 5 | 108,000 | 103,000 | 5 |
| Selected balance sheet data (average) | | | | | | |
| Total assets | \$ 1,461,857 | \$ 1,429,953 | 2 | \$ 1,445,848 | \$ 1,418,955 | 2 |
| Trading assets-debt and equity instruments | 533,082 | 411,079 | 30 | 511,047 | 415,190 | 23 |
| Trading assets-derivative receivables | 63,094 | 83,582 | (25) | 63,553 | 75,184 | (15) |
| Loans: | | | | | | |
| Loans retained ^(a) | \$ 189,153 | \$ 169,909 | 11 | \$ 187,372 | \$ 165,467 | 13 |
| Loans held-for-sale and loans at fair value ^(b) | 38,132 | 48,048 | (21) | 40,339 | 49,714 | (19) |
| Total loans | \$ 227,285 | \$ 217,957 | 4 | \$ 227,711 | \$ 215,181 | 6 |
| Deposits | 722,818 | 773,664 | (7) | 711,266 | 765,200 | (7) |
| Equity | 108,000 | 103,000 | 5 | 108,000 | 103,000 | 5 |
| Headcount | 74,822 | 69,447 | 8 % | 74,822 | 69,447 | 8 % |

(a) Loans retained includes credit portfolio loans, loans held by consolidated Firm-administered multi-seller conduits, trade finance loans, other held-for-investment loans and overdrafts.

(b) Loans held-for-sale and loans at fair value primarily reflect lending-related positions originated and purchased in Markets, including loans held for securitization.

Selected metrics

| (in millions, except ratios) | As of or for the three months ended June 30, | | | As of or for the six months ended June 30, | | |
|---|--|-----------------|-------------|--|-----------------|-------------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Credit data and quality statistics | | | | | | |
| Net charge-offs/(recoveries) | \$ 56 | \$ 38 | 47 % | \$ 106 | \$ 58 | 83 % |
| Nonperforming assets: | | | | | | |
| Nonaccrual loans: | | | | | | |
| Nonaccrual loans retained ^(a) | \$ 924 | \$ 697 | 33 | \$ 924 | \$ 697 | 33 |
| Nonaccrual loans held-for-sale and loans at fair value ^(b) | 818 | 840 | (3) | 818 | 840 | (3) |
| Total nonaccrual loans | 1,742 | 1,537 | 13 | 1,742 | 1,537 | 13 |
| Derivative receivables | 286 | 447 | (36) | 286 | 447 | (36) |
| Assets acquired in loan satisfactions | 133 | 84 | 58 | 133 | 84 | 58 |
| Total nonperforming assets | \$ 2,161 | \$ 2,068 | 4 | \$ 2,161 | \$ 2,068 | 4 |
| Allowance for credit losses: | | | | | | |
| Allowance for loan losses | \$ 2,531 | \$ 1,809 | 40 | \$ 2,531 | \$ 1,809 | 40 |
| Allowance for lending-related commitments | 1,207 | 1,358 | (11) | 1,207 | 1,358 | (11) |
| Total allowance for credit losses | \$ 3,738 | \$ 3,167 | 18 % | \$ 3,738 | \$ 3,167 | 18 % |
| Net charge-off/(recovery) rate ^(c) | 0.12 % | 0.09 % | | 0.11 % | 0.07 % | |
| Allowance for loan losses to period-end loans retained | 1.30 | 1.06 | | 1.30 | 1.06 | |
| Allowance for loan losses to period-end loans retained, excluding trade finance and conduits ^(d) | 1.86 | 1.38 | | 1.86 | 1.38 | |
| Allowance for loan losses to nonaccrual loans retained ^(a) | 274 | 260 | | 274 | 260 | |
| Nonaccrual loans to total period-end loans | 0.75 % | 0.71 % | | 0.75 % | 0.71 % | |

(a) Allowance for loan losses of \$145 million and \$130 million were held against these nonaccrual loans at June 30, 2023 and 2022, respectively.

(b) At June 30, 2023 and 2022, nonaccrual loans excluded mortgage loans 90 or more days past due and insured by U.S. government agencies of \$76 million and \$196 million, respectively. These amounts have been excluded based upon the government guarantee.

(c) Loans held-for-sale and loans at fair value were excluded when calculating the net charge-off/(recovery) rate.

(d) Management uses allowance for loan losses to period-end loans retained, excluding trade finance and conduits, a non-GAAP financial measure, to provide a more meaningful assessment of CIB's allowance coverage ratio. Refer to Explanation and Reconciliation of the Firm's Use of Non-GAAP Financial Measures on pages 20-21.

Investment banking fees

| (in millions) | Three months ended June 30, | | | Six months ended June 30, | | |
|--------------------------------------|-----------------------------|-----------------|-------------|---------------------------|-----------------|--------------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Advisory | \$ 540 | \$ 664 | (19)% | \$ 1,296 | \$ 1,465 | (12)% |
| Equity underwriting | 318 | 245 | 30 | 553 | 494 | 12 |
| Debt underwriting ^(a) | 699 | 741 | (6) | 1,362 | 1,741 | (22) |
| Total investment banking fees | \$ 1,557 | \$ 1,650 | (6)% | \$ 3,211 | \$ 3,700 | (13)% |

(a) Represents long-term debt and loan syndications.

League table results - wallet share

| | Three months ended June 30, | | | | Six months ended June 30, | | | | Full-year 2022 | |
|---|-----------------------------|-------|------|-------|---------------------------|-------|------|-------|----------------|-------|
| | 2023 | | 2022 | | 2023 | | 2022 | | Full-year 2022 | |
| | Rank | Share | Rank | Share | Rank | Share | Rank | Share | Rank | Share |
| Based on fees ^(a) | | | | | | | | | | |
| M&A^(b) | | | | | | | | | | |
| Global | # 2 | 8.7 % | # 2 | 7.5 % | # 2 | 9.3 % | # 2 | 7.4 % | # 2 | 8.0 % |
| U.S. | 2 | 11.5 | 2 | 8.3 | 2 | 11.8 | 2 | 8.4 | 2 | 9.0 |
| Equity and equity-related^(c) | | | | | | | | | | |
| Global | 1 | 7.6 | 1 | 6.0 | 1 | 7.1 | 1 | 5.6 | 2 | 5.7 |
| U.S. | 1 | 14.7 | 1 | 15.1 | 1 | 13.3 | 1 | 13.2 | 1 | 13.8 |
| Long-term debt^(d) | | | | | | | | | | |
| Global | 2 | 6.8 | 1 | 7.2 | 1 | 6.7 | 1 | 7.6 | 1 | 6.9 |
| U.S. | 2 | 10.4 | 1 | 12.5 | 2 | 10.0 | 1 | 12.3 | 1 | 12.2 |
| Loan syndications | | | | | | | | | | |
| Global | 1 | 12.4 | 1 | 12.2 | 1 | 12.6 | 1 | 11.3 | 1 | 11.0 |
| U.S. | 1 | 15.7 | 1 | 13.9 | 1 | 16.1 | 1 | 11.9 | 1 | 12.7 |
| Global investment banking fees^(e) | # 1 | 8.3 % | # 2 | 8.1 % | # 1 | 8.4 % | # 1 | 7.9 % | # 1 | 7.8 % |

(a) Source: Dealogic as of July 3, 2023. Reflects the ranking of revenue wallet and market share.

(b) Global M&A excludes any withdrawn transactions. U.S. M&A revenue wallet represents wallet from client parents based in the U.S.

(c) Global equity and equity-related ranking includes rights offerings and Chinese A-Shares.

(d) Long-term debt rankings include investment-grade, high-yield, supranationals, sovereigns, agencies, covered bonds, asset-backed securities ("ABS") and mortgage-backed securities ("MBS"); and exclude money market, short-term debt and U.S. municipal securities.

(e) Global investment banking fees exclude money market, short-term debt and shelf securities.

Markets revenue

The following table summarizes selected income statement data for the Markets businesses. Markets includes both Fixed Income Markets and Equity Markets. Markets revenue consists of principal transactions, fees, commissions and other income, as well as net interest income. The Firm assesses its Markets business performance on a total revenue basis, as offsets may occur across revenue line items. For example, securities that generate net interest income may be risk-managed by derivatives that are

reflected at fair value in principal transactions revenue. Refer to Notes 6 and 7 for a description of the composition of these income statement line items. Refer to Markets revenue on page 70 of JPMorgan Chase's 2022 Form 10-K for further information.

For the periods presented below, the primary source of principal transactions revenue was the amount recognized upon executing new transactions.

| (in millions) | Three months ended June 30, | | | Three months ended June 30, | | |
|------------------------------------|-----------------------------|-----------------|-----------------|-----------------------------|-----------------|-----------------|
| | 2023 | | | 2022 | | |
| | Fixed Income Markets | Equity Markets | Total Markets | Fixed Income Markets | Equity Markets | Total Markets |
| Principal transactions | \$ 3,120 | \$ 3,350 | \$ 6,470 | \$ 2,934 | \$ 2,448 | \$ 5,382 |
| Lending- and deposit-related fees | 76 | 7 | 83 | 76 | 4 | 80 |
| Commissions and other fees | 151 | 472 | 623 | 128 | 516 | 644 |
| All other income | 369 | (40) | 329 | 166 | (31) | 135 |
| Noninterest revenue | 3,716 | 3,789 | 7,505 | 3,304 | 2,937 | 6,241 |
| Net interest income ^(a) | 851 | (1,338) | (487) | 1,407 | 142 | 1,549 |
| Total net revenue | \$ 4,567 | \$ 2,451 | \$ 7,018 | \$ 4,711 | \$ 3,079 | \$ 7,790 |

| (in millions) | Six months ended June 30, | | | Six months ended June 30, | | |
|------------------------------------|---------------------------|-----------------|------------------|---------------------------|-----------------|------------------|
| | 2023 | | | 2022 | | |
| | Fixed Income Markets | Equity Markets | Total Markets | Fixed Income Markets | Equity Markets | Total Markets |
| Principal transactions | \$ 7,518 | \$ 6,379 | \$ 13,897 | \$ 6,323 | \$ 4,732 | \$ 11,055 |
| Lending- and deposit-related fees | 146 | 14 | 160 | 154 | 8 | 162 |
| Commissions and other fees | 295 | 994 | 1,289 | 284 | 1,063 | 1,347 |
| All other income | 700 | (54) | 646 | 283 | (71) | 212 |
| Noninterest revenue | 8,659 | 7,333 | 15,992 | 7,044 | 5,732 | 12,776 |
| Net interest income ^(a) | 1,607 | (2,199) | (592) | 3,365 | 402 | 3,767 |
| Total net revenue | \$ 10,266 | \$ 5,134 | \$ 15,400 | \$ 10,409 | \$ 6,134 | \$ 16,543 |

(a) The decline in Markets net interest income was driven by higher funding costs.

Selected metrics

| (in millions, except where otherwise noted) | As of or for the three months ended June 30, | | | As of or for the six months ended June 30, | | |
|--|--|------------------|----------|--|------------------|----------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Assets under custody ("AUC") by asset class (period-end) (in billions): | | | | | | |
| Fixed Income | \$ 14,708 | \$ 14,720 | – % | \$ 14,708 | \$ 14,720 | – % |
| Equity | 11,892 | 10,359 | 15 | 11,892 | 10,359 | 15 |
| Other ^(a) | 3,824 | 3,500 | 9 | 3,824 | 3,500 | 9 |
| Total AUC | \$ 30,424 | \$ 28,579 | 6 | \$ 30,424 | \$ 28,579 | 6 |
| Merchant processing volume (in billions) ^(b) | \$ 600.1 | \$ 539.6 | 11 | \$ 1,158.9 | \$ 1,029.8 | 13 |
| Client deposits and other third-party liabilities (average) ^(c) | \$ 647,479 | \$ 722,388 | (10)% | \$ 640,642 | \$ 715,791 | (10)% |

(a) Consists of mutual funds, unit investment trusts, currencies, annuities, insurance contracts, options and other contracts.

(b) Represents Firmwide merchant processing volume.

(c) Client deposits and other third-party liabilities pertain to the Payments and Securities Services businesses.

International metrics

| (in millions, except where otherwise noted) | As of or for the three months ended June 30, | | | As of or for the six months ended June 30, | | |
|--|--|----------------------|-------------|--|-----------------------|-------------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Total net revenue^(a) | | | | | | |
| Europe/Middle East/Africa | \$ 3,813 | \$ 4,280 | (11)% | \$ 8,081 | \$ 8,972 | (10)% |
| Asia-Pacific | 1,889 | 2,023 | (7) | 4,022 | 4,008 | – |
| Latin America/Caribbean | 543 | 464 | 17 | 1,105 | 1,141 | (3) |
| Total international net revenue | 6,245 | 6,767 | (8) | 13,208 | 14,121 | (6) |
| North America | 6,274 | 5,236 ^(c) | 20 | 12,911 | 11,458 ^(c) | 13 |
| Total net revenue | \$ 12,519 | \$ 12,003 | 4 | \$ 26,119 | \$ 25,579 | 2 |
| Loans retained (period-end)^(a) | | | | | | |
| Europe/Middle East/Africa | \$ 39,752 | \$ 35,524 | 12 | \$ 39,752 | \$ 35,524 | 12 |
| Asia-Pacific | 14,789 | 16,427 | (10) | 14,789 | 16,427 | (10) |
| Latin America/Caribbean | 8,704 | 7,961 | 9 | 8,704 | 7,961 | 9 |
| Total international loans | 63,245 | 59,912 | 6 | 63,245 | 59,912 | 6 |
| North America | 131,205 | 111,307 | 18 | 131,205 | 111,307 | 18 |
| Total loans retained | \$ 194,450 | \$ 171,219 | 14 | \$ 194,450 | \$ 171,219 | 14 |
| Client deposits and other third-party liabilities (average)^(b) | | | | | | |
| Europe/Middle East/Africa | \$ 228,490 | \$ 272,919 | (16) | \$ 229,655 | \$ 259,781 | (12) |
| Asia-Pacific | 128,253 | 129,514 | (1) | 127,146 | 132,126 | (4) |
| Latin America/Caribbean | 38,911 | 41,785 | (7) | 38,825 | 42,720 | (9) |
| Total international | \$ 395,654 | \$ 444,218 | (11) | \$ 395,626 | \$ 434,627 | (9) |
| North America | 251,825 | 278,170 | (9) | 245,016 | 281,164 | (13) |
| Total client deposits and other third-party liabilities | \$ 647,479 | \$ 722,388 | (10) | \$ 640,642 | \$ 715,791 | (10) |
| AUC (period-end)^(b) (in billions) | | | | | | |
| North America | \$ 20,512 | \$ 18,816 | 9 | \$ 20,512 | \$ 18,816 | 9 |
| All other regions | 9,912 | 9,763 | 2 | 9,912 | 9,763 | 2 |
| Total AUC | \$ 30,424 | \$ 28,579 | 6 % | \$ 30,424 | \$ 28,579 | 6 % |

(a) Total net revenue and loans retained (excluding loans held-for-sale and loans at fair value) are based on the location of the trading desk, booking location, or domicile of the client, as applicable.

(b) Client deposits and other third-party liabilities pertaining to the Payments and Securities Services businesses, and AUC, are based on the domicile of the client.

(c) In the first quarter of 2023, the allocations of revenue and expense to CCB associated with a Merchant Services revenue sharing agreement were discontinued and are now retained in Payments in CIB. Prior-period amounts have been revised to conform with the current presentation.

COMMERCIAL BANKING

Refer to pages 73-75 of JPMorgan Chase's 2022 Form 10-K and Line of Business Metrics on page 207 for a discussion of the business profile of CB.

Selected income statement data

| (in millions) | Three months ended June 30, | | | Six months ended June 30, | | |
|---|-----------------------------|---------------|-------------|---------------------------|-----------------|-------------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Revenue | | | | | | |
| Lending- and deposit-related fees | \$ 249 | \$ 348 | (28)% | \$ 476 | \$ 712 | (33)% |
| Card income | 201 | 170 | 18 | 374 | 337 | 11 |
| All other income | 385 | 386 | – | 766 | 722 | 6 |
| Noninterest revenue | 835 | 904 | (8) | 1,616 | 1,771 | (9) |
| Net interest income | 3,153 ^(b) | 1,779 | 77 | 5,883 ^(b) | 3,310 | 78 |
| Total net revenue^(a) | 3,988 | 2,683 | 49 | 7,499 | 5,081 | 48 |
| Provision for credit losses | 1,097 ^(b) | 209 | 425 | 1,514 ^(b) | 366 | 314 |
| Noninterest expense | | | | | | |
| Compensation expense | 656 | 559 | 17 | 1,297 | 1,112 | 17 |
| Noncompensation expense | 644 | 597 | 8 | 1,311 | 1,173 | 12 |
| Total noninterest expense | 1,300 | 1,156 | 12 | 2,608 | 2,285 | 14 |
| Income before income tax expense | 1,591 | 1,318 | 21 | 3,377 | 2,430 | 39 |
| Income tax expense | 383 | 324 | 18 | 822 | 586 | 40 |
| Net income | \$ 1,208 | \$ 994 | 22 % | \$ 2,555 | \$ 1,844 | 39 % |

- (a) Total net revenue included tax-equivalent adjustments from income tax credits related to equity investments in designated community development entities and in entities established for rehabilitation of historic properties, as well as tax-exempt income related to municipal financing activities of \$89 million and \$73 million for the three months ended June 30, 2023 and 2022, respectively and \$171 million and \$142 million for the six months ended June 30, 2023 and 2022, respectively.
- (b) Includes the impact of the First Republic acquisition. Refer to page 24 for additional information.

Selected income statement data (continued)

| (in millions, except ratios) | Three months ended June 30, | | | Six months ended June 30, | | |
|--|-----------------------------|-----------------|-------------|---------------------------|-----------------|-------------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Revenue by product | | | | | | |
| Lending | \$ 1,480 ^(c) | \$ 1,058 | 40 % | \$ 2,702 ^(c) | \$ 2,163 | 25 % |
| Payments | 2,248 | 1,253 | 79 | 4,276 | 2,275 | 88 |
| Investment banking ^(a) | 213 | 234 | (9) | 463 | 453 | 2 |
| Other | 47 | 138 | (66) | 58 | 190 | (69) |
| Total net revenue | \$ 3,988 | \$ 2,683 | 49 | \$ 7,499 | \$ 5,081 | 48 |
| Investment Banking and Markets revenue, gross ^(b) | \$ 767 | \$ 788 | (3) | \$ 1,648 | \$ 1,517 | 9 |
| Revenue by client segments | | | | | | |
| Middle Market Banking | \$ 1,916 ^(d) | \$ 1,169 | 64 | \$ 3,597 ^(d) | \$ 2,149 | 67 |
| Corporate Client Banking | 1,229 | 927 | 33 | 2,405 | 1,757 | 37 |
| Commercial Real Estate Banking | 806 ^(d) | 590 | 37 | 1,448 ^(d) | 1,171 | 24 |
| Other | 37 | (3) | NM | 49 | 4 | NM |
| Total net revenue | \$ 3,988 | \$ 2,683 | 49 % | \$ 7,499 | \$ 5,081 | 48 % |
| Financial ratios | | | | | | |
| Return on equity | 16 % | 15 % | | 17 % | 14 % | |
| Overhead ratio | 33 | 43 | | 35 | 45 | |

- (a) Includes CB's share of revenue from investment banking products sold to CB clients through the CIB which is reported in All other income.
- (b) Includes gross revenues earned by the Firm that are subject to a revenue sharing arrangement between CB and the CIB for Investment Banking and Markets' products sold to CB clients. This includes revenues related to fixed income and equity markets products. Refer to Business Segment Results on page 22 for discussion of revenue sharing.
- (c) Includes the impact of the First Republic acquisition. Refer to page 24 for additional information.
- (d) For the three and six months ended June 30, 2023, included \$48 million and \$130 million for Middle Market Banking and Commercial Real Estate Banking, respectively, associated with the First Republic acquisition.

Quarterly results

Net income was \$1.2 billion, up 22%.

Net revenue was \$4.0 billion, up 49%. Net interest income was \$3.2 billion, up 77%, predominantly driven by deposit margin expansion on higher rates and higher average loans, partially offset by lower average deposits.

Noninterest revenue was \$835 million, down 8%, driven by lower deposit-related fees due to the higher level of credits earned by clients that reduce such fees, partially offset by higher card income.

Noninterest expense was \$1.3 billion, up 12%, predominantly driven by higher compensation expense, including headcount growth, as well as higher volume-related expense.

The provision for credit losses was \$1.1 billion, reflecting an addition of \$608 million to establish the allowance for the First Republic loans and lending-related commitments. The net addition also reflected \$389 million driven by updates to certain assumptions related to office real estate, as well as net downgrade activity in Middle Market Banking.

The prior year provision was \$209 million.

Refer to Credit and Investment Risk Management on pages 62-83 and Allowance for Credit Losses on pages 80-82 for further discussions of the credit portfolios and the allowance for credit losses.

Year-to-date results

Net income was \$2.6 billion, up 39%.

Net revenue was \$7.5 billion, up 48%. Net interest income was \$5.9 billion, up 78%, driven by deposit margin expansion on higher rates and higher average loans, partially offset by lower average deposits.

Noninterest revenue was \$1.6 billion, down 9%, driven by lower deposit-related fees due to the higher level of credits earned by clients that reduce such fees, partially offset by higher card income.

Noninterest expense was \$2.6 billion, up 14%, largely driven by higher compensation expense, including headcount growth, as well as higher volume-related expense.

The provision for credit losses was \$1.5 billion, reflecting an addition of \$608 million to establish the allowance for the First Republic loans and lending-related commitments, in the second quarter of 2023. The net addition also reflected \$768 million driven by a deterioration in the Firm's weighted-average economic outlook, including updates to certain assumptions related to office real estate, as well as net downgrade activity.

The prior year provision was \$366 million.

Selected metrics

| (in millions, except headcount) | As of or for the three months ended June 30, | | | As of or for the six months ended June 30, | | |
|---|--|-------------------|-------------|--|-------------------|-------------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Selected balance sheet data (period-end) | | | | | | |
| Total assets | \$ 305,280 | \$ 242,456 | 26 % | \$ 305,280 | \$ 242,456 | 26 % |
| Loans: | | | | | | |
| Loans retained | 282,124 ^(b) | 223,541 | 26 | 282,124 ^(b) | 223,541 | 26 |
| Loans held-for-sale and loans at fair value | 1,540 | 566 | 172 | 1,540 | 566 | 172 |
| Total loans | \$ 283,664 | \$ 224,107 | 27 | \$ 283,664 | \$ 224,107 | 27 |
| Equity | 30,000 | 25,000 | 20 | 30,000 | 25,000 | 20 |
| Period-end loans by client segment | | | | | | |
| Middle Market Banking ^(a) | \$ 79,885 ^(c) | \$ 68,535 | 17 | \$ 79,885 ^(c) | \$ 68,535 | 17 |
| Corporate Client Banking | 60,511 | 49,503 | 22 | 60,511 | 49,503 | 22 |
| Commercial Real Estate Banking | 142,897 ^(c) | 105,982 | 35 | 142,897 ^(c) | 105,982 | 35 |
| Other | 371 | 87 | 326 | 371 | 87 | 326 |
| Total loans ^(a) | \$ 283,664 | \$ 224,107 | 27 | \$ 283,664 | \$ 224,107 | 27 |
| Selected balance sheet data (average) | | | | | | |
| Total assets | \$ 290,875 | \$ 239,381 | 22 | \$ 273,269 | \$ 236,444 | 16 |
| Loans: | | | | | | |
| Loans retained | 270,091 ^(d) | 218,478 | 24 | 253,542 ^(d) | 213,536 | 19 |
| Loans held-for-sale and loans at fair value | 726 | 1,004 | (28) | 939 | 1,572 | (40) |
| Total loans | \$ 270,817 | \$ 219,482 | 23 | \$ 254,481 | \$ 215,108 | 18 |
| Average loans by client segment | | | | | | |
| Middle Market Banking | \$ 78,037 ^(e) | \$ 66,640 | 17 | \$ 75,547 ^(e) | \$ 64,550 | 17 |
| Corporate Client Banking | 59,159 | 47,832 | 24 | 57,877 | 46,720 | 24 |
| Commercial Real Estate Banking | 133,394 ^(e) | 104,890 | 27 | 120,838 ^(e) | 103,701 | 17 |
| Other | 227 | 120 | 89 | 219 | 137 | 60 |
| Total loans | \$ 270,817 | \$ 219,482 | 23 | \$ 254,481 | \$ 215,108 | 18 |
| Deposits | 275,196 | 300,339 | (8) | 270,595 | 308,518 | (12) |
| Equity | 29,505 | 25,000 | 18 | 29,005 | 25,000 | 16 |
| Headcount | 15,991 | 13,811 | 16 % | 15,991 | 13,811 | 16 % |

(a) At June 30, 2023 and 2022, total loans included \$65 million and \$335 million of loans, respectively, under the PPP, of which \$60 million and \$306 million were in Middle Market Banking, respectively. Refer to Credit Portfolio on pages 108-109 of JPMorgan Chase's 2022 Form 10-K for a further discussion of the PPP.

(b) Includes the impact of the First Republic acquisition. Refer to page 24 for additional information.

(c) As of June 30, 2023, included \$6.2 billion and \$33.3 billion for Middle Market Banking and Commercial Real Estate Banking, respectively, associated with the First Republic acquisition.

(d) For the three and six months ended June 30, 2023, included \$28.6 billion and \$14.4 billion, respectively, associated with the First Republic acquisition.

(e) For the three months ended June 30, 2023, included \$4.4 billion and \$24.2 billion for Middle Market Banking and Commercial Real Estate Banking, respectively, and for the six months ended June 30, 2023, included \$2.2 billion and \$12.2 billion for Middle Market Banking and Commercial Real Estate Banking, respectively, associated with the First Republic acquisition.

Selected metrics (continued)

| (in millions, except ratios) | As of or for the three months ended June 30, | | | As of or for the six months ended June 30, | | |
|---|---|-----------------|-------------|---|-----------------|-------------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Credit data and quality statistics | | | | | | |
| Net charge-offs/(recoveries) | \$ 100 | \$ 1 | NM | \$ 137 | \$ 7 | NM |
| Nonperforming assets | | | | | | |
| Nonaccrual loans: | | | | | | |
| Nonaccrual loans retained ^(a) | \$ 1,068 | \$ 761 | 40 % | \$ 1,068 | \$ 761 | 40 % |
| Nonaccrual loans held-for-sale and loans at fair value | — | — | — | — | — | — |
| Total nonaccrual loans | \$ 1,068 | \$ 761 | 40 | \$ 1,068 | \$ 761 | 40 |
| Assets acquired in loan satisfactions | — | 8 | NM | — | 8 | NM |
| Total nonperforming assets | \$ 1,068 | \$ 769 | 39 | \$ 1,068 | \$ 769 | 39 |
| Allowance for credit losses: | | | | | | |
| Allowance for loan losses | \$ 4,729 | \$ 2,602 | 82 | \$ 4,729 | \$ 2,602 | 82 |
| Allowance for lending-related commitments | 801 | 725 | 10 | 801 | 725 | 10 |
| Total allowance for credit losses | \$ 5,530 ^(c) | \$ 3,327 | 66 % | \$ 5,530 ^(c) | \$ 3,327 | 66 % |
| Net charge-off/(recovery) rate ^(b) | 0.15 % | — % | | 0.11 % | 0.01 % | |
| Allowance for loan losses to period-end loans retained | 1.68 | 1.16 | | 1.68 | 1.16 | |
| Allowance for loan losses to nonaccrual loans retained ^(a) | 443 | 342 | | 443 | 342 | |
| Nonaccrual loans to period-end total loans | 0.38 | 0.34 | | 0.38 | 0.34 | |

(a) Allowance for loan losses of \$205 million and \$74 million was held against nonaccrual loans retained at June 30, 2023 and 2022, respectively.

(b) Loans held-for-sale and loans at fair value were excluded when calculating the net charge-off/(recovery) rate.

(c) As of June 30, 2023, included a \$608 million allowance established as part of the First Republic acquisition.

ASSET & WEALTH MANAGEMENT

Refer to pages 76-78 of JPMorgan Chase's 2022 Form 10-K and Line of Business Metrics on pages 207-208 for a discussion of the business profile of AWM.

Selected income statement data

| (in millions, except ratios) | Three months ended June 30, | | | Six months ended June 30, | | |
|---|-----------------------------|-----------------|-------------|---------------------------|-----------------|-------------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Revenue | | | | | | |
| Asset management fees | \$ 2,930 | \$ 2,797 | 5 % | \$ 5,691 | \$ 5,696 | – % |
| Commissions and other fees | 196 | 240 | (18) | 377 | 456 | (17) |
| All other income | 232 ^(a) | 47 | 394 | 623 ^(a) | 171 | 264 |
| Noninterest revenue | 3,358 | 3,084 | 9 | 6,691 | 6,323 | 6 |
| Net interest income | 1,585 ^(a) | 1,222 | 30 | 3,036 ^(a) | 2,298 | 32 |
| Total net revenue | 4,943 | 4,306 | 15 | 9,727 | 8,621 | 13 |
| Provision for credit losses | 145 ^(a) | 44 | 230 | 173 ^(a) | 198 | (13) |
| Noninterest expense | | | | | | |
| Compensation expense | 1,746 | 1,508 | 16 | 3,481 | 3,038 | 15 |
| Noncompensation expense | 1,417 | 1,411 | – | 2,773 | 2,741 | 1 |
| Total noninterest expense | 3,163 | 2,919 | 8 | 6,254 | 5,779 | 8 |
| Income before income tax expense | 1,635 | 1,343 | 22 | 3,300 | 2,644 | 25 |
| Income tax expense | 409 | 339 | 21 | 707 | 632 | 12 |
| Net income | \$ 1,226 | \$ 1,004 | 22 | \$ 2,593 | \$ 2,012 | 29 |
| Revenue by line of business | | | | | | |
| Asset Management | \$ 2,128 | \$ 2,137 | – | \$ 4,562 | \$ 4,451 | 2 |
| Global Private Bank | 2,815 ^(a) | 2,169 | 30 | 5,165 ^(a) | 4,170 | 24 |
| Total net revenue | \$ 4,943 | \$ 4,306 | 15 % | \$ 9,727 | \$ 8,621 | 13 % |
| Financial ratios | | | | | | |
| Return on equity | 29 % | 23 % | | 31 % | 23 % | |
| Overhead ratio | 64 | 68 | | 64 | 67 | |
| Pre-tax margin ratio: | | | | | | |
| Asset Management | 27 | 29 | | 32 | 31 | |
| Global Private Bank | 37 | 33 | | 35 | 30 | |
| Asset & Wealth Management | 33 | 31 | | 34 | 31 | |

(a) Includes the impact of the First Republic acquisition. Refer to page 24 for additional information.

Quarterly results

Net income was \$1.2 billion, up 22%.

Net revenue was \$4.9 billion, up 15%. Net interest income was \$1.6 billion, up 30%. Noninterest revenue was \$3.4 billion, up 9%.

Revenue from Asset Management was \$2.1 billion, flat compared to the prior year, driven by:

- lower NII due to higher funding costs, largely offset by
- higher management fees on strong net inflows.

Revenue from Global Private Bank was \$2.8 billion, up 30%, predominantly driven by:

- deposit margin expansion reflecting higher rates on lower average deposit balances, and
- higher lending-related fees and average loans driven by the impact of the First Republic acquisition.

Noninterest expense was \$3.2 billion, up 8%, driven by higher compensation, including growth in private banking advisor teams, higher revenue-related compensation and

the impact from the acquisitions of Global Shares and J.P. Morgan Asset Management China.

The provision for credit losses was \$145 million, driven by a \$146 million addition to the allowance for credit losses to establish the allowance for the First Republic loans and lending-related commitments.

Refer to Credit and Investment Risk Management on pages 62-83 and Allowance for Credit Losses on pages 80-82 for further discussions of the credit portfolios and the allowance for credit losses.

Year-to-date results

Net income was \$2.6 billion, up 29%.

Net revenue was \$9.7 billion, up 13%. Net interest income was \$3.0 billion, up 32%. Noninterest revenue was \$6.7 billion, up 6%.

Revenue from Asset Management was \$4.6 billion, up 2%, driven by:

- a gain of \$339 million on the original minority interest in CIFM upon the Firm's acquisition of the remaining 51% interest in the entity,

largely offset by

- lower NII driven by higher funding costs,
- lower performance fees, and
- lower asset management fees reflecting a decline in market levels predominantly offset by the removal of most money market fund fee waivers in the prior year and the impact of net inflows.

Revenue from Global Private Bank was \$5.2 billion, up 24%, driven by:

- deposit margin expansion reflecting higher rates on lower average deposit balances, and
- higher lending-related fees and average loans driven by the impact of the First Republic acquisition,

partially offset by

- an investment valuation loss in the first quarter of 2023.

Noninterest expense was \$6.3 billion, up 8%, predominantly driven by higher compensation, including growth in private banking advisor teams, higher revenue-related compensation and the impact from the acquisitions of Global Shares and J.P. Morgan Asset Management China.

The provision for credit losses was \$173 million, predominantly driven by a \$146 million addition to the allowance for credit losses to establish the allowance for the First Republic loans and lending-related commitments, in the second quarter of 2023.

The prior year provision was \$198 million.

Selected metrics

| (in millions, except ranking data, headcount and ratios) | As of or for the three months ended June 30, | | | As of or for the six months ended June 30, | | |
|---|--|---------------|-------------|--|---------------|-------------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| % of JPM mutual fund assets rated as 4- or 5-star ^(a) | 69 % | 72 % | | 69 % | 72 % | |
| % of JPM mutual fund assets ranked in 1 st or 2 nd quartile: ^(b) | | | | | | |
| 1 year | 59 | 64 | | 59 | 64 | |
| 3 years | 66 | 73 | | 66 | 73 | |
| 5 years | 80 | 79 | | 80 | 79 | |
| Selected balance sheet data (period-end)^(c) | | | | | | |
| Total assets | \$ 247,118 | \$ 235,553 | 5 % | \$ 247,118 | \$ 235,553 | 5 % |
| Loans | 222,493 ^(d) | 218,841 | 2 | 222,493 ^(d) | 218,841 | 2 |
| Deposits | 199,763 | 257,437 | (22) | 199,763 | 257,437 | (22) |
| Equity | 17,000 | 17,000 | — | 17,000 | 17,000 | — |
| Selected balance sheet data (average)^(c) | | | | | | |
| Total assets | \$ 238,987 | \$ 234,565 | 2 | \$ 233,933 | \$ 233,444 | — |
| Loans | 219,469 ^(e) | 216,846 | 1 | 215,491 ^(e) | 215,735 | — |
| Deposits | 211,872 | 268,861 | (21) | 218,078 | 278,256 | (22) |
| Equity | 16,670 | 17,000 | (2) | 16,337 | 17,000 | (4) |
| Headcount | 26,931 | 23,981 | 12 | 26,931 | 23,981 | 12 |
| Number of Global Private Bank client advisors | 3,214 | 2,866 | 12 | 3,214 | 2,866 | 12 |
| Credit data and quality statistics^(c) | | | | | | |
| Net charge-offs/(recoveries) | \$ 2 | \$ 9 | (78) | \$ — | \$ 8 | NM |
| Nonaccrual loans | 615 | 620 | (1) | 615 | 620 | (1) |
| Allowance for credit losses: | | | | | | |
| Allowance for loan losses | \$ 649 | \$ 547 | 19 | \$ 649 | \$ 547 | 19 |
| Allowance for lending-related commitments | 39 | 22 | 77 | 39 | 22 | 77 |
| Total allowance for credit losses | \$ 688^(f) | \$ 569 | 21 % | \$ 688^(f) | \$ 569 | 21 % |
| Net charge-off/(recovery) rate | — % | 0.02 % | | — % | 0.01 % | |
| Allowance for loan losses to period-end loans | 0.29 | 0.25 | | 0.29 | 0.25 | |
| Allowance for loan losses to nonaccrual loans | 106 | 88 | | 106 | 88 | |
| Nonaccrual loans to period-end loans | 0.28 | 0.28 | | 0.28 | 0.28 | |

(a) Represents the Morningstar Rating for all domiciled funds except for Japan domiciled funds which use Nomura. Includes only Asset Management retail open-ended mutual funds that have a rating. Excludes money market funds, Undiscovered Managers Fund, and Brazil domiciled funds.

(b) Quartile ranking sourced from Morningstar, Lipper and Nomura based on country of domicile. Includes only Asset Management retail open-ended mutual funds that are ranked by the aforementioned sources. Excludes money market funds, Undiscovered Managers Fund, and Brazil domiciled funds.

(c) Loans, deposits and related credit data and quality statistics relate to the Global Private Bank business.

(d) Includes the impact of the First Republic acquisition. Refer to page 24 for additional information.

(e) For the three and six months ended June 30, 2023, included \$9.7 billion and \$4.9 billion, respectively, associated with the First Republic acquisition.

(f) As of June 30, 2023, included a \$146 million allowance established as part of the First Republic acquisition.

Client assets

Assets under management of \$3.2 trillion were up 16%, while client assets of \$4.6 trillion were up 20%, driven by continued net inflows, higher market levels and the impact of the acquisition of Global Shares.

Client assets

| (in billions) | As of June 30, | | |
|---|-------------------------|-----------------|-------------|
| | 2023 | 2022 | Change |
| Assets by asset class | | | |
| Liquidity | \$ 826 | \$ 654 | 26 % |
| Fixed income | 718 | 624 | 15 |
| Equity | 792 | 641 | 24 |
| Multi-asset | 647 | 615 | 5 |
| Alternatives | 205 | 209 | (2) |
| Total assets under management | 3,188 | 2,743 | 16 |
| Custody/brokerage/administration/deposits | 1,370 ^(b) | 1,055 | 30 |
| Total client assets^(a) | \$ 4,558 | \$ 3,798 | 20 |
| Assets by client segment | | | |
| Private Banking | \$ 881 | \$ 712 | 24 |
| Global Institutional | 1,423 | 1,294 | 10 |
| Global Funds | 884 | 737 | 20 |
| Total assets under management | \$ 3,188 | \$ 2,743 | 16 |
| Private Banking | \$ 2,170 ^(b) | \$ 1,715 | 27 |
| Global Institutional | 1,497 | 1,339 | 12 |
| Global Funds | 891 | 744 | 20 |
| Total client assets^(a) | \$ 4,558 | \$ 3,798 | 20 % |

(a) Includes CCB client investment assets invested in managed accounts and J.P. Morgan mutual funds where AWM is the investment manager.

(b) Includes the impact of the acquisition of Global Shares.

Client assets (continued)

| (in billions) | Three months ended June 30, | | Six months ended June 30, | |
|--|-----------------------------|-----------------|---------------------------|-----------------|
| | 2023 | 2022 | 2023 | 2022 |
| Assets under management rollforward | | | | |
| Beginning balance | \$ 3,006 | \$ 2,960 | \$ 2,766 | \$ 3,113 |
| Net asset flows: | | | | |
| Liquidity | 60 | — | 153 | (52) |
| Fixed income | 37 | (1) | 63 | (4) |
| Equity | 20 | 9 | 42 | 20 |
| Multi-asset | 3 | (3) | 1 | 3 |
| Alternatives | 1 | 1 | 2 | 6 |
| Market/performance/other impacts | 61 | (223) | 161 | (343) |
| Ending balance, June 30 | \$ 3,188 | \$ 2,743 | \$ 3,188 | \$ 2,743 |
| Client assets rollforward | | | | |
| Beginning balance | \$ 4,347 | \$ 4,116 | \$ 4,048 | \$ 4,295 |
| Net asset flows | 112 | (1) | 264 | (6) |
| Market/performance/other impacts | 99 | (317) | 246 | (491) |
| Ending balance, June 30 | \$ 4,558 | \$ 3,798 | \$ 4,558 | \$ 3,798 |

International

| (in millions) | Three months ended June 30, | | | Six months ended June 30, | | |
|--|-----------------------------|-----------------|-------------|---------------------------|-----------------|-------------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Total net revenue^(a) | | | | | | |
| Europe/Middle East/Africa | \$ 853 | \$ 719 | 19 % | \$ 1,700 | \$ 1,489 | 14 % |
| Asia-Pacific | 497 | 452 | 10 | 974 | 912 | 7 |
| Latin America/Caribbean | 247 | 248 | – | 487 | 499 | (2) |
| Total international net revenue | 1,597 | 1,419 | 13 | 3,161 | 2,900 | 9 |
| North America | 3,346 | 2,887 | 16 | 6,566 | 5,721 | 15 |
| Total net revenue^(a) | \$ 4,943 | \$ 4,306 | 15 % | \$ 9,727 | \$ 8,621 | 13 % |

(a) Regional revenue is based on the domicile of the client.

| (in billions) | As of June 30, | | | As of June 30, | | |
|--|-----------------|-----------------|-------------|-----------------|-----------------|-------------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Assets under management | | | | | | |
| Europe/Middle East/Africa | \$ 527 | \$ 481 | 10 % | \$ 527 | \$ 481 | 10 % |
| Asia-Pacific | 252 | 214 | 18 | 252 | 214 | 18 |
| Latin America/Caribbean | 79 | 68 | 16 | 79 | 68 | 16 |
| Total international assets under management | 858 | 763 | 12 | 858 | 763 | 12 |
| North America | 2,330 | 1,980 | 18 | 2,330 | 1,980 | 18 |
| Total assets under management | \$ 3,188 | \$ 2,743 | 16 | \$ 3,188 | \$ 2,743 | 16 |
| Client assets | | | | | | |
| Europe/Middle East/Africa | \$ 663 | \$ 595 | 11 | \$ 663 | \$ 595 | 11 |
| Asia-Pacific | 378 | 324 | 17 | 378 | 324 | 17 |
| Latin America/Caribbean | 217 | 184 | 18 | 217 | 184 | 18 |
| Total international client assets | 1,258 | 1,103 | 14 | 1,258 | 1,103 | 14 |
| North America | 3,300 | 2,695 | 22 | 3,300 | 2,695 | 22 |
| Total client assets | \$ 4,558 | \$ 3,798 | 20 % | \$ 4,558 | \$ 3,798 | 20 % |

CORPORATE

Refer to pages 79-80 of JPMorgan Chase's 2022 Form 10-K for a discussion of Corporate.

Selected income statement and balance sheet data

| (in millions, except headcount) | As of or for the three months ended June 30, | | | As of or for the six months ended June 30, | | |
|--|--|-----------------|------------|--|-------------------|------------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Revenue | | | | | | |
| Principal transactions | \$ 113 | \$ 17 | NM | \$ 195 | \$ (144) | NM |
| Investment securities losses | (900) | (153) | (488)% | (1,768) | (547) | (223)% |
| All other income | 2,767 ^(c) | (108) | NM | 2,798 ^(c) | 102 | NM |
| Noninterest revenue | 1,980 | (244) | NM | 1,225 | (589) | NM |
| Net interest income | 1,738 ^(c) | 324 | 436 | 3,478 ^(c) | (212) | NM |
| Total net revenue^(a) | 3,718 | 80 | NM | 4,703 | (801) | NM |
| Provision for credit losses | (243) | 28 | NM | 127 | 57 | 123 |
| Noninterest expense | 1,152^(c) | 206 | 459 | 1,312^(c) | 390 | 236 |
| Income/(loss) before income tax expense/(benefit) | | | | | | |
| | 2,809 | (154) | NM | 3,264 | (1,248) | NM |
| Income tax expense/(benefit) | 169 ^(d) | 20 | NM | 380 ^(d) | (218) | NM |
| Net income/(loss) | \$ 2,640 | \$ (174) | NM | \$ 2,884 | \$ (1,030) | NM |
| Total net revenue | | | | | | |
| Treasury and CIO | \$ 1,261 | \$ 82 | NM | \$ 2,367 | \$ (862) | NM |
| Other Corporate | 2,457 ^(c) | (2) | NM | 2,336 ^(c) | 61 | NM |
| Total net revenue | \$ 3,718 | \$ 80 | NM | \$ 4,703 | \$ (801) | NM |
| Net income/(loss) | | | | | | |
| Treasury and CIO | \$ 1,057 | \$ 88 | NM | \$ 1,681 | \$ (660) | NM |
| Other Corporate | 1,583 ^(c) | (262) | NM | 1,203 ^(c) | (370) | NM |
| Total net income/(loss) | \$ 2,640 | \$ (174) | NM | \$ 2,884 | \$ (1,030) | NM |
| Total assets (period-end) | \$ 1,263,595 | \$ 1,459,528 | (13) | \$ 1,263,595 | \$ 1,459,528 | (13) |
| Loans (period-end) | 2,172 | 2,187 | (1) | 2,172 | 2,187 | (1) |
| Deposits (period-end) ^(b) | 21,083 | 13,191 | 60 | 21,083 | 13,191 | 60 |
| Headcount | 45,235 | 40,348 | 12 % | 45,235 | 40,348 | 12 % |

(a) Included tax-equivalent adjustments, driven by tax-exempt income from municipal bonds, of \$45 million and \$60 million for the three months ended June 30, 2023 and 2022, respectively, and \$101 million and \$118 million for the six months ended June 30, 2023 and 2022, respectively.

(b) Predominantly relates to the Firm's international consumer initiatives.

(c) Includes the impacts of the First Republic acquisition. Refer to Note 28 for additional information.

(d) Income taxes associated with the First Republic acquisition are reflected in the estimated bargain purchase gain.

Quarterly results

Net income was \$2.6 billion, compared with a net loss of \$174 million in the prior year.

Net revenue was \$3.7 billion, compared with \$80 million in the prior year, driven by higher net interest income due to higher rates, partially offset by lower Firmwide average deposit balances available for deployment in Treasury and CIO.

Noninterest revenue was \$2.0 billion, compared with a loss of \$244 million in the prior year, driven by:

- a \$2.7 billion estimated bargain purchase gain associated with the First Republic acquisition
- higher revenue related to cash deployment transactions in Treasury and CIO, and
- higher losses in the prior year on certain revenues associated with foreign exchange rate movements,

partially offset by

- higher net investment securities losses on sales of U.S. Treasuries and U.S. GSE and government agency MBS, associated with repositioning the investment securities portfolio, and
- net losses on certain legacy private equity investments in Corporate, compared with net gains in the prior year

Noninterest expense of \$1.2 billion was up \$946 million driven by expense of \$562 million associated with the First Republic acquisition, higher legal expense, and a greater benefit in the prior year on certain expenses associated with foreign exchange rate movements.

The net impact of movements in foreign exchange rates associated with the foreign exchange risk that was transferred to Treasury and CIO on certain revenues and

expense were not material to net income. Refer to Foreign Exchange Risk on page 22 for additional information.

The provision for credit losses was a net benefit of \$243 million, reflecting a reduction in the allowance for credit losses associated with the deposit placed with First Republic Bank in the first quarter of 2023.

Refer to Note 10 for additional information on the investment securities portfolio, and Note 13 for additional information on the allowance for credit losses.

The current period tax expense benefited from the income tax expense associated with the First Republic acquisition reflected in the estimated bargain purchase gain, partially offset by changes in the level and mix of income and expenses subject to U.S. federal and state and local taxes that also impact the Firm's tax reserves.

Year-to-date results

Net income was \$2.9 billion, compared with a net loss of \$1.0 billion in the prior year.

Net revenue was \$4.7 billion, compared with a loss of \$801 million in the prior year, driven by higher net interest income due to higher rates, partially offset by lower Firmwide average deposit balances available for deployment in Treasury and CIO.

Noninterest revenue was \$1.2 billion, compared with a loss of \$589 million, driven by:

- a \$2.7 billion estimated bargain purchase gain associated with the First Republic acquisition,
- higher revenue related to cash deployment transactions in Treasury and CIO, and
- higher losses in the prior year on certain revenues associated with foreign exchange rate movements,

partially offset by

- higher net investment securities losses related to the sales of U.S. Treasuries and U.S. GSE and government agency MBS, associated with repositioning the investment securities portfolio,
- the absence of proceeds in the prior year from an insurance settlement, and
- lower net gains related to certain other Corporate investments.

Noninterest expense of \$1.3 billion was up \$922 million driven by expense of \$562 million associated with the First Republic acquisition, higher legal expense, and a greater benefit in the prior year on certain expenses associated with foreign exchange rate movements.

The net impact of movements in foreign exchange rates associated with the foreign exchange risk that was transferred to Treasury and CIO on certain revenues and expense were not material to net income. Refer to Foreign Exchange Risk on page 22 for additional information.

The current period tax expense benefited from the income tax expense associated with the First Republic acquisition reflected in the estimated bargain purchase gain, largely offset by changes in the level and mix of income and expenses subject to U.S. federal and state and local taxes that also impact the Firm's tax reserves.

Other Corporate also reflects the Firm's international consumer initiatives, which includes Chase U.K., the Firm's digital retail bank in the U.K.; Nutmeg, a digital wealth manager in the U.K.; and a 40% ownership stake in C6 Bank, a digital bank in Brazil.

Treasury and CIO overview

At June 30, 2023, the average credit rating of the Treasury and CIO investment securities comprising the portfolio in the table below was AA+ (based upon external ratings where available and, where not available, based primarily upon internal risk ratings). Refer to Note 10 for further information on the Firm's investment securities portfolio and internal risk ratings. Refer to Liquidity Risk Management on pages 54-61 for further information on liquidity and funding risk. Refer to Market Risk Management on pages 84-89 for information on interest rate and foreign exchange risks.

Selected income statement and balance sheet data

| (in millions) | As of or for the three months ended June 30, | | | As of or for the six months ended June 30, | | |
|---|--|------------|--------|--|------------|--------|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Investment securities losses | \$ (900) | \$ (153) | (488)% | \$ (1,768) | \$ (547) | (223)% |
| Available-for-sale securities (average) | \$ 198,620 | \$ 252,121 | (21) | \$ 200,687 | \$ 278,073 | (28) |
| Held-to-maturity securities (average) ^(a) | 410,594 | 418,843 | (2) | 413,953 | 391,978 | 6 |
| Investment securities portfolio (average) | \$ 609,214 | \$ 670,964 | (9) | \$ 614,640 | \$ 670,051 | (8) |
| Available-for-sale securities (period-end) | \$ 201,211 ^(c) | \$ 220,213 | (9) | \$ 201,211 ^(c) | \$ 220,213 | (9) |
| Held-to-maturity securities (period-end) ^(a) | 408,941 | 441,649 | (7) | 408,941 | 441,649 | (7) |
| Investment securities portfolio, net of allowance for credit losses (period-end) ^(b) | \$ 610,152 | \$ 661,862 | (8)% | \$ 610,152 | \$ 661,862 | (8)% |

(a) Effective January 1, 2023, the Firm adopted new hedge accounting guidance. As permitted by the guidance, the Firm elected to transfer \$7.1 billion of HTM securities to AFS. During 2022, the Firm transferred \$78.3 billion of investment securities from AFS to HTM for capital management purposes. Refer to Note 1 and Note 10 for additional information on the new hedge accounting guidance.

(b) As of June 30, 2023 and 2022, the allowance for credit losses on investment securities was \$74 million and \$47 million, respectively.

(c) As of June 30, 2023, included \$25.8 billion of AFS securities associated with the First Republic acquisition. Refer to Note 28 for additional information.

FIRMWIDE RISK MANAGEMENT

Risk is an inherent part of JPMorgan Chase’s business activities. When the Firm extends a consumer or wholesale loan, advises customers and clients on their investment decisions, makes markets in securities, or offers other products or services, the Firm takes on some degree of risk. The Firm’s overall objective is to manage its business, and the associated risks, in a manner that balances serving the interests of its clients, customers and investors, and protecting the safety and soundness of the Firm.

The Firm believes that effective risk management requires, among other things:

- Acceptance of responsibility, including identification and escalation of risks by all individuals within the Firm;
- Ownership of risk identification, assessment, data and management within each of the LOBs and Corporate; and
- A Firmwide risk governance and oversight structure.

The Firm follows a disciplined and balanced compensation framework with strong internal governance and independent oversight by the Board of Directors (the “Board”). The impact of risk and control issues is carefully considered in the Firm’s performance evaluation and incentive compensation processes.

Risk governance framework

The Firm’s risk governance framework involves understanding drivers of risks, types of risks, and impacts of risks.



Refer to pages 81-84 of JPMorgan Chase’s 2022 Form 10-K for a further discussion of Firmwide risk management governance and oversight.

Risk governance and oversight functions

The following sections of this Form 10-Q and the 2022 Form 10-K discuss the risk governance and oversight functions in place to manage the risks inherent in the Firm’s business activities.

| Risk governance and oversight functions | Form 10-Q page reference | Form 10-K page reference |
|---|--------------------------|--------------------------|
| Strategic Risk | | 85 |
| Capital Risk | 48-53 | 86-96 |
| Liquidity Risk | 54-61 | 97-104 |
| Reputation Risk | | 105 |
| Consumer Credit Risk | 65-69 | 110-115 |
| Wholesale Credit Risk | 70-79 | 116-126 |
| Investment Portfolio Risk | 83 | 130 |
| Market Risk | 84-89 | 131-138 |
| Country Risk | 90 | 139-140 |
| Climate Risk | | 141 |
| Operational Risk | | 142-148 |
| Compliance Risk | | 145 |
| Conduct Risk | | 146 |
| Legal Risk | | 147 |
| Estimations and Model Risk | | 148 |

CAPITAL RISK MANAGEMENT

Capital risk is the risk the Firm has an insufficient level or composition of capital to support the Firm's business activities and associated risks during normal economic environments and under stressed conditions.

Refer to pages 86-96 of JPMorgan Chase's 2022 Form 10-K, Note 23 of this Form 10-Q and the Firm's Pillar 3 Regulatory Capital Disclosures reports, which are available on the Firm's website, for a further discussion of the Firm's capital risk.

Basel III Overview

The capital rules under Basel III establish minimum capital ratios and overall capital adequacy standards for large and internationally active U.S. Bank Holding Companies ("BHCs") and banks, including the Firm and its insured depository institution ("IDI") subsidiaries, including JPMorgan Chase Bank, N.A. The minimum amount of regulatory capital that must be held by BHCs and banks is determined by calculating risk-weighted assets ("RWA"), which are on-balance sheet assets and off-balance sheet exposures, weighted according to risk. Two comprehensive approaches are prescribed for calculating RWA: a standardized approach ("Basel III Standardized"), and an advanced approach ("Basel III Advanced"). For each of the risk-based capital ratios, the capital adequacy of the Firm is evaluated against the lower of the Standardized or Advanced approaches compared to their respective regulatory capital ratio requirements. The Firm's Basel III Standardized risk-based ratios are currently more binding than the Basel III Advanced risk-based ratios.

Basel III also includes a requirement for Advanced Approaches banking organizations, including the Firm, to calculate its SLR. Refer to SLR on page 51 for additional information.

Key Regulatory Developments

CECL regulatory capital transition

Beginning January 1, 2022, the \$2.9 billion CECL capital benefit, provided by the Federal Reserve in response to the COVID-19 pandemic, is being phased out at 25% per year over a three-year period. As of June 30, 2023, the Firm's CET1 capital reflected the remaining \$1.4 billion benefit associated with the CECL capital transition provisions.

Additionally, effective January 1, 2023, the Firm phased out 50% of the other CECL capital transition provisions which impacted Tier 2 capital, adjusted average assets, total leverage exposure and RWA, as applicable.

Refer to Capital Risk Management on pages 86-96 and Note 1 of JPMorgan Chase's 2022 Form 10-K for further information on CECL capital transition provisions and the CECL accounting guidance.

Risk-based Capital Targets

The Firm's target for its Basel III Standardized CET1 capital ratio for the first quarter of 2024 remains at 13.5%. The Firm's quarterly capital ratios may vary from the target dependent on market conditions. The target is based on the Basel III capital rules currently in effect.

Basel III Finalization

In July 2023, the Federal Reserve, the OCC and the FDIC released a proposal to amend the risk-based capital framework, entitled "Regulatory capital rule: Amendments applicable to large banking organizations and to banking organizations with significant trading activity". Under the proposal, changes would include replacement of the advanced approach with an expanded risk-based approach, which would not permit the use of internal models for the calculation of risk-weighted assets, other than for Market risk. In addition, the stress capital buffer requirement would be applicable to both the expanded risk-based approach and the standardized approach. The proposal would significantly revise risk-based capital requirements for all banks with assets of \$100 billion or more, including the Firm and other U.S. GSIBs. The proposed effective date is July 1, 2025 with a three year transition period applicable to the expanded risk-based approach.

GSIB Surcharge

In July 2023, the Federal Reserve also released a proposal to amend the calculation of the GSIB surcharge. If adopted as proposed, these amendments would require the Firm to assess its GSIB surcharge on an annual basis, using the average of the quarterly surcharge calculations throughout the calendar year, with daily averaging required for certain measures within the surcharge calculation. Surcharge increments would be reduced from 50bp to 10bp and there would also be other technical amendments to the Method 2 calculation. The proposed amendments would revise risk-based capital requirements for the Firm and other U.S. GSIBs, and would become effective on two calendar quarters after the adoption of the final rule. Refer to Risk-based Capital Regulatory Requirements on pages 89-90 of JPMorgan Chase's 2022 Form 10-K for further information on the GSIB surcharge.

The following tables present the Firm's risk-based capital metrics under both the Basel III Standardized and Advanced approaches and leverage-based capital metrics. Refer to Capital Risk Management on pages 86-96 of JPMorgan Chase's 2022 Form 10-K for a further discussion of these capital metrics. Refer to Note 23 for JPMorgan Chase Bank, N.A.'s risk-based and leverage-based capital metrics. First Republic Bank was not subject to Advanced approach regulatory capital requirements. As a result, for certain exposures associated with the First Republic acquisition, Advanced RWA and any impact on Advanced Total capital is calculated under the Standardized approach as permitted by the transition provisions in the U.S. capital rules. Refer to Note 28 for additional information on the First Republic acquisition.

| (in millions, except ratios) | Standardized | | | Advanced | | |
|--|---------------|-------------------|---|--------------------------|-------------------|---|
| | June 30, 2023 | December 31, 2022 | Capital ratio requirements ^(b) | June 30, 2023 | December 31, 2022 | Capital ratio requirements ^(b) |
| Risk-based capital metrics:^(a) | | | | | | |
| CET1 capital | \$ 235,827 | \$ 218,934 | | \$ 235,827 | \$ 218,934 | |
| Tier 1 capital | 262,585 | 245,631 | | 262,585 | 245,631 | |
| Total capital | 295,281 | 277,769 | | 281,953 ^(c) | 264,583 | |
| Risk-weighted assets | 1,706,927 | 1,653,538 | | 1,694,714 ^(c) | 1,609,773 | |
| CET1 capital ratio | 13.8 % | 13.2 % | 12.5 % | 13.9 % | 13.6 % | 11.0 % |
| Tier 1 capital ratio | 15.4 | 14.9 | 14.0 | 15.5 | 15.3 | 12.5 |
| Total capital ratio | 17.3 | 16.8 | 16.0 | 16.6 | 16.4 | 14.5 |

(a) The capital metrics reflect the CECL capital transition provisions.

(b) Represents minimum requirements and regulatory buffers applicable to the Firm for the period ended June 30, 2023. For the period ended December 31, 2022, the Basel III Standardized CET1, Tier 1, and Total capital ratio requirements applicable to the Firm were 12.0%, 13.5%, and 15.5%, respectively; the Basel III Advanced CET1, Tier 1, and Total capital ratio requirements applicable to the Firm were 10.5%, 12.0%, and 14.0%, respectively. Refer to Note 23 for additional information.

(c) Includes the impacts of certain assets associated with the First Republic acquisition to which the Standardized approach has been applied as permitted by the transition provisions in the U.S. capital rules.

| Three months ended (in millions, except ratios) | June 30, 2023 | December 31, 2022 | Capital ratio requirements ^(c) |
|--|---------------|-------------------|---|
| Leverage-based capital metrics:^(a) | | | |
| Adjusted average assets ^(b) | \$ 3,796,579 | \$ 3,703,873 | |
| Tier 1 leverage ratio | 6.9 % | 6.6 % | 4.0 % |
| Total leverage exposure | \$ 4,492,761 | \$ 4,367,092 | |
| SLR | 5.8 % | 5.6 % | 5.0 % |

(a) The capital metrics reflect the CECL capital transition provisions.

(b) Adjusted average assets, for purposes of calculating the leverage ratios, includes quarterly average assets adjusted for on-balance sheet assets that are subject to deduction from Tier 1 capital, predominantly goodwill, inclusive of estimated equity method goodwill, and other intangible assets.

(c) Represents minimum requirements and regulatory buffers applicable to the Firm. Refer to Note 23 for additional information.

Capital components

The following table presents reconciliations of total stockholders' equity to Basel III CET1 capital, Tier 1 capital and Total capital as of June 30, 2023 and December 31, 2022.

| (in millions) | June 30, 2023 | December 31, 2022 |
|---|-------------------------|----------------------|
| Total stockholders' equity | \$ 312,516 | \$ 292,332 |
| Less: Preferred stock | 27,404 | 27,404 |
| Common stockholders' equity | 285,112 | 264,928 |
| Add: | | |
| Certain deferred tax liabilities ^(a) | 3,097 | 2,510 |
| Other CET1 capital adjustments ^(b) | 5,586 | 6,221 |
| Less: | | |
| Goodwill ^(c) | 54,339 | 53,501 |
| Other intangible assets | 3,629 | 1,224 |
| Standardized/Advanced CET1 capital | \$ 235,827 | \$ 218,934 |
| Add: Preferred stock | 27,404 | 27,404 |
| Less: Other Tier 1 adjustments | 646 | 707 |
| Standardized/Advanced Tier 1 capital | \$ 262,585 | \$ 245,631 |
| Long-term debt and other instruments qualifying as Tier 2 capital | \$ 13,424 | \$ 13,569 |
| Qualifying allowance for credit losses ^(d) | 20,459 | 19,353 |
| Other | (1,187) | (784) |
| Standardized Tier 2 capital | \$ 32,696 | \$ 32,138 |
| Standardized Total capital | \$ 295,281 | \$ 277,769 |
| Adjustment in qualifying allowance for credit losses for Advanced Tier 2 capital ^(e) | (13,328) ^(f) | (13,186) |
| Advanced Tier 2 capital | \$ 19,368 | \$ 18,952 |
| Advanced Total capital | \$ 281,953 | \$ 264,583 |

- (a) Represents deferred tax liabilities related to tax-deductible goodwill and to identifiable intangibles created in nontaxable transactions, which are netted against goodwill and other intangibles when calculating CET1 capital.
- (b) As of June 30, 2023 and December 31, 2022, included a net benefit associated with cash flow hedges and debit valuation adjustments ("DVA") related to structured notes recorded in AOCI of \$5.3 billion and \$5.2 billion and the benefit from the CECL capital transition provisions of \$1.4 billion and \$2.2 billion, respectively.
- (c) Goodwill deducted from capital includes goodwill associated with equity method investments in nonconsolidated financial institutions based on regulatory requirements. Refer to Principal investment risk on page 83 for additional information.
- (d) Represents the allowance for credit losses eligible for inclusion in Tier 2 capital up to 1.25% of credit risk RWA, including the impact of the CECL capital transition provision with any excess deducted from RWA.
- (e) Represents an adjustment to qualifying allowance for credit losses for the excess of eligible credit reserves over expected credit losses up to 0.6% of credit risk RWA, including the impact of the CECL capital transition provision with any excess deducted from RWA.
- (f) Included an incremental \$714 million allowance for credit losses on certain assets associated with the First Republic acquisition to which the Standardized approach has been applied, as permitted by the transition provisions in the U.S. capital rules.

Capital rollforward

The following table presents the changes in Basel III CET1 capital, Tier 1 capital and Tier 2 capital for the six months ended June 30, 2023.

| Six months ended June 30, (in millions) | 2023 |
|--|-------------------|
| Standardized/Advanced CET1 capital at December 31, 2022 | \$ 218,934 |
| Net income applicable to common equity | 26,365 |
| Dividends declared on common stock | (5,911) |
| Net purchase of treasury stock | (4,304) |
| Changes in additional paid-in capital | 534 |
| Changes related to AOCI applicable to capital: | |
| Unrealized gains/(losses) on investment securities | 2,969 |
| Translation adjustments, net of hedges ^(a) | 267 |
| Fair value hedges | (10) |
| Defined benefit pension and other postretirement employee benefit ("OPEB") plans | (61) |
| Changes related to other CET1 capital adjustments ^(b) | (2,956) |
| Change in Standardized/Advanced CET1 capital | 16,893 |
| Standardized/Advanced CET1 capital at June 30, 2023 | \$ 235,827 |
| Standardized/Advanced Tier 1 capital at December 31, 2022 | \$ 245,631 |
| Change in CET1 capital ^(b) | 16,893 |
| Redemptions of noncumulative perpetual preferred stock | – |
| Other | 61 |
| Change in Standardized/Advanced Tier 1 capital | 16,954 |
| Standardized/Advanced Tier 1 capital at June 30, 2023 | \$ 262,585 |
| Standardized Tier 2 capital at December 31, 2022 | \$ 32,138 |
| Change in long-term debt and other instruments qualifying as Tier 2 | (145) |
| Change in qualifying allowance for credit losses ^(b) | 1,106 |
| Other | (403) |
| Change in Standardized Tier 2 capital | 558 |
| Standardized Tier 2 capital at June 30, 2023 | \$ 32,696 |
| Standardized Total capital at June 30, 2023 | \$ 295,281 |
| Advanced Tier 2 capital at December 31, 2022 | \$ 18,952 |
| Change in long-term debt and other instruments qualifying as Tier 2 | (145) |
| Change in qualifying allowance for credit losses ^{(b)(c)} | 964 |
| Other | (403) |
| Change in Advanced Tier 2 capital | 416 |
| Advanced Tier 2 capital at June 30, 2023 | \$ 19,368 |
| Advanced Total capital at June 30, 2023 | \$ 281,953 |

- (a) Includes foreign currency translation adjustments and the impact of related derivatives.
- (b) Includes the impact of the CECL capital transition provisions and the cumulative effect of changes in accounting principles. Refer to Note 1 for additional information.
- (c) Included an incremental \$714 million allowance for credit losses on certain assets associated with the First Republic acquisition to which the Standardized approach has been applied, as permitted by the transition provisions in the U.S. capital rules.

RWA rollforward

The following table presents changes in the components of RWA under Basel III Standardized and Advanced approaches for the six months ended June 30, 2023. The amounts in the rollforward categories are estimates, based on the predominant driver of the change.

| Six months ended June 30, 2023 (in millions) | Standardized | | | Advanced | | | |
|--|-----------------------------------|--------------------|---------------------|--------------------------------------|--------------------|-------------------------|---------------------|
| | Credit risk RWA ^(c) | Market risk RWA | Total RWA | Credit risk RWA ^{(c)(d)} | Market risk RWA | Operational risk RWA | Total RWA |
| December 31, 2022 | \$ 1,568,536 | \$ 85,002 | \$ 1,653,538 | \$ 1,078,076 | \$ 85,432 | \$ 446,265 | \$ 1,609,773 |
| Model & data changes ^(a) | (6,013) | (3,592) | (9,605) | (3,772) | (3,592) | – | (7,364) |
| Movement in portfolio levels ^(b) | 70,207 | (7,213) | 62,994 | 102,745 | (7,487) | (2,953) | 92,305 |
| Changes in RWA | 64,194 | (10,805) | 53,389 | 98,973 | (11,079) | (2,953) | 84,941 |
| June 30, 2023 | \$ 1,632,730 | \$ 74,197 | \$ 1,706,927 | \$ 1,177,049 | \$ 74,353 | \$ 443,312 | \$ 1,694,714 |

- (a) Model & data changes refer to material movements in levels of RWA as a result of revised methodologies and/or treatment per regulatory guidance (exclusive of rule changes).
- (b) Movement in portfolio levels (inclusive of rule changes) refers to: for Credit risk RWA, changes in book size, impacts associated with the First Republic acquisition including the benefit of the shared-loss agreements entered into with the FDIC, position rollofs in legacy portfolios in Home Lending, changes in composition and credit quality, market movements, and deductions for excess eligible credit reserves not eligible for inclusion in Tier 2 capital; for Market risk RWA, changes in position, market movements, and changes in the Firm's regulatory multiplier from Regulatory VaR backtesting exceptions; and for Operational risk RWA, updates to cumulative losses and macroeconomic model inputs.
- (c) As of June 30, 2023 and December 31, 2022, the Basel III Standardized Credit risk RWA included wholesale and retail off balance-sheet RWA of \$221.2 billion and \$210.1 billion, respectively; and the Basel III Advanced Credit risk RWA included wholesale and retail off balance-sheet RWA of \$199.0 billion and \$180.8 billion, respectively.
- (d) As of June 30, 2023, Credit risk RWA reflected approximately \$57.1 billion of RWA calculated under the Standardized approach for certain assets associated with the First Republic acquisition as permitted by the transition provisions in the U.S. capital rules.

Refer to the Firm's Pillar 3 Regulatory Capital Disclosures reports, which are available on the Firm's website, for further information on Credit risk RWA, Market risk RWA and Operational risk RWA.

Supplementary leverage ratio

Refer to Supplementary Leverage Ratio on page 93 of JPMorgan Chase's 2022 Form 10-K for additional information.

The following table presents the components of the Firm's SLR.

| Three months ended (in millions, except ratio) | June 30, 2023 | December 31, 2022 |
|---|---------------------|----------------------|
| Tier 1 capital | \$ 262,585 | \$ 245,631 |
| Total average assets | 3,851,388 | 3,755,271 |
| Less: Regulatory capital adjustments ^(a) | 54,809 | 51,398 |
| Total adjusted average assets ^(b) | 3,796,579 | 3,703,873 |
| Add: Off-balance sheet exposures ^(c) | 696,182 | 663,219 |
| Total leverage exposure | \$ 4,492,761 | \$ 4,367,092 |
| SLR | 5.8 % | 5.6 % |

- (a) For purposes of calculating the SLR, includes quarterly average assets adjusted for on-balance sheet assets that are subject to deduction from Tier 1 capital, predominantly goodwill, inclusive of estimated equity method goodwill, other intangible assets and adjustments for the CECL capital transition provisions.
- (b) Adjusted average assets used for the calculation of Tier 1 leverage ratio.
- (c) Off-balance sheet exposures are calculated as the average of the three month-end spot balances on applicable regulatory exposures during the reporting quarter. Refer to the Firm's Pillar 3 Regulatory Capital Disclosures reports for additional information.

Line of business equity

Each business segment is allocated capital by taking into consideration a variety of factors including capital levels of similarly rated peers and applicable regulatory capital requirements. As of June 30, 2023, the Firm updated its line of business capital allocations to reflect the impact of the First Republic acquisition.

Refer to line of business equity on page 93 of JPMorgan Chase's 2022 Form 10-K for additional information on capital allocation.

The following table presents the capital allocated to each business segment.

Line of business equity (Allocated capital)

| (in billions) | June 30, 2023 | March 31, 2023 | December 31, 2022 |
|--|------------------|-------------------|----------------------|
| Consumer & Community Banking | \$ 55.5 | \$ 52.0 | \$ 50.0 |
| Corporate & Investment Bank | 108.0 | 108.0 | 103.0 |
| Commercial Banking | 30.0 | 28.5 | 25.0 |
| Asset & Wealth Management | 17.0 | 16.0 | 17.0 |
| Corporate | 74.6 | 71.2 | 69.9 |
| Total common stockholders' equity | \$ 285.1 | \$ 275.7 | \$ 264.9 |

Capital actions

Common stock dividends

The Firm's quarterly common stock dividend is currently \$1.00 per share. On June 30, 2023, the Firm announced that its Board of Directors intends to increase the quarterly common stock dividend to \$1.05 per share, effective in the third quarter of 2023. The Firm's dividends are subject to approval by the Board of Directors on a quarterly basis.

Common stock

The Firm is authorized to purchase up to \$30 billion under its common share repurchase program previously approved by the Board of Directors.

The following table sets forth the Firm's repurchases of common stock for the three and six months ended June 30, 2023 and 2022.

| (in millions) | Three months ended June 30, | | Six months ended June 30, | |
|--|--------------------------------|--------|------------------------------|----------|
| | 2023 | 2022 | 2023 | 2022 |
| Total number of shares of common stock repurchased | 16.7 | 5.0 | 38.7 | 23.1 |
| Aggregate purchase price of common stock repurchases | \$ 2,293 | \$ 622 | \$ 5,233 | \$ 3,122 |

Refer to Capital actions on page 94 of JPMorgan Chase's 2022 Form 10-K for additional information.

Refer to Part II, Item 2: Unregistered Sales of Equity Securities and Use of Proceeds and Part II, Item 5: Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities on pages 209-210 of this Form 10-Q and page 34 of JPMorgan Chase's 2022 Form 10-K, respectively, for additional information regarding repurchases of the Firm's equity securities.

Preferred stock

Preferred stock dividends declared were \$373 million and \$410 million, and \$729 million and \$807 million, for the three and six months ended June 30, 2023 and 2022, respectively.

Refer to Note 19 of this Form 10-Q and Note 21 of JPMorgan Chase's 2022 Form 10-K for additional information on the Firm's preferred stock, including the issuance and redemption of preferred stock.

Subordinated Debt

Refer to Long-term funding and issuance on page 60 and Note 18 for additional information on the Firm's subordinated debt.

Capital planning and stress testing

Comprehensive Capital Analysis and Review

On April 5, 2023, the Firm submitted its 2023 Capital Plan to the Federal Reserve. On June 30, 2023, the Firm announced that it had completed the Federal Reserve's 2023 Comprehensive Capital Analysis and Review ("CCAR") stress test process.

On July 27, 2023, the Federal Reserve announced the Firm's 2023 SCB requirement of 2.9% (down from the current 4.0%), which will result in a Standardized CET1

capital ratio requirement, including regulatory buffers, of 11.4% (down from the current 12.5%) for the fourth quarter of 2023. The SCB requirement will become effective on October 1, 2023 and will remain in effect until September 30, 2024.

Refer to Capital planning and stress testing on pages 86-87 of JPMorgan Chase's 2022 Form 10-K for additional information on CCAR.

Other capital requirements

Total Loss-Absorbing Capacity

The Federal Reserve's TLAC rule requires the U.S. GSIB top-tier holding companies, including the Firm, to maintain minimum levels of external TLAC and eligible long-term debt ("eligible LTD").

The following table presents the eligible external TLAC and eligible LTD amounts, as well as a representation of these amounts as a percentage of the Firm's total RWA and total leverage exposure applying the impact of the CECL capital transition provisions as of June 30, 2023 and December 31, 2022.

| (in billions, except ratio) | June 30, 2023 | | December 31, 2022 | |
|------------------------------|---------------|----------|-------------------|----------|
| | External TLAC | LTD | External TLAC | LTD |
| Total eligible amount | \$ 493.8 | \$ 218.2 | \$ 486.0 | \$ 228.5 |
| % of RWA | 28.9 % | 12.8 % | 29.4 % | 13.8 % |
| Regulatory requirements | 23.0 | 10.0 | 22.5 | 9.5 |
| Surplus/ (shortfall) | \$ 101.2 | \$ 47.6 | \$ 114.0 | \$ 71.4 |
| % of total leverage exposure | 11.0 % | 4.9 % | 11.1 % | 5.2 % |
| Regulatory requirements | 9.5 | 4.5 | 9.5 | 4.5 |
| Surplus/ (shortfall) | \$ 66.9 | \$ 16.1 | \$ 71.2 | \$ 32.0 |

Effective January 1, 2023, the Firm's regulatory requirements for TLAC to RWA and LTD to RWA ratios increased by 50 bps to 23.0% and 10.0%, respectively, due to the increase in the Firm's GSIB requirements. Refer to Risk-based Capital Regulatory Requirements on pages 89-90 of JPMorgan Chase's 2022 Form 10-K for further information on the GSIB surcharge.

Refer to Liquidity Risk Management on pages 54-61 for further information on long-term debt issued by the Parent Company.

Refer to Part I, Item 1A: Risk Factors on pages 9-32 of JPMorgan Chase's 2022 Form 10-K for information on the financial consequences to holders of the Firm's debt and equity securities in a resolution scenario.

Refer to other capital requirements on page 95 of JPMorgan Chase's 2022 Form 10-K for additional information on TLAC.

U.S. broker-dealer regulatory capital

J.P. Morgan Securities

JPMorgan Chase's principal U.S. broker-dealer subsidiary is J.P. Morgan Securities. J.P. Morgan Securities is subject to the regulatory capital requirements of Rule 15c3-1 under the Securities Exchange Act of 1934 (the "Net Capital Rule"). J.P. Morgan Securities is also registered as a futures commission merchant and is subject to regulatory capital requirements, including those imposed by the SEC, the Commodity Futures Trading Commission ("CFTC"), the Financial Industry Regulatory Authority ("FINRA") and the National Futures Association ("NFA").

The following table presents J.P. Morgan Securities' net capital:

| June 30, 2023 | | | |
|---------------|----|--------|----------|
| (in millions) | | Actual | Minimum |
| Net Capital | \$ | 24,578 | \$ 5,593 |

Non-U.S. subsidiary regulatory capital

J.P. Morgan Securities plc

J.P. Morgan Securities plc is a wholly-owned subsidiary of JPMorgan Chase Bank, N.A. and has authority to engage in banking, investment banking and broker-dealer activities. J.P. Morgan Securities plc is jointly regulated in the U.K. by the Prudential Regulation Authority ("PRA") and the Financial Conduct Authority ("FCA"). J.P. Morgan Securities plc is subject to the European Union ("EU") Capital Requirements Regulation ("CRR"), as adopted in the U.K., and the PRA capital rules, each of which have implemented Basel III and thereby subject J.P. Morgan Securities plc to its requirements.

The Bank of England requires that U.K. banks, including U.K. regulated subsidiaries of overseas groups, maintain minimum requirements for own funds and eligible liabilities ("MREL"). As of June 30, 2023, J.P. Morgan Securities plc was compliant with its MREL requirements.

Effective January 1, 2023, J.P. Morgan Securities plc was required to meet the minimum leverage capital requirement established by the PRA of 3.25%, plus regulatory buffers.

The following table presents J.P. Morgan Securities plc's risk-based and leverage-based capital metrics:

| June 30, 2023 | | | |
|------------------------------|----|-----------|--|
| (in millions, except ratios) | | Estimated | Regulatory Minimum ratios ^(a) |
| Total capital | \$ | 55,711 | |
| CET1 capital ratio | | 17.1 % | 4.5 % |
| Tier 1 capital ratio | | 22.1 | 6.0 |
| Total capital ratio | | 28.2 | 8.0 |
| Tier 1 leverage ratio | | 7.0 | 3.3 ^(b) |

(a) Represents minimum Pillar 1 requirements specified by the PRA. J.P. Morgan Securities plc's capital ratios as of June 30, 2023 exceeded the minimum requirements, including the additional capital requirements specified by the PRA.

(b) At least 75% of the Tier 1 leverage ratio minimum must be met with CET1 capital.

J.P. Morgan SE

JPMSE is a wholly-owned subsidiary of JPMorgan Chase Bank, N.A. and has authority to engage in banking, investment banking and markets activities. JPMSE is regulated by the European Central Bank as well as the local regulators in each of the countries in which it operates, and it is subject to EU capital requirements under Basel III. JPMSE is required by the EU Single Resolution Board to maintain MREL. As of June 30, 2023, JPMSE was compliant with its MREL requirements.

The following table presents JPMSE's risk-based and leverage-based capital metrics:

| June 30, 2023 | | | |
|------------------------------|----|-----------|--|
| (in millions, except ratios) | | Estimated | Regulatory Minimum ratios ^(a) |
| Total capital | \$ | 43,524 | |
| CET1 capital ratio | | 19.9 % | 4.5 % |
| Tier 1 capital ratio | | 19.9 | 6.0 |
| Total capital ratio | | 35.4 | 8.0 |
| Tier 1 leverage ratio | | 5.5 | 3.0 |

(a) Represents minimum Pillar 1 requirements specified by the EU CRR. J.P. Morgan SE's capital and leverage ratios as of June 30, 2023 exceeded the minimum requirements, including the additional capital requirements specified by EU regulators.

Refer to U.S. broker-dealer and Non-U.S. subsidiary regulatory capital on page 96 of JPMorgan Chase's 2022 Form 10-K for further information.

LIQUIDITY RISK MANAGEMENT

Liquidity risk is the risk that the Firm will be unable to meet its contractual and contingent financial obligations as they arise or that it does not have the appropriate amount, composition and tenor of funding and liquidity to support its assets and liabilities. Refer to pages 97-104 of JPMorgan Chase's 2022 Form 10-K and the Firm's U.S. LCR Disclosure reports, which are available on the Firm's website, for a further discussion of the Firm's liquidity risk.

LCR and HQLA

The LCR rule requires that the Firm and JPMorgan Chase Bank, N.A. maintain an amount of eligible HQLA that is sufficient to meet their respective estimated total net cash outflows over a prospective 30 calendar-day period of significant stress.

Under the LCR rule, the amount of eligible HQLA held by JPMorgan Chase Bank, N.A. that is in excess of its stand-alone 100% minimum LCR requirement, and that is not transferable to non-bank affiliates, must be excluded from the Firm's reported eligible HQLA. The LCR for both the Firm and JPMorgan Chase Bank, N.A. is required to be a minimum of 100%.

The following table summarizes the Firm and JPMorgan Chase Bank, N.A.'s average LCR for the three months ended June 30, 2023, March 31, 2023 and June 30, 2022 based on the Firm's interpretation of the LCR framework.

| Average amount (in millions) | Three months ended | | |
|---|--------------------|-------------------|-------------------|
| | June 30, 2023 | March 31, 2023 | June 30, 2022 |
| JPMorgan Chase & Co.: | | | |
| HQLA | | | |
| Eligible cash ^(a) | \$ 440,294 | \$ 453,287 | \$ 634,480 |
| Eligible securities ^{(b)(c)} | 327,837 | 278,223 | 107,473 |
| Total HQLA^{(d)(e)} | \$ 768,131 | \$ 731,510 | \$ 741,953 |
| Net cash outflows | \$ 683,446 | \$ 642,650 | \$ 676,234 |
| LCR | 112 % | 114 % | 110 % |
| Net excess eligible HQLA^(d) | \$ 84,685 | \$ 88,860 | \$ 65,719 |
| JPMorgan Chase Bank N.A.: | | | |
| LCR | 129 % | 140 % | 169 % |
| Net excess eligible HQLA | \$ 211,233 | \$ 278,651 | \$ 487,867 |

- (a) Represents cash on deposit at central banks, primarily the Federal Reserve Banks.
- (b) Predominantly U.S. Treasuries, U.S. GSE and government agency MBS, and sovereign bonds net of applicable haircuts under the LCR rule.
- (c) Eligible HQLA securities may be reported in securities borrowed or purchased under resale agreements, trading assets, or investment securities on the Firm's Consolidated balance sheets.
- (d) Excludes average excess eligible HQLA at JPMorgan Chase Bank, N.A. that are not transferable to non-bank affiliates.
- (e) End-of-period HQLA balances were \$791.5 billion, \$758.9 billion, and \$721.1 billion for June 30, 2023, March 31, 2023 and June 30, 2022, respectively.

The Firm's average LCR decreased during the three months ended June 30, 2023, compared with the three months period ended March 31, 2023, due to long-term debt maturities, common stock repurchases and common stock

dividends paid, predominantly offset by a dividend payment from JPMorgan Chase Bank, N.A. to the Parent Company.

The Firm's average LCR increased during the three months ended June 30, 2023, compared with the prior year period, driven by dividend payments from JPMorgan Chase Bank, N.A. to the Parent Company, partially offset by common stock repurchases and common stock dividends paid.

JPMorgan Chase Bank, N.A.'s average LCR decreased during the three months ended June 30, 2023, compared with the three months ended March 31, 2023, reflecting an approximate 50% decline associated with the First Republic acquisition, reducing HQLA and increasing net cash outflows. JPMorgan Chase Bank, N.A.'s HQLA was further impacted by a reduction in cash primarily driven by higher average loans, a dividend payment to the Parent Company, and a decline in average deposits.

JPMorgan Chase Bank, N.A.'s average LCR for the three months ended June 30, 2023 decreased when compared with the same period in the prior year, reflecting a decrease in JPMorgan Chase Bank, N.A.'s HQLA as a result of a reduction in cash from a decline in average deposits and loan growth, as well as lower market values of HQLA-eligible investment securities and the impact of the First Republic acquisition.

Refer to Note 10 and Note 28 for additional information on the Firm's investment securities portfolio and the First Republic acquisition.

Actions by the Federal Reserve have impacted depositor behavior, resulting in reductions to system-wide deposits, including those held by the Firm. Each of the Firm and JPMorgan Chase Bank, N.A.'s average LCR may fluctuate from period to period due to changes in their respective eligible HQLA and estimated net cash outflows as a result of ongoing business activity and from the continued impacts of Federal Reserve actions as well as other factors.

Refer to page 98 of JPMorgan Chase's 2022 Form 10-K and the Firm's U.S. LCR Disclosure reports for additional information on HQLA and net cash outflows.

Internal stress testing

The Firm conducts internal liquidity stress testing that is intended to ensure that the Firm and its material legal entities have sufficient liquidity under a variety of adverse scenarios, including scenarios analyzed as part of the Firm's resolution and recovery planning. Internal Stress scenarios are produced on a regular basis, and other stress tests are performed in response to specific market events or concerns. Results of stress tests are considered in the formulation of the Firm's funding plan and assessment of its liquidity position.

The Firm maintains liquidity at the Parent Company, the Intermediate Holding Company ("IHC"), and operating subsidiaries at levels sufficient to comply with liquidity risk tolerances and minimum liquidity requirements, and to

manage through periods of stress when access to normal funding sources may be disrupted.

Other liquidity sources

In addition to the assets reported in the Firm's eligible HQLA discussed above, the Firm had unencumbered marketable securities, such as equity and debt securities, that the Firm believes would be available to raise liquidity. This includes excess eligible HQLA securities at JPMorgan Chase Bank, N.A. that are not transferable to non-bank affiliates. The fair value of these securities was approximately \$620 billion and \$694 billion as of June 30, 2023 and December 31, 2022, respectively, although the amount of liquidity that could be raised at any particular time would be dependent on prevailing market conditions. The decrease compared to December 31, 2022, was driven by a reduction in excess eligible HQLA securities at JPMorgan Chase Bank, N.A., largely offset by an increase in CIB trading assets and AFS securities associated with the First Republic acquisition.

The Firm also had available borrowing capacity at the Federal Home Loan Banks ("FHLBs") and the discount window at the Federal Reserve Banks as a result of collateral pledged by the Firm to such banks of approximately \$332 billion and \$323 billion as of June 30, 2023 and December 31, 2022, respectively. This borrowing capacity excludes the benefit of cash and securities reported in the Firm's eligible HQLA or other unencumbered securities that are currently pledged at the Federal Reserve Banks discount window and other central banks. Although available, the Firm does not view this borrowing capacity at the Federal Reserve Banks discount window and the other central banks as a primary source of liquidity.

NSFR

The net stable funding ratio ("NSFR") is a liquidity requirement for large banking organizations that is intended to measure the adequacy of "available" stable funding that is sufficient to meet their "required" amounts of stable funding over a one-year horizon.

As of June 30, 2023, the Firm and JPMorgan Chase Bank, N.A. were compliant with the 100% minimum NSFR requirement, based on the Firm's current interpretation of the final rule. By the end of August 2023, the Firm will be required to publicly disclose its quarterly average NSFR on a semiannual basis.

Funding

Sources of funds

Management believes that the Firm's unsecured and secured funding capacity is sufficient to meet its on- and off-balance sheet obligations, which includes both short- and long-term cash requirements.

The Firm funds its global balance sheet through diverse sources of funding including stable deposits, secured and unsecured funding in the capital markets and stockholders' equity. Deposits are the primary funding source for JPMorgan Chase Bank, N.A. Additionally, JPMorgan Chase Bank, N.A. may access funding through short- or long-term secured borrowings, through the issuance of unsecured long-term debt, or from borrowings from the IHC. The

Firm's non-bank subsidiaries are primarily funded from long-term unsecured borrowings and short-term secured borrowings which are primarily securities loaned or sold under repurchase agreements. Excess funding is invested by Treasury and CIO in the Firm's investment securities portfolio or deployed in cash or other short-term liquid investments based on their interest rate and liquidity risk characteristics.

Refer to Note 24 for additional information on off-balance sheet obligations.

Deposits

The table below summarizes, by LOB and Corporate, the period-end deposit balances as of June 30, 2023, and December 31, 2022, and the average deposit balances for the three and six months ended June 30, 2023 and 2022, respectively.

| (in millions) | June 30, 2023 | December 31, 2022 | Three months ended June 30, | | Six months ended June 30, | |
|------------------------------|---------------------|---------------------|-----------------------------|---------------------|---------------------------|---------------------|
| | | | Average | | Average | |
| | | | 2023 | 2022 | 2023 | 2022 |
| Consumer & Community Banking | \$ 1,173,514 | \$ 1,131,611 | \$ 1,157,309 | \$ 1,180,453 | \$ 1,135,261 | \$ 1,167,057 |
| Corporate & Investment Bank | 735,576 | 689,893 | 722,818 | 773,664 | 711,266 | 765,200 |
| Commercial Banking | 269,026 | 271,342 | 275,196 | 300,339 | 270,595 | 308,518 |
| Asset & Wealth Management | 199,763 | 233,130 | 211,872 | 268,861 | 218,078 | 278,256 |
| Corporate | 21,083 | 14,203 | 20,219 | 8,995 | 18,931 | 4,948 |
| Total Firm | \$ 2,398,962 | \$ 2,340,179 | \$ 2,387,414 | \$ 2,532,312 | \$ 2,354,131 | \$ 2,523,979 |

The Firm believes that deposits provide a stable source of funding and reduce the Firm's reliance on the wholesale funding markets. A significant portion of the Firm's deposits are consumer deposits and wholesale operating deposits, which are both considered to be stable sources of liquidity. Wholesale operating deposits are generally considered to be stable sources of liquidity because they are generated from customers that maintain operating service relationships with the Firm.

The Firm believes that average deposit balances are generally more representative of deposit trends than period-end deposit balances. However, during periods of market disruption those trends could be affected.

Average deposits were lower for the three months ended June 30, 2023 compared to the three months ended June 30, 2022. The decrease was driven by:

- the continued migration into higher-yielding investments in AWM as a result of the rising interest rate environment,
- continued deposit attrition in CIB, including actions to reduce certain deposits, partially offset by net issuances of structured notes as a result of client demand,
- continued deposit attrition in CB, partially offset by continued inflows as a result of disruptions in the market in the first quarter of 2023, and
- a net decline in CCB primarily from existing accounts due to increased customer spending, largely offset by the impact of the First Republic acquisition,

partially offset by

- an increase in Corporate related to the Firm's international consumer initiatives.

Average deposits were lower for the six months ended June 30, 2023 compared to the six months ended June 30, 2022. The decrease was driven by:

- the continued migration into higher-yielding investments in AWM as a result of the rising interest rate environment,
- continued deposit attrition in CIB, including actions to reduce certain deposits, partially offset by net issuances of structured notes as a result of client demand,
- continued deposit attrition in CB, partially offset by continued inflows as a result of disruptions in the market in the first quarter of 2023, and
- a net decline in CCB primarily from existing accounts due to increased customer spending, partially offset by the impact of the First Republic acquisition,

partially offset by

- an increase in Corporate related to the Firm's international consumer initiatives.

Period-end deposits increased, reflecting:

- increases in CIB due to deposit inflows related to client-driven activities and net issuances of structured notes as a result of client demand,
- \$68 billion of deposits in CCB associated with the First Republic acquisition, partially offset by a net decline primarily in existing accounts due to increased customer spending, and
- an increase in Corporate related to the Firm's international consumer initiatives,

partially offset by

- the continued migration into higher-yielding investments in AWM as a result of the rising interest rate environment, and
- ongoing attrition in CB driven by higher rates and seasonal outflows, predominantly offset by inflows as a result of disruptions in the market in the first quarter of 2023.

Refer to the Firm's Consolidated Balance Sheets Analysis and the Business Segment Results on pages 16-19 and pages 22-46, respectively, for further information on deposit and liability balance trends. Refer to Note 3 for further information on structured notes.

Certain deposits are covered by insurance protection that provides additional funding stability and results in a benefit to the LCR. Deposit insurance protection may be available to depositors in the countries in which the deposits are placed. For example, the FDIC provides deposit insurance protection for deposits placed in a U.S. depository institution. At June 30, 2023 and December 31, 2022^(a), the Firmwide estimated uninsured deposits were \$1,381.1 billion and \$1,353.1 billion, respectively, primarily reflecting wholesale operating deposits.

Total uninsured deposits include time deposits. The table below presents an estimate of uninsured U.S. and non-U.S. time deposits, and their remaining maturities. The Firm's estimates of its uninsured U.S. time deposits are based on data that the Firm calculates periodically under applicable FDIC regulations. For purposes of this presentation, all non-U.S. time deposits are deemed to be uninsured.

| (in millions) | June 30, 2023 | | December 31, 2022 | |
|---------------------------------------|------------------|------------------|--------------------------|------------------|
| | U.S. | Non-U.S. | U.S. | Non-U.S. |
| Three months or less | \$ 33,242 | \$ 74,455 | \$ 25,910 ^(a) | \$ 68,765 |
| Over three months but within 6 months | 15,044 | 5,452 | 8,670 | 3,658 |
| Over six months but within 12 months | 8,014 | 3,524 | 7,035 | 2,850 |
| Over 12 months | 770 | 2,506 | 787 | 2,634 |
| Total | \$ 57,070 | \$ 85,937 | \$ 42,402 | \$ 77,907 |

(a) Prior-period amounts for the Firmwide estimated uninsured deposits, including uninsured U.S. time deposits, have been revised to conform with the current presentation, reflecting refinements to the calculation.

Refer to pages 100-101 of JPMorgan Chase's 2022 Form 10-K for additional disclosure on the Firm's deposit balances.

The table below shows the loan and deposit balances, the loans-to-deposits ratios, and deposits as a percentage of total liabilities, as of June 30, 2023 and December 31, 2022.

| (in billions except ratios) | June 30, 2023 | December 31, 2022 |
|--------------------------------------|---------------|-------------------|
| Deposits | \$ 2,399.0 | \$ 2,340.2 |
| Deposits as a % of total liabilities | 67 % | 69 % |
| Loans | \$ 1,300.1 | \$ 1,135.6 |
| Loans-to-deposits ratio | 54 % | 49 % |

The following tables provide a summary of the average balances and average interest rates of JPMorgan Chase's deposits for the three and six months ended June 30, 2023 and 2022.

| (Unaudited) (in millions) | Average balances | | | |
|---|---------------------|---------------------|---------------------|---------------------|
| | Three months ended | | Six months ended | |
| | June 30, 2023 | June 30, 2022 | June 30, 2023 | June 30, 2022 |
| U.S. offices | | | | |
| Noninterest-bearing | \$ 646,767 | \$ 713,059 | \$ 635,748 | \$ 709,294 |
| Interest-bearing | | | | |
| Demand ^(a) | 286,453 | 352,081 | 283,524 | 346,005 |
| Savings ^(b) | 883,737 | 987,067 | 887,257 | 996,138 |
| Time | 138,985 | 54,670 | 118,960 | 52,904 |
| Total interest-bearing deposits | 1,309,175 | 1,393,818 | 1,289,741 | 1,395,047 |
| Total deposits in U.S. offices | 1,955,942 | 2,106,877 | 1,925,489 | 2,104,341 |
| Non-U.S. offices | | | | |
| Noninterest-bearing | 24,948 | 28,832 | 25,390 | 28,789 |
| Interest-bearing | | | | |
| Demand | 320,822 | 335,102 | 320,527 | 331,348 |
| Time | 85,702 | 61,501 | 82,725 | 59,501 |
| Total interest-bearing deposits | 406,524 | 396,603 | 403,252 | 390,849 |
| Total deposits in non-U.S. offices | 431,472 | 425,435 | 428,642 | 419,638 |
| Total deposits | \$ 2,387,414 | \$ 2,532,312 | \$ 2,354,131 | \$ 2,523,979 |

| (Unaudited) | Average interest rates | | | |
|---|------------------------|---------------|------------------|---------------|
| | Three months ended | | Six months ended | |
| | June 30, 2023 | June 30, 2022 | June 30, 2023 | June 30, 2022 |
| U.S. offices | | | | |
| Noninterest-bearing | NA | NA | NA | NA |
| Interest-bearing | | | | |
| Demand ^(a) | 3.41 % | 0.32 % | 3.09 % | 0.18 % |
| Savings ^(b) | 1.04 | 0.12 | 0.97 | 0.10 |
| Time | 4.53 | 0.92 | 4.52 | 0.60 |
| Total interest-bearing deposits | 1.93 | 0.20 | 1.75 | 0.14 |
| Total deposits in U.S. offices | 1.28 | 0.12 | 1.19 | 0.08 |
| Non-U.S. offices | | | | |
| Noninterest-bearing | NA | NA | NA | NA |
| Interest-bearing | | | | |
| Demand | 2.53 | 0.08 | 2.38 | 0.02 |
| Time | 5.66 | 0.72 | 5.32 | 0.38 |
| Total interest-bearing deposits | 3.21 | 0.20 | 2.98 | 0.08 |
| Total deposits in non-U.S. offices | 3.01 | 0.16 | 2.80 | 0.06 |
| Total deposits | 1.60 % | 0.16 % | 1.47 % | 0.08 % |

(a) Includes Negotiable Order of Withdrawal ("NOW") accounts, and certain trust accounts.

(b) Includes Money Market Deposit Accounts ("MMDAs").

Refer to Note 16 for additional information on deposits.

The following table summarizes short-term and long-term funding, excluding deposits, as of June 30, 2023, and December 31, 2022, and average balances for the three and six months ended June 30, 2023 and 2022, respectively. Refer to the Consolidated Balance Sheets Analysis on pages 16-19 and Note 11 for additional information.

Sources of funds (excluding deposits)

| (in millions) | June 30, 2023 | December 31, 2022 | Three months ended June 30, | | Six months ended June 30, | |
|---|-----------------------|-------------------|-----------------------------|-------------------|---------------------------|-------------------|
| | | | Average | | Average | |
| | | | 2023 | 2022 | 2023 | 2022 |
| Commercial paper | \$ 11,686 | \$ 12,557 | \$ 11,057 | \$ 19,589 | \$ 11,930 | \$ 17,097 |
| Other borrowed funds | 7,532 | 8,418 | 9,791 | 12,533 | 9,931 | 13,061 |
| Federal funds purchased | 1,783 | 1,684 | 1,564 | 1,241 | 1,729 | 1,467 |
| Total short-term unsecured funding | \$ 21,001 | \$ 22,659 | \$ 22,412 | \$ 33,363 | \$ 23,590 | \$ 31,625 |
| Securities sold under agreements to repurchase ^(a) | \$ 260,999 | \$ 198,382 | \$ 258,297 | \$ 227,075 | \$ 252,322 | \$ 235,300 |
| Securities loaned ^(a) | 3,490 | 2,547 | 3,857 | 5,060 | 3,994 | 4,982 |
| Other borrowed funds | 21,804 ^(g) | 23,052 | 21,179 | 26,376 | 22,037 | 27,152 |
| Obligations of Firm-administered multi-seller conduits ^(b) | 16,383 | 9,236 | 12,741 | 6,779 | 11,622 | 6,625 |
| Total short-term secured funding | \$ 302,676 | \$ 233,217 | \$ 296,074 | \$ 265,290 | \$ 289,975 | \$ 274,059 |
| Senior notes | \$ 177,966 | \$ 188,025 | \$ 180,712 | \$ 187,143 | \$ 182,830 | \$ 188,779 |
| Subordinated debt | 19,763 | 21,803 | 20,543 | 19,139 | 21,182 | 19,688 |
| Structured notes ^(c) | 76,648 | 70,839 | 75,075 | 66,025 | 74,413 | 68,584 |
| Total long-term unsecured funding | \$ 274,377 | \$ 280,667 | \$ 276,330 | \$ 272,307 | \$ 278,425 | \$ 277,051 |
| Credit card securitization ^(b) | \$ 999 | \$ 1,999 | \$ 999 | \$ 1,748 | \$ 1,087 | \$ 2,010 |
| FHLB advances | 36,094 ^(d) | 11,093 | 28,420 | 11,106 | 19,804 | 11,107 |
| Purchase Money Note ^(d) | 48,883 | NA | 32,745 | NA | 16,463 | NA |
| Other long-term secured funding ^(e) | 4,724 | 4,105 | 4,667 | 3,807 | 4,383 | 3,858 |
| Total long-term secured funding | \$ 90,700 | \$ 17,197 | \$ 66,831 | \$ 16,661 | \$ 41,737 | \$ 16,975 |
| Preferred stock^(f) | \$ 27,404 | \$ 27,404 | \$ 27,404 | \$ 32,838 | \$ 27,404 | \$ 33,180 |
| Common stockholders' equity^(f) | \$ 285,112 | \$ 264,928 | \$ 277,885 | \$ 247,986 | \$ 274,560 | \$ 250,234 |

(a) Primarily consists of short-term securities loaned or sold under agreements to repurchase.

(b) Included in beneficial interests issued by consolidated variable interest entities on the Firm's Consolidated balance sheets.

(c) Includes certain TLAC-eligible long-term unsecured debt issued by the Parent Company.

(d) As of June 30, 2023, included \$25.0 billion FHLB advances and the Purchase Money Note associated with the First Republic acquisition. Refer to Note 28 for additional information.

(e) Includes long-term structured notes which are secured.

(f) Refer to Capital Risk Management on pages 48-53, Consolidated statements of changes in stockholders' equity on page 99 of this Form 10-Q, and Note 21 and Note 22 of JPMorgan Chase's 2022 Form 10-K for additional information on preferred stock and common stockholders' equity.

(g) As of June 30, 2023, included FHLB advances with original maturities of less than one year of \$2.3 billion associated with the First Republic acquisition. Refer to Note 28 for additional information.

Short-term funding

The Firm's sources of short-term secured funding primarily consist of securities loaned or sold under agreements to repurchase. These instruments are secured predominantly by high-quality securities collateral, including government-issued debt and U.S. GSE and government agency MBS. Securities sold under agreements to repurchase increased at June 30, 2023, compared with December 31, 2022, due to higher secured financing of trading assets and the impact of a lower level of netting on client-driven market-making activities in Markets.

The balances associated with securities loaned or sold under agreements to repurchase fluctuate over time due to investment and financing activities of clients, the Firm's demand for financing, the ongoing management of the mix of the Firm's liabilities, including its secured and unsecured financing (for both the investment securities and market-making portfolios), and other market and portfolio factors.

The Firm's sources of short-term unsecured funding primarily consist of issuances of wholesale commercial paper and other borrowed funds.

The decrease in commercial paper at June 30, 2023 from December 31, 2022, and for the average three and six months ended June 30, 2023 compared to the prior year periods, was due to lower net issuance levels resulting from short-term liquidity management.

The decrease in average unsecured other borrowed funds for the three and six months ended June 30, 2023 compared to the prior year periods was due to a lower level of overdrafts as well as net maturities of structured notes classified as other borrowed funds in CIB.

Long-term funding and issuance

Long-term funding provides an additional source of stable funding and liquidity for the Firm. The Firm's long-term funding plan is driven primarily by expected client activity, liquidity considerations, and regulatory requirements, including TLAC. Long-term funding objectives include maintaining diversification, maximizing market access and optimizing funding costs. The Firm evaluates various funding markets, tenors and currencies in creating its optimal long-term funding plan.

The significant majority of the Firm's long-term unsecured funding is issued by the Parent Company to provide flexibility in support of the funding needs of both bank and non-bank subsidiaries. The Parent Company advances substantially all net funding proceeds to its subsidiary, the IHC. The IHC does not issue debt to external counterparties. The following table summarizes long-term unsecured issuance and maturities or redemptions for the three and six months ended June 30, 2023 and 2022. Refer to Note 18 of this Form 10-Q and Liquidity Risk Management on pages 97-104 of JPMorgan Chase's 2022 Form 10-K for additional information on the IHC and long-term debt.

Long-term unsecured funding

| | Three months ended June 30, | | Six months ended June 30, | | Three months ended June 30, | | Six months ended June 30, | |
|---|-----------------------------|------------------|---------------------------|------------------|-----------------------------|------------------|---------------------------|------------------|
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| (Notional in millions) | Parent Company | | | | Subsidiaries | | | |
| Issuance | | | | | | | | |
| Senior notes issued in the U.S. market | \$ 2,500 | \$ 13,000 | \$ 2,500 | \$ 21,100 | \$ – | \$ – | \$ – | \$ – |
| Senior notes issued in non-U.S. markets | – | – | – | 2,752 | – | – | – | – |
| Total senior notes | 2,500 | 13,000 | 2,500 | 23,852 | – | – | – | – |
| Structured notes ^(a) | 563 | 918 | 1,444 | 2,074 | 7,947 | 11,230 | 15,665 | 19,679 |
| Total long-term unsecured funding - issuance | \$ 3,063 | \$ 13,918 | \$ 3,944 | \$ 25,926 | \$ 7,947 | \$ 11,230 | \$ 15,665 | \$ 19,679 |
| Maturities/redemptions | | | | | | | | |
| Senior notes | \$ 6,335 | \$ 5,000 | \$ 13,433 | \$ 8,693 | \$ 2 | \$ – | \$ 67 | \$ 64 |
| Subordinated debt | 2,027 | – | 2,027 | – | – | – | – | – |
| Structured notes | 324 | 415 | 771 | 1,392 | 6,479 | 7,428 | 13,981 | 15,075 |
| Total long-term unsecured funding - maturities/redemptions | \$ 8,686 | \$ 5,415 | \$ 16,231 | \$ 10,085 | \$ 6,481 | \$ 7,428 | \$ 14,048 | \$ 15,139 |

(a) Includes certain TLAC-eligible long-term unsecured debt issued by the Parent Company.

The Firm can also raise secured long-term funding through securitization of consumer credit card loans and FHLB advances. The following table summarizes the securitization issuance, as well as the FHLB advances and the Purchase Money Note associated with the First Republic acquisition, and their respective maturities or redemptions, as applicable for the three and six months ended June 30, 2023 and 2022, respectively.

Long-term secured funding

| (in millions) | Three months ended June 30, | | | | Six months ended June 30, | | | |
|--|-----------------------------|--------------|------------------------|--------------|---------------------------|---------------|------------------------|---------------|
| | Issuance | | Maturities/Redemptions | | Issuance | | Maturities/Redemptions | |
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| Credit card securitization | \$ – | \$ – | \$ – | \$ – | \$ – | \$ – | \$ 1,000 | \$ 650 |
| FHLB advances | 25,775 ^(a) | – | 602 | 4 | 25,775 ^(a) | – | 604 | 6 |
| Purchase Money Note ^(a) | 50,000 | NA | – | NA | 50,000 | NA | – | NA |
| Other long-term secured funding ^(b) | 591 | 82 | 58 | 31 | 742 | 284 | 112 | 92 |
| Total long-term secured funding | \$ 76,366 | \$ 82 | \$ 660 | \$ 35 | \$ 76,517 | \$ 284 | \$ 1,716 | \$ 748 |

(a) As of June 30, 2023, included FHLB advances and the Purchase Money Note associated with the First Republic acquisition. Refer to Note 28 for additional information.

(b) Includes long-term structured notes that are secured.

The Firm's wholesale businesses also securitize loans for client-driven transactions; those client-driven loan securitizations are not considered to be a source of funding for the Firm and are not included in the table above. Refer to Note 14 of JPMorgan Chase's 2022 Form 10-K for a further description of client-driven loan securitizations.

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. The nature and magnitude of the impact of ratings downgrades depends on numerous contractual and behavioral factors, which the Firm believes are incorporated in its liquidity risk

and stress testing metrics. The Firm believes that it maintains sufficient liquidity to withstand a potential decrease in funding capacity due to ratings downgrades.

Additionally, the Firm's funding requirements for VIEs and other third-party commitments may be adversely affected by a decline in credit ratings. Refer to Note 5 and Note 14 for additional information.

The credit ratings of the Parent Company and the Firm's principal bank and non-bank subsidiaries as of June 30, 2023, were as follows:

| June 30, 2023 | JPMorgan Chase & Co. | | | JPMorgan Chase Bank, N.A. | | | J.P. Morgan Securities LLC J.P. Morgan Securities plc J.P. Morgan SE | | |
|----------------------------------|----------------------|-------------------|---------|---------------------------|-------------------|---------|--|-------------------|---------|
| | Long-term issuer | Short-term issuer | Outlook | Long-term issuer | Short-term issuer | Outlook | Long-term issuer | Short-term issuer | Outlook |
| Moody's Investors Service | A1 | P-1 | Stable | Aa2 | P-1 | Stable | Aa3 | P-1 | Stable |
| Standard & Poor's ^(a) | A- | A-2 | Stable | A+ | A-1 | Stable | A+ | A-1 | Stable |
| Fitch Ratings | AA- | F1+ | Stable | AA | F1+ | Stable | AA | F1+ | Stable |

(a) On March 31, 2023, Standard & Poor's affirmed the credit ratings of the Parent Company and the Firm's principal bank and non-bank subsidiaries, and revised the outlook from positive to stable.

Refer to page 104 of JPMorgan Chase's 2022 Form 10-K for a discussion of the factors that could affect the credit ratings of the Parent Company and the Firm's principal bank and non-bank subsidiaries.

CREDIT AND INVESTMENT RISK MANAGEMENT

Credit and investment risk is the risk associated with the default or change in credit profile of a client, counterparty or customer; or loss of principal or a reduction in expected returns on investments, including consumer credit risk, wholesale credit risk, and investment portfolio risk. Refer to Consumer Credit Portfolio, Wholesale Credit Portfolio and Allowance for Credit Losses on pages 65-82 for a further discussion of Credit Risk.

Refer to page 83 for a further discussion of Investment Portfolio Risk. Refer to Credit and Investment Risk Management on pages 106-130 of JPMorgan Chase's 2022 Form 10-K for a further discussion of the Firm's Credit and Investment Risk Management framework.

CREDIT PORTFOLIO

Credit risk is the risk associated with the default or change in credit profile of a client, counterparty or customer.

In the following tables, total loans include loans retained (i.e., held-for-investment); loans held-for-sale; and certain loans accounted for at fair value. The following tables do not include loans which the Firm accounts for at fair value and classifies as trading assets; refer to Notes 2 and 3 for further information regarding these loans. Refer to Notes 12, 24 and 5 for additional information on the Firm's loans, lending-related commitments and derivative receivables.

Refer to Note 10 for information regarding the credit risk inherent in the Firm's investment securities portfolio; and refer to Note 11 for information regarding the credit risk inherent in the securities financing portfolio. Refer to Consumer Credit Portfolio on pages 65-69 and Note 12 for further discussions of the consumer credit environment and consumer loans. Refer to Wholesale Credit Portfolio on pages 70-79 and Note 12 for further discussions of the wholesale credit environment and wholesale loans.

On January 1, 2023, the Firm adopted changes to the TDR accounting guidance, which eliminated the accounting and disclosure requirements for TDRs including the requirement to assess whether a modification is reasonably expected or involves a concession. The new guidance requires disclosure for loan modifications to borrowers experiencing financial difficulty consisting of principal forgiveness, interest rate reduction, other-than-insignificant payment delay, term extension or a combination of these modifications. The Firm has defined these types of modifications as financial difficulty modifications ("FDMs"). As a result of the elimination of the requirement to assess whether a modification is reasonably expected or involves a concession, the population of loans considered FDMs will differ from those previously considered TDRs. Refer to Note 1 and Note 12 for further information.

Total credit portfolio

| (in millions) | Credit exposure | | Nonperforming ^(d) | |
|---|------------------------------------|---------------------|------------------------------|-----------------|
| | Jun 30, 2023 | Dec 31, 2022 | Jun 30, 2023 | Dec 31, 2022 |
| Loans retained | \$ 1,255,688 | \$ 1,089,598 | \$ 6,377 | \$ 5,837 |
| Loans held-for-sale | 5,592 | 3,970 | 119 | 54 |
| Loans at fair value | 38,789 | 42,079 | 777 | 829 |
| Total loans | 1,300,069 | 1,135,647 | 7,273 | 6,720 |
| Derivative receivables | 64,217 | 70,880 | 286 | 296 |
| Receivables from customers ^(a) | 42,741 | 49,257 | — | — |
| Total credit-related assets | 1,407,027 | 1,255,784 | 7,559 | 7,016 |
| Assets acquired in loan satisfactions | | | | |
| Real estate owned | NA | NA | 243 | 203 |
| Other | NA | NA | 36 | 28 |
| Total assets acquired in loan satisfactions | NA | NA | 279 | 231 |
| Lending-related commitments | 1,473,420 | 1,326,782 | 332 | 455 |
| Total credit portfolio | \$ 2,880,447 ^(c) | \$ 2,582,566 | \$ 8,170 | \$ 7,702 |
| Credit derivatives and credit-related notes used in credit portfolio management activities ^(b) | \$ (32,090) | \$ (19,330) | \$ — | \$ — |
| Liquid securities and other cash collateral held against derivatives | (23,282) | (23,014) | NA | NA |

- (a) Receivables from customers reflect held-for-investment margin loans to brokerage clients in CIB, CCB and AWM; these are reported within accrued interest and accounts receivable on the Consolidated balance sheets.
- (b) Represents the net notional amount of protection purchased and sold through credit derivatives and credit-related notes used to manage credit exposures.
- (c) Included credit exposure associated with the First Republic acquisition consisting of \$104.6 billion in the Consumer credit portfolio and \$98.2 billion in the Wholesale credit portfolio.
- (d) At June 30, 2023, and December 31, 2022, nonperforming assets excluded mortgage loans 90 or more days past due and insured by U.S. government agencies of \$215 million and \$302 million, respectively. These amounts have been excluded based upon the government guarantee. In addition, the Firm's policy is generally to exempt credit card loans from being placed on nonaccrual status as permitted by regulatory guidance.

The following table provides information on Firmwide nonaccrual loans to total loans.

| (in millions, except ratios) | June 30, 2023 | | Dec 31, 2022 | |
|---|---------------|-----------|--------------|-----------|
| Total nonaccrual loans | \$ | 7,273 | \$ | 6,720 |
| Total loans | | 1,300,069 | | 1,135,647 |
| Firmwide nonaccrual loans to total loans outstanding | | 0.56 % | | 0.59 % |

The following table provides information about the Firm's net charge-offs and recoveries.

| (in millions, except ratios) | Three months ended June 30, | | Six months ended June 30, | |
|---------------------------------|--------------------------------|-----------|------------------------------|-----------|
| | 2023 | 2022 | 2023 | 2022 |
| Net charge-offs | \$ 1,411 | \$ 657 | \$ 2,548 | \$ 1,239 |
| Average retained loans | 1,194,044 | 1,035,933 | 1,138,550 | 1,020,180 |
| Net charge-off rates | 0.47 % | 0.25 % | 0.45 % | 0.24 % |

CONSUMER CREDIT PORTFOLIO

The Firm's retained consumer portfolio consists primarily of loans and lending-related commitments for residential real estate, credit card, scored auto and business banking. The consumer credit portfolio also includes certain loans and lending-related commitments associated with the First Republic acquisition, primarily in residential real estate. The Firm's focus is on serving primarily the prime segment of the consumer credit market. Refer to Note 12 of this Form 10-Q; and Consumer Credit Portfolio on pages 110-115 and Note 12 of JPMorgan Chase's 2022 Form 10-K for further information on consumer loans, as well as the Firm's nonaccrual and charge-off accounting policies. Refer to Note 24 of this Form 10-Q and Note 28 of JPMorgan Chase's 2022 Form 10-K for further information on lending-related commitments.

The following tables present consumer credit-related information with respect to the scored credit portfolios held in CCB, AWM, CIB and Corporate.

Consumer credit portfolio

| (in millions) | Credit exposure | | Nonaccrual loans ^{(j)(k)(l)} | |
|--|-------------------------------|---------------------|---------------------------------------|-----------------|
| | Jun 30, 2023 | Dec 31, 2022 | Jun 30, 2023 | Dec 31, 2022 |
| Consumer, excluding credit card | | | | |
| Residential real estate ^(a) | \$ 328,010 | \$ 237,561 | \$ 3,641 | \$ 3,745 |
| Auto and other ^{(b)(c)} | 68,185 | 63,192 | 143 | 129 |
| Total loans - retained | 396,195 | 300,753 | 3,784 | 3,874 |
| Loans held-for-sale | 549 | 618 | 71 | 28 |
| Loans at fair value ^(d) | 11,460 | 10,004 | 410 | 423 |
| Total consumer, excluding credit card loans | 408,204 | 311,375 | 4,265 | 4,325 |
| Lending-related commitments ^(e) | 50,846 | 33,518 | | |
| Total consumer exposure, excluding credit card | 459,050 ⁽ⁱ⁾ | 344,893 | | |
| Credit card | | | | |
| Loans retained ^(f) | 191,348 | 185,175 | NA | NA |
| Total credit card loans | 191,348 | 185,175 | NA | NA |
| Lending-related commitments ^{(e)(g)} | 881,485 | 821,284 | | |
| Total credit card exposure | 1,072,833 | 1,006,459 | | |
| Total consumer credit portfolio | \$ 1,531,883 | \$ 1,351,352 | \$ 4,265 | \$ 4,325 |
| Credit-related notes used in credit portfolio management activities ^(h) | \$ (985) | \$ (1,187) | | |

| (in millions, except ratios) | Three months ended June 30, | | | | | |
|---|------------------------------|---------------|--------------------------|-------------------|---|---------------|
| | Net charge-offs/(recoveries) | | Average loans - retained | | Net charge-off/(recovery) rate ^(m) | |
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| Consumer, excluding credit card | | | | | | |
| Residential real estate | \$ (25) | \$ (67) | \$ 293,073 | \$ 232,770 | (0.03)% | (0.12)% |
| Auto and other | 147 | 94 | 66,470 | 66,879 | 0.89 | 0.56 |
| Total consumer, excluding credit card - retained | 122 | 27 | 359,543 | 299,649 | 0.14 | 0.04 |
| Credit card - retained | 1,124 | 580 | 187,027 | 158,434 | 2.41 | 1.47 |
| Total consumer - retained | \$ 1,246 | \$ 607 | \$ 546,570 | \$ 458,083 | 0.91 % | 0.53 % |

| (in millions, except ratios) | Six months ended June 30, | | | | | |
|---|------------------------------|-----------------|--------------------------|-------------------|---|---------------|
| | Net charge-offs/(recoveries) | | Average loans - retained | | Net charge-off/(recovery) rate ^(m) | |
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| Consumer, excluding credit card | | | | | | |
| Residential real estate | \$ (45) | \$ (134) | \$ 265,082 | \$ 229,369 | (0.03)% | (0.12)% |
| Auto and other | 299 | 207 | 65,145 | 68,197 | 0.93 | 0.61 |
| Total consumer, excluding credit card - retained | 254 | 73 | 330,227 | 297,566 | 0.16 | 0.05 |
| Credit card - retained | 2,046 | 1,086 | 183,757 | 153,941 | 2.25 | 1.42 |
| Total consumer - retained | \$ 2,300 | \$ 1,159 | \$ 513,984 | \$ 451,507 | 0.90 % | 0.52 % |

(a) Includes scored mortgage and home equity loans held in CCB and AWM.

(b) At June 30, 2023 and December 31, 2022, excluded operating lease assets of \$10.9 billion and \$12.0 billion, respectively. These operating lease assets are included in other assets on the Firm's Consolidated balance sheets. Refer to Note 17 for further information.

(c) Includes scored auto and business banking loans, and overdrafts.

(d) Includes scored mortgage loans held in CCB and CIB, and other consumer unsecured loans in CIB.

(e) Credit card, home equity and certain business banking 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 if certain conditions are met, home equity commitments and certain business banking commitments, the Firm can reduce or cancel these lines of credit by providing the borrower notice or, in some cases as permitted by law, without notice. Refer to Note 24 for further information.

(f) Includes billed interest and fees.

(g) Also includes commercial card lending-related commitments primarily in CB and CIB.

- (h) Represents the notional amount of protection obtained through the issuance of credit-related notes that reference certain pools of residential real estate and auto loans in the retained consumer portfolio.
- (i) Included credit exposure of \$104.6 billion associated with the First Republic acquisition consisting of \$101.5 billion in residential real estate and \$3.1 billion in auto and other.
- (j) At June 30, 2023 and December 31, 2022, nonaccrual loans excluded mortgage loans 90 or more days past due and insured by U.S. government agencies of \$215 million and \$302 million, respectively. These amounts have been excluded from nonaccrual loans based upon the government guarantee. In addition, the Firm's policy is generally to exempt credit card loans from being placed on nonaccrual status, as permitted by regulatory guidance.
- (k) Generally excludes loans under payment deferral programs offered in response to the COVID-19 pandemic.
- (l) At June 30, 2023 and December 31, 2022, nonaccrual loans excluded \$39 million and \$101 million, respectively, of PPP loans 90 or more days past due and guaranteed by the SBA.
- (m) Average consumer loans held-for-sale and loans at fair value were \$13.3 billion and \$18.2 billion for the three months ended June 30, 2023 and 2022, respectively, and \$12.4 billion and \$21.0 billion for the six months ended June 30, 2023 and 2022, respectively. These amounts were excluded when calculating net charge-off/(recovery) rates.

Maturities and sensitivity to changes in interest rates

The table below sets forth loan maturities by scheduled repayments, by class of loan and the distribution between fixed and floating interest rates based on the stated terms of the loan agreements. Refer to Consumer Credit Portfolio on pages 110-115 of JPMorgan Chase's 2022 Form 10-K for further information.

| June 30, 2023 (in millions) | Within 1 year ^(d) | 1-5 years | 5-15 years | After 15 years | Total |
|--|---------------------------------|------------------|-------------------|-------------------|-------------------|
| Consumer, excluding credit card | | | | | |
| Residential real estate | \$ 16,797 | \$ 27,570 | \$ 109,586 | \$ 183,944 | \$ 337,897 |
| Auto and other | 19,826 ^(e) | 45,847 | 4,629 | 5 | 70,307 |
| Total consumer, excluding credit card loans^(a) | \$ 36,623 | \$ 73,417 | \$ 114,215 | \$ 183,949 | \$ 408,204 |
| Total credit card loans | \$ 190,780 | \$ 568 | \$ — | \$ — | \$ 191,348 |
| Total consumer loans | \$ 227,403 | \$ 73,985 | \$ 114,215 | \$ 183,949 | \$ 599,552 |
| Loans due after one year at fixed interest rates | | | | | |
| Residential real estate ^(b) | | \$ 20,332 | \$ 59,618 | \$ 91,537 | |
| Auto and other | | 45,771 | 3,678 | 5 | |
| Credit card | | 568 | — | — | |
| Loans due after one year at variable interest rates | | | | | |
| Residential real estate ^(c) | | \$ 7,238 | \$ 49,968 | \$ 92,407 | |
| Auto and other | | 76 | 951 | — | |
| Total consumer loans | | \$ 73,985 | \$ 114,215 | \$ 183,949 | |

- (a) Included \$3.6 billion, \$4.7 billion, \$27.3 billion, and \$58.3 billion of loans within 1 year, 1-5 years, 5-15 years, and after 15 years, respectively, associated with the First Republic acquisition.
- (b) Included \$3.0 billion, \$8.8 billion, and \$15.6 billion in 1-5 years, 5-15 years, and after 15 years, respectively, associated with the First Republic acquisition.
- (c) Included \$1.7 billion, \$18.6 billion, and \$42.7 billion in 1-5 years, 5-15 years, and after 15 years, respectively, associated with the First Republic acquisition.
- (d) Includes loans held-for-sale and loans at fair value.
- (e) Includes overdrafts.

Consumer, excluding credit card

Portfolio analysis

Loans increased compared to December 31, 2022 driven by residential real estate loans associated with the First Republic acquisition and higher auto loans.

Residential real estate: The residential real estate portfolio, including loans held-for-sale and loans at fair value, predominantly consists of prime mortgage loans and home equity lines of credit.

Retained loans increased compared to December 31, 2022, reflecting residential real estate loans associated with the First Republic acquisition. Retained nonaccrual loans decreased compared to December 31, 2022. Net recoveries were lower for the three and six months ended June 30, 2023 compared to the same periods in the prior year driven by lower prepayments due to higher interest rates.

Loans at fair value decreased from December 31, 2022, driven by a decrease in CIB due to sales outpacing purchases largely offset by an increase in Home Lending as originations outpaced warehouse loan sales. Nonaccrual loans at fair value were relatively flat compared to December 31, 2022.

At June 30, 2023 and December 31, 2022, the carrying value of interest-only residential mortgage loans was \$90.0 billion and \$36.3 billion, respectively. The increase was driven by the impact of the First Republic acquisition. These loans have an interest-only payment period generally followed by an adjustable-rate or fixed-rate fully amortizing payment period to maturity and are typically originated as higher-balance loans to higher-income borrowers. The credit performance of this portfolio is comparable with the performance of the broader prime mortgage portfolio and there were no charge-offs associated with the First Republic acquisition.

The carrying value of home equity lines of credit outstanding was \$16.9 billion at June 30, 2023, which included \$2.6 billion associated with the First Republic acquisition. The carrying value of home equity lines of credit outstanding included \$4.6 billion of HELOCs that have recast from interest-only to fully amortizing payments or have been modified and \$4.7 billion of interest-only balloon HELOCs, which primarily mature after 2030. The Firm manages the risk of HELOCs during their revolving period by closing or reducing the undrawn line to the extent permitted by law when borrowers are exhibiting a material deterioration in their credit risk profile.

The following table provides a summary of the Firm's residential mortgage portfolio insured and/or guaranteed by U.S. government agencies, predominantly loans held-for-sale and loans at fair value. The Firm monitors its exposure to certain potential unrecoverable claim payments related to government-insured loans and considers this exposure in estimating the allowance for loan losses.

| (in millions) | June 30, 2023 | December 31, 2022 |
|--|------------------|----------------------|
| Current | \$ 614 | \$ 659 |
| 30-89 days past due | 112 | 136 |
| 90 or more days past due | 215 | 302 |
| Total government guaranteed loans | \$ 941 | \$ 1,097 |

Geographic composition and current estimated loan-to-value ratio of residential real estate loans

At June 30, 2023, \$229.8 billion, or 70% of the total retained residential real estate loan portfolio, was concentrated in California, New York, Florida, Texas and Massachusetts, compared with \$147.8 billion, or 62% at December 31, 2022.

Refer to Note 12 for information on the geographic composition and current estimated LTVs of the Firm's residential real estate loans.

Modified residential real estate loans

For the three and six months ended June 30, 2023, residential real estate FDMS were \$35 million and \$75 million, respectively. In addition to FDMS, the Firm also had \$33 million and \$48 million of loans subject to trial modification where the terms of the loans have not been permanently modified, as well as \$3 million and \$5 million of loans subject to discharge under Chapter 7 bankruptcy proceedings ("Chapter 7 loans") for the three and six months ended June 30, 2023, respectively. The changes to the TDR accounting guidance eliminated the TDR reasonably expected and concession assessment criteria. Accordingly, trial modifications and Chapter 7 loans were considered TDRs, but not FDMS. Refer to Note 1 and Note 12 for further information.

For the three and six months ended June 30, 2022, residential real estate TDRs were \$115 million and \$233 million, respectively. Refer to Note 12 for further information on TDRs in prior periods.

Auto and other: The auto and other loan portfolio, including loans at fair value consists of prime-quality scored auto and business banking loans, other consumer unsecured loans, and overdrafts. The portfolio increased when compared to December 31, 2022 due to originations of scored Auto loans and an increase in other consumer unsecured fair value option loans associated with the First Republic acquisition, largely offset by paydowns. Net charge-offs increased for the three and six months ended June 30, 2023 compared to the same periods in the prior year due to higher scored Auto charge-offs as delinquency levels normalized and vehicle valuations declined. The scored Auto net charge-off rates were 0.41% and 0.12% for the three months ended June 30, 2023 and 2022, respectively, and 0.43% and 0.15% for the six months ended June 30, 2023 and 2022, respectively.

Nonperforming assets

The following table presents information as of June 30, 2023 and December 31, 2022, about consumer, excluding credit card, nonperforming assets.

Nonperforming assets^(a)

| (in millions) | June 30, 2023 | December 31, 2022 |
|--|------------------|----------------------|
| Nonaccrual loans | | |
| Residential real estate ^(b) | \$ 4,122 | \$ 4,196 |
| Auto and other ^(c) | 143 | 129 |
| Total nonaccrual loans | 4,265 | 4,325 |
| Assets acquired in loan satisfactions | | |
| Real estate owned | 126 | 129 |
| Other | 36 | 28 |
| Total assets acquired in loan satisfactions | 162 | 157 |
| Total nonperforming assets | \$ 4,427 | \$ 4,482 |

- (a) At June 30, 2023 and December 31, 2022, nonperforming assets excluded mortgage loans 90 or more days past due and insured by U.S. government agencies of \$215 million and \$302 million, respectively. These amounts have been excluded based upon the government guarantee.
- (b) Generally excludes loans under payment deferral programs offered in response to the COVID-19 pandemic.
- (c) At June 30, 2023 and December 31, 2022, nonaccrual loans excluded \$39 million and \$101 million, respectively, of PPP loans 90 or more days past due and guaranteed by the SBA.

Nonaccrual loans

The following table presents changes in consumer, excluding credit card, nonaccrual loans for the six months ended June 30, 2023 and 2022.

Nonaccrual loan activity

| Six months ended June 30, (in millions) | 2023 | 2022 |
|---|-----------------|-----------------|
| Beginning balance | \$ 4,325 | \$ 5,350 |
| Additions | 1,290 | 1,149 |
| Reductions: | | |
| Principal payments and other ^(a) | 486 | 789 |
| Charge-offs | 202 | 117 |
| Returned to performing status | 573 | 824 |
| Foreclosures and other liquidations | 89 | 97 |
| Total reductions | 1,350 | 1,827 |
| Net changes | (60) | (678) |
| Ending balance | \$ 4,265 | \$ 4,672 |

(a) Other reductions include loan sales.

Refer to Note 12 for further information about the consumer credit portfolio, including information about delinquencies, other credit quality indicators, loan modifications and loans that were in the process of active or suspended foreclosure.

Credit card

Total credit card loans increased from December 31, 2022 reflecting growth from new accounts and revolving balances which continued to normalize to pre-pandemic levels. The June 30, 2023 30+ and 90+ day delinquency rates of 1.70% and 0.84%, respectively, increased compared to the December 31, 2022 30+ and 90+ day delinquency rates of 1.45% and 0.68% respectively, and net charge-offs increased for the three and six months ended June 30, 2023 compared to the same periods in the prior year as 30+ day delinquencies have normalized.

Consistent with the Firm's policy, all credit card loans typically remain on accrual status until charged off. However, the Firm's allowance for loan losses includes the estimated uncollectible portion of accrued and billed interest and fee income. Refer to Note 12 for further information about this portfolio, including information about delinquencies.

Geographic and FICO composition of credit card loans

Refer to Note 12 for information on the geographic and FICO composition of the Firm's credit card loans.

Modifications of credit card loans

For the three and six months ended June 30, 2023, credit card FDMS were \$181 million and \$326 million, respectively. In addition to FDMS, the Firm also had \$26 million of loans subject to trial modification where the terms of the loans have not been permanently modified for both the three and six months ended June 30, 2023. The changes to the TDR accounting guidance eliminated the TDR reasonably expected and concession assessment criteria. Accordingly, trial modifications were considered TDRs, but not FDMS.

For the three and six months ended June 30, 2022, credit card TDRs were \$81 million and \$163 million, respectively. Refer to Note 1 and Note 12 for further information.

WHOLESALE CREDIT PORTFOLIO

In its wholesale businesses, the Firm is exposed to credit risk primarily through its underwriting, lending, market-making, and hedging activities with and for clients and counterparties, as well as through various operating services (such as cash management and clearing activities), securities financing activities and cash placed with banks. A portion of the loans originated or acquired by the Firm's wholesale businesses is generally retained on the balance sheet. The Firm distributes a significant percentage of the loans that it originates into the market as part of its syndicated loan business and to manage portfolio concentrations and credit risk. The wholesale portfolio is actively managed, in part by conducting ongoing, in-depth reviews of client credit quality and transaction structure inclusive of collateral where applicable, and of industry, product and client concentrations. Refer to the industry discussion on pages 72-75 for further information.

The Firm's wholesale credit portfolio includes exposure held in CIB, CB, AWM and Corporate, as well as risk-rated BWM and auto dealer exposure held in CCB, for which the wholesale methodology is applied when determining the allowance for loan losses. The Firm continues to convert certain operations, and to integrate clients, products and services, associated with the First Republic acquisition to align with the Firm's businesses and operations. Accordingly, reporting classifications and internal risk rating profiles in the wholesale portfolio may change in future periods. Refer to Business Developments on page 9 for additional information.

As of June 30, 2023, the increase in nonperforming exposure was driven by loans, resulting from client-specific downgrades in CB and AWM, partially offset by a reduction in lending-related commitments. For the six months ended June 30, 2023, wholesale charge-offs remained low, despite an increase in charge-offs in the second quarter of 2023 concentrated in Office real estate.

As of June 30, 2023, retained loans increased \$64.5 billion predominantly driven by the impact of the First Republic acquisition. Lending-related commitments increased \$69.1 billion driven by the impact of the First Republic acquisition, and net portfolio activity in CIB and CB, including an increase in held-for-sale positions in the bridge financing portfolio.

Wholesale credit portfolio

| (in millions) | Credit exposure | | Nonperforming | |
|---|-----------------------------------|--------------------|-----------------|-----------------|
| | Jun 30, 2023 | Dec 31, 2022 | Jun 30, 2023 | Dec 31, 2022 |
| Loans retained | \$ 668,145 | \$ 603,670 | \$ 2,593 | \$ 1,963 |
| Loans held-for-sale | 5,043 | 3,352 | 48 | 26 |
| Loans at fair value | 27,329 | 32,075 | 367 | 406 |
| Loans | 700,517 | 639,097 | 3,008 | 2,395 |
| Derivative receivables | 64,217 | 70,880 | 286 | 296 |
| Receivables from customers ^(a) | 42,741 | 49,257 | — | — |
| Total wholesale credit-related assets | 807,475 | 759,234 | 3,294 | 2,691 |
| Assets acquired in loan satisfactions | | | | |
| Real estate owned | — | NA | 117 | 74 |
| Other | — | NA | — | — |
| Total assets acquired in loan satisfactions | — | NA | 117 | 74 |
| Lending-related commitments | 541,089 | 471,980 | 332 | 455 |
| Total wholesale credit portfolio | \$1,348,564 ^(c) | \$1,231,214 | \$ 3,743 | \$ 3,220 |
| Credit derivatives and credit-related notes used in credit portfolio management activities ^(b) | \$ (31,105) | \$ (18,143) | \$ — | \$ — |
| Liquid securities and other cash collateral held against derivatives | (23,282) | (23,014) | — | NA |

(a) Receivables from customers reflect held-for-investment margin loans to brokerage clients in CIB, CCB and AWM; these are reported within accrued interest and accounts receivable on the Consolidated balance sheets.

(b) Represents the net notional amount of protection purchased and sold through credit derivatives and credit-related notes used to manage both performing and nonperforming wholesale credit exposures; these derivatives do not qualify for hedge accounting under U.S. GAAP. Refer to Credit derivatives on page 79 and Note 5 for additional information.

(c) Included credit exposure of \$98.2 billion associated with the First Republic acquisition.

Wholesale credit exposure - maturity and ratings profile

The following tables present the maturity and internal risk rating profiles of the wholesale credit portfolio as of June 30, 2023, and December 31, 2022. The Firm generally considers internal ratings with qualitative characteristics equivalent to BBB-/Baa3 or higher as investment grade, and takes into consideration collateral and structural support when determining the internal risk rating for each credit facility. Refer to Note 12 of JPMorgan Chase's 2022 Form 10-K for further information on internal risk ratings.

| June 30, 2023, (in millions, except ratios) | Maturity profile ^(d) | | | | Ratings profile | | | |
|--|---------------------------------|------------------------|----------------|--------------------|------------------|---------------------|--------------------|---------------|
| | 1 year or less | 1 year through 5 years | After 5 years | Total | Investment-grade | Noninvestment-grade | Total | Total % of IG |
| Loans retained | \$ 225,626 | \$ 265,856 | \$ 176,663 | \$ 668,145 | \$ 451,978 | \$ 216,167 | \$ 668,145 | 68 % |
| Derivative receivables | | | | 64,217 | | | 64,217 | |
| Less: Liquid securities and other cash collateral held against derivatives | | | | (23,282) | | | (23,282) | |
| Total derivative receivables, net of collateral | 12,198 | 11,089 | 17,648 | 40,935 | 32,682 | 8,253 | 40,935 | 80 |
| Lending-related commitments | 141,356 | 375,289 | 24,444 | 541,089 | 354,209 | 186,880 | 541,089 | 65 |
| Subtotal | 379,180 | 652,234 | 218,755 | 1,250,169 | 838,869 | 411,300 | 1,250,169 | 67 |
| Loans held-for-sale and loans at fair value ^(a) | | | | 32,372 | | | 32,372 | |
| Receivables from customers | | | | 42,741 | | | 42,741 | |
| Total exposure - net of liquid securities and other cash collateral held against derivatives | | | | \$1,325,282 | | | \$1,325,282 | |
| Credit derivatives and credit-related notes used in credit portfolio management activities ^{(b)(c)} | \$ (6,612) | \$ (22,502) | \$ (1,991) | \$ (31,105) | \$ (26,836) | \$ (4,269) | \$ (31,105) | 86 % |

| December 31, 2022 (in millions, except ratios) | Maturity profile ^(d) | | | | Ratings profile | | | |
|--|---------------------------------|------------------------|----------------|--------------------|------------------|---------------------|---------------------|---------------|
| | 1 year or less | 1 year through 5 years | After 5 years | Total | Investment-grade | Noninvestment-grade | Total | Total % of IG |
| Loans retained | \$ 204,761 | \$ 253,896 | \$ 145,013 | \$ 603,670 | \$ 425,412 | \$ 178,258 | \$ 603,670 | 70 % |
| Derivative receivables | | | | 70,880 | | | 70,880 | |
| Less: Liquid securities and other cash collateral held against derivatives | | | | (23,014) | | | (23,014) | |
| Total derivative receivables, net of collateral | 13,508 | 14,880 | 19,478 | 47,866 | 36,231 | 11,635 | 47,866 | 76 |
| Lending-related commitments | 101,083 | 347,456 | 23,441 | 471,980 | 327,168 | 144,812 | 471,980 | 69 |
| Subtotal | 319,352 | 616,232 | 187,932 | 1,123,516 | 788,811 | 334,705 | 1,123,516 | 70 |
| Loans held-for-sale and loans at fair value ^(a) | | | | 35,427 | | | 35,427 | |
| Receivables from customers | | | | 49,257 | | | 49,257 | |
| Total exposure - net of liquid securities and other cash collateral held against derivatives | | | | \$1,208,200 | | | \$ 1,208,200 | |
| Credit derivatives and credit-related notes used in credit portfolio management activities ^{(b)(c)} | \$ (2,817) | \$ (13,530) | \$ (1,796) | \$ (18,143) | \$ (15,115) | \$ (3,028) | \$ (18,143) | 83 % |

(a) Loans held-for-sale are primarily related to syndicated loans and loans transferred from the retained portfolio.

(b) These derivatives do not qualify for hedge accounting under U.S. GAAP.

(c) The notional amounts are presented on a net basis by underlying reference entity and the ratings profile shown is based on the ratings of the reference entity on which protection has been purchased. Predominantly all of the credit derivatives entered into by the Firm where it has purchased protection used in credit portfolio management activities are executed with investment-grade counterparties. In addition, the Firm obtains credit protection against certain loans in the retained loan portfolio through the issuance of credit-related notes.

(d) The maturity profile of retained loans, lending-related commitments and derivative receivables is generally based on remaining contractual maturity. Derivative contracts that are in a receivable position as of June 30, 2023, may become payable prior to maturity based on their cash flow profile or changes in market conditions.

Wholesale credit exposure - industry exposures

The Firm focuses on the management and diversification of its industry exposures, and pays particular attention to industries with actual or potential credit concerns.

Exposures deemed criticized align with the U.S. banking regulators' definition of criticized exposures, which consist of the special mention, substandard and doubtful categories. Total criticized exposure, excluding loans held-for-sale and loans at fair value, was \$35.0 billion and \$31.3 billion as of June 30, 2023 and December 31, 2022, representing approximately 2.8% and 2.7% of total wholesale credit exposure, respectively. Criticized exposure increased, driven by client-specific downgrades largely in Real Estate, Consumer and Retail, Technology, Media & Telecommunications, and Healthcare, as well as exposures associated with the First Republic acquisition, partially offset by client-specific upgrades. Of the \$35.0 billion of criticized exposure at June 30, 2023, approximately half was undrawn and \$31.8 billion was performing.

The table below summarizes by industry the Firm's exposures as of June 30, 2023 and December 31, 2022. The industry of risk category is generally based on the client or counterparty's primary business activity. Refer to Note 4 for additional information on industry concentrations.

Wholesale credit exposure - industries^(a)

| As of or for the six months ended June 30, 2023 (in millions) | Noninvestment-grade | | | | | Selected metrics | | | | |
|--|--------------------------------------|-------------------|-------------------|-----------------------|--------------------------|---|------------------------------|--|---|--|
| | Credit exposure ^{(b)(g)(h)} | Investment-grade | Noncriticized | Criticized performing | Criticized nonperforming | 30 days or more past due and accruing loans | Net charge-offs/(recoveries) | Credit derivative hedges and credit-related notes ⁽ⁱ⁾ | Liquid securities and other cash collateral held against derivative receivables | |
| Real Estate | \$ 206,912 | \$ 151,293 | \$ 50,328 | \$ 4,715 | \$ 576 | \$ 286 | \$ 102 | \$ (671) | \$ - | |
| Individuals and Individual Entities ^(b) | 141,178 | 115,505 | 24,954 | 210 | 509 | 1,158 | - | - | - | |
| Asset Managers | 138,143 | 87,284 | 50,713 | 138 | 8 | 72 | - | - | (8,906) | |
| Consumer & Retail | 125,935 | 62,890 | 54,980 | 7,511 | 554 | 416 | 59 | (3,618) | - | |
| Industrials | 77,206 | 43,489 | 30,310 | 3,242 | 165 | 362 | 16 | (2,072) | (3) | |
| Technology, Media & Telecommunications | 76,444 | 41,401 | 27,127 | 7,708 | 208 | 125 | 78 | (3,396) | - | |
| Healthcare | 65,547 | 43,569 | 19,435 | 2,140 | 403 | 292 | 13 | (2,829) | (13) | |
| Banks & Finance Cos | 61,659 | 31,037 | 29,540 | 1,061 | 21 | 71 | 4 | (470) | (1,123) | |
| State & Municipal Govt ^(c) | 37,157 | 33,372 | 3,560 | 222 | 3 | 7 | - | (4) | - | |
| Utilities | 35,757 | 25,124 | 9,746 | 768 | 119 | 60 | (2) | (1,989) | - | |
| Oil & Gas | 33,233 | 18,969 | 13,768 | 446 | 50 | 42 | 4 | (1,384) | - | |
| Automotive | 32,947 | 23,385 | 9,174 | 235 | 153 | 56 | - | (623) | - | |
| Chemicals & Plastics | 22,195 | 12,020 | 9,243 | 811 | 121 | 26 | - | (835) | - | |
| Insurance | 21,874 | 15,513 | 6,062 | 299 | - | 14 | - | (531) | (7,529) | |
| Central Govt | 16,845 | 16,396 | 318 | 127 | 4 | - | - | (3,724) | (229) | |
| Metals & Mining | 15,631 | 8,528 | 6,623 | 450 | 30 | - | (6) | (209) | - | |
| Transportation | 15,447 | 6,879 | 7,002 | 1,516 | 50 | 64 | (18) | (598) | - | |
| Securities Firms | 9,077 | 6,116 | 2,961 | - | - | 4 | - | (14) | (2,693) | |
| Financial Markets Infrastructure | 4,993 | 4,599 | 394 | - | - | - | - | (1) | - | |
| All other ^(d) | 135,271 | 114,197 | 20,621 | 216 | 237 | 40 | (2) | (8,137) | (2,786) | |
| Subtotal | \$ 1,273,451 | \$ 861,566 | \$ 376,859 | \$ 31,815 | \$ 3,211 | \$ 3,095 | \$ 248 | \$ (31,105) | \$ (23,282) | |
| Loans held-for-sale and loans at fair value | 32,372 | | | | | | | | | |
| Receivables from customers | 42,741 | | | | | | | | | |
| Total^(e) | \$ 1,348,564 | | | | | | | | | |

(continued from previous page)

| As of or for the year ended December 31, 2022 (in millions) | Noninvestment-grade | | | | | Selected metrics | | | |
|---|-----------------------------------|-------------------|-------------------|-----------------------|--------------------------|---|------------------------------|--|---|
| | Credit exposure ^{(f)(g)} | Investment-grade | Noncriticized | Criticized performing | Criticized nonperforming | 30 days or more past due and accruing loans | Net charge-offs/(recoveries) | Credit derivative hedges and credit-related notes ^(h) | Liquid securities and other cash collateral held against derivative receivables |
| Real Estate | \$ 170,857 | \$ 129,866 | \$ 36,945 | \$ 3,609 | \$ 437 | \$ 543 | \$ 19 | \$ (113) | \$ – |
| Individuals and Individual Entities ^(b) | 130,815 | 112,006 | 18,104 | 360 | 345 | 1,038 | 1 | – | – |
| Asset Managers | 95,656 | 78,925 | 16,665 | 61 | 5 | 15 | (1) | – | (8,278) |
| Consumer & Retail | 120,555 | 60,781 | 51,871 | 7,295 | 608 | 321 | 49 | (1,157) | – |
| Industrials | 72,483 | 39,052 | 30,500 | 2,809 | 122 | 282 | 44 | (1,258) | – |
| Technology, Media & Telecommunications | 72,286 | 39,199 | 25,689 | 7,096 | 302 | 62 | 39 | (1,766) | – |
| Healthcare | 62,613 | 43,839 | 17,117 | 1,479 | 178 | 43 | 27 | (1,055) | – |
| Banks & Finance Cos | 51,816 | 27,811 | 22,994 | 961 | 50 | 36 | – | (262) | (994) |
| State & Municipal Govt ^(c) | 33,847 | 33,191 | 529 | 126 | 1 | 36 | – | (9) | (5) |
| Utilities | 36,218 | 25,981 | 9,294 | 807 | 136 | 21 | 15 | (607) | (1) |
| Oil & Gas | 38,668 | 20,547 | 17,616 | 474 | 31 | 57 | (6) | (414) | – |
| Automotive | 33,287 | 23,908 | 8,839 | 416 | 124 | 198 | (2) | (513) | – |
| Chemicals & Plastics | 20,030 | 12,134 | 7,103 | 744 | 49 | 10 | 3 | (298) | – |
| Insurance | 21,045 | 15,468 | 5,396 | 181 | – | 1 | – | (273) | (7,296) |
| Central Govt | 19,095 | 18,698 | 362 | 35 | – | – | 10 | (4,591) | (677) |
| Metals & Mining | 15,915 | 8,825 | 6,863 | 222 | 5 | 7 | (1) | (27) | (4) |
| Transportation | 15,009 | 6,497 | 6,862 | 1,574 | 76 | 24 | 2 | (339) | – |
| Securities Firms | 8,066 | 4,235 | 3,716 | 115 | – | – | (13) | (26) | (2,811) |
| Financial Markets | 4,962 | 4,525 | 437 | – | – | – | – | – | – |
| Infrastructure | 4,962 | 4,525 | 437 | – | – | – | – | – | – |
| All other ^(d) | 123,307 | 105,284 | 17,555 | 223 | 245 | 4 | (5) | (5,435) | (2,948) |
| Subtotal | \$ 1,146,530 | \$ 810,772 | \$ 304,457 | \$ 28,587 | \$ 2,714 | \$ 2,698 | \$ 181 | \$ (18,143) | \$ (23,014) |
| Loans held-for-sale and loans at fair value | 35,427 | | | | | | | | |
| Receivables from customers | 49,257 | | | | | | | | |
| Total^(e) | \$ 1,231,214 | | | | | | | | |

- (a) The industry rankings presented in the table as of December 31, 2022, are based on the industry rankings of the corresponding exposures as of June 30, 2023, not actual rankings of such exposures as of December 31, 2022.
- (b) Individuals and Individual Entities predominantly consists of Global Private Bank clients within AWM and J.P. Morgan Wealth Management within CCB, and includes exposure to personal investment companies and personal and testamentary trusts.
- (c) In addition to the credit risk exposure to states and municipal governments (both U.S. and non-U.S.) noted above, the Firm held \$6.8 billion and \$6.6 billion of trading assets as of June 30, 2023, and December 31, 2022, respectively; \$24.0 billion and \$6.8 billion, respectively, of AFS securities; and \$11.6 billion and \$19.7 billion, respectively, of HTM securities, issued by U.S. state and municipal governments. Refer to Note 2 and Note 10 for further information.
- (d) All other includes: SPEs, and Private education and civic organizations, representing approximately 94% and 6%, respectively, as of June 30, 2023 and 95% and 5%, respectively, as of December 31, 2022.
- (e) Excludes cash and other deposits placed with banks of \$485.4 billion and \$556.6 billion, as of June 30, 2023, and December 31, 2022, respectively, which is predominantly placed with various central banks, primarily Federal Reserve Banks.
- (f) Credit exposure is net of risk participations and excludes the benefit of credit derivatives and credit-related notes used in credit portfolio management activities held against derivative receivables or loans and liquid securities and other cash collateral held against derivative receivables.
- (g) Credit exposure includes held-for-sale and fair value option elected lending-related commitments.
- (h) Included credit exposure of \$98.2 billion associated with the First Republic acquisition predominantly in Asset Managers, Real Estate, and Individuals and Individual Entities.
- (i) Represents the net notional amounts of protection purchased and sold through credit derivatives and credit-related notes used to manage the credit exposures; these derivatives do not qualify for hedge accounting under U.S. GAAP. The All other category includes purchased credit protection on certain credit indices.

Presented below is additional detail on certain of the Firm's industry exposures.

Real Estate

Real Estate exposure was \$206.9 billion as of June 30, 2023. Criticized exposure increased by \$1.3 billion from \$4.0 billion as of December 31, 2022 to \$5.3 billion as of June 30, 2023, driven by client-specific downgrades, partially offset by client-specific upgrades.

| (in millions, except ratios) | June 30, 2023 | | | | |
|--|---------------------------------------|------------------------|-------------------|--------------------|------------------------|
| | Loans and Lending-related Commitments | Derivative Receivables | Credit exposure | % Investment-grade | % Drawn ^(e) |
| Multifamily ^(a) | \$ 119,840 | \$ 11 | \$ 119,851 | 83 % | 89 % |
| Other Income Producing Properties ^(b) | 18,664 | 178 | 18,842 | 56 | 68 |
| Industrial | 17,997 | – | 17,997 | 66 | 74 |
| Office | 17,623 | 24 | 17,647 | 62 | 76 |
| Services and Non Income Producing | 15,656 | 63 | 15,719 | 64 | 53 |
| Retail | 12,899 | 35 | 12,934 | 61 | 71 |
| Lodging | 3,902 | 20 | 3,922 | 16 | 47 |
| Total Real Estate Exposure^(c) | \$ 206,581 | \$ 331 | \$ 206,912 | 73 % | 80 % |

| (in millions, except ratios) | December 31, 2022 | | | | |
|--|---------------------------------------|------------------------|-------------------|--------------------|------------------------|
| | Loans and Lending-related Commitments | Derivative Receivables | Credit exposure | % Investment-grade | % Drawn ^(e) |
| Multifamily ^(a) | \$ 99,555 | \$ 17 | \$ 99,572 | 82 % | 87 % |
| Other Income Producing Properties ^(b) | 12,701 | 150 | 12,851 | 70 | 62 |
| Industrial | 15,928 | 1 | 15,929 | 72 | 71 |
| Office | 14,917 | 25 | 14,942 | 74 | 73 |
| Services and Non Income Producing | 13,968 | 10 | 13,978 | 65 | 48 |
| Retail | 10,192 | 8 | 10,200 | 75 | 68 |
| Lodging | 3,347 | 38 | 3,385 | 6 | 37 |
| Total Real Estate Exposure | \$ 170,608 | \$ 249 | \$ 170,857 | 76 % | 77 % |

(a) Multifamily exposure is largely in California.

(b) Other Income Producing Properties consists of clients with diversified property types or other property types outside of categories listed in the table above.

(c) Real Estate exposure is approximately 82% secured; unsecured exposure is approximately 76% investment-grade.

(d) Included \$33.2 billion of credit exposure associated with the First Republic acquisition.

(e) Represents drawn exposure as a percentage of credit exposure.

Consumer & Retail

Consumer & Retail exposure was \$125.9 billion as of June 30, 2023. Criticized exposure increased by \$162 million from \$7.9 billion as of December 31, 2022 to \$8.1 billion as of June 30, 2023, driven by client-specific downgrades predominantly offset by client-specific upgrades and net portfolio activity.

| June 30, 2023 | | | | | | |
|--|---------------------------------------|------------------------|-------------------|--------------------|------------------------|--|
| (in millions, except ratios) | Loans and Lending-related Commitments | Derivative Receivables | Credit exposure | % Investment-grade | % Drawn ^(d) | |
| Retail ^(a) | \$ 35,745 | \$ 329 | \$ 36,074 | 53 % | 32 % | |
| Business and Consumer Services | 33,127 | 348 | 33,475 | 49 | 41 | |
| Food and Beverage | 31,747 | 1,195 | 32,942 | 56 | 40 | |
| Consumer Hard Goods | 13,927 | 285 | 14,212 | 47 | 36 | |
| Leisure ^(b) | 9,111 | 121 | 9,232 | 25 | 44 | |
| Total Consumer & Retail^(c) | \$ 123,657 | \$ 2,278 | \$ 125,935 | 50 % | 38 % | |

| December 31, 2022 | | | | | | |
|------------------------------------|---------------------------------------|------------------------|-------------------|--------------------|------------------------|--|
| (in millions, except ratios) | Loans and Lending-related Commitments | Derivative Receivables | Credit exposure | % Investment-grade | % Drawn ^(d) | |
| Retail ^(a) | \$ 33,891 | \$ 309 | \$ 34,200 | 50 % | 33 % | |
| Business and Consumer Services | 31,256 | 384 | 31,640 | 50 | 40 | |
| Food and Beverage | 31,706 | 736 | 32,442 | 59 | 39 | |
| Consumer Hard Goods | 13,879 | 172 | 14,051 | 51 | 39 | |
| Leisure ^(b) | 8,173 | 49 | 8,222 | 21 | 45 | |
| Total Consumer & Retail | \$ 118,905 | \$ 1,650 | \$ 120,555 | 50 % | 38 % | |

(a) Retail consists of Home Improvement & Specialty Retailers, Restaurants, Supermarkets, Discount & Drug Stores, Specialty Apparel and Department Stores.

(b) Leisure consists of Gaming, Arts & Culture, Travel Services and Sports & Recreation. As of June 30, 2023 approximately 88% of the noninvestment-grade Leisure portfolio is secured.

(c) Consumer & Retail exposure is approximately 57% secured; unsecured exposure is approximately 79% investment-grade.

(d) Represents drawn exposure as a percent of credit exposure.

Oil & Gas

Oil & Gas exposure was \$33.2 billion as of June 30, 2023 of which \$496 million was considered criticized exposure.

| June 30, 2023 | | | | | | |
|---|---------------------------------------|------------------------|------------------|--------------------|------------------------|--|
| (in millions, except ratios) | Loans and Lending-related Commitments | Derivative Receivables | Credit exposure | % Investment-grade | % Drawn ^(c) | |
| Exploration & Production ("E&P") and Oil field Services | \$ 16,592 | \$ 1,186 | \$ 17,778 | 56 % | 29 % | |
| Other Oil & Gas ^(a) | 15,289 | 166 | 15,455 | 58 | 28 | |
| Total Oil & Gas^(b) | \$ 31,881 | \$ 1,352 | \$ 33,233 | 57 % | 29 % | |

| December 31, 2022 | | | | | | |
|---|---------------------------------------|------------------------|------------------|--------------------|------------------------|--|
| (in millions, except ratios) | Loans and Lending-related Commitments | Derivative Receivables | Credit exposure | % Investment-grade | % Drawn ^(c) | |
| Exploration & Production ("E&P") and Oil field Services | \$ 17,729 | \$ 4,666 | \$ 22,395 | 50 % | 25 % | |
| Other Oil & Gas ^(a) | 15,818 | 455 | 16,273 | 57 | 25 | |
| Total Oil & Gas | \$ 33,547 | \$ 5,121 | \$ 38,668 | 53 % | 25 % | |

(a) Other Oil & Gas includes Integrated Oil & Gas companies, Midstream/Oil Pipeline companies and refineries.

(b) Oil & Gas exposure is approximately 40% secured, approximately half of which is reserve-based lending to the Exploration & Production sub-sector; unsecured exposure is approximately 68% investment-grade.

(c) Represents drawn exposure as a percent of credit exposure.

Loans

In its wholesale businesses, the Firm provides loans to a variety of clients, ranging from large corporate and institutional clients to high-net-worth individuals. Refer to Note 12 for a further discussion on loans, including information about delinquencies, loan modifications and other credit quality indicators.

The following table presents the change in the nonaccrual loan portfolio for the six months ended June 30, 2023 and 2022. Since June 30, 2022, nonaccrual loan exposure increased by \$518 million driven by Healthcare, Consumer & Retail, and Real Estate resulting from downgrades, partially offset by Transportation and civic organizations resulting from net portfolio activity.

Wholesale nonaccrual loan activity

| Six months ended June 30, (in millions) | 2023 | 2022 |
|--|-----------------|-----------------|
| Beginning balance | \$ 2,395 | \$ 2,445 |
| Additions | 1,649 | 1,239 |
| Reductions: | | |
| Paydowns and other | 618 | 776 |
| Gross charge-offs | 281 | 83 |
| Returned to performing status | 85 | 326 |
| Sales | 52 | 9 |
| Total reductions | 1,036 | 1,194 |
| Net changes | 613 | 45 |
| Ending balance | \$ 3,008 | \$ 2,490 |

The following table presents net charge-offs/recoveries, which are defined as gross charge-offs less recoveries, for the three and six months ended June 30, 2023 and 2022. The amounts in the table below do not include gains or losses from sales of nonaccrual loans recognized in noninterest revenue.

Wholesale net charge-offs/(recoveries)

| (in millions, except ratios) | Three months ended June 30, | | Six months ended June 30, | |
|--------------------------------|--------------------------------|-----------|------------------------------|-----------|
| | 2023 | 2022 | 2023 | 2022 |
| Loans | | | | |
| Average loans retained | \$647,474 | \$577,850 | \$624,566 | \$568,673 |
| Gross charge-offs | 189 | 71 | 294 | 123 |
| Gross recoveries collected | (24) | (21) | (46) | (43) |
| Net charge-offs/(recoveries) | 165 | 50 | 248 | 80 |
| Net charge-off/(recovery) rate | 0.10 % | 0.03 % | 0.08 % | 0.03 % |

Modified wholesale loans

The amortized cost of wholesale FDMs was \$673 million and \$854 million for the three and six months ended June 30, 2023, respectively. Refer to Note 1 and Note 12 for further information.

Wholesale TDRs were \$60 million and \$479 million for the three and six months ended June 30, 2022, respectively. Refer to Note 12 for further information on TDRs in prior periods.

Maturities and sensitivity to changes in interest rates

The table below sets forth loan maturities by scheduled repayments, by class of loan and the distribution between fixed and floating interest rates based on the stated terms of the loan agreements. Refer to Wholesale Credit Portfolio on pages 116-126 of JPMorgan Chase's 2022 Form 10-K for further information. Refer to Note 12 for further information on loan classes.

| June 30, 2023 (in millions, except ratios) | 1 year or less ^(f) | After 1 year through 5 years | After 5 years through 15 years | After 15 years | Total |
|--|-------------------------------|------------------------------|--------------------------------|------------------|-------------------|
| Wholesale loans: | | | | | |
| Secured by real estate ^(a) | \$ 17,025 | \$ 61,188 | \$ 50,001 | \$ 41,680 | \$ 169,894 |
| Commercial and industrial | 54,346 | 114,370 | 8,863 | 197 | 177,776 |
| Other ^(b) | 184,593 | 127,299 | 35,378 | 5,577 | 352,847 |
| Total wholesale loans | \$ 255,964 | \$ 302,857 | \$ 94,242 | \$ 47,454 | \$ 700,517 |
| Loans due after one year at fixed interest rates | | | | | |
| Secured by real estate ^(c) | | \$ 15,915 | \$ 11,563 | \$ 520 | |
| Commercial and industrial | | 5,775 | 1,238 | 66 | |
| Other | | 30,048 | 15,690 | 3,808 | |
| Loans due after one year at variable interest rates | | | | | |
| Secured by real estate ^(d) | | \$ 45,273 | \$ 38,438 | \$ 41,160 | |
| Commercial and industrial | | 108,595 | 7,625 | 131 | |
| Other ^(e) | | 97,251 | 19,688 | 1,769 | |
| Total wholesale loans | | \$ 302,857 | \$ 94,242 | \$ 47,454 | |

(a) Included \$6.5 billion, \$17.0 billion, and \$9.9 billion of loans in 1 year or less, after 1 year through 5 years, and after 5 years though 15, respectively, associated with the First Republic acquisition.

(b) Included \$12.0 billion, and \$3.8 billion of loans in 1 year or less, and after 1 year through 5 years, respectively, associated with the First Republic acquisition.

(c) Included \$9.7 billion, and \$5.7 billion in after 1 year through 5 years, and after 5 years though 15, respectively, associated with the First Republic acquisition.

(d) Included \$7.3 billion, and \$4.2 billion in after 1 year through 5 years, and after 5 years though 15, respectively, associated with the First Republic acquisition.

(e) Included \$3.2 billion in after 1 year through 5 years associated with the First Republic acquisition.

(f) Includes loans held-for-sale, demand loans and overdrafts.

The following table presents net charge-offs/recoveries, average retained loans and net charge-off/recovery rate by loan class for the three and six months ended June 30, 2023 and 2022.

| (in millions, except ratios) | Three months ended June 30, | | | | | | | |
|--------------------------------|-----------------------------|---------|---------------------------|---------|---------|---------|---------|---------|
| | Secured by real estate | | Commercial and industrial | | Other | | Total | |
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| Net charge-offs/(recoveries) | \$ 85 | \$ 2 | \$ 81 | \$ 47 | \$ (1) | \$ 1 | \$ 165 | \$ 50 |
| Average retained loans | 153,590 | 120,441 | 171,684 | 162,702 | 322,200 | 294,707 | 647,474 | 577,850 |
| Net charge-off/(recovery) rate | 0.22 % | 0.01 % | 0.19 % | 0.12 % | – % | – % | 0.10 % | 0.03 % |
| (in millions, except ratios) | Six months ended June 30, | | | | | | | |
| | Secured by real estate | | Commercial and industrial | | Other | | Total | |
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| Net charge-offs/(recoveries) | \$ 90 | \$ 8 | \$ 151 | \$ 54 | \$ 7 | \$ 18 | \$ 248 | \$ 80 |
| Average retained loans | 139,822 | 119,139 | 171,136 | 158,222 | 313,608 | 291,312 | 624,566 | 568,673 |
| Net charge-off/(recovery) rate | 0.13 % | 0.01 % | 0.18 % | 0.07 % | – % | 0.01 % | 0.08 % | 0.03 % |

Lending-related commitments

The Firm uses lending-related financial instruments, such as commitments (including revolving credit facilities) and guarantees, to address the financing needs of its clients. The contractual amounts of these financial instruments represent the maximum possible credit risk should the clients draw down on these commitments or when the Firm fulfills its obligations under these guarantees, and the clients subsequently fail to perform according to the terms of these contracts. Most of these commitments and guarantees have historically been refinanced, extended, cancelled, or expired without being drawn upon or a default occurring. As a result, the Firm does not believe that the total contractual amount of these wholesale lending-related commitments is representative of the Firm's expected future credit exposure or funding requirements. Refer to Note 24 for further information on wholesale lending-related commitments.

Receivables from customers

Receivables from customers reflect held-for-investment margin loans to brokerage clients in CIB, CCB and AWM that are collateralized by assets maintained in the clients' brokerage accounts (e.g., cash on deposit, and liquid and readily marketable debt or equity securities). Because of this collateralization, no allowance for credit losses is generally held against these receivables. To manage its credit risk the Firm establishes margin requirements and monitors the required margin levels on an ongoing basis, and requires clients to deposit additional cash or other collateral, or to reduce positions, when appropriate. These receivables are reported within accrued interest and accounts receivable on the Firm's Consolidated balance sheets.

Derivative contracts

Derivatives enable clients and counterparties to manage risk including credit risk and risks arising from fluctuations in interest rates, foreign exchange and equities and commodities prices. The Firm makes markets in derivatives in order to meet these needs and uses derivatives to manage certain risks associated with net open risk positions from its market-making activities, including the counterparty credit risk arising from derivative receivables. The Firm also uses derivative instruments to manage its own credit risk and other market risk exposure. The nature of the counterparty and the settlement mechanism of the derivative affect the credit risk to which the Firm is exposed. For over-the-counter ("OTC") derivatives the Firm is exposed to the credit risk of the derivative counterparty. For exchange-traded derivatives ("ETD"), such as futures and options, and cleared over-the-counter ("OTC-cleared") derivatives, the Firm can also be exposed to the credit risk of the relevant central counterparty clearing house ("CCP"). Where possible, the Firm seeks to mitigate its credit risk exposures arising from derivative contracts through the use of legally enforceable master netting arrangements and collateral agreements.

The percentage of the Firm's over-the-counter derivative transactions subject to collateral agreements – excluding foreign exchange spot trades, which are not typically covered by collateral agreements due to their short maturity, and centrally cleared trades that are settled daily – was approximately 88% and 87% at June 30, 2023, and December 31, 2022, respectively. Refer to Note 5 for additional information on the Firm's use of collateral agreements and for a further discussion of derivative contracts, counterparties and settlement types.

The fair value of derivative receivables reported on the Consolidated balance sheets was \$64.2 billion and \$70.9 billion at June 30, 2023, and December 31, 2022, respectively. The decrease was primarily driven by market movements in CIB Markets. Derivative receivables represent the fair value of the derivative contracts after giving effect to legally enforceable master netting agreements and the related cash collateral held by the Firm.

In addition, the Firm held liquid securities and other cash collateral that may be used as security when the fair value of the client's exposure is in the Firm's favor. For these purposes, the definition of liquid securities is consistent with the definition of high quality liquid assets as defined in the LCR rule.

In management's view, the appropriate measure of current credit risk should also take into consideration other collateral, which generally represents securities that do not qualify as high quality liquid assets under the LCR rule. The benefits of these additional collateral amounts for each counterparty are subject to a legally enforceable master netting agreement and limited to the net amount of the derivative receivables for each counterparty.

The Firm also holds additional collateral (primarily cash, G7 government securities, other liquid government agency and guaranteed securities, and corporate debt and equity securities) 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. Although this collateral does not reduce the balances and is not included in the tables below, it is available as security against potential exposure that could arise should the fair value of the client's derivative contracts move in the Firm's favor. Refer to Note 5 for additional information on the Firm's use of collateral agreements for derivatives transactions.

The following tables summarize the net derivative receivables and the internal ratings profile for the periods presented.

Derivative receivables

| (in millions) | June 30, 2023 | December 31, 2022 |
|---|------------------|----------------------|
| Total, net of cash collateral | \$ 64,217 | \$ 70,880 |
| Liquid securities and other cash collateral held against derivative receivables | (23,282) | (23,014) |
| Total, net of liquid securities and other cash collateral | \$ 40,935 | \$ 47,866 |
| Other collateral held against derivative receivables | (1,257) | (1,261) |
| Total, net of collateral | \$ 39,678 | \$ 46,605 |

Ratings profile of derivative receivables

| (in millions, except ratios) | June 30, 2023 | | December 31, 2022 | |
|------------------------------|----------------------------|---------------------------------|----------------------------|---------------------------------|
| | Exposure net of collateral | % of exposure net of collateral | Exposure net of collateral | % of exposure net of collateral |
| Investment-grade | \$ 31,560 | 80 % | \$ 35,097 | 75 % |
| Noninvestment-grade | 8,118 | 20 | 11,508 | 25 |
| Total | \$ 39,678 | 100 % | \$ 46,605 | 100 % |

Credit portfolio management activities

The Firm uses credit derivatives for two primary purposes: first, in its capacity as a market-maker, and second, as an end-user, to manage the Firm's own credit risk associated with traditional lending activities (loans and lending-related commitments) and derivatives counterparty exposure in the Firm's wholesale businesses. In addition, the Firm obtains credit protection against certain loans in the retained wholesale portfolio through the issuance of credit-related notes. Information on credit portfolio management activities is provided in the table below.

Credit derivatives and credit-related notes used in credit portfolio management activities

| (in millions) | Notional amount of protection purchased and sold ^(a) | |
|---|---|----------------------|
| | June 30, 2023 | December 31, 2022 |
| Credit derivatives and credit-related notes used to manage: | | |
| Loans and lending-related commitments | \$ 16,801 | \$ 6,422 |
| Derivative receivables | 14,304 | 11,721 |
| Credit derivatives and credit-related notes used in credit portfolio management activities | \$ 31,105 | \$ 18,143 |

(a) Amounts are presented net, considering the Firm's net protection purchased or sold with respect to each underlying reference entity or index.

Refer to Credit derivatives in Note 5 of this Form 10-Q and Note 5 of JPMorgan Chase's 2022 Form 10-K for further information on credit derivatives and derivatives used in credit portfolio management activities.

ALLOWANCE FOR CREDIT LOSSES

The Firm's allowance for credit losses represents management's estimate of expected credit losses over the remaining expected life of the Firm's financial assets measured at amortized cost and certain off-balance sheet lending-related commitments. The allowance for credit losses generally consists of:

- the allowance for loan losses, which covers the Firm's retained loan portfolios (scored and risk-rated),
- the allowance for lending-related commitments, which is reflected in accounts payable and other liabilities on the Consolidated balance sheets, and
- the allowance for credit losses on investment securities, which is reflected in investment securities on the Consolidated balance sheets.

Discussion of changes in the allowance

The allowance for credit losses as of June 30, 2023 was \$24.3 billion, reflecting a net addition of \$2.7 billion from December 31, 2022.

The net addition to the allowance for credit losses included \$1.5 billion, consisting of:

- \$819 million in **wholesale**, predominantly driven by net downgrade activity, updates to certain assumptions related to office real estate in CB in the second quarter of 2023, and the impact of the additional weight placed on the adverse scenarios in the first quarter of 2023, and
- \$649 million in **consumer**, predominantly driven by Card Services, reflecting loan growth, the net effect of changes in the Firm's macroeconomic outlook, including the impact from the weighted average U.S. unemployment rate peaking in the third quarter of 2024, and the additional weight placed on the adverse scenarios in the first quarter of 2023, partially offset by reduced borrower uncertainty.

The net addition also included \$1.2 billion to establish the allowance for the First Republic loans and lending-related commitments in the second quarter of 2023.

The Firm has maintained the additional weight placed on the relative adverse scenario in the first quarter of 2023, reflecting an increased probability of a moderate recession due to tightening financial conditions.

The allowance for credit losses also reflected a reduction of \$587 million as a result of the adoption of changes to the TDR accounting guidance on January 1, 2023. Refer to Note 1 for further information.

The Firm's allowance for credit losses is estimated using a weighted average of five internally developed macroeconomic scenarios. The adverse scenarios incorporate more punitive macroeconomic factors than the central case assumptions provided in the table below, resulting in a weighted average U.S. unemployment rate peaking at 5.8% in the third quarter of 2024, and a 1.5% lower U.S. real GDP exiting the fourth quarter of 2024.

The Firm's central case assumptions reflected U.S. unemployment rates and U.S. real GDP as follows:

| | Assumptions at June 30, 2023 | | |
|--|------------------------------|-------|-------|
| | 4Q23 | 2Q24 | 4Q24 |
| U.S. unemployment rate ^(a) | 4.2 % | 4.9 % | 5.0 % |
| YoY growth in U.S. real GDP ^(b) | 0.5 % | – % | 1.0 % |

| | Assumptions at December 31, 2022 | | |
|--|----------------------------------|-------|-------|
| | 2Q23 | 4Q23 | 2Q24 |
| U.S. unemployment rate ^(a) | 3.8 % | 4.3 % | 5.0 % |
| YoY growth in U.S. real GDP ^(b) | 1.5 % | 0.4 % | – % |

(a) Reflects quarterly average of forecasted U.S. unemployment rate.

(b) The year over year growth in U.S. real GDP in the forecast horizon of the central scenario is calculated as the percentage change in U.S. real GDP levels from the prior year.

Subsequent changes to this forecast and related estimates will be reflected in the provision for credit losses in future periods.

Refer to Note 13 and Note 10 of JPMorgan Chase's 2022 Form 10-K for a description of the policies, methodologies and judgments used to determine the Firm's allowance for credit losses on loans, lending-related commitments, and investment securities.

Refer to Consumer Credit Portfolio on pages 65-69, Wholesale Credit Portfolio on pages 70-79 and Note 12 for additional information on the consumer and wholesale credit portfolios.

Refer to Critical Accounting Estimates Used by the Firm on pages 91-93 for further information on the allowance for credit losses and related management judgments.

Allowance for credit losses and related information

| Six months ended June 30, (in millions, except ratios) | 2023 | | | | 2022 | | | |
|--|---------------------------------------|------------------|------------------|------------------|---------------------------------------|------------------|-----------------|------------------|
| | Consumer, excluding credit card | Credit card | Wholesale | Total | Consumer, excluding credit card | Credit card | Wholesale | Total |
| Allowance for loan losses | | | | | | | | |
| Beginning balance at January 1, | \$ 2,040 | \$ 11,200 | \$ 6,486 | \$ 19,726 | \$ 1,765 | \$ 10,250 | \$ 4,371 | \$ 16,386 |
| Cumulative effect of a change in accounting principle ^(a) | (489) | (100) | 2 | (587) | NA | NA | NA | NA |
| Gross charge-offs | 501 | 2,432 | 294 | 3,227 | 384 | 1,505 | 123 | 2,012 |
| Gross recoveries collected | (247) | (386) | (46) | (679) | (311) | (419) | (43) | (773) |
| Net charge-offs/(recoveries) | 254 | 2,046 | 248 | 2,548 | 73 | 1,086 | 80 | 1,239 |
| Provision for loan losses | 751 | 2,546 | 2,067 | 5,364 | 237 | 1,236 | 1,125 | 2,598 |
| Other | – | – | 25 | 25 | – | – | 5 | 5 |
| Ending balance at June 30, | \$ 2,048 | \$ 11,600 | \$ 8,332 | \$ 21,980 | \$ 1,929 | \$ 10,400 | \$ 5,421 | \$ 17,750 |
| Allowance for lending-related commitments | | | | | | | | |
| Beginning balance at January 1, | \$ 76 | \$ – | \$ 2,306 | \$ 2,382 | \$ 113 | \$ – | \$ 2,148 | \$ 2,261 |
| Provision for lending-related commitments | 52 | – | (253) | (201) | (2) | – | (37) | (39) |
| Other | 1 | – | 4 | 5 | (1) | – | 1 | – |
| Ending balance at June 30, | \$ 129 | \$ – | \$ 2,057 | \$ 2,186 | \$ 110 | \$ – | \$ 2,112 | \$ 2,222 |
| Impairment methodology | | | | | | | | |
| Asset-specific ^(b) | \$ (971) | \$ – | \$ 478 | \$ (493) | \$ (676) | \$ 227 | \$ 332 | \$ (117) |
| Portfolio-based | 3,019 | 11,600 | 7,854 | 22,473 | 2,605 | 10,173 | 5,089 | 17,867 |
| Total allowance for loan losses | \$ 2,048 | \$ 11,600 | \$ 8,332 | \$ 21,980 | \$ 1,929 | \$ 10,400 | \$ 5,421 | \$ 17,750 |
| Impairment methodology | | | | | | | | |
| Asset-specific | \$ – | \$ – | \$ 65 | \$ 65 | \$ – | \$ – | \$ 78 | \$ 78 |
| Portfolio-based | 129 | – | 1,992 | 2,121 | 110 | – | 2,034 | 2,144 |
| Total allowance for lending-related commitments | \$ 129 | \$ – | \$ 2,057 | \$ 2,186 | \$ 110 | \$ – | \$ 2,112 | \$ 2,222 |
| Total allowance for investment securities | NA | NA | NA | \$ 104 | NA | NA | NA | \$ 47 |
| Total allowance for credit losses^{(c)(d)} | \$ 2,177 | \$ 11,600 | \$ 10,389 | \$ 24,270 | \$ 2,039 | \$ 10,400 | \$ 7,533 | \$ 20,019 |
| Memo: | | | | | | | | |
| Retained loans, end-of-period | \$ 396,195 | \$ 191,348 | \$ 668,145 | \$ 1,255,688 | \$ 302,631 | \$ 165,494 | \$ 584,265 | \$ 1,052,390 |
| Retained loans, average | 330,227 | 183,757 | 624,566 | 1,138,550 | 297,566 | 153,941 | 568,673 | 1,020,180 |
| Credit ratios | | | | | | | | |
| Allowance for loan losses to retained loans | 0.52 % | 6.06 % | 1.25 % | 1.75 % | 0.64 % | 6.28 % | 0.93 % | 1.69 % |
| Allowance for loan losses to retained nonaccrual loans ^(e) | 54 | NM | 321 | 345 | 46 | NM | 260 | 283 |
| Allowance for loan losses to retained nonaccrual loans excluding credit card | 54 | NM | 321 | 163 | 46 | NM | 260 | 117 |
| Net charge-off/(recovery) rates | 0.16 | 2.25 | 0.08 | 0.45 | 0.05 | 1.42 | 0.03 | 0.24 |

- (a) Represents the impact to the allowance for loan losses upon the Firm's adoption of changes to the TDR accounting guidance on January 1, 2023. The adoption of this guidance eliminated the existing accounting and disclosure requirements for TDRs, including the requirement to measure the allowance using a discounted cash flow ("DCF") methodology. The Firm elected to change from an asset-specific allowance approach to its non-DCF, portfolio-based allowance approach for modified loans to troubled borrowers for all portfolios except collateral-dependent loans and nonaccrual risk-rated loans, for which the asset-specific allowance approach will continue to apply. Refer to Note 1 for further information.
- (b) Includes collateral-dependent loans, including those for which foreclosure is deemed probable, and nonaccrual risk-rated loans for all periods presented. Prior periods also include non collateral-dependent TDRs or reasonably expected TDRs and modified purchased credit deteriorated ("PCD") loans.
- (c) At June 30, 2023, in addition to the allowance for credit losses in the table above, the Firm also had an allowance for credit losses of \$18 million associated with certain accounts receivable in CIB.
- (d) As of June 30, 2023 included \$1.2 billion allowance for credit losses associated with the First Republic acquisition.
- (e) The Firm's policy is generally to exempt credit card loans from being placed on nonaccrual status as permitted by regulatory guidance.

Allocation of allowance for loan losses

The table below presents a breakdown of the allowance for loan losses by loan class. Refer to Note 12 for further information on loan classes.

| (in millions, except ratios) | June 30, 2023 | | December 31, 2022 | |
|--|---------------------------|---|---------------------------|---|
| | Allowance for loan losses | Percent of retained loans to total retained loans | Allowance for loan losses | Percent of retained loans to total retained loans |
| Residential real estate | \$ 1,022 | 26 % | \$ 1,070 | 22 % |
| Auto and other | 1,026 | 5 | 970 | 6 |
| Consumer, excluding credit card | 2,048 | 32 | 2,040 | 28 |
| Credit card | 11,600 | 15 | 11,200 | 17 |
| Total consumer | 13,648 | 47 | 13,240 | 45 |
| Secured by real estate | 2,548 | 13 | 1,782 | 12 |
| Commercial and industrial | 3,837 | 14 | 3,507 | 15 |
| Other | 1,947 | 27 | 1,197 | 28 |
| Total wholesale | 8,332 | 53 | 6,486 | 55 |
| Total^(a) | \$ 21,980 | 100 % | \$ 19,726 | 100 % |

(a) As of June 30, 2023 included \$1.1 billion allowance for loan losses associated with the First Republic acquisition, consisting of \$377 million in Residential real estate, \$290 million in Secured by real estate, and \$404 million in Commercial and industrial.

INVESTMENT PORTFOLIO RISK MANAGEMENT

Investment portfolio risk is the risk associated with the loss of principal or a reduction in expected returns on investments arising from the investment securities portfolio or from principal investments. The investment securities portfolio is predominantly held by Treasury and CIO in connection with the Firm's balance sheet and asset-liability management objectives. Principal investments are predominantly privately-held financial instruments and are managed in the LOBs and Corporate. Investments are typically intended to be held over extended periods and, accordingly, the Firm has no expectation for short-term realized gains with respect to these investments.

Investment securities risk

Investment securities risk includes the exposure associated with a default in the payment of principal and interest. This risk is mitigated given that the investment securities portfolio held by Treasury and CIO predominantly consists of high-quality securities. At June 30, 2023, the Treasury and CIO investment securities portfolio, net of the allowance for credit losses, was \$610.2 billion, and the average credit rating of the securities comprising the portfolio was AA+ (based upon external ratings where available, and where not available, based primarily upon internal risk ratings). Refer to Corporate segment results on pages 45-46 and Note 10 for further information on the investment securities portfolio and internal risk ratings. Refer to Liquidity Risk Management on pages 54-61 for further information on related liquidity risk. Refer to Market Risk Management on pages 84-89 for further information on the market risk inherent in the portfolio.

Principal investment risk

Principal investments are typically privately-held financial instruments representing ownership interests or other forms of junior capital. In general, principal investments include tax-oriented investments and investments made to enhance or accelerate the Firm's business strategies and exclude those that are consolidated on the Firm's balance sheets. These investments are made by dedicated investing businesses or as part of a broader business strategy. The Firm's principal investments are managed by the LOBs and Corporate and are reflected within their respective financial results. The Firm's investments will continue to evolve in line with its strategies, including the Firm's commitment to support underserved communities and minority-owned businesses.

The table below presents the aggregate carrying values of the principal investment portfolios as of June 30, 2023 and December 31, 2022.

| (in billions) | June 30, 2023 | December 31, 2022 |
|---|------------------|----------------------|
| Tax-oriented investments, primarily in alternative energy and affordable housing ^(a) | \$ 27.5 | \$ 26.2 |
| Private equity, various debt and equity instruments, and real assets ^(b) | 11.4 | 10.8 |
| Total carrying value | \$ 38.9 | \$ 37.0 |

(a) As of June 30, 2023, included approximately \$1.2 billion in tax-oriented investments in CIB associated with the First Republic acquisition.

(b) Includes the Firm's 40% ownership in C6 Bank and 49% ownership in Viva Wallet.

Refer to page 130 of JPMorgan Chase's 2022 Form 10-K for a discussion of the Firm's Investment Portfolio Risk Management governance and oversight.

MARKET RISK MANAGEMENT

Market risk is the risk associated with the effect of changes in market factors such as interest and foreign exchange rates, equity and commodity prices, credit spreads or implied volatilities, on the value of assets and liabilities held for both the short and long term. Refer to Market Risk Management on pages 131-138 of JPMorgan Chase's 2022 Form 10-K for a discussion of the Firm's Market Risk Management organization, market risk measurement, risk monitoring and control, and predominant business activities that give rise to market risk.

Models used to measure market risk are inherently imprecise and are limited in their ability to measure certain risks or to predict losses. This imprecision may be heightened when sudden or severe shifts in market conditions occur. For additional discussion on model uncertainty refer to Estimations and Model Risk Management on page 148 of JPMorgan Chase's 2022 Form 10-K.

Market Risk Management periodically reviews the Firm's existing market risk measures to identify opportunities for enhancement, and to the extent appropriate, will calibrate those measures accordingly over time.

Value-at-risk

JPMorgan Chase utilizes value-at-risk ("VaR"), a statistical risk measure, to estimate the potential loss from adverse market moves in the current market environment. The Firm has a single VaR framework used as a basis for calculating Risk Management VaR and Regulatory VaR.

The Firm's Risk Management VaR is calculated assuming a one-day holding period and an expected tail-loss methodology which approximates a 95% confidence level. For risk management purposes, the Firm believes this methodology provides a daily measure of risk that is closely aligned to risk management decisions made by the LOBs and Corporate and, along with other market risk measures, provides the appropriate information needed to respond to risk events. The Firm calculates separately a daily aggregated VaR in accordance with regulatory rules ("Regulatory VaR"), which is used to derive the Firm's regulatory VaR-based capital requirements under Basel III.

The Firm's VaR model calculations are periodically evaluated and enhanced in response to changes in the composition of the Firm's portfolios, changes in market conditions, improvements in the Firm's modeling techniques and measurements, and other factors. Such changes may affect historical comparisons of VaR results. Refer to Estimations and Model Risk Management on page 148 of JPMorgan Chase's 2022 Form 10-K for information regarding model reviews and approvals.

Refer to page 133 of JPMorgan Chase's 2022 Form 10-K for further information regarding VaR, including the inherent limitations, and the key differences between Risk Management VaR and Regulatory VaR. Refer to JPMorgan Chase's Basel III Pillar 3 Regulatory Capital Disclosures reports, which are available on the Firm's website, for additional information on Regulatory VaR and the other components of market risk regulatory capital for the Firm (e.g., VaR-based measure, stressed VaR-based measure and the respective backtesting). Refer to Other risk measures on pages 136-138 of JPMorgan Chase's 2022 Form 10-K for further information regarding nonstatistical market risk measures used by the Firm.

The table below shows the results of the Firm's Risk Management VaR measure using a 95% confidence level. VaR can vary significantly as positions change, market volatility fluctuates, and diversification benefits change.

Total VaR

| (in millions) | Three months ended | | | | | | | | |
|---|--------------------|--------------|--------------|----------------|--------------|--------------|------------------|--------------|-------------------|
| | June 30, 2023 | | | March 31, 2023 | | | June 30, 2022 | | |
| | Avg. | Min | Max | Avg. | Min | Max | Avg. | Min | Max |
| CIB trading VaR by risk type | | | | | | | | | |
| Fixed income | \$ 57 | \$ 50 | \$ 66 | \$ 56 | \$ 45 | \$ 71 | \$ 60 | \$ 48 | \$ 79 |
| Foreign exchange | 12 | 7 | 24 | 10 | 6 | 17 | 8 | 4 | 13 |
| Equities | 8 | 5 | 11 | 7 | 5 | 10 | 11 | 7 | 15 |
| Commodities and other | 12 | 8 | 17 | 15 | 11 | 19 | 14 | 12 | 17 |
| Diversification benefit to CIB trading VaR ^(a) | (48) | NM | NM | (44) | NM | NM | (43) | NM | NM |
| CIB trading VaR | 41 | 31 | 50 | 44 | 34 | 55 | 50 | 38 | 66 |
| Credit Portfolio VaR ^(b) | 14 | 11 | 18 | 11 | 8 | 17 | 17 | 6 | 31 ^(e) |
| Diversification benefit to CIB VaR ^(a) | (11) | NM | NM | (10) | NM | NM | (15) | NM | NM |
| CIB VaR | 44 | 34 | 55 | 45 | 35 | 58 | 52 | 38 | 70 |
| CCB VaR | 9 ^(d) | 6 | 14 | 11 | 6 | 15 | 5 ^(d) | 4 | 6 |
| Corporate and other LOB VaR ^(c) | 13 | 11 | 15 | 15 | 13 | 17 | 10 | 9 | 11 |
| Diversification benefit to other VaR ^(a) | (7) | NM | NM | (8) | NM | NM | (3) | NM | NM |
| Other VaR | 15 | 13 | 19 | 18 | 14 | 22 | 12 | 10 | 14 |
| Diversification benefit to CIB and other VaR ^(a) | (12) | NM | NM | (16) | NM | NM | (10) | NM | NM |
| Total VaR | \$ 47 | \$ 36 | \$ 56 | \$ 47 | \$ 37 | \$ 57 | \$ 54 | \$ 41 | \$ 71 |

- (a) Diversification benefit represents the difference between the portfolio VaR and the sum of its individual components. This reflects the non-additive nature of VaR due to imperfect correlation across LOBs, Corporate, and risk types. For maximum and minimum VaR, diversification benefit is not meaningful as the maximum and minimum VaR for each portfolio may have occurred on different trading days than the components.
- (b) Credit portfolio VaR includes the derivative CVA, hedges of the CVA and hedges of the retained loan portfolio, which are reported in principal transactions revenue. This VaR does not include the retained loan portfolio, which is not reported at fair value. In the first quarter of 2022, in line with the Firm's internal model governance, the credit risk component of CVA related to certain counterparties was removed from Credit Portfolio VaR due to the widening of the credit spreads for those counterparties to elevated levels. The related hedges were also removed to maintain consistency. This exposure is now reflected in other sensitivity-based measures.
- (c) Corporate and other LOB VaR includes a legacy private equity position in Corporate which is publicly traded.
- (d) The increase in CCB VaR is driven by interest rate volatility impacting Home Lending warehouse loans, MSR, and related hedges.
- (e) For the period ended June 30, 2022, maximum Credit Portfolio VaR remained elevated due to the effects of nickel price increases and the associated volatility in the nickel market which occurred during the first quarter of 2022.

Quarter over quarter results

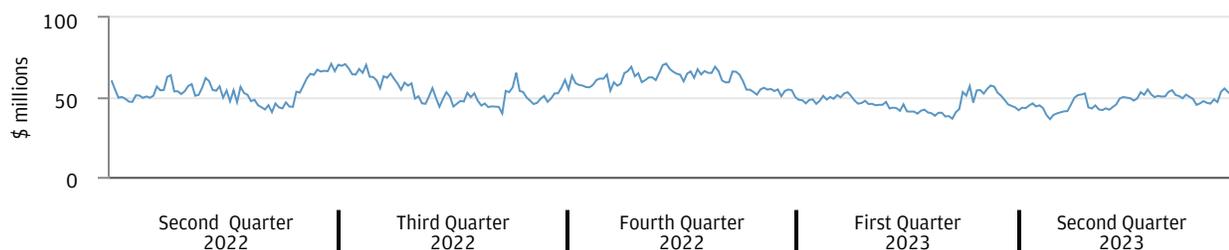
Average total VaR was flat for the three months ended June 30, 2023, when compared with March 31, 2023, reflecting increases in fixed income offset by market volatility relating to commodities rolling out of the one-year historical look-back period.

Year over year results

Average total VaR decreased by \$7 million for the three months ended June 30, 2023, compared with the same period in the prior year predominantly driven by risk reductions impacting Credit Portfolio VaR as well as fixed income.

The following graph presents daily Risk Management VaR for the five trailing quarters.

Daily Risk Management VaR



VaR backtesting

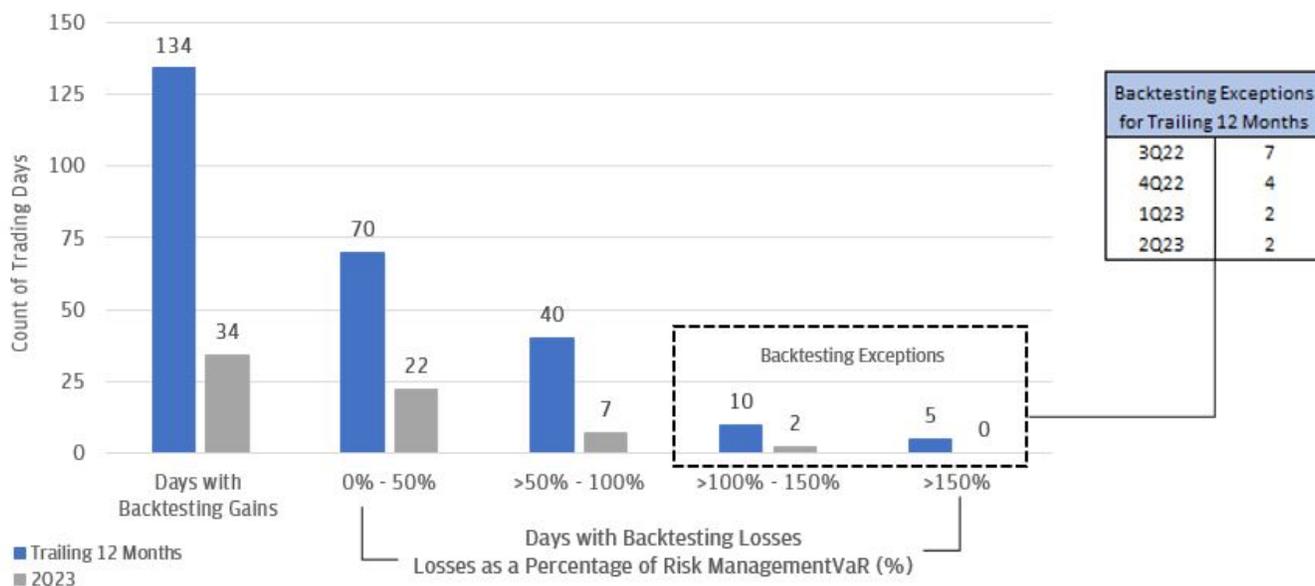
The Firm performs daily VaR model backtesting, which compares the daily Risk Management VaR results with the daily gains and losses that are utilized for VaR backtesting purposes. The gains and losses depicted in the chart below do not reflect the Firm's reported revenue as they exclude certain components of total net revenue, such as those associated with the execution of new transactions (i.e., intraday client-driven trading and intraday risk management activities), fees, commissions, other valuation adjustments and net interest income. These excluded components of total net revenue may more than offset the backtesting gain or loss on a particular day. The definition of backtesting gains and losses above is consistent with the requirements for backtesting under Basel III capital rules.

A backtesting exception occurs when the daily backtesting loss exceeds the daily Risk Management VaR for the prior day. Under the Firm's Risk Management VaR methodology, assuming current changes in market values are consistent with the historical changes used in the simulation, the Firm would expect to incur VaR backtesting exceptions five times every 100 trading days on average. The number of VaR backtesting exceptions observed can differ from the statistically expected number of backtesting exceptions if the current level of market volatility is materially different from the level of market volatility during the 12 months of historical data used in the VaR calculation.

For the 12 months ended June 30, 2023, the Firm posted backtesting gains on 134 of the 259 days, and observed 15 VaR backtesting exceptions. For the three months ended June 30, 2023, the Firm posted backtesting gains on 34 of the 65 days, and observed two VaR backtesting exceptions.

The following chart presents the distribution of Firmwide daily backtesting gains and losses for the trailing 12 months and three months ended June 30, 2023. The daily backtesting losses are displayed as a percentage of the corresponding daily Risk Management VaR. The count of days with backtesting losses are shown in aggregate, in fifty percentage point intervals. Backtesting exceptions are displayed within the intervals that are greater than one hundred percent. The results in the chart below differ from the results of backtesting disclosed in the Market Risk section of the Firm's Basel III Pillar 3 Regulatory Capital Disclosures reports, which are based on Regulatory VaR applied to the Firm's covered positions.

Distribution of Daily Backtesting Gains and Losses



Structural interest rate risk management

The effect of interest rate exposure on the Firm's reported net income is important as interest rate risk represents one of the Firm's significant market risks. Interest rate risk arises not only from trading activities but also from the Firm's traditional banking activities, which include extension of loans and credit facilities, taking deposits, issuing debt and the investment securities portfolio.

One way that the Firm evaluates its structural interest rate risk is through earnings-at-risk. Earnings-at-risk estimates the Firm's interest rate exposure for a given interest rate scenario. It is presented as a sensitivity to a baseline, which includes net interest income and certain interest rate sensitive fees. The baseline uses market interest rates and in the case of deposits, pricing assumptions. The Firm conducts simulations of changes to this baseline for interest rate-sensitive assets and liabilities denominated in U.S. dollars and other currencies ("non-U.S. dollar" currencies). These simulations primarily include retained loans, deposits, deposits with banks, investment securities, long-term debt and any related interest rate hedges, and funds transfer pricing of other positions in risk management VaR and other sensitivity-based measures as described on page 132 of JPMorgan Chase's 2022 Form 10-K.

Earnings-at-risk scenarios estimate the potential change to a net interest income baseline, over the following 12 months utilizing multiple assumptions. These scenarios include a parallel shift involving changes to both short-term and long-term rates by an equal amount; a steeper yield curve involving holding short-term rates constant and increasing long-term rates; and a flatter yield curve involving increasing short-term rates and holding long-term rates constant or holding short-term rates constant and decreasing long-term rates. These scenarios consider many different factors, including:

- The impact on exposures as a result of instantaneous changes in interest rates from baseline rates.
- Forecasted balance sheet, as well as modeled prepayment and reinvestment behavior, but excluding assumptions about actions that could be taken by the Firm or its clients and customers in response to instantaneous rate changes. Mortgage prepayment assumptions are based on the interest rates used in the scenarios compared with underlying contractual rates, the time since origination, and other factors which are updated periodically based on historical experience. Deposit forecasts are a key assumption in the Firm's earnings-at-risk. The baseline reflects certain assumptions relating to the reversal of Quantitative Easing that are highly uncertain and require management judgment. Therefore, the actual amount of deposits held by the Firm, at any particular time, could be impacted by actions the Federal Reserve may take as part of monetary policy, including through the use of the Reverse Repurchase Facility. In addition, there are other factors that impact the amount of deposits held at the Firm such

as the level of loans across the industry and competition for deposits.

- The pricing sensitivity of deposits, known as deposit betas, represent the amount by which deposit rates paid could change upon a given change in market interest rates. As part of the Firm's continuous evaluation and periodic enhancements to its earnings-at-risk calculations, the Firm updated its model in the second quarter of 2023 to incorporate deposit repricing lags impacting both consumer and wholesale deposits. The model change incorporated observed pricing and customer behavior in both rising and falling interest rate environments. Actual deposit rates paid may differ from the modeled assumptions, primarily due to customer behavior and competition for deposits.

The Firm's earnings-at-risk scenarios are periodically evaluated and enhanced in response to changes in the composition of the Firm's balance sheet, changes in market conditions, improvements in the Firm's simulation and other factors. While a relevant measure of the Firm's interest rate exposure, the earnings-at-risk analysis does not represent a forecast of the Firm's net interest income. Refer to Outlook on page 8 for additional information.

The Firm's U.S. dollar sensitivities are presented in the table below.

| (in billions) | June 30, 2023 ^(a) | December 31, 2022 |
|------------------------------------|------------------------------|-------------------|
| Parallel shift: | | |
| +100 bps shift in rates | \$ 2.5 | \$ (2.0) |
| -100 bps shift in rates | (2.2) | 2.4 |
| Steeper yield curve: | | |
| +100 bps shift in long-term rates | 0.6 | 0.8 |
| -100 bps shift in short-term rates | (1.6) | 3.2 |
| Flatter yield curve: | | |
| +100 bps shift in short-term rates | 1.8 | (2.8) |
| -100 bps shift in long-term rates | (0.6) | (0.9) |

(a) Reflects the impact of the aforementioned model update to incorporate deposit repricing lags. Prior periods have not been revised.

In the absence of the model update to incorporate deposit repricing lags in the second quarter of 2023, the Firm's U.S. dollar sensitivities as of June 30, 2023, would have been lower by \$4.2 billion to the +100 basis points shift in short-term and parallel rate scenarios and higher by \$4.4 billion to the -100 basis points shift in short-term and parallel rate scenarios.

In addition, the change in the Firm's U.S. dollar sensitivities as of June 30, 2023 compared to December 31, 2022 reflected the impact of changes in the Firm's balance sheet including the impact of the First Republic acquisition.

As of June 30, 2023, the Firm's sensitivity to the +/-100 basis points parallel shift in rates is primarily the result of a greater impact from assets repricing compared to the impact of liabilities repricing.

The Firm continues to convert certain operations, and to integrate products associated with the First Republic acquisition to align with the Firm's business and operations. The Firm also continues to evaluate to which segments certain products associated with the First Republic acquisition, including deposits, should be allocated. Accordingly, earnings-at-risk results may be impacted in future periods.

The Firm's non-U.S. dollar sensitivities are presented in the table below.

| (in billions) | June 30, 2023 | December 31, 2022 |
|------------------------------------|------------------|----------------------|
| Parallel shift: | | |
| +100 bps shift in rates | \$ 0.8 | \$ 0.7 |
| -100 bps shift in rates | (0.8) | (0.6) |
| Steeper yield curve: | | |
| -100 bps shift in short-term rates | (0.7) | (0.6) |
| Flatter yield curve: | | |
| +100 bps shift in short-term rates | 0.8 | 0.6 |

The results of the non-U.S. dollar interest rate scenario involving a steeper/flatter yield curve with long-term rates increasing/decreasing by 100 basis points and short-term rates staying at current levels were not material to the Firm's earnings-at-risk at June 30, 2023 and December 31, 2022.

In addition to earnings-at-risk, the Firm also measures Economic Value Sensitivity (EVS). EVS stress tests the longer-term economic value of equity by measuring the sensitivity of the Firm's current balance sheet, primarily retained loans, deposits, debt and investment securities as well as related hedges, under various interest rate scenarios. In accordance with the CTC structural interest rate risk policy, the Firm has established limits on EVS as a percentage of TCE.

Refer to Other Risk Measures on pages 136-138 of JPMorgan Chase's 2022 Form 10-K for additional information.

Other sensitivity-based measures

The Firm quantifies the market risk of certain debt and equity and credit and funding-related exposures by assessing the potential impact on net revenue, other comprehensive income (“OCI”) and noninterest expense due to changes in relevant market variables. Refer to the predominant business activities that give rise to market risk on page 138 of JPMorgan Chase’s 2022 Form 10-K for additional information on the positions captured in other sensitivity-based measures.

The table below represents the potential impact to net revenue, OCI or noninterest expense for market risk-sensitive instruments that are not included in VaR or earnings-at-risk. Where appropriate, instruments used for hedging purposes are reported net of the positions being hedged. The sensitivities disclosed in the table below may not be representative of the actual gain or loss that would have been realized at June 30, 2023 and December 31, 2022, as the movement in market parameters across maturities may vary and are not intended to imply management’s expectation of future changes in these sensitivities.

| Gain/(loss) (in millions) | | | | |
|---|---|---|---------------|-------------------|
| Activity | Description | Sensitivity measure | June 30, 2023 | December 31, 2022 |
| Debt and equity^(a) | | | | |
| Asset Management activities | Consists of seed capital and related hedges; fund co-investments ^(c) ; and certain deferred compensation and related hedges ^(d) | 10% decline in market value | \$ (58) | \$ (56) |
| Other debt and equity | Consists of certain real estate-related fair value option elected loans, privately held equity and other investments held at fair value ^(c) | 10% decline in market value | (1,016) | (1,046) |
| Credit- and funding-related exposures | | | | |
| Non-USD LTD cross-currency basis | Represents the basis risk on derivatives used to hedge the foreign exchange risk on the non-USD LTD ^(e) | 1 basis point parallel tightening of cross currency basis | (11) | (12) |
| Non-USD LTD hedges foreign currency (“FX”) exposure | Primarily represents the foreign exchange revaluation on the fair value of the derivative hedges ^(e) | 10% depreciation of currency | 4 | 3 |
| Derivatives - funding spread risk | Impact of changes in the spread related to derivatives FVA ^(c) | 1 basis point parallel increase in spread | (4) | (4) |
| CVA - counterparty credit risk ^(b) | Credit risk component of CVA and associated hedges | 10% credit spread widening | – | (1) |
| Fair value option elected liabilities - funding spread risk | Impact of changes in the spread related to fair value option elected liabilities DVA ^(e) | 1 basis point parallel increase in spread | 45 | 43 |
| Fair value option elected liabilities - interest rate sensitivity | Interest rate sensitivity on fair value option elected liabilities resulting from a change in the Firm’s own credit spread ^(e) | 1 basis point parallel increase in spread | – | – |
| | Interest rate sensitivity related to risk management of changes in the Firm’s own credit spread on the fair value option elected liabilities noted above ^(c) | 1 basis point parallel increase in spread | – | – |

(a) Excludes equity securities without readily determinable fair values that are measured under the measurement alternative. Refer to Note 2 for additional information.

(b) In the first quarter of 2022, in line with the Firm’s internal model governance, the credit risk component of CVA related to certain counterparties was removed from Credit Portfolio VaR due to the widening of the credit spreads for those counterparties to elevated levels. The related hedges were also removed to maintain consistency. This exposure is now reflected in other sensitivity-based measures.

(c) Impact recognized through net revenue.

(d) Impact recognized through noninterest expense.

(e) Impact recognized through OCI.

COUNTRY RISK MANAGEMENT

The Firm, through its LOBs and Corporate, may be exposed to country risk resulting from financial, economic, political or other significant developments which adversely affect the value of the Firm's exposures related to a particular country or set of countries. The Country Risk Management group actively monitors the various portfolios which may be impacted by these developments and measures the extent to which the Firm's exposures are diversified given the Firm's strategy and risk tolerance relative to a country.

Refer to pages 139-140 of JPMorgan Chase's 2022 Form 10-K for a further discussion of the Firm's country risk management.

Risk Reporting

The following table presents the Firm's top 20 exposures by country (excluding the U.S.) as of June 30, 2023 and their comparative exposures as of December 31, 2022. The selection of countries represents the Firm's largest total exposures by individual country, based on the Firm's internal country risk management approach, and does not represent the Firm's view of any existing or potentially adverse credit conditions. Country exposures may fluctuate from period to period due to client activity and market flows.

The increases in exposures to Germany and the United Kingdom were primarily driven by increases in cash placed with the central banks of those countries, due to client-driven activities, including as a result of changes in interest rates.

The decrease in exposure to Australia was driven by a reduction in cash placed with the central bank of Australia due to client-driven activities resulting from changes in interest rates.

The Firm continues to monitor potential impacts to the Firm associated with the war in Ukraine. As of June 30, 2023, exposure to Russia was approximately \$430 million. This amount excludes certain deposits placed on behalf of clients at the Depository Insurance Agency of Russia.

Top 20 country exposures (excluding the U.S.)^(a)

| (in billions) | June 30, 2023 | | | | | December 31, 2022 ^(f) |
|----------------|------------------------------------|------------------------|--------------------------------------|----------------------|----------------|----------------------------------|
| | Deposits with banks ^(b) | Lending ^(c) | Trading and investing ^(d) | Other ^(e) | Total exposure | Total exposure |
| Germany | \$ 94.0 | \$ 12.5 | \$ 5.5 | \$ 0.3 | \$ 112.3 | \$ 93.2 |
| United Kingdom | 44.1 | 25.6 | 17.4 | 1.9 | 89.0 | 70.1 |
| Japan | 32.7 | 2.7 | 7.7 | 0.3 | 43.4 | 55.8 |
| Brazil | 1.9 | 4.6 | 11.2 | — | 17.7 | 17.8 |
| Canada | 2.4 | 10.7 | 3.0 | 0.2 | 16.3 | 14.4 |
| Australia | 5.0 | 6.3 | 3.0 | — | 14.3 | 25.7 |
| Switzerland | 7.6 | 3.3 | 1.4 | 1.7 | 14.0 | 15.3 |
| France | 0.4 | 10.7 | 0.1 | 1.4 | 12.6 | 18.1 |
| China | 3.3 | 5.0 | 4.1 | — | 12.4 | 13.7 |
| Belgium | 6.7 | 1.7 | 1.4 | — | 9.8 | 9.2 |
| Singapore | 1.8 | 3.9 | 3.6 | 0.2 | 9.5 | 9.9 |
| India | 1.2 | 3.6 | 3.9 | 0.6 | 9.3 | 9.0 |
| South Korea | 1.0 | 3.8 | 3.5 | 0.2 | 8.5 | 10.0 |
| Netherlands | 0.1 | 6.4 | 0.6 | 0.2 | 7.3 | 7.1 |
| Mexico | 1.0 | 4.3 | 2.0 | — | 7.3 | 5.4 |
| Saudi Arabia | 0.8 | 4.0 | 1.8 | — | 6.6 | 7.9 |
| Spain | 0.4 | 5.1 | 0.9 | — | 6.4 | 5.8 |
| Hong Kong SAR | 2.3 | 1.4 | 0.8 | 0.4 | 4.9 | 4.5 |
| Luxembourg | 0.8 | 2.6 | 1.3 | — | 4.7 | 5.3 |
| Sweden | 1.2 | 3.4 | (0.1) | — | 4.5 | 4.4 |

- (a) Country exposures presented in the table reflect 88% of total Firmwide non-U.S. exposure, where exposure is attributed to an individual country based on the Firm's internal country risk management approach, as of both June 30, 2023 and December 31, 2022.
- (b) Predominantly represents cash placed with central banks.
- (c) Includes loans and accrued interest receivable, lending-related commitments (net of eligible collateral and the allowance for credit losses). Excludes intra-day and operating exposures, such as those from settlement and clearing activities.
- (d) Includes market-making inventory, investment securities, and counterparty exposure on derivative and securities financings net of eligible collateral and hedging. Includes exposure from single reference entity ("single-name"), index and other multiple reference entity transactions for which one or more of the underlying reference entities is in a country listed in the above table.
- (e) Includes physical commodities inventory and clearing house guarantee funds.
- (f) The country rankings presented in the table as of December 31, 2022, are based on the country rankings of the corresponding exposures at June 30, 2023, not actual rankings of such exposures as of December 31, 2022.

CRITICAL ACCOUNTING ESTIMATES USED BY THE FIRM

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 appropriate carrying value of assets and liabilities. The Firm has established policies and control procedures intended to ensure that estimation methods, including any judgments made as part of such methods, are well-controlled, independently reviewed and applied consistently from period to period. The methods used and judgments made reflect, among other factors, the nature of the assets or liabilities and the related business and risk management strategies, which may vary across the Firm's businesses and portfolios. 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 carrying value of its assets and liabilities are appropriate. The following is a brief description of the Firm's critical accounting estimates involving significant judgments.

Allowance for credit losses

The Firm's allowance for credit losses represents management's estimate of expected credit losses over the remaining expected life of the Firm's financial assets measured at amortized cost and certain off-balance sheet lending-related commitments. The allowance for credit losses generally consists of:

- The allowance for loan losses, which covers the Firm's retained loan portfolios (scored and risk-rated).
- The allowance for lending-related commitments, which is reflected in accounts payable and other liabilities on the Consolidated balance sheets, and
- The allowance for credit losses on investment securities, which is reflected in investment securities on the Consolidated balance sheets.

The allowance for credit losses involves significant judgment on a number of matters including development and weighting of macroeconomic forecasts, incorporation of historical loss experience, assessment of risk characteristics, assignment of risk ratings, valuation of collateral, and the determination of remaining expected life. Refer to Note 10 and Note 13 of JPMorgan Chase's 2022 Form 10-K for further information on these judgments as well as the Firm's policies and methodologies used to determine the Firm's allowance for credit losses; and refer to Allowance for credit losses on pages 80-82 and Note 13 of this Form 10-Q for further information.

One of the most significant judgments involved in estimating the Firm's allowance for credit losses relates to the macroeconomic forecasts used to estimate credit losses over the eight-quarter forecast period within the Firm's methodology. The eight-quarter forecast incorporates hundreds of macroeconomic variables ("MEVs") that are relevant for exposures across the Firm, with modeled credit losses being driven primarily by a subset of less than twenty

variables. The specific variables that have the greatest effect on the modeled losses of each portfolio vary by portfolio and geography.

- Key MEVs for the consumer portfolio include regional U.S. unemployment and HPI.
- Key MEVs for the wholesale portfolio include U.S. unemployment, U.S. real GDP, U.S. equity prices, U.S. interest rates, corporate credit spreads, oil prices, commercial real estate prices and HPI.

Changes in the Firm's assumptions and forecasts of economic conditions could significantly affect its estimate of expected credit losses in the portfolio at the balance sheet date or lead to significant changes in the estimate from one reporting period to the next.

As a result of the First Republic acquisition, the Firm recorded an allowance for credit losses for the loans acquired and lending-related commitments assumed as of May 1, 2023. Given the differences in risk rating methodologies for the First Republic Portfolio, and the ongoing integration of products and systems, the allowance for credit losses for the acquired wholesale portfolio was measured based on other facilities underwritten by the Firm with similar risk characteristics and not based on modeled estimates. As such, the First Republic wholesale portfolio is excluded from the modeled estimates sensitivity analysis below. The allowance for credit losses for predominantly all of the consumer portfolio was measured using the Firm's modeled approach, as the consumer portfolio is predominantly residential real estate that has more commonly defined risk characteristics including loan to value ratio and credit score, and therefore is reflected in the sensitivity analysis below. Refer to Note 28 for additional information on the First Republic acquisition.

It is difficult to estimate how potential changes in any one factor or input might affect the overall allowance for credit losses because management considers a wide variety of factors and inputs in estimating the allowance for credit losses. Changes in the factors and inputs considered may not occur at the same rate and may not be consistent across all geographies or product types, and changes in factors and inputs may be directionally inconsistent, such that improvement in one factor or input may offset deterioration in others.

To consider the impact of a hypothetical alternate macroeconomic forecast, the Firm compared the modeled credit losses determined using its central and relative adverse macroeconomic scenarios, which are two of the five scenarios considered in estimating the allowances for loan losses and lending-related commitments. The central and relative adverse scenarios each included a full suite of MEVs, but differed in the levels, paths and peaks/troughs of those variables over the eight-quarter forecast period.

For example, compared to the Firm's central scenario shown on page 80 and in Note 13, the Firm's relative

adverse scenario assumes an elevated U.S. unemployment rate, averaging approximately 1.6% higher over the eight-quarter forecast, with a peak difference of 2.2% in the first quarter of 2024; lower U.S. real GDP with a slower recovery, remaining approximately 3.1% lower at the end of the eight-quarter forecast, with a peak difference of approximately 3.4% in the third quarter of 2024; and lower national HPI with a peak difference of approximately 10.5% in the first quarter of 2025.

This analysis is not intended to estimate expected future changes in the allowance for credit losses, for a number of reasons, including:

- The allowance as of June 30, 2023, reflects credit losses beyond those estimated under the central scenario due to the weight placed on the adverse scenarios.
- The impacts of changes in many MEVs are both interrelated and nonlinear, so the results of this analysis cannot be simply extrapolated for more severe changes in macroeconomic variables.
- Expectations of future changes in portfolio composition and borrower behavior can significantly affect the allowance for credit losses.

To demonstrate the sensitivity of credit loss estimates to macroeconomic forecasts as of June 30, 2023, the Firm compared the modeled estimates under its relative adverse scenario to its central scenario. Without considering offsetting or correlated effects in other qualitative components of the Firm's allowance for credit losses, the comparison between these two scenarios for the exposures below reflect the following differences:

- An increase of approximately \$750 million for residential real estate loans and lending-related commitments, including the First Republic portfolios
- An increase of approximately \$2.4 billion for credit card loans
- An increase of approximately \$3.8 billion for wholesale loans and lending-related commitments, excluding the First Republic portfolios.

This analysis relates only to the modeled credit loss estimates and is not intended to estimate changes in the overall allowance for credit losses as it does not reflect any potential changes in other adjustments to the quantitative calculation, which would also be influenced by the judgment management applies to the modeled lifetime loss estimates to reflect the uncertainty and imprecision of these modeled lifetime loss estimates based on then-current circumstances and conditions.

Recognizing that forecasts of macroeconomic conditions are inherently uncertain, particularly in light of the recent economic conditions, the Firm believes that its process to consider the available information and associated risks and uncertainties is appropriately governed and that its estimates of expected credit losses were reasonable and appropriate for the period ended June 30, 2023.

Fair value

JPMorgan Chase carries a portion of its assets and liabilities at fair value. The majority of such assets and liabilities are measured at fair value on a recurring basis, including derivatives, structured note products and certain securities financing agreements. Certain assets and liabilities are measured at fair value on a nonrecurring basis, including certain mortgage, home equity and other loans, where the carrying value is based on the fair value of the underlying collateral.

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 fair value hierarchy. Refer to Note 2 for further information.

| June 30, 2023 (in millions, except ratios) | Total assets at fair value | Total level 3 assets |
|--|-------------------------------|-------------------------|
| Federal funds sold and securities purchased under resale agreements | \$ 322,579 | \$ – |
| Securities borrowed | 55,905 | – |
| Trading assets: | | |
| Trading-debt and equity instruments | 572,739 | 3,313 |
| Derivative receivables ^(a) | 64,217 | 10,749 |
| Total trading assets | 636,956 | 14,062 |
| AFS securities | 203,262 | 267 |
| Loans | 38,789 | 3,808 |
| MSRs | 8,229 | 8,229 |
| Other | 13,250 | 417 |
| Total assets measured at fair value on a recurring basis | 1,278,970 | 26,783 |
| Total assets measured at fair value on a nonrecurring basis | 1,936 | 1,126 |
| Total assets measured at fair value | \$1,280,906 | \$ 27,909 |
| Total Firm assets | \$3,868,240 | |
| Level 3 assets at fair value as a percentage of total Firm assets ^(a) | | 0.7 % |
| Level 3 assets at fair value as a percentage of total Firm assets at fair value ^(a) | | 2.2 % |

(a) For purposes of the table above, the derivative receivables total reflects the impact of netting adjustments; however, the \$10.7 billion of derivative receivables classified as level 3 does not reflect the netting adjustment as such netting is not relevant to a presentation based on the transparency of inputs to the valuation of an asset. The level 3 balances would be reduced if netting were applied, including the netting benefit associated with cash collateral.

Valuation

Estimating fair value requires the application of judgment. The type and level of judgment required is largely dependent on the amount of observable market information available to the Firm. For instruments valued using internally developed valuation models and other valuation techniques that use significant unobservable inputs and are therefore classified within level 3 of the fair value hierarchy, judgments used to estimate fair value are more significant than those required when estimating the fair value of instruments classified within levels 1 and 2.

In arriving at an estimate of fair value for an instrument within level 3, management must first determine the appropriate valuation model or other valuation technique to use. Second, the lack of observability of certain significant inputs requires management to assess relevant empirical data in deriving valuation inputs including, for example, transaction details, yield curves, interest rates, prepayment speeds, default rates, volatilities, correlations, prices (such as commodity, equity or debt prices), valuations of comparable instruments, foreign exchange rates and credit curves. Refer to Note 2 for a further discussion of the valuation of level 3 instruments, including unobservable inputs used.

For instruments classified in levels 2 and 3, management judgment must be applied to assess the appropriate level of valuation adjustments to reflect counterparty credit quality, the Firm's creditworthiness, market funding rates, liquidity considerations, unobservable parameters, and for portfolios that meet specified criteria, the size of the net open risk position. 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. In periods of heightened market volatility and uncertainty judgments are further affected by the wider variation of reasonable valuation estimates, particularly for positions that are less liquid. Refer to Note 2 for a further discussion of valuation adjustments applied by the Firm.

Imprecision in estimating unobservable market inputs or other factors can affect the amount of gain 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 methods and assumptions used reflect management judgment and may vary across the Firm's businesses and portfolios.

The Firm uses various methodologies and assumptions in the determination of fair value. The use of methodologies or assumptions different than those used by the Firm could result in a different estimate of fair value at the reporting date. Refer to Note 2 for a detailed discussion of the Firm's valuation process and hierarchy, and its determination of fair value for individual financial instruments.

Credit card rewards liability

The credit card rewards liability was \$12.2 billion and \$11.3 billion at June 30, 2023 and December 31, 2022, respectively, and is recorded in accounts payable and other liabilities on the Consolidated balance sheets. The increase in the liability was predominantly driven by continued growth in rewards points earned on higher spend and promotional offers outpacing redemptions throughout 2023, and, to a lesser extent, adjustments to certain reward program terms in the second quarter. Refer to pages 151-152 of JPMorgan Chase's 2022 Form 10-K for a description of the significant assumptions and sensitivities, associated with the Firm's credit card rewards liability.

Income taxes

Refer to Income taxes on page 152 of JPMorgan Chase's 2022 Form 10-K for a description of the significant assumptions, judgments and interpretations associated with the accounting for income taxes.

Goodwill impairment

Management applies significant judgment when testing goodwill for impairment. Refer to Goodwill impairment on page 151 of JPMorgan Chase's 2022 Form 10-K for a description of the significant valuation judgments associated with goodwill impairment.

Refer to Note 15 for additional information on goodwill, including the goodwill impairment assessment as of June 30, 2023.

Litigation reserves

Refer to Note 26 of this Form 10-Q, and Note 30 of JPMorgan Chase's 2022 Form 10-K for a description of the significant estimates and judgments associated with establishing litigation reserves.

ACCOUNTING AND REPORTING DEVELOPMENTS

Financial Accounting Standards Board (“FASB”) Standards Adopted since January 1, 2021

| Standard | Summary of guidance | Effects on financial statements |
|--|---|--|
| Reference Rate Reform <i>Issued March 2020 and updated January 2021 and December 2022</i> | <ul style="list-style-type: none"> Provides optional expedients and exceptions to current accounting guidance when financial instruments, hedge accounting relationships, and other transactions are amended due to reference rate reform. | <ul style="list-style-type: none"> Issued and effective March 12, 2020. The January 7, 2021 and December 21, 2022 updates were effective when issued. Refer to Accounting and Reporting Developments on page 153 of JPMorgan Chase's 2022 Form 10-K for further information. |

FASB Standards Adopted since January 1, 2023

| Standard | Summary of guidance | Effects on financial statements |
|---|--|---|
| Derivatives and Hedging: Fair Value Hedging - Portfolio Layer Method <i>Issued March 2022</i> | <ul style="list-style-type: none"> Expands the current ability to hedge a portfolio of prepayable assets to allow more of the portfolio to be hedged. Non-prepayable assets can also be included in the same portfolio, thus increasing the size of the portfolio and the amount available to be hedged. Clarifies the types of derivatives that can be used as hedges, and the balance sheet presentation and disclosure requirements for the hedge accounting adjustments. Allows a one-time reclassification from HTM to AFS upon adoption. | <ul style="list-style-type: none"> Adopted prospectively on January 1, 2023. Refer to Note 1 for further information. |
| Financial Instruments - Credit Losses: Troubled Debt Restructurings and Vintage Disclosures <i>Issued March 2022</i> | <ul style="list-style-type: none"> Eliminates existing accounting and disclosure requirements for Troubled Debt Restructurings, including the requirement to measure the allowance using a discounted cash flow methodology. Requires disclosure of loan modifications for borrowers experiencing financial difficulty involving principal forgiveness, interest rate reduction, other-than-insignificant payment delay, term extension or a combination of these modifications. Requires disclosure of current period loan charge-off information by origination year. May be adopted prospectively, or by using a modified retrospective method wherein the effect of adoption is reflected as an adjustment to retained earnings at the effective date. | <ul style="list-style-type: none"> Adopted under the modified retrospective method on January 1, 2023. Refer to Note 1 for further information. |

FASB Standards Issued but not yet Adopted

| Standard | Summary of guidance | Effects on financial statements |
|--|--|--|
| Investments - Equity Method and Joint Ventures: Accounting for Investments in Tax Credit Structures Using the Proportional Amortization Method <i>Issued March 2023</i> | <ul style="list-style-type: none"> Expands the ability to elect proportional amortization for more types of tax-oriented investments (beyond low income housing tax credit investments) on a program-by-program basis. May be adopted using a full retrospective method, or a modified retrospective method wherein the effect of adoption is reflected as an adjustment to retained earnings at the effective date. | <ul style="list-style-type: none"> Required effective date: January 1, 2024.^(a) The Firm is currently evaluating the potential impact on the Consolidated Financial Statements. |

(a) Early adoption is permitted.

FORWARD-LOOKING STATEMENTS

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 Form 10-Q 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 SEC. In addition, the Firm’s senior management may make forward-looking statements orally to investors, analysts, 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 global business, economic and political conditions and geopolitical events, including the war in Ukraine;
- Changes in laws, rules and regulatory requirements, including capital and liquidity requirements affecting the Firm’s businesses, and the ability of the Firm to address those requirements;
- Heightened regulatory and governmental oversight and scrutiny of JPMorgan Chase’s business practices, including dealings with retail customers;
- Changes in trade, monetary and fiscal policies and laws;
- Changes in the level of inflation;
- Changes in income tax laws, rules and regulations;
- Changes in FDIC assessments;
- 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 capital and liquidity;
- Changes in credit ratings assigned to the Firm or its subsidiaries;
- Damage to the Firm’s reputation;
- Ability of the Firm to appropriately address social, environmental and sustainability concerns that may arise, including from its business activities;
- Ability of the Firm to deal effectively with an economic slowdown or other economic or market disruption, including, but not limited to, in the interest rate environment;
- Technology changes instituted by the Firm, its counterparties or competitors;
- The effectiveness of the Firm’s control agenda;
- Ability of the Firm to develop or discontinue 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 innovate and to increase market share;
- Ability of the Firm to attract and retain qualified and diverse employees;
- Ability of the Firm to control expenses;
- Competitive pressures;
- Changes in the credit quality of the Firm’s clients, customers and counterparties;
- Adequacy of the Firm’s risk management framework, disclosure controls and procedures and internal control over financial reporting;
- Adverse judicial or regulatory proceedings;
- Ability of the Firm to determine accurate values of certain assets and liabilities;
- Occurrence of natural or man-made disasters or calamities, including health emergencies, the spread of infectious diseases, epidemics or pandemics, an outbreak or escalation of hostilities or other geopolitical instabilities, the effects of climate change or extraordinary events beyond the Firm’s control, and the Firm’s ability to deal effectively with disruptions caused by the foregoing;
- Ability of the Firm to maintain the security of its financial, accounting, technology, data processing and other operational systems and facilities;
- Ability of the Firm to withstand disruptions that may be caused by any failure of its operational systems or those of third parties;
- Ability of the Firm to effectively defend itself against cyberattacks and other attempts by unauthorized parties to access information of the Firm or its customers or to disrupt the Firm’s systems; and
- The other risks and uncertainties detailed in Part I, Item 1A: Risk Factors in JPMorgan Chase’s 2022 Form 10-K.

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 any forward-looking statements. 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.

JPMorgan Chase & Co.
Consolidated statements of income (unaudited)

| (in millions, except per share data) | Three months ended June 30, | | Six months ended June 30, | |
|---|-----------------------------|-----------------|---------------------------|------------------|
| | 2023 | 2022 | 2023 | 2022 |
| Revenue | | | | |
| Investment banking fees | \$ 1,513 | \$ 1,586 | \$ 3,162 | \$ 3,594 |
| Principal transactions | 6,910 | 4,990 | 14,525 | 10,095 |
| Lending- and deposit-related fees | 1,828 | 1,873 | 3,448 | 3,712 |
| Asset management fees | 3,774 | 3,517 | 7,239 | 7,169 |
| Commissions and other fees | 1,739 | 1,723 | 3,434 | 3,433 |
| Investment securities losses | (900) | (153) | (1,768) | (547) |
| Mortgage fees and related income | 278 | 378 | 499 | 838 |
| Card income | 1,094 | 1,133 | 2,328 | 2,108 |
| Other income | 3,292 | 540 | 4,299 | 2,030 |
| Noninterest revenue | 19,528 | 15,587 | 37,166 | 32,432 |
| Interest income | 41,644 | 18,646 | 78,648 | 34,142 |
| Interest expense | 19,865 | 3,518 | 36,158 | 5,142 |
| Net interest income | 21,779 | 15,128 | 42,490 | 29,000 |
| Total net revenue | 41,307 | 30,715 | 79,656 | 61,432 |
| Provision for credit losses | 2,899 | 1,101 | 5,174 | 2,564 |
| Noninterest expense | | | | |
| Compensation expense | 11,216 | 10,301 | 22,892 | 21,088 |
| Occupancy expense | 1,070 | 1,129 | 2,185 | 2,263 |
| Technology, communications and equipment expense | 2,267 | 2,376 | 4,451 | 4,736 |
| Professional and outside services | 2,561 | 2,469 | 5,009 | 5,041 |
| Marketing | 1,122 | 881 | 2,167 | 1,801 |
| Other expense | 2,586 | 1,593 | 4,225 | 3,011 |
| Total noninterest expense | 20,822 | 18,749 | 40,929 | 37,940 |
| Income before income tax expense | 17,586 | 10,865 | 33,553 | 20,928 |
| Income tax expense | 3,114 | 2,216 | 6,459 | 3,997 |
| Net income | \$ 14,472 | \$ 8,649 | \$ 27,094 | \$ 16,931 |
| Net income applicable to common stockholders | \$ 14,011 | \$ 8,195 | \$ 26,204 | \$ 16,039 |
| Net income per common share data | | | | |
| Basic earnings per share | \$ 4.76 | \$ 2.77 | \$ 8.86 | \$ 5.40 |
| Diluted earnings per share | 4.75 | 2.76 | 8.85 | 5.39 |
| Weighted-average basic shares | 2,943.8 | 2,962.2 | 2,956.1 | 2,969.6 |
| Weighted-average diluted shares | 2,948.3 | 2,966.3 | 2,960.5 | 2,973.7 |

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

JPMorgan Chase & Co.
Consolidated statements of comprehensive income (unaudited)

| (in millions) | Three months ended June 30, | | Six months ended June 30, | |
|---|-----------------------------|-----------------|---------------------------|-----------------|
| | 2023 | 2022 | 2023 | 2022 |
| Net income | \$ 14,472 | \$ 8,649 | \$ 27,094 | \$ 16,931 |
| Other comprehensive income/(loss), after-tax | | | | |
| Unrealized gains/(losses) on investment securities | 757 | (4,031) | 2,969 | (11,484) |
| Translation adjustments, net of hedges | 70 | (679) | 267 | (741) |
| Fair value hedges | 11 | 51 | (10) | 161 |
| Cash flow hedges | (497) | (1,348) | 301 | (4,139) |
| Defined benefit pension and OPEB plans | (6) | 20 | (61) | 87 |
| DVA on fair value option elected liabilities | (207) | 1,185 | (415) | 1,831 |
| Total other comprehensive income/(loss), after-tax | 128 | (4,802) | 3,051 | (14,285) |
| Comprehensive income | \$ 14,600 | \$ 3,847 | \$ 30,145 | \$ 2,646 |

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

JPMorgan Chase & Co.
Consolidated balance sheets (unaudited)

| (in millions, except share data) | June 30, 2023 | December 31, 2022 |
|--|---------------------|----------------------|
| Assets | | |
| Cash and due from banks | \$ 26,064 | \$ 27,697 |
| Deposits with banks | 469,059 | 539,537 |
| Federal funds sold and securities purchased under resale agreements (included \$322,579 and \$311,883 at fair value) | 325,628 | 315,592 |
| Securities borrowed (included \$55,905 and \$70,041 at fair value) | 163,563 | 185,369 |
| Trading assets (included assets pledged of \$142,625 and \$93,687) | 636,996 | 453,799 |
| Available-for-sale securities (amortized cost of \$209,876 and \$216,188; included assets pledged of \$12,864 and \$9,158) | 203,262 | 205,857 |
| Held-to-maturity securities | 408,941 | 425,305 |
| Investment securities, net of allowance for credit losses | 612,203 | 631,162 |
| Loans (included \$38,789 and \$42,079 at fair value) | 1,300,069 | 1,135,647 |
| Allowance for loan losses | (21,980) | (19,726) |
| Loans, net of allowance for loan losses | 1,278,089 | 1,115,921 |
| Accrued interest and accounts receivable | 111,561 | 125,189 |
| Premises and equipment | 29,493 | 27,734 |
| Goodwill, MSRs and other intangible assets | 64,238 | 60,859 |
| Other assets (included \$14,166 and \$14,921 at fair value and assets pledged of \$5,844 and \$7,998) | 151,346 | 182,884 |
| Total assets^(a) | \$ 3,868,240 | \$ 3,665,743 |
| Liabilities | | |
| Deposits (included \$51,568 and \$28,620 at fair value) | \$ 2,398,962 | \$ 2,340,179 |
| Federal funds purchased and securities loaned or sold under repurchase agreements (included \$216,604 and \$151,999 at fair value) | 266,272 | 202,613 |
| Short-term borrowings (included \$17,942 and \$15,792 at fair value) | 41,022 | 44,027 |
| Trading liabilities | 178,809 | 177,976 |
| Accounts payable and other liabilities (included \$5,101 and \$7,038 at fair value) | 286,934 | 300,141 |
| Beneficial interests issued by consolidated VIEs (included \$1 and \$5 at fair value) | 19,647 | 12,610 |
| Long-term debt (included \$78,609 and \$72,281 at fair value) | 364,078 | 295,865 |
| Total liabilities^(a) | 3,555,724 | 3,373,411 |
| Commitments and contingencies (refer to Notes 22, 23 and 24) | | |
| Stockholders' equity | | |
| Preferred stock (\$1 par value; authorized 200,000,000 shares; issued 2,740,375 shares) | 27,404 | 27,404 |
| Common stock (\$1 par value; authorized 9,000,000,000 shares; issued 4,104,933,895 shares) | 4,105 | 4,105 |
| Additional paid-in capital | 89,578 | 89,044 |
| Retained earnings | 317,359 | 296,456 |
| Accumulated other comprehensive losses | (14,290) | (17,341) |
| Treasury stock, at cost (1,198,848,622 and 1,170,676,094 shares) | (111,640) | (107,336) |
| Total stockholders' equity | 312,516 | 292,332 |
| Total liabilities and stockholders' equity | \$ 3,868,240 | \$ 3,665,743 |

(a) The following table presents information on assets and liabilities related to VIEs that are consolidated by the Firm at June 30, 2023, and December 31, 2022. The assets of the consolidated VIEs are used to settle the liabilities of those entities. The holders of the beneficial interests generally do not have recourse to the general credit of JPMorgan Chase. The assets and liabilities in the table below include third-party assets and liabilities of consolidated VIEs and exclude intercompany balances that eliminate in consolidation. Refer to Note 14 for a further discussion.

| (in millions) | June 30, 2023 | December 31, 2022 |
|--|------------------|----------------------|
| Assets | | |
| Trading assets | \$ 2,368 | \$ 2,151 |
| Loans | 39,125 | 34,411 |
| All other assets | 532 | 550 |
| Total assets | \$ 42,025 | \$ 37,112 |
| Liabilities | | |
| Beneficial interests issued by consolidated VIEs | \$ 19,647 | \$ 12,610 |
| All other liabilities | 247 | 279 |
| Total liabilities | \$ 19,894 | \$ 12,889 |

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

JPMorgan Chase & Co.
Consolidated statements of changes in stockholders' equity (unaudited)

| (in millions, except per share data) | Three months ended June 30, | | Six months ended June 30, | |
|---|-----------------------------|-------------------|---------------------------|-------------------|
| | 2023 | 2022 | 2023 | 2022 |
| Preferred stock | | | | |
| Balance at the beginning of the period | \$ 27,404 | \$ 32,838 | \$ 27,404 | \$ 34,838 |
| Issuance | – | – | – | – |
| Redemption | – | – | – | (2,000) |
| Balance at June 30 | 27,404 | 32,838 | 27,404 | 32,838 |
| Common stock | | | | |
| Balance at the beginning and end of the period | 4,105 | 4,105 | 4,105 | 4,105 |
| Additional paid-in capital | | | | |
| Balance at the beginning of the period | 89,155 | 88,260 | 89,044 | 88,415 |
| Shares issued and commitments to issue common stock for employee share-based compensation awards, and related tax effects | 423 | 354 | 534 | 199 |
| Balance at June 30 | 89,578 | 88,614 | 89,578 | 88,614 |
| Retained earnings | | | | |
| Balance at the beginning of the period | 306,208 | 277,177 | 296,456 | 272,268 |
| Cumulative effect of change in accounting principles | – | – | 449 | – |
| Net income | 14,472 | 8,649 | 27,094 | 16,931 |
| Dividends declared: | | | | |
| Preferred stock | (373) | (410) | (729) | (807) |
| Common stock (\$1.00 and \$1.00 per share and \$2.00 and \$2.00 per share, respectively) | (2,948) | (2,971) | (5,911) | (5,947) |
| Balance at June 30 | 317,359 | 282,445 | 317,359 | 282,445 |
| Accumulated other comprehensive income/(loss) | | | | |
| Balance at the beginning of the period | (14,418) | (9,567) | (17,341) | (84) |
| Other comprehensive income/(loss), after-tax | 128 | (4,802) | 3,051 | (14,285) |
| Balance at June 30 | (14,290) | (14,369) | (14,290) | (14,369) |
| Treasury stock, at cost | | | | |
| Balance at the beginning of the period | (109,372) | (106,914) | (107,336) | (105,415) |
| Repurchase | (2,316) | (622) | (5,271) | (3,122) |
| Reissuance | 48 | 46 | 967 | 1,047 |
| Balance at June 30 | (111,640) | (107,490) | (111,640) | (107,490) |
| Total stockholders' equity | \$ 312,516 | \$ 286,143 | \$ 312,516 | \$ 286,143 |

Effective January 1, 2023, the Firm adopted the Financial Instruments - Credit Losses: Troubled Debt Restructurings and Derivatives and Hedging: Fair Value Hedging - Portfolio Layer Method accounting guidance. Refer to Note 1 for further information.

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

JPMorgan Chase & Co.
Consolidated statements of cash flows (unaudited)

| (in millions) | Six months ended June 30, | |
|--|---------------------------|-------------------|
| | 2023 | 2022 |
| Operating activities | | |
| Net income | \$ 27,094 | \$ 16,931 |
| Adjustments to reconcile net income to net cash used in operating activities: | | |
| Provision for credit losses | 5,174 | 2,564 |
| Depreciation and amortization | 2,156 | 3,609 |
| Deferred tax (benefit)/expense | (2,238) | (2,086) |
| Bargain purchase gain associated with the First Republic acquisition | (2,712) | – |
| Other | 3,008 | 2,172 |
| Originations and purchases of loans held-for-sale | (48,270) | (102,857) |
| Proceeds from sales, securitizations and paydowns of loans held-for-sale | 47,746 | 116,764 |
| Net change in: | | |
| Trading assets | (178,766) | (53,816) |
| Securities borrowed | 21,835 | 3,379 |
| Accrued interest and accounts receivable | 16,107 | (43,051) |
| Other assets | 44,599 | (14,930) |
| Trading liabilities | (4,846) | 23,646 |
| Accounts payable and other liabilities | (24,563) | 70,976 |
| Other operating adjustments | 1,300 | 800 |
| Net cash provided by/(used in) operating activities | (92,376) | 24,101 |
| Investing activities | | |
| Net change in: | | |
| Federal funds sold and securities purchased under resale agreements | (9,816) | (60,833) |
| Held-to-maturity securities: | | |
| Proceeds from paydowns and maturities | 13,762 | 20,952 |
| Purchases | (4,141) | (27,490) |
| Available-for-sale securities: | | |
| Proceeds from paydowns and maturities | 23,470 | 21,913 |
| Proceeds from sales | 69,875 | 36,217 |
| Purchases | (52,433) | (66,200) |
| Proceeds from sales and securitizations of loans held-for-investment | 19,526 | 22,185 |
| Other changes in loans, net | (33,353) | (67,802) |
| Net cash used in the First Republic acquisition | (9,920) | – |
| All other investing activities, net | (11,419) | (4,753) |
| Net cash provided by/(used in) investing activities | 5,551 | (125,811) |
| Financing activities | | |
| Net change in: | | |
| Deposits | (27,782) | 5,841 |
| Federal funds purchased and securities loaned or sold under repurchase agreements | 63,590 | 28,586 |
| Short-term borrowings | (3,135) | 5,622 |
| Beneficial interests issued by consolidated VIEs | 7,708 | 552 |
| Proceeds from long-term borrowings | 19,357 | 45,873 |
| Payments of long-term borrowings | (32,003) | (25,991) |
| Redemption of preferred stock | – | (2,000) |
| Treasury stock repurchased | (5,167) | (3,162) |
| Dividends paid | (6,651) | (6,774) |
| All other financing activities, net | (1,275) | 423 |
| Net cash provided by financing activities | 14,642 | 48,970 |
| Effect of exchange rate changes on cash and due from banks and deposits with banks | 72 | (18,834) |
| Net decrease in cash and due from banks and deposits with banks | (72,111) | (71,574) |
| Cash and due from banks and deposits with banks at the beginning of the period | 567,234 | 740,834 |
| Cash and due from banks and deposits with banks at the end of the period | \$ 495,123 | \$ 669,260 |
| Cash interest paid | \$ 35,250 | \$ 4,457 |
| Cash income taxes paid, net | 5,466 | 3,100 |

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (unaudited)

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 financial services firm based in the U.S., with operations worldwide. The Firm is a leader in investment banking, financial services for consumers and small businesses, commercial banking, financial transaction processing and asset management. On May 1, 2023, JPMorgan Chase acquired certain assets and assumed certain liabilities of First Republic Bank (the “First Republic acquisition”) from the Federal Deposit Insurance Corporation (“FDIC”). The Firm continues to convert certain operations, and to integrate clients, products and services, associated with the First Republic acquisition, to align with the Firm’s businesses and operations. The Firm also continues to evaluate to which segments certain clients, products and services associated with the First Republic acquisition, including deposits, should be allocated. Accordingly, reporting classifications and allocations may change in future periods including across the Firm’s segments. Refer to Note 27 for a further discussion of the Firm’s business segments and Note 28 for additional information on the First Republic acquisition.

The accounting and financial reporting policies of JPMorgan Chase and its subsidiaries conform to U.S. GAAP. Additionally, where applicable, the policies conform to the accounting and reporting guidelines prescribed by regulatory authorities.

The unaudited Consolidated Financial Statements prepared in conformity with U.S. GAAP require management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expense, and the disclosures of contingent assets and liabilities. Actual results could be different from these estimates. In the opinion of management, all normal, recurring adjustments have been included such that this interim financial information is fairly stated.

These unaudited Consolidated Financial Statements should be read in conjunction with the audited Consolidated Financial Statements, and related notes thereto, included in JPMorgan Chase’s 2022 Form 10-K.

Certain amounts reported in prior periods have been revised to conform with 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.

Assets held for clients in an agency or fiduciary capacity by the Firm are not assets of JPMorgan Chase and are not included on the Consolidated balance sheets.

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.

Refer to Notes 1 and 14 of JPMorgan Chase’s 2022 Form 10-K for a further description of JPMorgan Chase’s accounting policies regarding consolidation.

Offsetting assets and liabilities

U.S. GAAP permits entities to present derivative receivables and derivative payables with the same counterparty and the related cash collateral receivables and payables on a net basis on the Consolidated balance sheets when a legally enforceable master netting agreement exists. U.S. GAAP also permits securities financing balances to be presented on a net basis when specified conditions are met, including the existence of a legally enforceable master netting agreement. The Firm has elected to net such balances where it has determined that the specified conditions are met. Refer to Note 1 of JPMorgan Chase’s 2022 Form 10-K for further information on offsetting assets and liabilities.

Accounting standards adopted January 1, 2023

Derivatives and Hedging: Fair Value Hedging – Portfolio Layer Method

The adoption of this guidance expanded the ability to hedge a portfolio of prepayable assets to allow more of the portfolio to be hedged. Non-prepayable assets can also be included in the same portfolio, thus increasing the size of the portfolio and the amount available to be hedged. This guidance also clarified the types of derivatives that can be used as hedges, and the balance sheet presentation and disclosure requirements for the hedge accounting adjustments. As permitted by the guidance, the Firm elected to transfer HTM securities to AFS and designate those securities in a portfolio layer method hedge upon adoption. The adoption impact of the transfer on retained earnings was not material.

Refer to Note 5 and Note 10 for additional information.

Financial Instruments – Credit Losses: Troubled Debt Restructurings and Vintage Disclosures

The adoption of this guidance eliminated the accounting and disclosure requirements for TDRs, including the requirement to measure the allowance using a discounted cash flow (“DCF”) methodology, and allowed the option of a non-DCF portfolio-based approach for modified loans to troubled borrowers. If a DCF methodology is still applied for these modified loans, the discount rate must be the post-

modification effective interest rate, instead of the pre-modification effective interest rate.

The Firm elected to apply its non-DCF, portfolio-based allowance approach for modified loans to troubled borrowers for all portfolios except modified nonaccrual risk-rated loans which the Firm elected to continue applying a DCF methodology. Refer to Note 13 of JPMorgan Chase's 2022 Form 10-K for a description of the portfolio-based allowance approach and the asset-specific allowance approach.

This guidance was adopted under the modified retrospective method which resulted in a net decrease to the allowance for credit losses of \$587 million and an increase to retained earnings of \$446 million, after-tax, predominantly driven by residential real estate and credit card.

The adoption of this guidance eliminated the disclosure requirements for TDRs including the requirement to assess whether a modification is reasonably expected or involves a concession. The new guidance requires disclosure for loan modifications to borrowers experiencing financial difficulty consisting of principal forgiveness, interest rate reduction, other-than-insignificant payment delay, term extension or a combination of these modifications. The Firm has defined these types of modifications as financial difficulty modifications ("FDMs"). As a result of the elimination of the requirement to assess whether a modification is reasonably expected or involves a concession, the population of loans considered FDMs will differ from those previously considered TDRs. This guidance also requires disclosure of current period gross charge-offs by vintage origination year.

Refer to Note 12 for further information.

Note 2 – Fair value measurement

Refer to Note 2 of JPMorgan Chase’s 2022 Form 10-K for a discussion of the Firm’s valuation methodologies for assets, liabilities and lending-related commitments measured at fair value and the fair value hierarchy.

The following table presents the assets and liabilities reported at fair value as of June 30, 2023, and December 31, 2022, by major product category and fair value hierarchy.

Assets and liabilities measured at fair value on a recurring basis

| June 30, 2023 (in millions) | Fair value hierarchy | | | Derivative netting adjustments ^(f) | Total fair value |
|---|----------------------|--------------|-----------|---|------------------|
| | Level 1 | Level 2 | Level 3 | | |
| Federal funds sold and securities purchased under resale agreements | \$ — | \$ 322,579 | \$ — | \$ — | \$ 322,579 |
| Securities borrowed | — | 55,905 | — | — | 55,905 |
| Trading assets: | | | | | |
| Debt instruments: | | | | | |
| Mortgage-backed securities: | | | | | |
| U.S. GSEs and government agencies ^(a) | — | 88,769 | 706 | — | 89,475 |
| Residential - nonagency | — | 2,684 | 5 | — | 2,689 |
| Commercial - nonagency | — | 1,517 | 6 | — | 1,523 |
| Total mortgage-backed securities | — | 92,970 | 717 | — | 93,687 |
| U.S. Treasury, GSEs and government agencies ^(a) | 129,042 | 9,204 | — | — | 138,246 |
| Obligations of U.S. states and municipalities | — | 6,782 | 6 | — | 6,788 |
| Certificates of deposit, bankers' acceptances and commercial paper | — | 2,834 | — | — | 2,834 |
| Non-U.S. government debt securities | 41,423 | 63,986 | 199 | — | 105,608 |
| Corporate debt securities | — | 33,106 | 522 | — | 33,628 |
| Loans | — | 6,984 | 1,105 | — | 8,089 |
| Asset-backed securities | — | 2,497 | 14 | — | 2,511 |
| Total debt instruments | 170,465 | 218,363 | 2,563 | — | 391,391 |
| Equity securities | 148,222 | 1,337 | 631 | — | 150,190 |
| Physical commodities ^(b) | 2,442 | 11,265 | 6 | — | 13,713 |
| Other | — | 17,332 | 113 | — | 17,445 |
| Total debt and equity instruments^(c) | 321,129 | 248,297 | 3,313 | — | 572,739 |
| Derivative receivables: | | | | | |
| Interest rate | 1,988 | 282,125 | 4,199 | (260,603) | 27,709 |
| Credit | — | 12,535 | 1,150 | (12,440) | 1,245 |
| Foreign exchange | 204 | 226,130 | 1,345 | (205,485) | 22,194 |
| Equity | — | 57,619 | 3,773 | (54,068) | 7,324 |
| Commodity | — | 17,358 | 282 | (11,895) | 5,745 |
| Total derivative receivables | 2,192 | 595,767 | 10,749 | (544,491) | 64,217 |
| Total trading assets^(d) | 323,321 | 844,064 | 14,062 | (544,491) | 636,956 |
| Available-for-sale securities: | | | | | |
| Mortgage-backed securities: | | | | | |
| U.S. GSEs and government agencies ^(a) | 1 | 79,767 | — | — | 79,768 |
| Residential - nonagency | — | 3,544 | — | — | 3,544 |
| Commercial - nonagency | — | 2,056 | — | — | 2,056 |
| Total mortgage-backed securities | 1 | 85,367 | — | — | 85,368 |
| U.S. Treasury and government agencies | 62,688 | 49 | — | — | 62,737 |
| Obligations of U.S. states and municipalities | — | 24,023 | — | — | 24,023 |
| Non-U.S. government debt securities | 13,397 | 8,643 | — | — | 22,040 |
| Corporate debt securities | — | 121 | 267 | — | 388 |
| Asset-backed securities: | | | | | |
| Collateralized loan obligations | — | 5,437 | — | — | 5,437 |
| Other ^(a) | — | 3,269 | — | — | 3,269 |
| Total available-for-sale securities | 76,086 | 126,909 | 267 | — | 203,262 |
| Loans ^(e) | — | 34,981 | 3,808 | — | 38,789 |
| Mortgage servicing rights | — | — | 8,229 | — | 8,229 |
| Other assets ^(f) | 6,146 | 6,687 | 417 | — | 13,250 |
| Total assets measured at fair value on a recurring basis | \$ 405,553 | \$ 1,391,125 | \$ 26,783 | \$ (544,491) | \$ 1,278,970 |
| Deposits | — | 49,515 | 2,053 | — | 51,568 |
| Federal funds purchased and securities loaned or sold under repurchase agreements | — | 216,604 | — | — | 216,604 |
| Short-term borrowings | — | 16,238 | 1,704 | — | 17,942 |
| Trading liabilities: | | | | | |
| Debt and equity instruments ^(c) | 101,437 | 30,764 | 63 | — | 132,264 |
| Derivative payables: | | | | | |
| Interest rate | 1,610 | 270,411 | 5,321 | (262,185) | 15,157 |
| Credit | — | 13,306 | 461 | (13,201) | 566 |
| Foreign exchange | 185 | 222,444 | 956 | (209,408) | 14,177 |
| Equity | — | 62,016 | 5,654 | (57,865) | 9,805 |
| Commodity | — | 18,650 | 635 | (12,445) | 6,840 |
| Total derivative payables | 1,795 | 586,827 | 13,027 | (555,104) | 46,545 |
| Total trading liabilities | 103,232 | 617,591 | 13,090 | (555,104) | 178,809 |
| Accounts payable and other liabilities | 3,486 | 1,547 | 68 | — | 5,101 |
| Beneficial interests issued by consolidated VIEs | — | 1 | — | — | 1 |
| Long-term debt | — | 53,184 | 25,425 | — | 78,609 |
| Total liabilities measured at fair value on a recurring basis | \$ 106,718 | \$ 954,680 | \$ 42,340 | \$ (555,104) | \$ 548,634 |

| December 31, 2022 (in millions) | Fair value hierarchy | | | Derivative netting adjustments ^(f) | Total fair value |
|---|----------------------|--------------|-----------|---|------------------|
| | Level 1 | Level 2 | Level 3 | | |
| Federal funds sold and securities purchased under resale agreements | \$ — | \$ 311,883 | \$ — | \$ — | \$ 311,883 |
| Securities borrowed | — | 70,041 | — | — | 70,041 |
| Trading assets: | | | | | |
| Debt instruments: | | | | | |
| Mortgage-backed securities: | | | | | |
| U.S. GSEs and government agencies ^(a) | — | 68,162 | 759 | — | 68,921 |
| Residential - nonagency | — | 2,498 | 5 | — | 2,503 |
| Commercial - nonagency | — | 1,448 | 7 | — | 1,455 |
| Total mortgage-backed securities | — | 72,108 | 771 | — | 72,879 |
| U.S. Treasury, GSEs and government agencies ^(a) | 61,191 | 8,546 | — | — | 69,737 |
| Obligations of U.S. states and municipalities | — | 6,608 | 7 | — | 6,615 |
| Certificates of deposit, bankers' acceptances and commercial paper | — | 2,009 | — | — | 2,009 |
| Non-U.S. government debt securities | 18,213 | 48,429 | 155 | — | 66,797 |
| Corporate debt securities | — | 25,626 | 463 | — | 26,089 |
| Loans | — | 5,744 | 759 | — | 6,503 |
| Asset-backed securities | — | 2,536 | 23 | — | 2,559 |
| Total debt instruments | 79,404 | 171,606 | 2,178 | — | 253,188 |
| Equity securities | 82,483 | 2,060 | 665 | — | 85,208 |
| Physical commodities ^(b) | 9,595 | 16,673 | 2 | — | 26,270 |
| Other | — | 18,146 | 64 | — | 18,210 |
| Total debt and equity instruments^(c) | 171,482 | 208,485 | 2,909 | — | 382,876 |
| Derivative receivables: | | | | | |
| Interest rate | 3,390 | 292,956 | 4,069 | (271,996) | 28,419 |
| Credit | — | 9,722 | 607 | (9,239) | 1,090 |
| Foreign exchange | 169 | 240,207 | 1,203 | (218,214) | 23,365 |
| Equity | — | 57,485 | 4,428 | (52,774) | 9,139 |
| Commodity | — | 24,982 | 375 | (16,490) | 8,867 |
| Total derivative receivables | 3,559 | 625,352 | 10,682 | (568,713) | 70,880 |
| Total trading assets^(d) | 175,041 | 833,837 | 13,591 | (568,713) | 453,756 |
| Available-for-sale securities: | | | | | |
| Mortgage-backed securities: | | | | | |
| U.S. GSEs and government agencies ^(a) | 3 | 71,500 | — | — | 71,503 |
| Residential - nonagency | — | 4,620 | — | — | 4,620 |
| Commercial - nonagency | — | 1,958 | — | — | 1,958 |
| Total mortgage-backed securities | 3 | 78,078 | — | — | 78,081 |
| U.S. Treasury and government agencies | 92,060 | — | — | — | 92,060 |
| Obligations of U.S. states and municipalities | — | 6,786 | — | — | 6,786 |
| Non-U.S. government debt securities | 10,591 | 9,105 | — | — | 19,696 |
| Corporate debt securities | — | 118 | 239 | — | 357 |
| Asset-backed securities: | | | | | |
| Collateralized loan obligations | — | 5,792 | — | — | 5,792 |
| Other | — | 3,085 | — | — | 3,085 |
| Total available-for-sale securities | 102,654 | 102,964 | 239 | — | 205,857 |
| Loans ^(e) | — | 40,661 | 1,418 | — | 42,079 |
| Mortgage servicing rights | — | — | 7,973 | — | 7,973 |
| Other assets ^(f) | 7,544 | 6,065 | 405 | — | 14,014 |
| Total assets measured at fair value on a recurring basis | \$ 285,239 | \$ 1,365,451 | \$ 23,626 | \$ (568,713) | \$ 1,105,603 |
| Deposits | \$ — | \$ 26,458 | \$ 2,162 | \$ — | \$ 28,620 |
| Federal funds purchased and securities loaned or sold under repurchase agreements | — | 151,999 | — | — | 151,999 |
| Short-term borrowings | — | 14,391 | 1,401 | — | 15,792 |
| Trading liabilities: | | | | | |
| Debt and equity instruments ^(c) | 98,719 | 28,032 | 84 | — | 126,835 |
| Derivative payables: | | | | | |
| Interest rate | 2,643 | 284,280 | 3,368 | (274,321) | 15,970 |
| Credit | — | 9,377 | 594 | (9,217) | 754 |
| Foreign exchange | 160 | 250,647 | 714 | (232,665) | 18,856 |
| Equity | — | 57,649 | 4,812 | (53,657) | 8,804 |
| Commodity | — | 22,748 | 521 | (16,512) | 6,757 |
| Total derivative payables | 2,803 | 624,701 | 10,009 | (586,372) | 51,141 |
| Total trading liabilities | 101,522 | 652,733 | 10,093 | (586,372) | 177,976 |
| Accounts payable and other liabilities | 5,702 | 1,283 | 53 | — | 7,038 |
| Beneficial interests issued by consolidated VIEs | — | 5 | — | — | 5 |
| Long-term debt | — | 48,189 | 24,092 | — | 72,281 |
| Total liabilities measured at fair value on a recurring basis | \$ 107,224 | \$ 895,058 | \$ 37,801 | \$ (586,372) | \$ 453,711 |

(a) At June 30, 2023, and December 31, 2022, included total U.S. GSE obligations of \$93.5 billion and \$73.8 billion, respectively, which were mortgage-related.

(b) Physical commodities inventories are generally accounted for at the lower of cost or net realizable value. "Net realizable value" is a term defined in U.S. GAAP as not exceeding fair value less costs to sell ("transaction costs"). Transaction costs for the Firm's physical commodities inventories are either not applicable or immaterial to the value of the inventory. Therefore, net realizable value approximates fair value for the Firm's physical commodities inventories. When fair value hedging has been applied (or when net realizable value is below cost), the carrying value of physical commodities approximates fair value, because under fair value hedge accounting, the cost basis is adjusted for changes in fair value. Refer to Note 5 for a further discussion of the Firm's hedge accounting relationships. To provide consistent fair value disclosure information, all physical commodities inventories have been included in each period presented.

- (c) Balances reflect the reduction of securities owned (long positions) by the amount of identical securities sold but not yet purchased (short positions).
- (d) Certain investments that are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient are not required to be classified in the fair value hierarchy. At June 30, 2023, and December 31, 2022, the fair values of these investments, which include certain hedge funds, private equity funds, real estate and other funds, were \$956 million and \$950 million, respectively. Included in these balances at June 30, 2023, and December 31, 2022, were trading assets of \$40 million and \$43 million, respectively, and other assets of \$916 million and \$907 million, respectively.
- (e) At June 30, 2023, and December 31, 2022, included \$9.3 billion and \$9.7 billion, respectively, of residential first-lien mortgages, and \$6.8 billion of commercial first-lien mortgages for both periods. Residential mortgage loans include conforming mortgage loans originated with the intent to sell to U.S. GSEs and government agencies of \$3.3 billion and \$2.4 billion, respectively.
- (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. The level 3 balances would be reduced if netting were applied, including the netting benefit associated with cash collateral.

Level 3 valuations

Refer to Note 2 of JPMorgan Chase's 2022 Form 10-K for further information on the Firm's valuation process and a detailed discussion of the determination of fair value for individual financial instruments.

The following table presents the Firm's primary level 3 financial instruments, the valuation techniques used to measure the fair value of those financial instruments, the significant unobservable inputs, the range of values for those inputs and the weighted or arithmetic averages of such inputs. While the determination to classify an instrument within level 3 is based on the significance of the unobservable inputs to the overall fair value measurement, level 3 financial instruments typically include observable components (that is, components that are actively quoted and can be validated to external sources) in addition to the unobservable components. The level 1 and/or level 2 inputs are not included in the table. In addition, the Firm manages the risk of the observable components of level 3 financial instruments using securities and derivative positions that are classified within levels 1 or 2 of the fair value hierarchy.

The range of values presented in the table is representative of the highest and lowest level input used to value the significant groups of instruments within a product/instrument classification. Where provided, the weighted averages of the input values presented in the table are calculated based on the fair value of the instruments that the input is being used to value.

In the Firm's view, the input range, weighted and arithmetic average values do not reflect the degree of input uncertainty or an assessment of the reasonableness of the Firm's estimates and assumptions. Rather, they reflect the characteristics of the various instruments held by the Firm and the relative distribution of instruments within the range of characteristics. For example, two option contracts may have similar levels of market risk exposure and valuation uncertainty, but may have significantly different implied volatility levels because the option contracts have different underlyings, tenors, or strike prices. The input range and weighted average values will therefore vary from period-to-period and parameter-to-parameter based on the characteristics of the instruments held by the Firm at each balance sheet date.

Level 3 inputs^(a)

June 30, 2023

| Product/Instrument | Fair value (in millions) | Principal valuation technique | Unobservable inputs ^(b) | Range of input values | | Average ⁽ⁱ⁾ | |
|---|-----------------------------|----------------------------------|-------------------------------------|-----------------------|-------------|------------------------|------|
| Residential mortgage-backed securities and loans ^(b) | \$ 1,641 | Discounted cash flows | Yield | 6% | 40% | 7% | |
| | | | Prepayment speed | 3% | 11% | 8% | |
| | | | Conditional default rate | 0% | 5% | 0% | |
| | | | Loss severity | 0% | 110% | 3% | |
| Commercial mortgage-backed securities and loans ^(c) | 2,318 | Market comparables | Price | \$0 | \$101 | \$84 | |
| Corporate debt securities | 789 | Market comparables | Price | \$0 | \$242 | \$95 | |
| Loans ^(d) | 1,671 | Market comparables | Price | \$0 | \$108 | \$78 | |
| Non-U.S. government debt securities | 199 | Market comparables | Price | \$6 | \$106 | \$91 | |
| Net interest rate derivatives | (1,105) | Option pricing | Interest rate volatility | 26 bps | 674 bps | 131 bps | |
| | | | Interest rate spread volatility | 37 bps | 77 bps | 64 bps | |
| | | | Bermudan switch value | 0% | 58% | 20% | |
| | | | Interest rate correlation | (82)% | 90% | 15% | |
| | | | IR-FX correlation | (35)% | 60% | 5% | |
| | | | (17) Discounted cash flows | Prepayment speed | 0% | 15% | 5% |
| Net credit derivatives | 673 | Discounted cash flows | Credit correlation | 35% | 65% | 48% | |
| | | | Credit spread | 0 bps | 11,279 bps | 342 bps | |
| | | | Recovery rate | 10% | 90% | 40% | |
| | | | 16 Market comparables | Price | \$15 | \$115 | \$83 |
| Net foreign exchange derivatives | 461 (72) | Option pricing | IR-FX correlation | (40)% | 60% | 19% | |
| | | | Discounted cash flows | Prepayment speed | | 11% | 11% |
| | | | | Interest rate curve | 0% | 30% | 6% |
| Net equity derivatives | (1,881) | Option pricing | Forward equity price ^(h) | 84% | 142% | 101% | |
| | | | Equity volatility | 3% | 167% | 32% | |
| | | | Equity correlation | 15% | 100% | 58% | |
| | | | Equity-FX correlation | (86)% | 60% | (29)% | |
| | | | Equity-IR correlation | 10% | 35% | 21% | |
| Net commodity derivatives | (353) | Option pricing | Oil commodity forward | \$95 / BBL | \$249 / BBL | \$172 / BBL | |
| | | | Natural gas commodity forward | \$1 / MMBTU | \$7 / MMBTU | \$4 / MMBTU | |
| | | | Commodity volatility | 5% | 175% | 90% | |
| | | | Commodity correlation | (28)% | 80% | 26% | |
| MSRs | 8,229 | Discounted cash flows | Refer to Note 15 | | | | |
| Long-term debt, short-term borrowings, and deposits ^(e) | 27,806 | Option pricing | Interest rate volatility | 26 bps | 674 bps | 131 bps | |
| | | | Bermudan switch value | 0% | 58% | 20% | |
| | | | Interest rate correlation | (82)% | 90% | 15% | |
| | | | IR-FX correlation | (35)% | 60% | 5% | |
| | | | Equity correlation | 15% | 100% | 58% | |
| | | | Equity-FX correlation | (86)% | 60% | (29)% | |
| | | | Equity-IR correlation | 10% | 35% | 21% | |
| | | | 1,376 Discounted cash flows | Credit correlation | 35% | 65% | 48% |
| Other level 3 assets and liabilities, net ^(f) | 1,056 | | | | | | |

(a) The categories presented in the table have been aggregated based upon the product type, which may differ from their classification on the Consolidated balance sheets. Furthermore, the inputs presented for each valuation technique in the table are, in some cases, not applicable to every instrument valued using the technique as the characteristics of the instruments can differ.

(b) Comprises U.S. GSE and government agency securities of \$706 million, nonagency securities of \$5 million and non-trading loans of \$930 million.

(c) Comprises nonagency securities of \$6 million, trading loans of \$72 million and non-trading loans of \$2.2 billion.

(d) Comprises trading loans of \$1.0 billion and non-trading loans of \$638 million.

(e) Long-term debt, short-term borrowings and deposits include structured notes issued by the Firm that are financial instruments that typically contain embedded derivatives. The estimation of the fair value of structured notes includes the derivative features embedded within the instrument. The significant unobservable inputs are broadly consistent with those presented for derivative receivables.

(f) Includes equity securities of \$843 million including \$213 million in Other assets, for which quoted prices are not readily available and the fair value is generally based on internal valuation techniques such as EBITDA multiples and comparable analysis. All other level 3 assets and liabilities are insignificant both individually and in aggregate.

(g) Price is a significant unobservable input for certain instruments. When quoted market prices are not readily available, reliance is generally placed on price-based internal valuation techniques. The price input is expressed assuming a par value of \$100.

(h) Forward equity price is expressed as a percentage of the current equity price.

(i) Amounts represent weighted averages except for derivative related inputs where arithmetic averages are used.

Changes in and ranges of unobservable inputs

Refer to Note 2 of JPMorgan Chase's 2022 Form 10-K for a discussion of the impact on fair value of changes in unobservable inputs and the relationships between unobservable inputs as well as a description of attributes of the underlying instruments and external market factors that affect the range of inputs used in the valuation of the Firm's positions.

Changes in level 3 recurring fair value measurements

The following tables include a rollforward of the Consolidated balance sheets amounts (including changes in fair value) for financial instruments classified by the Firm within level 3 of the fair value hierarchy for the three months ended June 30, 2023 and 2022. When a determination is made to classify a financial instrument within level 3, the determination is based on the significance of the unobservable inputs 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 risk-manages 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.

| Three months ended June 30, 2023 (in millions) | Fair value measurements using significant unobservable inputs | | | | | | | | Change in unrealized gains/ (losses) related to financial instruments held at June 30, 2023 | |
|---|---|---|--------------------------|--------------|----------------------------|------------------------------|----------------------------------|----------------------------------|--|--|
| | Fair value at April 1, 2023 | Total realized/ unrealized gains/(losses) | Purchases ^(g) | Sales | Settlements ^(h) | Transfers into level 3 | Transfers (out of) level 3 | Fair value at June 30, 2023 | | |
| Assets:^(a) | | | | | | | | | | |
| Federal funds sold and securities purchased under resale agreements | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Trading assets: | | | | | | | | | | |
| Debt instruments: | | | | | | | | | | |
| Mortgage-backed securities: | | | | | | | | | | |
| U.S. GSEs and government agencies | 757 | - | 106 | (106) | (40) | - | (11) | 706 | (6) | |
| Residential - nonagency | 5 | 6 | - | (6) | - | - | - | 5 | - | |
| Commercial - nonagency | 10 | (1) | - | - | - | 5 | (8) | 6 | (1) | |
| Total mortgage-backed securities | 772 | 5 | 106 | (112) | (40) | 5 | (19) | 717 | (7) | |
| Obligations of U.S. states and municipalities | 6 | - | - | - | - | - | - | 6 | - | |
| Non-U.S. government debt securities | 169 | 29 | 50 | (49) | - | - | - | 199 | 31 | |
| Corporate debt securities | 538 | - | 61 | (43) | (2) | 7 | (39) | 522 | (2) | |
| Loans | 926 | (6) | 246 | (65) | (18) | 102 | (80) | 1,105 | (6) | |
| Asset-backed securities | 7 | - | 4 | (1) | - | 4 | - | 14 | - | |
| Total debt instruments | 2,418 | 28 | 467 | (270) | (60) | 118 | (138) | 2,563 | 16 | |
| Equity securities | 581 | (16) | 50 | (36) | - | 104 | (52) | 631 | (16) | |
| Physical commodities | - | - | 6 | - | - | - | - | 6 | - | |
| Other | 140 | (19) | 2 | - | (6) | - | (4) | 113 | (18) | |
| Total trading assets - debt and equity instruments | 3,139 | (7) ^(c) | 525 | (306) | (66) | 222 | (194) | 3,313 | (18) ^(c) | |
| Net derivative receivables: ^(b) | | | | | | | | | | |
| Interest rate | 754 | (1,043) | 60 | (42) | 49 | (914) | 14 | (1,122) | (960) | |
| Credit | 452 | 228 | - | (1) | 31 | 2 | (23) | 689 | 240 | |
| Foreign exchange | 545 | (37) | 51 | (67) | (126) | 55 | (32) | 389 | (29) | |
| Equity | (885) | (148) | 295 | (675) | (726) | 349 | (91) | (1,881) | 9 | |
| Commodity | (287) | (50) | 35 | (51) | 16 | (12) | (4) | (353) | (71) | |
| Total net derivative receivables | 579 | (1,050) ^(c) | 441 | (836) | (756) | (520) | (136) | (2,278) | (811) ^(c) | |
| Available-for-sale securities: | | | | | | | | | | |
| Corporate debt securities | 250 | 17 | - | - | - | - | - | 267 | 17 | |
| Total available-for-sale securities | 250 | 17 ^(d) | - | - | - | - | - | 267 | 17 ^(d) | |
| Loans | 1,479 | (3) ^(c) | 2,137 | (7) | (490) | 760 | (68) | 3,808 | (52) ^(c) | |
| Mortgage servicing rights | 7,755 | 275 ^(e) | 546 | (92) | (255) | - | - | 8,229 | 275 ^(e) | |
| Other assets | 406 | 16 ^(c) | 5 | (2) | (14) | 8 | (2) | 417 | 16 ^(c) | |
| Total trading assets - debt and equity instruments | | | | | | | | | | |
| Fair value measurements using significant unobservable inputs | | | | | | | | | | |
| Three months ended June 30, 2023 (in millions) | Fair value at April 1, 2023 | Total realized/ unrealized (gains)/losses | Purchases | Sales | Issuances | Settlements ^(h) | Transfers into level 3 | Transfers (out of) level 3 | Fair value at June 30, 2023 | Change in unrealized (gains)/ losses related to financial instruments held at June 30, 2023 |
| Liabilities:^(a) | | | | | | | | | | |
| Deposits | \$ 2,208 | \$ (51) ^{(c)(f)} | \$ - | \$ - | \$ 139 | \$ (181) | \$ - | \$ (62) | \$ 2,053 | \$ (51) ^{(c)(f)} |
| Short-term borrowings | 1,410 | 50 ^{(c)(f)} | - | - | 1,191 | (927) | 2 | (22) | 1,704 | 29 ^{(c)(f)} |
| Trading liabilities - debt and equity instruments | 63 | (1) ^(c) | - | (2) | - | (2) | 6 | (1) | 63 | (1) ^(c) |
| Accounts payable and other liabilities | 56 | 5 ^(c) | (2) | 3 | - | - | 8 | (2) | 68 | 5 ^(c) |
| Long-term debt | 25,227 | 325 ^{(c)(f)} | - | - | 2,667 | (2,550) | 113 | (357) | 25,425 | 354 ^{(c)(f)} |

| Fair value measurements using significant unobservable inputs | | | | | | | | | | |
|--|-----------------------------|--|--------------------------|--------------|-----------|----------------------------|------------------------|----------------------------|-----------------------------|--|
| Three months ended June 30, 2022 (in millions) | Fair value at April 1, 2022 | Total realized/unrealized gains/(losses) | Purchases ^(g) | Sales | Issuances | Settlements ^(h) | Transfers into level 3 | Transfers (out of) level 3 | Fair value at June 30, 2022 | Change in unrealized gains/(losses) related to financial instruments held at June 30, 2022 |
| Assets:^(a) | | | | | | | | | | |
| Federal funds sold and securities purchased under resale agreements | \$ - | \$ - | \$ - | \$ - | | \$ - | \$ 1 | \$ - | \$ 1 | \$ - |
| Trading assets: | | | | | | | | | | |
| Debt instruments: | | | | | | | | | | |
| Mortgage-backed securities: | | | | | | | | | | |
| U.S. GSEs and government agencies | 286 | (1) | 643 | (118) | | (7) | - | - | 803 | (2) |
| Residential - nonagency | 10 | - | 5 | - | | (1) | - | - | 14 | - |
| Commercial - nonagency | 10 | - | - | - | | - | - | - | 10 | - |
| Total mortgage-backed securities | 306 | (1) | 648 | (118) | | (8) | - | - | 827 | (2) |
| Obligations of U.S. states and municipalities | 7 | - | - | - | | - | - | - | 7 | - |
| Non-U.S. government debt securities | 133 | (9) | 177 | (86) | | - | 6 | (16) | 205 | (8) |
| Corporate debt securities | 293 | (16) | 272 | (12) | | - | 57 | (20) | 574 | (16) |
| Loans | 1,049 | (33) | 122 | (164) | | (152) | 254 | (178) | 898 | (32) |
| Asset-backed securities | 28 | - | 1 | (10) | | - | 1 | - | 20 | - |
| Total debt instruments | 1,816 | (59) | 1,220 | (390) | | (160) | 318 | (214) | 2,531 | (58) |
| Equity securities | 663 | (99) | 98 | (61) | | - | 106 | (46) | 661 | (90) |
| Physical commodities | - | - | 2 | - | | - | - | - | 2 | - |
| Other | 175 | 66 | 6 | - | | (158) | - | (2) | 87 | 60 |
| Total trading assets - debt and equity instruments | 2,654 | (92) ^(c) | 1,326 | (451) | | (318) | 424 | (262) | 3,281 | (88) ^(c) |
| Net derivative receivables: ^(b) | | | | | | | | | | |
| Interest rate | 367 | 160 | 99 | (135) | | 105 | 44 | (220) | 420 | 204 |
| Credit | 44 | 264 | 4 | (3) | | (65) | 1 | 4 | 249 | 255 |
| Foreign exchange | 76 | 193 | 15 | (19) | | (38) | 24 | (6) | 245 | 174 |
| Equity | (2,583) | 1,838 | 162 | (466) | | (140) | (227) | 182 | (1,234) | 1,788 |
| Commodity | (414) | 382 | 18 | (69) | | 112 | (1) | (2) | 26 | 423 |
| Total net derivative receivables | (2,510) | 2,837 ^(c) | 298 | (692) | | (26) | (159) | (42) | (294) | 2,844 ^(c) |
| Available-for-sale securities: | | | | | | | | | | |
| Corporate debt securities | 205 | (19) | - | - | | - | - | - | 186 | (19) |
| Total available-for-sale securities | 205 | (19) ^(d) | - | - | | - | - | - | 186 | (19) ^(d) |
| Loans | 2,072 | (82) ^(c) | 273 | (95) | | (250) | 226 | (124) | 2,020 | (80) ^(c) |
| Mortgage servicing rights | 7,294 | 654 ^(e) | 341 | (614) | | (236) | - | - | 7,439 | 654 ^(e) |
| Other assets | 341 | 116 ^(c) | 5 | (28) | | (20) | - | (6) | 408 | 116 ^(c) |
| Fair value measurements using significant unobservable inputs | | | | | | | | | | |
| Three months ended June 30, 2022 (in millions) | Fair value at April 1, 2022 | Total realized/unrealized gains/(losses) | Purchases | Sales | Issuances | Settlements ^(h) | Transfers into level 3 | Transfers (out of) level 3 | Fair value at June 30, 2022 | Change in unrealized gains/(losses) related to financial instruments held at June 30, 2022 |
| Liabilities:^(a) | | | | | | | | | | |
| Deposits | \$ 2,121 | \$ (160) ^{(c)(f)} | \$ - | \$ - | \$ 138 | \$ (21) | \$ - | \$ (46) | \$ 2,032 | \$ (160) ^{(c)(f)} |
| Short-term borrowings | 2,146 | 14 ^{(c)(f)} | - | - | 963 | (1,036) | 14 | - | 2,101 | 93 ^{(c)(f)} |
| Trading liabilities - debt and equity instruments | 41 | 1 ^(c) | (20) | 4 | - | - | 30 | - | 56 | 1 ^(c) |
| Accounts payable and other liabilities | 108 | (2) ^(c) | (28) | 1 | - | - | - | (6) | 73 | (2) ^(c) |
| Long-term debt | 24,394 | (2,640) ^{(c)(f)} | - | - | 3,470 | (2,045) | 179 | (281) | 23,077 | (2,613) ^{(c)(f)} |

| Fair value measurements using significant unobservable inputs | | | | | | | | | | |
|--|---------------------------------|--|--------------------------|----------------|-----------|----------------------------|------------------------------|----------------------------------|-----------------------------------|--|
| Six months ended June 30, 2023 (in millions) | Fair value at Jan 1, 2023 | Total realized/ unrealized gains/ (losses) | Purchases ^(g) | Sales | Issuances | Settlements ^(h) | Transfers into level 3 | Transfers (out of) level 3 | Fair value at June 30, 2023 | Change in unrealized (gains)/losses related to financial instruments held at June 30, 2023 |
| Assets:^(a) | | | | | | | | | | |
| Federal funds sold and securities purchased under resale agreements | \$ - | \$ - | \$ - | \$ - | | \$ - | \$ - | \$ - | \$ - | \$ - |
| Trading assets: | | | | | | | | | | |
| Debt instruments: | | | | | | | | | | |
| Mortgage-backed securities: | | | | | | | | | | |
| U.S. GSEs and government agencies | 759 | 7 | 131 | (113) | | (64) | - | (14) | 706 | 2 |
| Residential - nonagency | 5 | 7 | - | (6) | | (2) | 1 | - | 5 | 1 |
| Commercial - nonagency | 7 | - | - | - | | (1) | 8 | (8) | 6 | (1) |
| Total mortgage-backed securities | 771 | 14 | 131 | (119) | | (67) | 9 | (22) | 717 | 2 |
| Obligations of U.S. states and municipalities | 7 | - | - | (1) | | - | - | - | 6 | - |
| Non-U.S. government debt securities | 155 | 40 | 100 | (96) | | - | - | - | 199 | 43 |
| Corporate debt securities | 463 | 24 | 110 | (60) | | (2) | 30 | (43) | 522 | 18 |
| Loans | 759 | 2 | 682 | (127) | | (113) | 125 | (223) | 1,105 | 1 |
| Asset-backed securities | 23 | - | 5 | (3) | | (1) | 5 | (15) | 14 | (1) |
| Total debt instruments | 2,178 | 80 | 1,028 | (406) | | (183) | 169 | (303) | 2,563 | 63 |
| Equity securities | 665 | (47) | 108 | (107) | | - | 140 | (128) | 631 | (27) |
| Physical Commodities | 2 | - | 6 | - | | (2) | - | - | 6 | - |
| Other | 64 | (40) | 96 | - | | (4) | 1 | (4) | 113 | (19) |
| Total trading assets - debt and equity instruments | 2,909 | (7) ^(c) | 1,238 | (513) | | (189) | 310 | (435) | 3,313 | 17 ^(c) |
| Net derivative receivables: ^(b) | | | | | | | | | | |
| Interest rate | 701 | (697) | 95 | (92) | | 27 | (1,079) | (77) | (1,122) | (582) |
| Credit | 13 | 474 | 3 | (4) | | 202 | 26 | (25) | 689 | 497 |
| Foreign exchange | 489 | 52 | 79 | (108) | | (201) | 119 | (41) | 389 | 29 |
| Equity | (384) | 23 | 613 | (1,362) | | (726) | 460 | (505) | (1,881) | 95 |
| Commodity | (146) | (42) | 39 | (118) | | (111) | (11) | 36 | (353) | (206) |
| Total net derivative receivables | 673 | (190) ^(c) | 829 | (1,684) | | (809) | (485) | (612) | (2,278) | (167) ^(c) |
| Available-for-sale securities: | | | | | | | | | | |
| Corporate debt securities | 239 | 28 | - | - | | - | - | - | 267 | 28 |
| Total available-for-sale securities | 239 | 28 ^(d) | - | - | | - | - | - | 267 | 28 ^(d) |
| Loans | 1,418 | 23 ^(c) | 2,285 | (73) | | (585) | 917 | (177) | 3,808 | 24 ^(c) |
| Mortgage servicing rights | 7,973 | 264 ^(e) | 577 | (90) | | (495) | - | - | 8,229 | 264 ^(e) |
| Other assets | 405 | 21 ^(c) | 17 | (2) | | (30) | 8 | (2) | 417 | 21 ^(c) |
| Fair value measurements using significant unobservable inputs | | | | | | | | | | |
| Six months ended June 30, 2023 (in millions) | Fair value at Jan 1, 2023 | Total realized/ unrealized (gains)/ losses | Purchases | Sales | Issuances | Settlements ^(h) | Transfers into level 3 | Transfers (out of) level 3 | Fair value at June 30, 2023 | Change in unrealized (gains)/losses related to financial instruments held at June 30, 2023 |
| Liabilities:^(a) | | | | | | | | | | |
| Deposits | \$ 2,162 | \$ (3) ^{(c)(f)} | \$ - | \$ - | \$ 267 | \$ (248) | \$ - | \$ (125) | \$ 2,053 | \$ (31) ^{(c)(f)} |
| Short-term borrowings | 1,401 | 140 ^{(c)(f)} | - | - | 2,242 | (2,059) | 2 | (22) | 1,704 | 34 ^{(c)(f)} |
| Trading liabilities - debt and equity instruments | 84 | (13) ^(c) | (27) | 6 | - | (2) | 18 | (3) | 63 | - |
| Accounts payable and other liabilities | 53 | 4 ^(c) | (2) | 7 | - | - | 8 | (2) | 68 | 4 ^(c) |
| Long-term debt | 24,092 | 1,681 ^{(c)(f)} | - | - | 5,400 | (5,525) | 204 | (427) | 25,425 | 1,674 ^{(c)(f)} |

| Six months ended June 30, 2022 (in millions) | Fair value measurements using significant unobservable inputs | | | | | | | Fair value at June 30, 2022 | Change in unrealized gains/ (losses) related to financial instruments held at June 30, 2022 | |
|---|---|--|--------------------------|----------------|----------------------------|------------------------------|----------------------------------|-----------------------------------|--|------|
| | Fair value at Jan 1, 2022 | Total realized/ unrealized gains/ (losses) | Purchases ^(g) | Sales | Settlements ^(h) | Transfers into level 3 | Transfers (out of) level 3 | | | |
| Assets: ^(a) | | | | | | | | | | |
| Federal funds sold and securities purchased under resale agreements | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1 | \$ - | \$ 1 | \$ - |
| Trading assets: | | | | | | | | | | |
| Debt instruments: | | | | | | | | | | |
| Mortgage-backed securities: | | | | | | | | | | |
| U.S. GSEs and government agencies | 265 | 26 | 665 | (125) | (28) | - | - | 803 | 24 | |
| Residential - nonagency | 28 | - | 5 | - | (12) | - | (7) | 14 | (1) | |
| Commercial - nonagency | 10 | - | - | - | - | - | - | 10 | - | |
| Total mortgage-backed securities | 303 | 26 | 670 | (125) | (40) | - | (7) | 827 | 23 | |
| Obligations of U.S. states and municipalities | 7 | - | - | - | - | - | - | 7 | - | |
| Non-U.S. government debt securities | 81 | (42) | 405 | (266) | - | 43 | (16) | 205 | (106) | |
| Corporate debt securities | 332 | (35) | 333 | (71) | (37) | 98 | (46) | 574 | (44) | |
| Loans | 708 | (37) | 419 | (262) | (159) | 525 | (296) | 898 | (13) | |
| Asset-backed securities | 26 | - | 2 | (10) | - | 5 | (3) | 20 | - | |
| Total debt instruments | 1,457 | (88) | 1,829 | (734) | (236) | 671 | (368) | 2,531 | (140) | |
| Equity securities | 662 | (912) | 321 | (301) | - | 959 | (68) | 661 | (474) | |
| Physical Commodities | - | - | 2 | - | - | - | - | 2 | - | |
| Other | 160 | 67 | 26 | - | (163) | - | (3) | 87 | 70 | |
| Total trading assets - debt and equity instruments | 2,279 | (933) ^(c) | 2,178 | (1,035) | (399) | 1,630 | (439) | 3,281 | (544) ^(c) | |
| Net derivative receivables: ^(b) | | | | | | | | | | |
| Interest rate | (16) | 393 | 225 | (229) | 256 | 17 | (226) | 420 | 428 | |
| Credit | 74 | 331 | 8 | (7) | (161) | (2) | 6 | 249 | 330 | |
| Foreign exchange | (419) | 538 | 147 | (43) | 32 | 18 | (28) | 245 | 486 | |
| Equity | (3,626) | 2,568 | 660 | (1,025) | 303 | (558) | 444 | (1,234) | 2,975 | |
| Commodity | (907) | 804 | 68 | (206) | 268 | (1) | - | 26 | 469 | |
| Total net derivative receivables | (4,894) | 4,634 ^(c) | 1,108 | (1,510) | 698 | (526) | 196 | (294) | 4,688 ^(c) | |
| Available-for-sale securities: | | | | | | | | | | |
| Corporate debt securities | 161 | 8 | 17 | - | - | - | - | 186 | 8 | |
| Total available-for-sale securities | 161 | 8 ^(d) | 17 | - | - | - | - | 186 | 8 ^(d) | |
| Loans | 1,933 | 16 ^(c) | 394 | (100) | (531) | 616 | (308) | 2,020 | (24) ^(c) | |
| Mortgage servicing rights | 5,494 | 1,613 ^(e) | 1,471 | (671) | (468) | - | - | 7,439 | 1,613 ^(e) | |
| Other assets | 306 | 125 ^(c) | 46 | (28) | (37) | 2 | (6) | 408 | 119 ^(c) | |

| Six months ended June 30, 2022 (in millions) | Fair value measurements using significant unobservable inputs | | | | | | | Fair value at June 30, 2022 | Change in unrealized (gains)/losses related to financial instruments held at June 30, 2022 | |
|---|---|--|-----------|-------|-----------|----------------------------|------------------------------|-----------------------------------|--|----------------------------------|
| | Fair value at Jan 1, 2022 | Total realized/ unrealized (gains)/losses | Purchases | Sales | Issuances | Settlements ^(h) | Transfers into level 3 | | | Transfers (out of) level 3 |
| Liabilities: ^(a) | | | | | | | | | | |
| Deposits | \$ 2,317 | \$ (302) ^{(c)(f)} | \$ - | \$ - | \$ 246 | \$ (69) | \$ - | \$ (160) | \$ 2,032 | \$ (298) ^{(c)(f)} |
| Short-term borrowings | 2,481 | (387) ^{(c)(f)} | - | - | 2,386 | (2,383) | 15 | (11) | 2,101 | 7 ^{(c)(f)} |
| Trading liabilities - debt and equity instruments | 30 | (16) ^(c) | (34) | 34 | - | - | 44 | (2) | 56 | 15 ^(c) |
| Accounts payable and other liabilities | 69 | (6) ^(c) | (28) | 43 | - | - | 1 | (6) | 73 | (6) ^(c) |
| Long-term debt | 24,374 | (4,308) ^{(c)(f)} | - | - | 7,520 | (4,521) | 442 | (430) | 23,077 | (4,151) ^{(c)(f)} |

(a) Level 3 assets at fair value as a percentage of total Firm assets at fair value (including assets measured at fair value on a nonrecurring basis) were 2% at both June 30, 2023 and December 31, 2022. Level 3 liabilities at fair value as a percentage of total Firm liabilities at fair value (including liabilities measured at fair value on a nonrecurring basis) were 8% at both June 30, 2023 and December 31, 2022, respectively.

- (b) All level 3 derivatives are presented on a net basis, irrespective of the underlying counterparty.
- (c) Predominantly reported in principal transactions revenue, except for changes in fair value for CCB mortgage loans and lending-related commitments originated with the intent to sell, and mortgage loan purchase commitments, which are reported in mortgage fees and related income.
- (d) Realized gains/(losses) on AFS securities are reported in investment securities gains/(losses). Unrealized gains/(losses) are reported in OCI. Realized and unrealized gains/(losses) recorded on level 3 AFS securities were not material both for the three and six months ended June 30, 2023 and 2022.
- (e) Changes in fair value for MSRs are reported in mortgage fees and related income.
- (f) Realized (gains)/losses due to DVA for fair value option elected liabilities are reported in principal transactions revenue, and were not material for the three and six months ended June 30, 2023 and 2022. Unrealized (gains)/losses are reported in OCI, and were \$23 million and \$(344) million for the three months ended June 30, 2023 and 2022, respectively and \$(277) million and \$(574) million for the six months ended June 30, 2023 and 2022, respectively.
- (g) Loan originations are included in purchases.
- (h) Includes financial assets and liabilities that have matured, been partially or fully repaid, impacts of modifications, deconsolidations associated with beneficial interests in VIEs and other items.

Level 3 analysis

Consolidated balance sheets changes

The following describes significant changes to level 3 assets since December 31, 2022, for those items measured at fair value on a recurring basis. Refer to Assets and liabilities measured at fair value on a nonrecurring basis on page 115 for further information on changes impacting items measured at fair value on a nonrecurring basis.

Three and six months ended June 30, 2023

Level 3 assets were \$26.8 billion at June 30, 2023, reflecting an increase of \$3.0 billion from March 31, 2023, and an increase of \$3.2 billion from December 31, 2022.

The increase for the three and six months ended June 30, 2023 was predominantly driven by:

- \$2.3 billion and \$2.4 billion, respectively, in non-trading loans primarily due to \$1.9 billion of loans in CIB associated with the First Republic acquisition.

Refer to the sections below for additional information.

Transfers between levels for instruments carried at fair value on a recurring basis

For the three months ended June 30, 2023, significant transfers from level 2 into level 3 included the following:

- \$1.2 billion of gross interest rate derivative payables as a result of transition to term SOFR for certain interest rate options.
- \$760 million of non-trading loans driven by a decrease in observability.

For the three months ended June 30, 2023, there were no significant transfers from level 3 into level 2.

For the six months ended June 30, 2023, significant transfers from level 2 into level 3 included the following:

- \$1.6 billion of gross interest rate derivative payables as a result of transition to term SOFR for certain interest rate options.
- \$901 million of gross equity derivative receivables as a result of a decrease in observability and an increase in the significance of unobservable inputs.
- \$917 million of non-trading loans driven by a decrease in observability.

For the six months ended June 30, 2023, significant transfers from level 3 into level 2 included the following:

- \$1.3 billion and \$827 million of gross equity derivative receivables and gross equity derivative payables, respectively, as a result of an increase in observability and a decrease in the significance of unobservable inputs.

For the three months ended June 30, 2022, there were no significant transfers from level 2 into level 3.

For the three months ended June 30, 2022, significant transfers from level 3 into level 2 included the following:

- \$930 million of gross interest rate derivative receivables as a result of an increase in observability and a decrease in the significance of unobservable inputs.

For the six months ended June 30, 2022, significant transfers from level 2 into level 3 included the following:

- \$1.6 billion of total debt and equity instruments, largely due to equity securities of \$959 million driven by a decrease in observability predominantly as a result of restricted access to certain markets.
- \$1.3 billion of gross equity derivative payables as a result of a decrease in observability and an increase in the significance of unobservable inputs.

For the six months ended June 30, 2022, significant transfers from level 3 into level 2 included the following:

- \$965 million of gross interest rate derivative receivables as a result of an increase in observability and a decrease in the significance of unobservable inputs.
- \$920 million and \$1.4 billion of gross equity derivative receivables and gross equity derivative payables, respectively, as a result of an increase in observability and a decrease in the significance of unobservable inputs.

All transfers are based on changes in the observability and/or significance of the valuation inputs and are assumed to occur at the beginning of the quarterly reporting period in which they occur.

Gains and losses

The following describes significant components of total realized/unrealized gains/(losses) for instruments measured at fair value on a recurring basis for the periods indicated. These amounts exclude any effects of the Firm's risk management activities where the financial instruments are classified as level 1 and 2 of the fair value hierarchy. Refer to Changes in level 3 recurring fair value measurements rollforward tables on pages 108-113 for further information on these instruments.

Three months ended June 30, 2023

- \$752 million of net losses on assets, driven by losses in net derivative receivables due to market movements.
- \$328 million of net losses on liabilities, driven by losses in long-term debt due to market movements.

Three months ended June 30, 2022

- \$3.4 billion of net gains on assets, largely driven by gains in net equity derivative receivables due to market movements and MSRs reflecting lower prepayment speeds on higher rates.
- \$2.8 billion of net gains on liabilities, predominantly driven by gains in long-term debt due to market movements.

Six months ended June 30, 2023

- \$139 million of net gains on assets, driven by gains in MSR reflecting lower prepayment speeds on higher rates.
- \$1.8 billion of net losses on liabilities, predominantly driven by losses in long-term debt due to market movements.

Six months ended June 30, 2022

- \$5.5 billion of net gains on assets, predominantly driven by gains in net equity derivative receivables due to market movements and MSRs reflecting lower prepayment speeds on higher rates.
- \$5.0 billion of net gains on liabilities, predominantly driven by gains in long-term debt due to market movements.

Refer to Note 15 for information on MSRs.

Credit and funding adjustments – derivatives

The following table provides the impact of credit and funding adjustments on principal transactions revenue in the respective periods, excluding the effect of any associated hedging activities. The FVA presented below includes the impact of the Firm's own credit quality on the inception value of liabilities as well as the impact of changes in the Firm's own credit quality over time.

| (in millions) | Three months ended June 30, | | Six months ended June 30, | |
|---------------------------------|--------------------------------|--------|------------------------------|----------|
| | 2023 | 2022 | 2023 | 2022 |
| Credit and funding adjustments: | | | | |
| Derivatives CVA | \$ 66 | \$ 147 | \$ 121 | \$ (165) |
| Derivatives FVA | 63 | 7 | 55 | (51) |

Refer to Note 2 of JPMorgan Chase's 2022 Form 10-K for further information about both credit and funding

adjustments, as well as information about valuation adjustments on fair value option elected liabilities.

Assets and liabilities measured at fair value on a nonrecurring basis

The following tables present the assets and liabilities held as of June 30, 2023 and 2022, for which nonrecurring fair value adjustments were recorded during the six months ended June 30, 2023 and 2022, by major product category and fair value hierarchy.

| June 30, 2023 (in millions) | Fair value hierarchy | | | Total fair value |
|---|----------------------|---------------|-----------------------|------------------|
| | Level 1 | Level 2 | Level 3 | |
| Loans | \$ — | \$ 803 | \$ 840 ^(b) | \$ 1,643 |
| Other assets ^(a) | — | 7 | 286 | 293 |
| Total assets measured at fair value on a nonrecurring basis | \$ — | \$ 810 | \$ 1,126 | \$ 1,936 |
| Accounts payable and other liabilities | — | — | — | — |
| Total liabilities measured at fair value on a nonrecurring basis | \$ — | \$ — | \$ — | \$ — |

| June 30, 2022 (in millions) | Fair value hierarchy | | | Total fair value |
|---|----------------------|-----------------|-----------------|------------------|
| | Level 1 | Level 2 | Level 3 | |
| Loans | \$ — | \$ 1,516 | \$ 665 | \$ 2,181 |
| Other assets | — | 22 | 1,083 | 1,105 |
| Total assets measured at fair value on a nonrecurring basis | \$ — | \$ 1,538 | \$ 1,748 | \$ 3,286 |
| Accounts payable and other liabilities | — | — | 293 | 293 |
| Total liabilities measured at fair value on a nonrecurring basis | \$ — | \$ — | \$ 293 | \$ 293 |

(a) Primarily includes equity securities without readily determinable fair values that were adjusted based on observable price changes in orderly transactions from an identical or similar investment of the same issuer (measurement alternative). Of the \$286 million in level 3 assets measured at fair value on a nonrecurring basis as of June 30, 2023, \$220 million related to equity securities adjusted based on the measurement alternative. These equity securities are classified as level 3 due to the infrequency of the observable prices and/or the restrictions on the shares.

(b) Of the \$840 million in level 3 assets measured at fair value on a nonrecurring basis as of June 30, 2023, \$23 million related to residential real estate loans carried at the net realizable value of the underlying collateral (e.g., collateral-dependent loans). These amounts are classified as level 3 as they are valued using information from broker's price opinions, appraisals and automated valuation models and discounted based upon the Firm's experience with actual liquidation values. These discounts ranged from 3% to 56% with a weighted average of 25%.

Nonrecurring fair value changes

The following table presents the total change in value of assets and liabilities for which fair value adjustments have been recognized for the three and six months ended June 30, 2023 and 2022, related to assets and liabilities held at those dates.

| (in millions) | Three months ended June 30, | | Six months ended June 30, | |
|---|--------------------------------|-----------------|------------------------------|-----------------|
| | 2023 | 2022 | 2023 | 2022 |
| Loans | \$ (96) | \$ (80) | \$ (128) | \$ (91) |
| Other assets ^(a) | (36) | (389) | (99) | (45) |
| Accounts payable and other liabilities | — | (269) | — | (288) |
| Total nonrecurring fair value gains/(losses) | \$ (132) | \$ (738) | \$ (227) | \$ (424) |

(a) Included \$(32) million and \$(387) million for the three months ended June 30, 2023 and 2022, respectively, and \$(93) million and \$(29) million for the six months ended June 30, 2023 and 2022, respectively, of net gains/(losses) as a result of the measurement alternative.

Refer to Note 12 for further information about the measurement of collateral-dependent loans.

Equity securities without readily determinable fair values

The Firm measures certain equity securities without readily determinable fair values at cost less impairment (if any), plus or minus observable price changes from an identical or similar investment of the same issuer (i.e., measurement alternative), with such changes recognized in other income.

In its determination of the new carrying values upon observable price changes, the Firm may adjust the prices if deemed necessary to arrive at the Firm's estimated fair values. Such adjustments may include adjustments to reflect the different rights and obligations of similar securities, and other adjustments that are consistent with the Firm's valuation techniques for private equity direct investments.

The following table presents the carrying value of equity securities without readily determinable fair values held as of June 30, 2023 and 2022, that are measured under the measurement alternative and the related adjustments recorded during the periods presented for those securities with observable price changes. These securities are included in the nonrecurring fair value tables when applicable price changes are observable.

| As of or for the period ended, (in millions) | Three months ended June 30, | | Six months ended June 30, | |
|---|-----------------------------|----------|---------------------------|----------|
| | 2023 | 2022 | 2023 | 2022 |
| Other assets | | | | |
| Carrying value ^(a) | \$ 4,673 | \$ 4,196 | \$ 4,673 | \$ 4,196 |
| Upward carrying value changes ^(b) | 5 | 76 | 40 | 445 |
| Downward carrying value changes/impairment ^(c) | (37) | (463) | (133) | (474) |

(a) The carrying value as of December 31, 2022 was \$4.1 billion. The period-end carrying values reflect cumulative purchases and sales in addition to upward and downward carrying value changes.

(b) The cumulative upward carrying value changes between January 1, 2018 and June 30, 2023 were \$1.5 billion.

(c) The cumulative downward carrying value changes/impairment between January 1, 2018 and June 30, 2023 were \$(1.0) billion.

Included in other assets above is the Firm's interest in approximately 37 million Visa Class B common shares ("Visa B shares"). These shares are subject to certain transfer restrictions and are convertible into Visa Class A common shares ("Visa A shares") at a specified conversion rate upon final resolution of certain litigation matters involving Visa. On June 29, 2023, Visa filed a Current Report on Form 8-K with the SEC indicating that the conversion rate of Visa B shares to Visa A shares decreased from 1.5991 to 1.5902 effective June 28, 2023. The conversion rate may be further adjusted by Visa depending on developments related to the litigation matters. The outcome of those litigation matters, and the effect that the resolution of those matters may have on the conversion rate, is unknown. Accordingly, as of June 30, 2023, there is significant uncertainty regarding when the transfer restrictions on Visa B shares may be terminated and what the final conversion rate for the Visa B shares will be. As a result of these considerations, as well as differences in voting rights, Visa B shares are not considered to be similar to Visa A shares, and they continue to be held at their nominal carrying value.

In connection with prior sales of Visa B shares, the Firm has entered into derivative instruments with the purchasers of the shares under which the Firm retains the risk associated with changes in the conversion rate. Under the terms of the derivative instruments, the Firm will (a) make or receive payments based on subsequent changes in the conversion rate and (b) make periodic interest payments to the purchasers of the Visa B shares. The payments under the derivative instruments will continue as long as the Visa B shares remain subject to transfer restrictions. The derivative instruments are accounted for at fair value using a discounted cash flow methodology based upon the Firm's estimate of the timing and magnitude of final resolution of the litigation matters. The derivative instruments are recorded in trading liabilities, and changes in fair value are recognized in other income. As of June 30, 2023, the Firm held derivative instruments associated with 23 million Visa B shares that the Firm had previously sold, which are all subject to similar terms and conditions.

Additional disclosures about the fair value of financial instruments that are not carried on the Consolidated balance sheets at fair value

The following table presents, by fair value hierarchy classification, the carrying values and estimated fair values at June 30, 2023, and December 31, 2022, of financial assets and liabilities, excluding financial instruments that are carried at fair value on a recurring basis, and their classification within the fair value hierarchy.

| (in billions) | June 30, 2023 | | | | | December 31, 2022 | | | | |
|---|----------------|--------------------------------|------------|---------|----------------------------|-------------------|--------------------------------|------------|---------|----------------------------|
| | Carrying value | Estimated fair value hierarchy | | | Total estimated fair value | Carrying value | Estimated fair value hierarchy | | | Total estimated fair value |
| | | Level 1 | Level 2 | Level 3 | | | Level 1 | Level 2 | Level 3 | |
| Financial assets | | | | | | | | | | |
| Cash and due from banks | \$ 26.1 | \$ 26.1 | \$ – | \$ – | \$ 26.1 | \$ 27.7 | \$ 27.7 | \$ – | \$ – | \$ 27.7 |
| Deposits with banks | 469.1 | 469.0 | 0.1 | – | 469.1 | 539.5 | 539.3 | 0.2 | – | 539.5 |
| Accrued interest and accounts receivable | 111.1 | – | 111.1 | 0.1 | 111.2 | 124.7 | – | 124.6 | 0.1 | 124.7 |
| Federal funds sold and securities purchased under resale agreements | 3.0 | – | 3.0 | – | 3.0 | 3.7 | – | 3.7 | – | 3.7 |
| Securities borrowed | 107.7 | – | 107.7 | – | 107.7 | 115.3 | – | 115.3 | – | 115.3 |
| Investment securities, held-to-maturity | 408.9 | 185.8 | 189.5 | – | 375.3 | 425.3 | 189.1 | 199.5 | – | 388.6 |
| Loans, net of allowance for loan losses ^(a) | 1,239.3 | – | 279.8 | 936.1 | 1,215.9 | 1,073.9 | – | 194.0 | 853.9 | 1,047.9 |
| Other | 69.2 | – | 66.9 | 2.4 | 69.3 | 101.2 | – | 99.6 | 1.7 | 101.3 |
| Financial liabilities | | | | | | | | | | |
| Deposits | \$ 2,347.4 | \$ – | \$ 2,347.5 | \$ – | \$ 2,347.5 | \$ 2,311.6 | \$ – | \$ 2,311.5 | \$ – | \$ 2,311.5 |
| Federal funds purchased and securities loaned or sold under repurchase agreements | 49.7 | – | 49.7 | – | 49.7 | 50.6 | – | 50.6 | – | 50.6 |
| Short-term borrowings ^(b) | 23.1 | – | 23.1 | – | 23.1 | 28.2 | – | 28.2 | – | 28.2 |
| Accounts payable and other liabilities | 248.1 | – | 238.8 | 8.8 | 247.6 | 257.5 | – | 251.2 | 5.6 | 256.8 |
| Beneficial interests issued by consolidated VIEs | 19.6 | – | 19.6 | – | 19.6 | 12.6 | – | 12.6 | – | 12.6 |
| Long-term debt ^(b) | 285.4 | – | 232.0 | 51.7 | 283.7 | 223.6 | – | 216.5 | 2.8 | 219.3 |

(a) 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 other key inputs, including expected lifetime credit losses, interest rates, prepayment rates, and primary origination or secondary market spreads. For certain loans, the fair value is measured based on the value of the underlying collateral. Carrying value of the loan takes into account the loan's allowance for loan losses, which represents the loan's expected credit losses over its remaining expected life. The difference between the estimated fair value and carrying value of a loan is generally attributable to changes in market interest rates, including credit spreads, market liquidity premiums and other factors that affect the fair value of a loan but do not affect its carrying value.

(b) Includes FHLB advances in level 2 of Long-term debt and Short-term borrowings and the Purchase Money Note in level 3 of Long-term debt associated with the First Republic acquisition. Refer to Notes 18 and 28 for additional information.

The majority of the Firm's lending-related commitments are not carried at fair value on a recurring basis on the Consolidated balance sheets. The carrying value and the estimated fair value of these wholesale lending-related commitments were as follows for the periods indicated.

| (in billions) | June 30, 2023 | | | | | December 31, 2022 | | | | |
|---------------------------------------|---|--------------------------------|---------|---------|----------------------------|--|--------------------------------|---------|---------|----------------------------|
| | Carrying value ^(a) ^{(b)(c)} | Estimated fair value hierarchy | | | Total estimated fair value | Carrying value ^(a) ^(b) | Estimated fair value hierarchy | | | Total estimated fair value |
| | | Level 1 | Level 2 | Level 3 | | | Level 1 | Level 2 | Level 3 | |
| Wholesale lending-related commitments | \$ 3.7 | \$ – | \$ – | \$ 4.9 | \$ 4.9 | \$ 2.3 | \$ – | \$ – | \$ 3.2 | \$ 3.2 |

(a) Excludes the current carrying values of the guarantee liability and the offsetting asset, each of which is recognized at fair value at the inception of the guarantees.

(b) Includes the wholesale allowance for lending-related commitments.

(c) As of June 30, 2023, includes fair value adjustments associated with the First Republic acquisition for other unfunded commitments to extend credit totaling \$1.6 billion. Refer to Notes 24 and 28 for additional information.

The Firm does not estimate the fair value of consumer off-balance sheet lending-related commitments. In many cases, the Firm can reduce or cancel these commitments by providing the borrower notice or, in some cases as permitted by law, without notice. Refer to page 169 of JPMorgan Chase's 2022 Form 10-K for a further discussion of the valuation of lending-related commitments.

Note 3 – Fair value option

The fair value option provides an option to elect fair value for selected financial assets, financial liabilities, unrecognized firm commitments, and written loan commitments.

The Firm has elected to measure certain instruments at fair value for several reasons including to mitigate income statement volatility caused by the differences between the measurement basis of elected instruments (e.g., certain instruments that otherwise would be accounted for on an accrual basis) and the associated risk management arrangements that are accounted for on a fair value basis, as well as to better reflect those instruments that are managed on a fair value basis.

The Firm’s election of fair value includes the following instruments:

- Loans purchased or originated as part of securitization warehousing activity, subject to bifurcation accounting, or managed on a fair value basis, including lending-related commitments
- Certain securities financing agreements
- 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
- Structured notes and other hybrid instruments, which are predominantly financial instruments that contain embedded derivatives, that are issued or transacted as part of client-driven activities
- Certain long-term beneficial interests issued by CIB’s consolidated securitization trusts where the underlying assets are carried at fair value

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 three and six months ended June 30, 2023 and 2022, for items for which the fair value option was elected. 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.

| (in millions) | Three months ended June 30, | | | | | |
|---|-----------------------------|-----------------------|---|------------------------|----------------------|---|
| | 2023 | | | 2022 | | |
| | Principal transactions | All other income | Total changes in fair value recorded ^(e) | Principal transactions | All other income | Total changes in fair value recorded ^(e) |
| Federal funds sold and securities purchased under resale agreements | \$ 18 | \$ – | \$ 18 | \$ (145) | \$ – | \$ (145) |
| Securities borrowed | (60) | – | (60) | (101) | – | (101) |
| Trading assets: | | | | | | |
| Debt and equity instruments, excluding loans | 1,160 | – | 1,160 | (1,255) | – | (1,255) |
| Loans reported as trading assets: | | | | | | |
| Changes in instrument-specific credit risk | 100 | – | 100 | (136) ^(f) | – | (136) |
| Other changes in fair value | 2 | 2 ^(c) | 4 | (11) | – | (11) |
| Loans: | | | | | | |
| Changes in instrument-specific credit risk | 6 | (5) ^(c) | 1 | (83) | 11 ^(c) | (72) |
| Other changes in fair value | (76) | (6) ^(c) | (82) | (501) | (260) ^(c) | (761) |
| Other assets | (16) | (1) ^(d) | (17) | (2) | 4 ^(d) | 2 |
| Deposits ^(a) | (395) | – | (395) | 382 | – | 382 |
| Federal funds purchased and securities loaned or sold under repurchase agreements | (8) | – | (8) | 124 | – | 124 |
| Short-term borrowings ^(a) | (110) | – | (110) | 471 | – | 471 |
| Trading liabilities | (15) | – | (15) | 54 | – | 54 |
| Beneficial interests issued by consolidated VIEs | – | – | – | – | – | – |
| Other liabilities | (1) | – | (1) | (7) | – | (7) |
| Long-term debt ^{(a)(b)} | (663) | (2) ^{(c)(d)} | (665) | 5,405 | 14 ^{(c)(d)} | 5,419 |

| (in millions) | Six months ended June 30, | | | | | |
|---|---------------------------|------------------------|---|------------------------|----------------------|---|
| | 2023 | | | 2022 | | |
| | Principal transactions | All other income | Total changes in fair value recorded ^(e) | Principal transactions | All other income | Total changes in fair value recorded ^(e) |
| Federal funds sold and securities purchased under resale agreements | \$ 220 | \$ — | \$ 220 | \$ (375) | \$ — | \$ (375) |
| Securities borrowed | 28 | — | 28 | (299) | — | (299) |
| Trading assets: | | | | | | |
| Debt and equity instruments, excluding loans | 2,755 | — | 2,755 | (911) | — | (911) |
| Loans reported as trading assets: | | | | | | |
| Changes in instrument-specific credit risk | 231 | — | 231 | (142) ^(f) | — | (142) |
| Other changes in fair value | 5 | 2 ^(c) | 7 | (22) | — | (22) |
| Loans: | | | | | | |
| Changes in instrument-specific credit risk | 71 | (4) ^(c) | 67 | (77) | 23 ^(c) | (54) |
| Other changes in fair value | 119 | 104 ^(c) | 223 | (1,220) | (774) ^(c) | (1,994) |
| Other assets | 14 | (1) ^(d) | 13 | 9 | 1 ^(d) | 10 |
| Deposits ^(a) | (868) | — | (868) | 784 | — | 784 |
| Federal funds purchased and securities loaned or sold under repurchase agreements | (69) | — | (69) | 206 | — | 206 |
| Short-term borrowings ^(a) | (269) | — | (269) | 773 | — | 773 |
| Trading liabilities | (30) | — | (30) | (12) | — | (12) |
| Beneficial interests issued by consolidated VIEs | — | — | — | (1) | — | (1) |
| Other liabilities | (1) | — | (1) | (4) | — | (4) |
| Long-term debt ^{(a)(b)} | (3,461) | (28) ^{(c)(d)} | (3,489) | 9,365 | 33 ^{(c)(d)} | 9,398 |

(a) Unrealized gains/(losses) due to instrument-specific credit risk (DVA) for liabilities for which the fair value option has been elected are recorded in OCI, while realized gains/(losses) are recorded in principal transactions revenue. Realized gains/(losses) due to instrument-specific credit risk recorded in principal transactions revenue were not material both for the three and six months ended June 30, 2023 and 2022.

(b) Long-term debt measured at fair value predominantly relates to structured notes. Although the risk associated with the structured notes is actively managed, the gains/(losses) reported in this table do not include the income statement impact of the risk management instruments used to manage such risk.

(c) Reported in mortgage fees and related income.

(d) Reported in other income.

(e) Changes in fair value exclude contractual interest, which is included in interest income and interest expense for all instruments other than certain hybrid financial instruments in CIB. Refer to Note 7 for further information regarding interest income and interest expense.

(f) Prior-period amounts have been revised to conform with the current presentation.

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 June 30, 2023, and December 31, 2022, for loans, long-term debt and long-term beneficial interests for which the fair value option has been elected.

| (in millions) | June 30, 2023 | | | December 31, 2022 | | |
|---|-----------------------------------|------------------|---|-----------------------------------|------------------|---|
| | Contractual principal outstanding | Fair value | Fair value over/(under) contractual principal outstanding | Contractual principal outstanding | Fair value | Fair value over/(under) contractual principal outstanding |
| Loans | | | | | | |
| Nonaccrual loans | | | | | | |
| Loans reported as trading assets | \$ 2,737 | \$ 529 | \$ (2,208) | \$ 2,517 | \$ 368 | \$ (2,149) |
| Loans | 911 | 760 | (151) | 967 | 829 | (138) |
| Subtotal | 3,648 | 1,289 | (2,359) | 3,484 | 1,197 | (2,287) |
| 90 or more days past due and government guaranteed | | | | | | |
| Loans ^(a) | 82 | 76 | (6) | 124 | 115 | (9) |
| All other performing loans^(b) | | | | | | |
| Loans reported as trading assets | 9,217 | 7,560 | (1,657) | 7,823 | 6,135 | (1,688) |
| Loans | 39,995 | 37,953 | (2,042) | 42,588 | 41,135 | (1,453) |
| Subtotal | 49,212 | 45,513 | (3,699) | 50,411 | 47,270 | (3,141) |
| Total loans | \$ 52,942 | \$ 46,878 | \$ (6,064) | \$ 54,019 | \$ 48,582 | \$ (5,437) |
| Long-term debt | | | | | | |
| Principal-protected debt | \$ 42,889 ^(d) | \$ 34,524 | \$ (8,365) | \$ 41,341 ^(d) | \$ 31,105 | \$ (10,236) |
| Nonprincipal-protected debt ^(c) | NA | 44,085 | NA | NA | 41,176 | NA |
| Total long-term debt | NA | \$ 78,609 | NA | NA | \$ 72,281 | NA |
| Long-term beneficial interests | | | | | | |
| Nonprincipal-protected debt ^(c) | NA | \$ 1 | NA | NA | \$ 5 | NA |
| Total long-term beneficial interests | NA | \$ 1 | NA | NA | \$ 5 | NA |

(a) These balances are excluded from nonaccrual loans as the loans are insured and/or guaranteed by U.S. government agencies.

(b) There were no performing loans that were ninety days or more past due as of June 30, 2023, and December 31, 2022.

(c) Remaining contractual principal is not applicable to nonprincipal-protected structured notes and long-term beneficial interests. Unlike principal-protected structured notes and long-term beneficial interests, for which the Firm is obligated to return a stated amount of principal at maturity, nonprincipal-protected structured notes and long-term beneficial interests do not obligate the Firm to return a stated amount of principal at maturity, but for structured notes to return an amount based on the performance of an underlying variable or derivative feature embedded in the note. However, investors are exposed to the credit risk of the Firm as issuer for both nonprincipal-protected and principal-protected notes.

(d) Where the Firm issues principal-protected zero-coupon or discount notes, the balance reflects the contractual principal payment at maturity or, if applicable, the contractual principal payment at the Firm's next call date.

At June 30, 2023, and December 31, 2022, the contractual amount of lending-related commitments for which the fair value option was elected was \$10.2 billion and \$7.6 billion, respectively, with a corresponding fair value of \$264 million and \$24 million, respectively. Refer to Note 28 of JPMorgan Chase's 2022 Form 10-K, and Note 24 of this Form 10-Q for further information regarding off-balance sheet lending-related financial instruments.

Structured note products by balance sheet classification and risk component

The following table presents the fair value of structured notes, by balance sheet classification and the primary risk type.

| (in millions) | June 30, 2023 | | | | December 31, 2022 | | | |
|-------------------------------|------------------|-----------------------|------------------|------------------|-------------------|-----------------------|------------------|------------------|
| | Long-term debt | Short-term borrowings | Deposits | Total | Long-term debt | Short-term borrowings | Deposits | Total |
| Risk exposure | | | | | | | | |
| Interest rate | \$ 34,860 | \$ 225 | \$46,527 | \$ 81,612 | \$ 31,973 | \$ 260 | \$ 24,655 | \$ 56,888 |
| Credit | 4,618 | 247 | – | 4,865 | 4,105 | 170 | – | 4,275 |
| Foreign exchange | 2,675 | 997 | 3 | 3,675 | 2,674 | 788 | 50 | 3,512 |
| Equity | 33,590 | 4,830 | 3,202 | 41,622 | 30,864 | 4,272 | 3,545 | 38,681 |
| Commodity | 2,017 | – | 1 ^(a) | 2,018 | 1,655 | 16 | 2 ^(a) | 1,673 |
| Total structured notes | \$ 77,760 | \$ 6,299 | \$49,733 | \$133,792 | \$ 71,271 | \$ 5,506 | \$ 28,252 | \$105,029 |

(a) Excludes deposits linked to precious metals for which the fair value option has not been elected of \$590 million and \$602 million for the periods ended June 30, 2023 and December 31, 2022, respectively.

Note 4 - Credit risk concentrations

Concentrations of credit risk arise when a number of clients, counterparties or 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 portfolios to assess potential credit risk concentrations and to obtain additional collateral when deemed necessary and permitted under the Firm's agreements. Senior management is significantly involved in the credit approval and review process, and risk levels are adjusted as needed to reflect the Firm's risk appetite.

In the Firm's consumer portfolio, concentrations are managed primarily by product and by U.S. geographic region, with a key focus on trends and concentrations at the portfolio level, where potential credit risk concentrations can be remedied through changes in underwriting policies and portfolio guidelines. Refer to Note 12 for additional information on the geographic composition of the Firm's consumer loan portfolios. In the wholesale portfolio, credit risk concentrations are evaluated primarily by industry and monitored regularly on both an aggregate portfolio level and on an individual client or counterparty basis.

The Firm's wholesale exposure is managed through loan syndications and participations, loan sales, securitizations, credit derivatives, master netting agreements, collateral and other risk-reduction techniques. Refer to Note 12 for additional information on loans.

The Firm does not believe that its exposure to any particular loan product or industry segment 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.

The table below presents both on-balance sheet and off-balance sheet consumer and wholesale credit exposure by the Firm's three credit portfolio segments as of June 30, 2023 and December 31, 2022. The wholesale industry of risk category is generally based on the client or counterparty's primary business activity.

| (in millions) | June 30, 2023 | | | | December 31, 2022 | | | |
|--|-----------------------------------|---------------------|------------------|----------------------------------|--------------------------------|------------------|-------------|----------------------------------|
| | Credit exposure ^{(h)(i)} | On-balance sheet | | Off-balance sheet ⁽ⁱ⁾ | Credit exposure ^(h) | On-balance sheet | | Off-balance sheet ⁽ⁱ⁾ |
| | | Loans | Derivatives | | | Loans | Derivatives | |
| Consumer, excluding credit card | \$ 459,050 | \$ 408,204 | \$ – | \$ 50,846 | \$ 344,893 | \$ 311,375 | \$ – | \$ 33,518 |
| Credit card^(a) | 1,072,833 | 191,348 | – | 881,485 | 1,006,459 | 185,175 | – | 821,284 |
| Total consumer^(a) | 1,531,883 | 599,552 | – | 932,331 | 1,351,352 | 496,550 | – | 854,802 |
| Wholesale^(b) | | | | | | | | |
| Real Estate | 206,912 | 165,069 | 331 | 41,512 | 170,857 | 131,681 | 249 | 38,927 |
| Individuals and Individual Entities ^(c) | 141,178 | 122,056 | 730 | 18,392 | 130,815 | 120,424 | 434 | 9,957 |
| Asset Managers | 138,143 | 52,730 | 14,751 | 70,662 | 95,656 | 40,511 | 16,397 | 38,748 |
| Consumer & Retail | 125,935 | 47,410 | 2,278 | 76,247 | 120,555 | 45,867 | 1,650 | 73,038 |
| Industrials | 77,206 | 27,537 | 1,424 | 48,245 | 72,483 | 26,960 | 1,770 | 43,753 |
| Technology, Media & Telecommunications | 76,444 | 21,159 | 2,601 | 52,684 | 72,286 | 21,622 | 2,950 | 47,714 |
| Healthcare | 65,547 | 22,727 | 1,720 | 41,100 | 62,613 | 22,970 | 1,683 | 37,960 |
| Banks & Finance Cos | 61,659 | 34,934 | 4,679 | 22,046 | 51,816 | 32,172 | 3,246 | 16,398 |
| State & Municipal Govt ^(d) | 37,157 | 20,656 | 457 | 16,044 | 33,847 | 18,147 | 585 | 15,115 |
| Utilities | 35,757 | 7,162 | 3,089 | 25,506 | 36,218 | 9,107 | 3,269 | 23,842 |
| Oil & Gas | 33,233 | 9,607 | 1,352 | 22,274 | 38,668 | 9,632 | 5,121 | 23,915 |
| Automotive | 32,947 | 15,169 | 602 | 17,176 | 33,287 | 14,735 | 529 | 18,023 |
| Chemicals & Plastics | 22,195 | 6,343 | 510 | 15,342 | 20,030 | 5,771 | 407 | 13,852 |
| Insurance | 21,874 | 2,772 | 8,175 | 10,927 | 21,045 | 2,387 | 8,081 | 10,577 |
| Central Govt | 16,845 | 3,670 | 10,827 | 2,348 | 19,095 | 3,167 | 12,955 | 2,973 |
| Metals & Mining | 15,631 | 4,786 | 311 | 10,534 | 15,915 | 5,398 | 475 | 10,042 |
| Transportation | 15,447 | 5,779 | 606 | 9,062 | 15,009 | 5,005 | 567 | 9,437 |
| Securities Firms | 9,077 | 957 | 3,392 | 4,728 | 8,066 | 556 | 3,387 | 4,123 |
| Financial Markets Infrastructure | 4,993 | 184 | 2,491 | 2,318 | 4,962 | 13 | 3,050 | 1,899 |
| All other ^(e) | 135,271 | 97,438 | 3,891 | 33,942 | 123,307 | 87,545 | 4,075 | 31,687 |
| Subtotal | 1,273,451 | 668,145 | 64,217 | 541,089 | 1,146,530 | 603,670 | 70,880 | 471,980 |
| Loans held-for-sale and loans at fair value | 32,372 | 32,372 | – | – | 35,427 | 35,427 | – | – |
| Receivables from customers ^(f) | 42,741 | – | – | – | 49,257 | – | – | – |
| Total wholesale | 1,348,564 | 700,517 | 64,217 | 541,089 | 1,231,214 | 639,097 | 70,880 | 471,980 |
| Total exposure^{(g)(h)} | \$ 2,880,447 | \$ 1,300,069 | \$ 64,217 | \$ 1,473,420 | \$ 2,582,566 | \$ 1,135,647 | \$ 70,880 | \$ 1,326,782 |

- (a) Also includes commercial card lending-related commitments primarily in CB and CIB.
- (b) The industry rankings presented in the table as of December 31, 2022, are based on the industry rankings of the corresponding exposures as of June 30, 2023, not actual rankings of such exposures at December 31, 2022.
- (c) Individuals and Individual Entities predominantly consists of Global Private Bank clients within AWM and J.P. Morgan Wealth Management within CCB, and includes exposure to personal investment companies and personal and testamentary trusts.
- (d) In addition to the credit risk exposure to states and municipal governments (both U.S. and non-U.S.) as of June 30, 2023 and December 31, 2022, noted above, the Firm held: \$6.8 billion and \$6.6 billion, respectively, of trading assets; \$24.0 billion and \$6.8 billion, respectively, of AFS securities; and \$11.6 billion and \$19.7 billion, respectively, of HTM securities, issued by U.S. state and municipal governments. Refer to Note 2 and Note 10 for further information.
- (e) All other includes: SPEs and Private education and civic organizations, representing approximately 94% and 6%, respectively, as of June 30, 2023 and 95% and 5%, respectively, as of December 31, 2022. Refer to Note 14 for more information on exposures to SPEs.
- (f) Receivables from customers reflect held-for-investment margin loans to brokerage clients in CIB, CCB and AWM that are collateralized by assets maintained in the clients' brokerage accounts (e.g., cash on deposit, liquid and readily marketable debt or equity securities). Because of this collateralization, no allowance for credit losses is generally held against these receivables. To manage its credit risk the Firm establishes margin requirements and monitors the required margin levels on an ongoing basis, and requires clients to deposit additional cash or other collateral, or to reduce positions, when appropriate. These receivables are reported within accrued interest and accounts receivable on the Firm's Consolidated balance sheets.
- (g) Excludes cash placed with banks of \$485.4 billion and \$556.6 billion, as of June 30, 2023 and December 31, 2022, respectively, which is predominantly placed with various central banks, primarily Federal Reserve Banks.
- (h) Credit exposure is net of risk participations and excludes the benefit of credit derivatives used in credit portfolio management activities held against derivative receivables or loans and liquid securities and other cash collateral held against derivative receivables.
- (i) Included credit exposure associated with the First Republic acquisition consisting of \$104.6 billion in the Consumer, excluding credit card portfolio, and \$98.2 billion in the Wholesale portfolio predominantly in Asset Managers, Real Estate, and Individuals and Individual Entities.
- (j) Represents lending-related financial instruments.

Note 5 - Derivative instruments

JPMorgan Chase makes markets in derivatives for clients and also uses derivatives to hedge or manage its own risk exposures. Refer to Note 5 of JPMorgan Chase's 2022 Form 10-K for a further discussion of the Firm's use of and accounting policies regarding derivative instruments.

The Firm's disclosures are based on the accounting treatment and purpose of these derivatives. A limited number of the Firm's derivatives are designated in hedge

accounting relationships and are disclosed according to the type of hedge (fair value hedge, cash flow hedge, or net investment hedge). Derivatives not designated in hedge accounting relationships include certain derivatives that are used to manage risks associated with specified assets and liabilities ("specified risk management" positions) as well as derivatives used in the Firm's market-making businesses or for other purposes.

The following table outlines the Firm's primary uses of derivatives and the related hedge accounting designation or disclosure category.

| Type of Derivative | Use of Derivative | Designation and disclosure | Affected segment or unit | 10-Q page reference |
|--|---|----------------------------|--------------------------|---------------------|
| Manage specifically identified risk exposures in qualifying hedge accounting relationships: | | | | |
| • Interest rate | Hedge fixed rate assets and liabilities | Fair value hedge | Corporate | 130-131 |
| • Interest rate | Hedge floating-rate assets and liabilities | Cash flow hedge | Corporate | 132 |
| • Foreign exchange | Hedge foreign currency-denominated assets and liabilities | Fair value hedge | Corporate | 130-131 |
| • Foreign exchange | Hedge foreign currency-denominated forecasted revenue and expense | Cash flow hedge | Corporate | 132 |
| • Foreign exchange | Hedge the value of the Firm's investments in non-U.S. dollar functional currency entities | Net investment hedge | Corporate | 133 |
| • Commodity | Hedge commodity inventory | Fair value hedge | CIB, AWM | 130-131 |
| Manage specifically identified risk exposures not designated in qualifying hedge accounting relationships: | | | | |
| • Interest rate | Manage the risk associated with mortgage commitments, warehouse loans and MSRs | Specified risk management | CCB | 134 |
| • Credit | Manage the credit risk associated with wholesale lending exposures | Specified risk management | CIB | 134 |
| • Interest rate and foreign exchange | Manage the risk associated with certain other specified assets and liabilities | Specified risk management | Corporate | 134 |
| Market-making derivatives and other activities: | | | | |
| • Various | Market-making and related risk management | Market-making and other | CIB | 134 |
| • Various | Other derivatives | Market-making and other | CIB, AWM, Corporate | 134 |

Notional amount of derivative contracts

The following table summarizes the notional amount of free-standing derivative contracts outstanding as of June 30, 2023, and December 31, 2022.

| (in billions) | Notional amounts ^(b) | |
|--|---------------------------------|-------------------|
| | June 30, 2023 | December 31, 2022 |
| Interest rate contracts | | |
| Swaps | \$ 29,292 | \$ 24,491 |
| Futures and forwards | 3,341 | 2,636 |
| Written options | 3,329 | 3,047 |
| Purchased options | 3,390 | 2,992 |
| Total interest rate contracts | 39,352 | 33,166 |
| Credit derivatives^(a) | 1,477 | 1,132 |
| Foreign exchange contracts | | |
| Cross-currency swaps | 4,436 | 4,196 |
| Spot, futures and forwards | 8,681 | 7,017 |
| Written options | 867 | 775 |
| Purchased options | 826 | 759 |
| Total foreign exchange contracts | 14,810 | 12,747 |
| Equity contracts | | |
| Swaps | 598 | 618 |
| Futures and forwards | 110 | 110 |
| Written options | 755 | 636 |
| Purchased options | 707 | 580 |
| Total equity contracts | 2,170 | 1,944 |
| Commodity contracts | | |
| Swaps | 137 | 136 |
| Spot, futures and forwards | 142 | 136 |
| Written options | 133 | 117 |
| Purchased options | 110 | 98 |
| Total commodity contracts | 522 | 487 |
| Total derivative notional amounts | \$ 58,331 | \$ 49,476 |

(a) Refer to the Credit derivatives discussion on page 135 for more information on volumes and types of credit derivative contracts.

(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 derivatives activity, the notional amounts significantly exceed, in the Firm's view, the possible losses that could arise from such transactions. For most derivative contracts, the notional amount is not exchanged; it is simply a reference amount used to calculate payments.

Impact of derivatives on the Consolidated balance sheets

The following table summarizes information on derivative receivables and payables (before and after netting adjustments) that are reflected on the Firm's Consolidated balance sheets as of June 30, 2023, and December 31, 2022, by accounting designation (e.g., whether the derivatives were designated in qualifying hedge accounting relationships or not) and contract type.

Free-standing derivative receivables and payables^(a)

| June 30, 2023 (in millions) | Gross derivative receivables | | | Net derivative receivables ^(b) | Gross derivative payables | | | Net derivative payables ^(b) |
|---|--------------------------------|-------------------------|------------------------------------|---|--------------------------------|-------------------------|---------------------------------|--|
| | 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 | \$ 288,312 | \$ — | \$ 288,312 | \$ 27,709 | \$ 277,334 | \$ 8 | \$ 277,342 | \$ 15,157 |
| Credit | 13,685 | — | 13,685 | 1,245 | 13,767 | — | 13,767 | 566 |
| Foreign exchange | 226,793 | 886 | 227,679 | 22,194 | 222,739 | 846 | 223,585 | 14,177 |
| Equity | 61,392 | — | 61,392 | 7,324 | 67,670 | — | 67,670 | 9,805 |
| Commodity | 16,872 | 768 | 17,640 | 5,745 | 18,465 | 820 | 19,285 | 6,840 |
| Total fair value of trading assets and liabilities | \$ 607,054 | \$ 1,654 | \$ 608,708 | \$ 64,217 | \$ 599,975 | \$ 1,674 | \$ 601,649 | \$ 46,545 |

| December 31, 2022 (in millions) | Gross derivative receivables | | | Net derivative receivables ^(b) | Gross derivative payables | | | Net derivative payables ^(b) |
|---|--------------------------------|-------------------------|------------------------------------|---|--------------------------------|-------------------------|---------------------------------|--|
| | 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 | \$ 300,411 | \$ 4 | \$ 300,415 | \$ 28,419 | \$ 290,291 | \$ — | \$ 290,291 | \$ 15,970 |
| Credit | 10,329 | — | 10,329 | 1,090 | 9,971 | — | 9,971 | 754 |
| Foreign exchange | 239,946 | 1,633 | 241,579 | 23,365 | 248,911 | 2,610 | 251,521 | 18,856 |
| Equity | 61,913 | — | 61,913 | 9,139 | 62,461 | — | 62,461 | 8,804 |
| Commodity | 23,652 | 1,705 | 25,357 | 8,867 | 20,758 | 2,511 | 23,269 | 6,757 |
| Total fair value of trading assets and liabilities | \$ 636,251 | \$ 3,342 | \$ 639,593 | \$ 70,880 | \$ 632,392 | \$ 5,121 | \$ 637,513 | \$ 51,141 |

(a) Balances exclude structured notes for which the fair value option has been elected. Refer to Note 3 for further information.

(b) As permitted under U.S. GAAP, the Firm has elected to net derivative receivables and derivative payables and the related cash collateral receivables and payables when a legally enforceable master netting agreement exists.

Derivatives netting

The following tables present, as of June 30, 2023, and December 31, 2022, gross and net derivative receivables and payables by contract and settlement type. Derivative receivables and payables, as well as the related cash collateral from the same counterparty, have been netted on the Consolidated balance sheets where the Firm has obtained an appropriate legal opinion with respect to the master netting agreement. Where such a legal opinion has not been either sought or obtained, amounts are not eligible for netting on the Consolidated balance sheets, and those derivative receivables and payables are shown separately in the tables below.

In addition to the cash collateral received and transferred that is presented on a net basis with derivative receivables and payables, the Firm receives and transfers additional collateral (financial instruments and cash). These amounts mitigate counterparty credit risk associated with the Firm's derivative instruments, but are not eligible for net presentation:

- collateral that consists of liquid securities and other cash collateral held at third-party custodians, which are shown separately as "Collateral not nettable on the Consolidated balance sheets" in the tables below, up to the fair value exposure amount. For the purpose of this disclosure, the definition of liquid securities is consistent with the definition of high quality liquid assets as defined in the LCR rule;
- the amount of collateral held or transferred that exceeds the fair value exposure at the individual counterparty level, as of the date presented, which is excluded from the tables below; and
- collateral held or transferred that relates to derivative receivables or payables where an appropriate legal opinion has not been either sought or obtained with respect to the master netting agreement, which is excluded from the tables below.

| (in millions) | June 30, 2023 | | | December 31, 2022 | | |
|---|------------------------------|---|------------------------------|------------------------------|---|------------------------------|
| | Gross derivative receivables | Amounts netted on the Consolidated balance sheets | Net derivative receivables | Gross derivative receivables | Amounts netted on the Consolidated balance sheets | Net derivative receivables |
| U.S. GAAP nettable derivative receivables | | | | | | |
| Interest rate contracts: | | | | | | |
| Over-the-counter ("OTC") | \$ 194,218 | \$ (168,569) | \$ 25,649 | \$ 203,922 | \$ (178,261) | \$ 25,661 |
| OTC-cleared | 91,665 | (91,508) | 157 | 93,800 | (93,424) | 376 |
| Exchange-traded ^(a) | 573 | (526) | 47 | 559 | (311) | 248 |
| Total interest rate contracts | 286,456 | (260,603) | 25,853 | 298,281 | (271,996) | 26,285 |
| Credit contracts: | | | | | | |
| OTC | 8,850 | (7,818) | 1,032 | 8,474 | (7,535) | 939 |
| OTC-cleared | 4,674 | (4,622) | 52 | 1,746 | (1,704) | 42 |
| Total credit contracts | 13,524 | (12,440) | 1,084 | 10,220 | (9,239) | 981 |
| Foreign exchange contracts: | | | | | | |
| OTC | 223,998 | (204,582) | 19,416 | 237,941 | (216,796) | 21,145 |
| OTC-cleared | 910 | (901) | 9 | 1,461 | (1,417) | 44 |
| Exchange-traded ^(a) | 11 | (2) | 9 | 15 | (1) | 14 |
| Total foreign exchange contracts | 224,919 | (205,485) | 19,434 | 239,417 | (218,214) | 21,203 |
| Equity contracts: | | | | | | |
| OTC | 24,672 | (21,496) | 3,176 | 30,323 | (25,665) | 4,658 |
| Exchange-traded ^(a) | 34,196 | (32,572) | 1,624 | 28,467 | (27,109) | 1,358 |
| Total equity contracts | 58,868 | (54,068) | 4,800 | 58,790 | (52,774) | 6,016 |
| Commodity contracts: | | | | | | |
| OTC | 9,317 | (5,539) | 3,778 | 14,430 | (7,633) | 6,797 |
| OTC-cleared | 111 | (111) | – | 120 | (112) | 8 |
| Exchange-traded ^(a) | 6,266 | (6,245) | 21 | 9,103 | (8,745) | 358 |
| Total commodity contracts | 15,694 | (11,895) | 3,799 | 23,653 | (16,490) | 7,163 |
| Derivative receivables with appropriate legal opinion | 599,461 | (544,491) | 54,970 ^(d) | 630,361 | (568,713) | 61,648 ^(d) |
| Derivative receivables where an appropriate legal opinion has not been either sought or obtained | 9,247 | | 9,247 | 9,232 | | 9,232 |
| Total derivative receivables recognized on the Consolidated balance sheets | \$ 608,708 | | \$ 64,217 | \$ 639,593 | | \$ 70,880 |
| Collateral not nettable on the Consolidated balance sheets ^{(b)(c)} | | | (23,282) | | | (23,014) |
| Net amounts | | | \$ 40,935 | | | \$ 47,866 |

| (in millions) | June 30, 2023 | | | December 31, 2022 | | |
|--|---------------------------|---|-------------------------|---------------------------|---|-------------------------|
| | Gross derivative payables | Amounts netted on the Consolidated balance sheets | Net derivative payables | Gross derivative payables | Amounts netted on the Consolidated balance sheets | Net derivative payables |
| U.S. GAAP nettable derivative payables | | | | | | |
| Interest rate contracts: | | | | | | |
| OTC | \$ 180,016 | \$ (167,127) | \$ 12,889 | \$ 190,108 | \$ (176,890) | \$ 13,218 |
| OTC-cleared | 94,771 | (94,554) | 217 | 97,417 | (97,126) | 291 |
| Exchange-traded ^(a) | 512 | (504) | 8 | 327 | (305) | 22 |
| Total interest rate contracts | 275,299 | (262,185) | 13,114 | 287,852 | (274,321) | 13,531 |
| Credit contracts: | | | | | | |
| OTC | 9,240 | (8,768) | 472 | 8,054 | (7,572) | 482 |
| OTC-cleared | 4,438 | (4,433) | 5 | 1,674 | (1,645) | 29 |
| Total credit contracts | 13,678 | (13,201) | 477 | 9,728 | (9,217) | 511 |
| Foreign exchange contracts: | | | | | | |
| OTC | 220,326 | (208,507) | 11,819 | 246,457 | (231,248) | 15,209 |
| OTC-cleared | 993 | (901) | 92 | 1,488 | (1,417) | 71 |
| Exchange-traded ^(a) | 15 | – | 15 | 20 | – | 20 |
| Total foreign exchange contracts | 221,334 | (209,408) | 11,926 | 247,965 | (232,665) | 15,300 |
| Equity contracts: | | | | | | |
| OTC | 28,206 | (25,293) | 2,913 | 29,833 | (26,554) | 3,279 |
| Exchange-traded ^(a) | 35,657 | (32,572) | 3,085 | 28,291 | (27,103) | 1,188 |
| Total equity contracts | 63,863 | (57,865) | 5,998 | 58,124 | (53,657) | 4,467 |
| Commodity contracts: | | | | | | |
| OTC | 9,591 | (6,061) | 3,530 | 11,954 | (7,642) | 4,312 |
| OTC-cleared | 116 | (116) | – | 112 | (112) | – |
| Exchange-traded ^(a) | 7,050 | (6,268) | 782 | 9,021 | (8,758) | 263 |
| Total commodity contracts | 16,757 | (12,445) | 4,312 | 21,087 | (16,512) | 4,575 |
| Derivative payables with appropriate legal opinion | 590,931 | (555,104) | 35,827 | 624,756 | (586,372) | 38,384 |
| Derivative payables where an appropriate legal opinion has not been either sought or obtained | 10,718 | | 10,718 | 12,757 | | 12,757 |
| Total derivative payables recognized on the Consolidated balance sheets | \$ 601,649 | | \$ 46,545 | \$ 637,513 | | \$ 51,141 |
| Collateral not nettable on the Consolidated balance sheets^{(b)(c)} | | | (4,248) | | | (3,318) |
| Net amounts | | | \$ 42,297 | | | \$ 47,823 |

(a) Exchange-traded derivative balances that relate to futures contracts are settled daily.

(b) Includes liquid securities and other cash collateral held at third-party custodians related to derivative instruments where an appropriate legal opinion has been obtained. For some counterparties, the collateral amounts of financial instruments may exceed the derivative receivables and derivative payables balances. Where this is the case, the total amount reported is limited to the net derivative receivables and net derivative payables balances with that counterparty.

(c) Derivative collateral relates only to OTC and OTC-cleared derivative instruments.

(d) Net derivatives receivable included cash collateral netted of \$52.5 billion and \$51.5 billion at June 30, 2023, and December 31, 2022, respectively. Net derivatives payable included cash collateral netted of \$63.2 billion and \$69.2 billion at June 30, 2023, and December 31, 2022, respectively. Derivative cash collateral relates to OTC and OTC-cleared derivative instruments.

Liquidity risk and credit-related contingent features

Refer to Note 5 of JPMorgan Chase's 2022 Form 10-K for a more detailed discussion of liquidity risk and credit-related contingent features related to the Firm's derivative contracts.

The following table shows the aggregate fair value of net derivative payables related to OTC and OTC-cleared derivatives that contain contingent collateral or termination features that may be triggered upon a ratings downgrade, and the associated collateral the Firm has posted in the normal course of business, at June 30, 2023, and December 31, 2022.

OTC and OTC-cleared derivative payables containing downgrade triggers

| (in millions) | June 30, 2023 | December 31, 2022 |
|---|---------------|-------------------|
| Aggregate fair value of net derivative payables | \$ 15,243 | \$ 16,023 |
| Collateral posted | 14,144 | 15,505 |

The following table shows the impact of a single-notch and two-notch downgrade of the long-term issuer ratings of JPMorgan Chase & Co. and its subsidiaries, predominantly JPMorgan Chase Bank, N.A., at June 30, 2023, and December 31, 2022, related to OTC and OTC-cleared derivative contracts with contingent collateral or termination features that may be triggered upon a ratings downgrade. Derivatives contracts generally require additional collateral to be posted or terminations to be triggered when the predefined rating threshold is breached. A downgrade by a single rating agency that does not result in a rating lower than a preexisting corresponding rating provided by another major rating agency will generally not result in additional collateral (except in certain instances in which additional initial margin may be required upon a ratings downgrade), nor in termination payment requirements. The liquidity impact in the table is calculated based upon a downgrade below the lowest current rating of the rating agencies referred to in the derivative contract.

Liquidity impact of downgrade triggers on OTC and OTC-cleared derivatives

| (in millions) | June 30, 2023 | | December 31, 2022 | |
|---|---------------------------|------------------------|---------------------------|------------------------|
| | Single-notch downgrade | Two-notch downgrade | Single-notch downgrade | Two-notch downgrade |
| Amount of additional collateral to be posted upon downgrade ^(a) | \$ 81 | \$ 1,241 | \$ 128 | \$ 1,293 |
| Amount required to settle contracts with termination triggers upon downgrade ^(b) | 80 | 811 | 88 | 925 |

(a) Includes the additional collateral to be posted for initial margin.

(b) Amounts represent fair values of derivative payables, and do not reflect collateral posted.

Derivatives executed in contemplation of a sale of the underlying financial asset

In certain instances the Firm enters into transactions in which it transfers financial assets but maintains the economic exposure to the transferred assets by entering into a derivative with the same counterparty in contemplation of the initial transfer. The Firm generally accounts for such transfers as collateralized financing transactions as described in Note 11, but in limited circumstances they may qualify to be accounted for as a sale and a derivative under U.S. GAAP. The amount of such transfers accounted for as a sale where the associated derivative was outstanding was not material at both June 30, 2023 and December 31, 2022.

Impact of derivatives on the Consolidated statements of income

The following tables provide information related to gains and losses recorded on derivatives based on their hedge accounting designation or purpose.

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 pre-tax gains/(losses) recorded on such derivatives and the related hedged items for the three and six months ended June 30, 2023 and 2022, respectively. The Firm includes gains/(losses) on the hedging derivative in the same line item in the Consolidated statements of income as the related hedged item.

| Three months ended June 30, 2023 (in millions) | Gains/(losses) recorded in income | | | Income statement impact of excluded components ^(e) | | OCI impact |
|---|-----------------------------------|-----------------|-------------------------|---|-----------------------|---|
| | Derivatives | Hedged items | Income statement impact | Amortization approach | Changes in fair value | Derivatives - Gains/(losses) recorded in OCI ^(f) |
| Contract type | | | | | | |
| Interest rate ^{(a)(b)} | \$ (151) | \$ 164 | \$ 13 | \$ – | \$ 5 | \$ – |
| Foreign exchange ^(c) | 254 | (188) | 66 | (156) | 66 | 15 |
| Commodity ^(d) | 422 | (290) | 132 | – | 133 | – |
| Total | \$ 525 | \$ (314) | \$ 211 | \$ (156) | \$ 204 | \$ 15 |

| Three months ended June 30, 2022 (in millions) | Gains/(losses) recorded in income | | | Income statement impact of excluded components ^(e) | | OCI impact |
|---|-----------------------------------|-----------------|-------------------------|---|-----------------------|---|
| | Derivatives | Hedged items | Income statement impact | Amortization approach | Changes in fair value | Derivatives - Gains/(losses) recorded in OCI ^(f) |
| Contract type | | | | | | |
| Interest rate ^{(a)(b)} | \$ (4,467) | \$ 4,367 | \$ (100) | \$ – | \$ (79) | \$ – |
| Foreign exchange ^(c) | (818) | 830 | 12 | (115) | 12 | 67 |
| Commodity ^(d) | (1,536) | 1,464 | (72) | – | (73) | – |
| Total | \$ (6,821) | \$ 6,661 | \$ (160) | \$ (115) | \$ (140) | \$ 67 |

| Six months ended June 30, 2023 (in millions) | Gains/(losses) recorded in income | | | Income statement impact of excluded components ^(e) | | OCI impact |
|---|-----------------------------------|---------------|-------------------------|---|-----------------------|---|
| | Derivatives | Hedged items | Income statement impact | Amortization approach | Changes in fair value | Derivatives - Gains/(losses) recorded in OCI ^(f) |
| Contract type | | | | | | |
| Interest rate ^{(a)(b)} | \$ 1,021 | \$ (940) | \$ 81 | \$ – | \$ 15 | \$ – |
| Foreign exchange ^(c) | 412 | (282) | 130 | (329) | 130 | (13) |
| Commodity ^(d) | (1,118) | 1,335 | 217 | – | 217 | – |
| Total | \$ 315 | \$ 113 | \$ 428 | \$ (329) | \$ 362 | \$ (13) |

| Six months ended June 30, 2022 (in millions) | Gains/(losses) recorded in income | | | Income statement impact of excluded components ^(e) | | OCI impact |
|---|-----------------------------------|------------------|-------------------------|---|-----------------------|---|
| | Derivatives | Hedged items | Income statement impact | Amortization approach | Changes in fair value | Derivatives - Gains/(losses) recorded in OCI ^(f) |
| Contract type | | | | | | |
| Interest rate ^{(a)(b)} | \$ (11,537) | \$ 11,348 | \$ (189) | \$ – | \$ (145) | \$ – |
| Foreign exchange ^(c) | (1,508) | 1,518 | 10 | (180) | 10 | 212 |
| Commodity ^(d) | (1,712) | 1,611 | (101) | – | (110) | – |
| Total | \$ (14,757) | \$ 14,477 | \$ (280) | \$ (180) | \$ (245) | \$ 212 |

- (a) Primarily consists of hedges of the benchmark (e.g., Secured Overnight Financing Rate (“SOFR”)) interest rate risk of fixed-rate long-term debt and AFS securities. Gains and losses were recorded in net interest income.
- (b) Includes the amortization of income/expense associated with the inception hedge accounting adjustment applied to the hedged item. Excludes the accrual of interest on interest rate swaps and the related hedged items.
- (c) 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 foreign currency rates and the income statement impact of excluded components were recorded primarily in principal transactions revenue and net interest income.
- (d) Consists of overall fair value hedges of physical commodities inventories that are generally carried at the lower of cost or net realizable value (net realizable value approximates fair value). Gains and losses were recorded in principal transactions revenue.
- (e) The assessment of hedge effectiveness excludes certain components of the changes in fair values of the derivatives and hedged items such as forward points on foreign exchange forward contracts, time values and cross-currency basis spreads. Excluded components may impact earnings either through amortization of the initial amount over the life of the derivative, or through fair value changes recognized in the current period.
- (f) Represents the change in value of amounts excluded from the assessment of effectiveness under the amortization approach, predominantly cross-currency basis spreads. The amount excluded at inception of the hedge is recognized in earnings over the life of the derivative.

As of June 30, 2023 and December 31, 2022, the following amounts were recorded on the Consolidated balance sheets related to certain cumulative fair value hedge basis adjustments that are expected to reverse through the income statement in future periods as an adjustment to yield.

| June 30, 2023 (in millions) | Carrying amount of the hedged items ^{(a)(b)} | Cumulative amount of fair value hedging adjustments included in the carrying amount of hedged items: | | |
|--------------------------------|--|---|---|------------|
| | | Active hedging relationships ^(d) | Discontinued hedging relationships ^{(d)(e)} | Total |
| Assets | | | | |
| Investment securities - AFS | \$ 136,444 ^(c) | \$ (2,752) | \$ (3,462) | \$ (6,214) |
| Liabilities | | | | |
| Long-term debt | 176,509 | (5,857) | (9,105) | (14,962) |

| December 31, 2022 (in millions) | Carrying amount of the hedged items ^{(a)(b)(c)} | Cumulative amount of fair value hedging adjustments included in the carrying amount of hedged items: | | |
|------------------------------------|---|---|---|------------|
| | | Active hedging relationships ^(d) | Discontinued hedging relationships ^{(d)(e)} | Total |
| Assets | | | | |
| Investment securities - AFS | \$ 84,073 ^(c) | \$ (4,149) | \$ (1,542) | \$ (5,691) |
| Liabilities | | | | |
| Long-term debt | 175,257 | (11,879) | (3,313) | (15,192) |

- (a) Excludes physical commodities with a carrying value of \$12.8 billion and \$26.0 billion at June 30, 2023 and December 31, 2022, respectively, to which the Firm applies fair value hedge accounting. As a result of the application of hedge accounting, these inventories are carried at fair value, thus recognizing unrealized gains and losses in current periods. Since the Firm exits these positions at fair value, there is no incremental impact to net income in future periods.
- (b) Excludes hedged items where only foreign currency risk is the designated hedged risk, as basis adjustments related to foreign currency hedges will not reverse through the income statement in future periods. At June 30, 2023 and December 31, 2022, the carrying amount excluded for AFS securities is \$20.9 billion and \$20.3 billion, respectively, and for long-term debt is \$216 million and \$221 million, respectively.
- (c) Carrying amount represents the amortized cost, net of allowance if applicable. Effective January 1, 2023, the Firm adopted the new portfolio layer method hedge accounting guidance which expanded the ability to hedge a portfolio of prepayable assets to allow more of the portfolio to be hedged. At June 30, 2023, the amortized cost of the portfolio layer method closed portfolios was \$67.8 billion, of which \$49.6 billion was designated as hedged. The cumulative amount of basis adjustments was \$(1.1) billion, reflecting \$(865) million and \$(229) million for active and discontinued hedging relationships, respectively. Refer to Note 1 and Note 10 for additional information.
- (d) Positive (negative) amounts related to assets represent cumulative fair value hedge basis adjustments that will reduce (increase) net interest income in future periods. Positive (negative) amounts related to liabilities represent cumulative fair value hedge basis adjustments that will increase (reduce) net interest income in future periods.
- (e) Represents basis adjustments existing on the balance sheet date associated with hedged items that have been de-designated from qualifying fair value hedging relationships.

Cash flow hedge gains and losses

The following tables present derivative instruments, by contract type, used in cash flow hedge accounting relationships, and the pre-tax gains/(losses) recorded on such derivatives, for the three and six months ended June 30, 2023 and 2022, respectively. The Firm includes the gains/(losses) on the hedging derivative in the same line item in the Consolidated statements of income as the change in cash flows on the related hedged item.

| Three months ended June 30, 2023 (in millions) | Derivatives gains/(losses) recorded in income and other comprehensive income/(loss) | | |
|---|---|----------------------------|-----------------------------------|
| | Amounts reclassified from AOCI to income | Amounts recorded in OCI | Total change in OCI for period |
| Contract type | | | |
| Interest rate ^(a) | \$ (474) | \$ (1,199) | \$ (725) |
| Foreign exchange ^(b) | 9 | 80 | 71 |
| Total | \$ (465) | \$ (1,119) | \$ (654) |

| Three months ended June 30, 2022 (in millions) | Derivatives gains/(losses) recorded in income and other comprehensive income/(loss) | | |
|---|---|----------------------------|-----------------------------------|
| | Amounts reclassified from AOCI to income | Amounts recorded in OCI | Total change in OCI for period |
| Contract type | | | |
| Interest rate ^(a) | \$ 86 | \$ (1,509) | \$ (1,595) |
| Foreign exchange ^(b) | (62) | (241) | (179) |
| Total | \$ 24 | \$ (1,750) | \$ (1,774) |

| Six months ended June 30, 2023 (in millions) | Derivatives gains/(losses) recorded in income and other comprehensive income/(loss) | | |
|---|---|----------------------------|-----------------------------------|
| | Amounts reclassified from AOCI to income | Amounts recorded in OCI | Total change in OCI for period |
| Contract type | | | |
| Interest rate ^(a) | \$ (902) | \$ (738) | \$ 164 |
| Foreign exchange ^(b) | (46) | 186 | 232 |
| Total | \$ (948) | \$ (552) | \$ 396 |

| Six months ended June 30, 2022 (in millions) | Derivatives gains/(losses) recorded in income and other comprehensive income/(loss) | | |
|---|---|----------------------------|-----------------------------------|
| | Amounts reclassified from AOCI to income | Amounts recorded in OCI | Total change in OCI for period |
| Contract type | | | |
| Interest rate ^(a) | \$ 329 | \$ (4,870) | \$ (5,199) |
| Foreign exchange ^(b) | (68) | (316) | (248) |
| Total | \$ 261 | \$ (5,186) | \$ (5,447) |

(a) Primarily consists of hedges of SOFR-indexed floating-rate assets. 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 noninterest revenue and compensation expense.

The Firm did not experience any forecasted transactions that failed to occur for the three and six months ended June 30, 2023 and 2022.

Over the next 12 months, the Firm expects that approximately \$(1.3) billion (after-tax) of net losses recorded in AOCI at June 30, 2023, related to cash flow hedges will be recognized in income. For cash flow hedges that have been terminated, the maximum length of time over which the derivative results recorded in AOCI will be recognized in earnings is approximately seven years, corresponding to the timing of the originally hedged forecasted cash flows. For open cash flow hedges, the maximum length of time over which forecasted transactions are hedged is approximately seven years. The Firm's longer-dated forecasted transactions 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 pre-tax gains/(losses) recorded on such instruments for the three and six months ended June 30, 2023 and 2022.

| Three months ended June 30, (in millions) | Gains/(losses) recorded in income and other comprehensive income/(loss) | | | |
|--|---|----------------------------|---|----------------------------|
| | 2023 | | 2022 | |
| | Amounts recorded in income ^{(a)(b)} | Amounts recorded in OCI | Amounts recorded in income ^{(a)(b)} | Amounts recorded in OCI |
| Foreign exchange derivatives | \$ 121 | \$ (88) | \$ (116) | \$ 3,520 |

| Six months ended June 30, (in millions) | Gains/(losses) recorded in income and other comprehensive income/(loss) | | | |
|--|---|----------------------------|---|----------------------------|
| | 2023 | | 2022 | |
| | Amounts recorded in income ^{(a)(b)} | Amounts recorded in OCI | Amounts recorded in income ^{(a)(b)} | Amounts recorded in OCI |
| Foreign exchange derivatives | \$ 205 | \$ (1,092) | \$ (247) | \$ 3,858 |

(a) Certain components of hedging derivatives are permitted to be excluded from the assessment of hedge effectiveness, such as forward points on foreign exchange forward contracts. The Firm elects to record changes in fair value of these amounts directly in other income.

(b) Excludes amounts reclassified from AOCI to income on the sale or liquidation of hedged entities. Excludes amounts reclassified from AOCI to income on the sale or liquidation of hedged entities. During the six months ended June 30, 2023, the Firm reclassified a pre-tax loss of \$41 million to other revenue related to the acquisition of CIFM. The amounts reclassified for the three months ended June 30, 2023 and three and six months ended June 30, 2022 were not material. Refer to Note 21 for further information.

Gains and losses on derivatives used for specified risk management purposes

The following table presents pre-tax gains/(losses) recorded on a limited number of derivatives, not designated in hedge accounting relationships, that are used to manage risks associated with certain specified assets and liabilities, including certain risks arising from mortgage commitments, warehouse loans, MSRs, wholesale lending exposures, and foreign currency-denominated assets and liabilities.

| | Derivatives gains/(losses) recorded in income | | | |
|---------------------------------|---|-----------------|---------------------------|-----------------|
| | Three months ended June 30, | | Six months ended June 30, | |
| (in millions) | 2023 | 2022 | 2023 | 2022 |
| Contract type | | | | |
| Interest rate ^(a) | \$ (112) | \$ (309) | \$ (126) | \$ (538) |
| Credit ^(b) | (67) | 89 | (163) | 122 |
| Foreign exchange ^(c) | 41 | 6 | 43 | (76) |
| Total | \$ (138) | \$ (214) | \$ (246) | \$ (492) |

- (a) Primarily represents interest rate derivatives used to hedge the interest rate risk inherent in mortgage commitments, warehouse loans and MSRs, as well as written commitments to originate warehouse loans. Gains and losses were recorded predominantly in mortgage fees and related income.
- (b) Relates to credit derivatives used to mitigate credit risk associated with lending exposures in the Firm's wholesale businesses. These derivatives do not include credit derivatives used to mitigate counterparty credit risk arising from derivative receivables, which is included in gains and losses on derivatives related to market-making activities and other derivatives. Gains and losses were recorded in principal transactions revenue.
- (c) Primarily relates to derivatives used to mitigate foreign exchange risk of specified foreign currency-denominated assets and liabilities. Gains and losses were recorded in principal transactions revenue.

Gains and losses on derivatives related to market-making activities and other derivatives

The Firm makes markets in derivatives in order to meet the needs of customers and uses derivatives to manage certain risks associated with net open risk positions from its market-making activities, including the counterparty credit risk arising from derivative receivables. All derivatives not included in the hedge accounting or specified risk management categories above are included in this category. Gains and losses on these derivatives are primarily recorded in principal transactions revenue. Refer to Note 6 for information on principal transactions revenue.

Credit derivatives

Refer to Note 5 of JPMorgan Chase's 2022 Form 10-K for a more detailed discussion of credit derivatives. The following tables present a summary of the notional amounts of credit derivatives and credit-related notes the Firm sold and purchased as of June 30, 2023 and December 31, 2022. The Firm does not use notional amounts of credit derivatives as the primary measure of risk management for such 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, each of which reduces, in the Firm's view, the risks associated with such derivatives.

Total credit derivatives and credit-related notes

| June 30, 2023 (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 | \$ (649,720) | \$ 677,813 | \$ 28,093 | \$ 5,774 |
| Other credit derivatives ^(a) | (55,887) | 73,831 | 17,944 | 13,765 |
| Total credit derivatives | (705,607) | 751,644 | 46,037 | 19,539 |
| Credit-related notes ^(b) | — | — | — | 8,064 |
| Total | \$ (705,607) | \$ 751,644 | \$ 46,037 | \$ 27,603 |

| December 31, 2022 (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 | \$ (495,557) | \$ 509,846 | \$ 14,289 | \$ 2,917 |
| Other credit derivatives ^(a) | (47,165) | 65,029 | 17,864 | 11,746 |
| Total credit derivatives | (542,722) | 574,875 | 32,153 | 14,663 |
| Credit-related notes ^(b) | — | — | — | 7,863 |
| Total | \$ (542,722) | \$ 574,875 | \$ 32,153 | \$ 22,526 |

(a) Other credit derivatives predominantly consist of credit swap options and total return swaps.

(b) Represents Other protection purchased by CIB, primarily in its market-making businesses.

(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 on referenced instruments (single-name, portfolio or index) where the Firm has not sold any protection on the identical reference instrument.

The following tables summarize the notional amounts by the ratings, maturity profile, and total fair value, of credit derivatives as of June 30, 2023, and December 31, 2022, 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 credit derivatives where JPMorgan Chase is the purchaser of protection are comparable to the profile reflected below.

Protection sold – credit derivatives ratings^(a)/maturity profile

| June 30, 2023 (in millions) | <1 year | 1-5 years | >5 years | Total notional amount | Fair value of receivables ^(b) | Fair value of payables ^(b) | Net fair value |
|--|---------------------|---------------------|--------------------|-----------------------|--|---------------------------------------|-----------------|
| Risk rating of reference entity | | | | | | | |
| Investment-grade | \$ (103,323) | \$ (412,661) | \$ (37,836) | \$ (553,820) | \$ 4,357 | \$ (1,281) | \$ 3,076 |
| Noninvestment-grade | (38,784) | (106,800) | (6,203) | (151,787) | 2,575 | (3,606) | (1,031) |
| Total | \$ (142,107) | \$ (519,461) | \$ (44,039) | \$ (705,607) | \$ 6,932 | \$ (4,887) | \$ 2,045 |

| December 31, 2022 (in millions) | <1 year | 1-5 years | >5 years | Total notional amount | Fair value of receivables ^(b) | Fair value of payables ^(b) | Net fair value |
|--|---------------------|---------------------|--------------------|-----------------------|--|---------------------------------------|-------------------|
| Risk rating of reference entity | | | | | | | |
| Investment-grade | \$ (90,484) | \$ (294,791) | \$ (30,822) | \$ (416,097) | \$ 2,324 | \$ (1,495) | \$ 829 |
| Noninvestment-grade | (33,244) | (87,011) | (6,370) | (126,625) | 1,267 | (3,209) | (1,942) |
| Total | \$ (123,728) | \$ (381,802) | \$ (37,192) | \$ (542,722) | \$ 3,591 | \$ (4,704) | \$ (1,113) |

(a) The ratings scale is primarily based on external credit ratings defined by S&P and Moody's.

(b) Amounts are shown on a gross basis, before the benefit of legally enforceable master netting agreements including cash collateral netting.

Note 6 – Noninterest revenue and noninterest expense

Noninterest revenue

Refer to Note 6 of JPMorgan Chase’s 2022 Form 10-K for a discussion of the components of and accounting policies for the Firm’s noninterest revenue.

Investment banking fees

The following table presents the components of investment banking fees.

| (in millions) | Three months ended June 30, | | Six months ended June 30, | |
|--------------------------------------|--------------------------------|-----------------|------------------------------|-----------------|
| | 2023 | 2022 | 2023 | 2022 |
| Underwriting | | | | |
| Equity | \$ 317 | \$ 230 | \$ 550 | \$ 472 |
| Debt | 704 | 711 | 1,376 | 1,685 |
| Total underwriting | 1,021 | 941 | 1,926 | 2,157 |
| Advisory | 492 | 645 | 1,236 | 1,437 |
| Total investment banking fees | \$ 1,513 | \$ 1,586 | \$ 3,162 | \$ 3,594 |

Principal transactions

The following table presents all realized and unrealized gains and losses recorded in principal transactions revenue. This table excludes interest income and interest expense on trading assets and liabilities, which are an integral part of the overall performance of the Firm’s client-driven market-making activities in CIB and fund deployment activities in Treasury and CIO. Refer to Note 7 for further information on interest income and interest expense.

Trading revenue is presented primarily by instrument type. The Firm’s client-driven market-making businesses generally utilize a variety of instrument types in connection with their market-making and related risk-management activities; accordingly, the trading revenue presented in the table below is not representative of the total revenue of any individual LOB.

| (in millions) | Three months ended June 30, | | Six months ended June 30, | |
|---|--------------------------------|-----------------|------------------------------|------------------|
| | 2023 | 2022 | 2023 | 2022 |
| Trading revenue by instrument type | | | | |
| Interest rate ^(a) | \$ 1,781 | \$ 376 | \$ 3,567 | \$ 845 |
| Credit ^(b) | 419 | 279 | 1,053 | 736 |
| Foreign exchange | 1,435 | 1,425 | 2,986 | 2,749 |
| Equity | 2,941 | 2,303 | 5,634 | 4,558 |
| Commodity | 368 | 499 | 1,294 | 1,246 |
| Total trading revenue | 6,944 | 4,882 | 14,534 | 10,134 |
| Private equity gains/(losses) | (34) | 108 | (9) | (39) |
| Principal transactions | \$ 6,910 | \$ 4,990 | \$ 14,525 | \$ 10,095 |

- (a) Includes the impact of changes in funding valuation adjustments on derivatives.
(b) Includes the impact of changes in credit valuation adjustments on derivatives, net of the associated hedging activities.
(c) Includes markdowns on held-for-sale positions, primarily unfunded commitments, in the bridge financing portfolio.

Lending- and deposit-related fees

The following table presents the components of lending- and deposit-related fees.

| (in millions) | Three months ended June 30, | | Six months ended June 30, | |
|--|--------------------------------|-----------------|------------------------------|-----------------|
| | 2023 | 2022 | 2023 | 2022 |
| Lending-related fees ^(a) | \$ 590 | \$ 362 | \$ 959 | \$ 724 |
| Deposit-related fees | 1,238 | 1,511 | 2,489 | 2,988 |
| Total lending- and deposit-related fees | \$ 1,828 | \$ 1,873 | \$ 3,448 | \$ 3,712 |

(a) Includes the impact of the First Republic acquisition. Refer to Note 28 for additional information.

Deposit-related fees include the impact of credits earned by clients that reduce such fees.

Asset management fees

The following table presents the components of asset management fees.

| (in millions) | Three months ended June 30, | | Six months ended June 30, | |
|--|--------------------------------|-----------------|------------------------------|-----------------|
| | 2023 | 2022 | 2023 | 2022 |
| Asset management fees | | | | |
| Investment management fees ^{(a)(b)} | \$ 3,695 | \$ 3,425 | \$ 7,085 | \$ 6,987 |
| All other asset management fees ^(c) | 79 | 92 | 154 | 182 |
| Total asset management fees | \$ 3,774 | \$ 3,517 | \$ 7,239 | \$ 7,169 |

(a) Represents fees earned from managing assets on behalf of the Firm’s clients, including investors in Firm-sponsored funds and owners of separately managed investment accounts.

(b) Includes the impact of the First Republic acquisition. Refer to Note 28 for additional information.

(c) Represents fees for services that are ancillary to investment management services, such as commissions earned on the sales or distribution of mutual funds to clients.

Commissions and other fees

The following table presents the components of commissions and other fees.

| (in millions) | Three months ended June 30, | | Six months ended June 30, | |
|---|--------------------------------|-----------------|------------------------------|-----------------|
| | 2023 | 2022 | 2023 | 2022 |
| Commissions and other fees | | | | |
| Brokerage commissions ^(a) | \$ 722 | \$ 738 | \$ 1,469 | \$ 1,548 |
| Administration fees ^(b) | 575 | 590 | 1,132 | 1,223 |
| All other commissions and fees ^(c) | 442 | 395 | 833 | 662 |
| Total commissions and other fees | \$ 1,739 | \$ 1,723 | \$ 3,434 | \$ 3,433 |

(a) Represents commissions earned when the Firm acts as a broker, by facilitating its clients’ purchases and sales of securities and other financial instruments.

(b) Predominantly includes fees for custody, securities lending, funds services and securities clearance.

(c) Includes travel-related and annuity sales commissions, depository receipt-related service fees, as well as other service fees, which are recognized as revenue when the services are rendered.

Card income

The following table presents the components of card income.

| (in millions) | Three months ended June 30, | | Six months ended June 30, | |
|--|--------------------------------|-----------------|------------------------------|-----------------|
| | 2023 | 2022 | 2023 | 2022 |
| Interchange and merchant processing income | \$ 7,885 | \$ 7,214 | \$ 15,024 | \$ 13,449 |
| Rewards costs and partner payments | (6,392) | (5,641) | (11,901) | (10,511) |
| Other card income ^(a) | (399) | (440) | (795) | (830) |
| Total card income | \$ 1,094 | \$ 1,133 | \$ 2,328 | \$ 2,108 |

(a) Predominantly represents the amortization of account origination costs and annual fees.

Refer to Note 15 for further information on **mortgage fees and related income**.

Other income

This revenue category includes operating lease income, as well as losses associated with the Firm's tax-oriented investments, predominantly alternative energy equity-method investments in CIB.

The following table presents certain components of other income:

| (in millions) | Three months ended June 30, | | Six months ended June 30, | |
|---|--------------------------------|--------|------------------------------|----------|
| | 2023 | 2022 | 2023 | 2022 |
| Operating lease income | \$ 716 | \$ 945 | \$ 1,471 | \$ 1,993 |
| Losses on tax-oriented investments ^(a) | (462) | (427) | (874) | (835) |
| Estimated bargain purchase gain associated with the First Republic acquisition ^(b) | 2,712 | — | 2,712 | — |
| Gain related to the acquisition of CIFM ^(c) | — | — | 339 | — |

(a) The losses associated with these tax-oriented investments are more than offset by lower income tax expense from the associated tax credits.

(b) Refer to Note 28 for additional information on the First Republic acquisition.

(c) Gain on the original minority interest in CIFM upon the Firm's acquisition of the remaining 51% of the entity.

Refer to Note 17 for information on operating lease income included within other income.

Noninterest expense

Other expense

Other expense on the Firm's Consolidated statements of income includes the following:

| (in millions) | Three months ended June 30, | | Six months ended June 30, | |
|---|--------------------------------|-------|------------------------------|--------|
| | 2023 | 2022 | 2023 | 2022 |
| Legal expense | \$ 420 | \$ 73 | \$ 596 | \$ 192 |
| FDIC-related expense | 338 | 216 | 655 | 414 |
| First Republic-related expense ^(a) | 599 | — | 599 | — |

(a) Refer to Note 28 for additional information on the First Republic acquisition.

FDIC Special Assessment

In May 2023, the FDIC issued a notice of proposed rulemaking recommending a special assessment related to the systemic risk determination made on March 12, 2023, to recover losses to the Deposit Insurance Fund ("DIF") arising from the protection of uninsured depositors resulting from recent bank resolutions. In its current form, the rule would impose a special assessment at an annual rate of 12.5 basis points on certain banks' estimated uninsured deposits reported as of December 31, 2022. The Firm expects to be subject to special assessments imposed by the FDIC to recover losses to the DIF.

Note 7 – Interest income and Interest expense

Refer to Note 7 of JPMorgan Chase's 2022 Form 10-K for a description of JPMorgan Chase's accounting policies regarding interest income and interest expense.

The following table presents the components of interest income and interest expense.

| (in millions) | Three months ended June 30, | | Six months ended June 30, | |
|--|--------------------------------|------------------|------------------------------|------------------|
| | 2023 | 2022 | 2023 | 2022 |
| Interest income | | | | |
| Loans ^(a) | \$ 20,306 | \$ 11,626 | \$ 38,014 | \$ 22,259 |
| Taxable securities | 4,194 | 2,289 | 8,161 | 4,268 |
| Non-taxable securities ^(b) | 343 | 245 | 591 | 490 |
| Total investment securities^(a) | 4,537 | 2,534 | 8,752 | 4,758 |
| Trading assets - debt instruments | 4,013 | 2,049 | 7,659 | 3,816 |
| Federal funds sold and securities purchased under resale agreements | 3,767 | 543 | 6,898 | 940 |
| Securities borrowed | 1,866 | 173 | 3,582 | 86 |
| Deposits with banks | 5,189 | 1,079 | 10,008 | 1,317 |
| All other interest-earning assets ^(c) | 1,966 | 642 | 3,735 | 966 |
| Total interest income | \$ 41,644 | \$ 18,646 | \$ 78,648 | \$ 34,142 |
| Interest expense | | | | |
| Interest-bearing deposits | \$ 9,591 | \$ 898 | \$ 17,228 | \$ 1,080 |
| Federal funds purchased and securities loaned or sold under repurchase agreements | 3,400 | 445 | 6,204 | 558 |
| Short-term borrowings ^(d) | 428 | 113 | 849 | 157 |
| Trading liabilities - debt and all other interest-bearing liabilities ^(e) | 2,373 | 471 | 4,344 | 662 |
| Long-term debt | 3,876 | 1,561 | 7,189 | 2,637 |
| Beneficial interest issued by consolidated VIEs | 197 | 30 | 344 | 48 |
| Total interest expense | \$ 19,865 | \$ 3,518 | \$ 36,158 | \$ 5,142 |
| Net interest income | \$ 21,779 | \$ 15,128 | \$ 42,490 | \$ 29,000 |
| Provision for credit losses | 2,899 | 1,101 | 5,174 | 2,564 |
| Net interest income after provision for credit losses | \$ 18,880 | \$ 14,027 | \$ 37,316 | \$ 26,436 |

- (a) Includes the amortization/accretion of unearned income (e.g., purchase premiums/discounts and net deferred fees/costs).
- (b) Represents securities which are tax-exempt for U.S. federal income tax purposes.
- (c) Includes interest earned on brokerage-related held-for-investment customer receivables, which are classified in accrued interest and accounts receivable, and all other interest-earning assets which are classified in other assets on the Consolidated balance sheets.
- (d) Includes commercial paper.
- (e) All other interest-bearing liabilities includes interest expense on brokerage-related customer payables.

Note 8 – Pension and other postretirement employee benefit plans

Refer to Note 8 of JPMorgan Chase’s 2022 Form 10-K for a discussion of JPMorgan Chase’s pension and OPEB plans.

The following table presents the net periodic benefit costs reported in the Consolidated statements of income for the Firm’s defined benefit pension, defined contribution and OPEB plans.

| (in millions) | Three months ended June 30, | | Six months ended June 30, | |
|--|-----------------------------|---------------|---------------------------|---------------|
| | 2023 | 2022 | 2023 | 2022 |
| | Pension and OPEB plans | | Pension and OPEB plans | |
| Total net periodic defined benefit plan cost/(credit) | \$ (94) | \$ (75) | \$ (188) | \$ (139) |
| Total defined contribution plans | 397 | 357 | 762 | 701 |
| Total pension and OPEB cost included in noninterest expense | \$ 303 | \$ 282 | \$ 574 | \$ 562 |

As of June 30, 2023 and December 31, 2022, the fair values of plan assets for the Firm’s significant defined benefit pension and OPEB plans were \$20.5 billion and \$19.9 billion, respectively.

Note 9 – Employee share-based incentives

Refer to Note 9 of JPMorgan Chase’s 2022 Form 10-K for a discussion of the accounting policies and other information relating to employee share-based incentives.

The Firm recognized the following noncash compensation expense related to its various employee share-based incentive plans in its Consolidated statements of income.

| (in millions) | Three months ended June 30, | | Six months ended June 30, | |
|---|--------------------------------|---------------|------------------------------|-----------------|
| | 2023 | 2022 | 2023 | 2022 |
| Cost of prior grants of restricted stock units (“RSUs”), performance share units (“PSUs”) and stock appreciation rights (“SARs”) that are amortized over their applicable vesting periods | \$ 449 | \$ 378 | \$ 806 | \$ 649 |
| Accrual of estimated costs of share-based awards to be granted in future periods, predominantly those to full-career eligible employees | 385 | 441 | 898 | 976 |
| Total noncash compensation expense related to employee share-based incentive plans | \$ 834 | \$ 819 | \$ 1,704 | \$ 1,625 |

In the first quarter of 2023, in connection with its annual incentive grant for the 2022 performance year, the Firm granted 20 million RSUs and 801 thousand PSUs with weighted-average grant date fair values of \$138.57 per RSU and \$139.81 per PSU.

Note 10 – Investment securities

Investment securities consist of debt securities that are classified as AFS or HTM. Debt securities classified as trading assets are discussed in Note 2. Predominantly all of the Firm's AFS and HTM securities are held by Treasury and CIO in connection with its asset-liability management activities. At June 30, 2023, the investment securities portfolio consisted of debt securities with an average credit rating of AA+ (based upon external ratings where available, and where not available, based primarily upon internal risk ratings).

Effective January 1, 2023, the Firm adopted the portfolio layer method hedge accounting guidance which permitted a transfer of HTM securities to AFS upon adoption. The Firm

transferred obligations of U.S. states and municipalities with a carrying value of \$7.1 billion resulting in the recognition of \$38 million net pre-tax unrealized losses in AOCI. This transfer was a noncash transaction. Refer to Note 1 and Note 21 for additional information.

During 2022, the Firm transferred \$78.3 billion of investment securities from AFS to HTM for capital management purposes. AOCI included pretax unrealized losses of \$4.8 billion on the securities at the date of transfer. Refer to Note 10 of JPMorgan Chase's 2022 Form 10-K for additional information regarding the investment securities portfolio.

The amortized costs and estimated fair values of the investment securities portfolio were as follows for the dates indicated.

| (in millions) | June 30, 2023 | | | | December 31, 2022 | | | |
|---|----------------------------------|------------------------|-------------------------|-------------------------------|----------------------------------|------------------------|-------------------------|-------------------|
| | Amortized cost ^{(c)(d)} | Gross unrealized gains | Gross unrealized losses | Fair value | Amortized cost ^{(c)(d)} | Gross unrealized gains | Gross unrealized losses | Fair value |
| Available-for-sale securities | | | | | | | | |
| Mortgage-backed securities: | | | | | | | | |
| U.S. GSEs and government agencies | \$ 84,749 | \$ 326 | \$ 5,307 | \$ 79,768 | \$ 77,194 | \$ 479 | \$ 6,170 | \$ 71,503 |
| Residential: | | | | | | | | |
| U.S. | 1,803 | 1 | 119 | 1,685 | 1,576 | 1 | 111 | 1,466 |
| Non-U.S. | 1,861 | 4 | 6 | 1,859 | 3,176 | 5 | 27 | 3,154 |
| Commercial | 2,223 | 1 | 168 | 2,056 | 2,113 | – | 155 | 1,958 |
| Total mortgage-backed securities | 90,636 | 332 | 5,600 | 85,368 | 84,059 | 485 | 6,463 | 78,081 |
| U.S. Treasury and government agencies | 63,998 | 297 | 1,558 | 62,737 | 95,217 | 302 | 3,459 | 92,060 |
| Obligations of U.S. states and municipalities | 24,279 | 172 | 428 | 24,023 | 7,103 | 86 | 403 | 6,786 |
| Non-U.S. government debt securities | 22,588 | 20 | 568 | 22,040 | 20,360 | 14 | 678 | 19,696 |
| Corporate debt securities | 410 | – | 22 | 388 | 381 | – | 24 | 357 |
| Asset-backed securities: | | | | | | | | |
| Collateralized loan obligations | 5,506 | 3 | 72 | 5,437 | 5,916 | 1 | 125 | 5,792 |
| Other | 3,324 | 2 | 57 | 3,269 | 3,152 | 2 | 69 | 3,085 |
| Unallocated portfolio layer fair value basis adjustments ^(a) | (865) | – | (865) | NA | NA | NA | NA | NA |
| Total available-for-sale securities | 209,876 | 826 | 7,440 | 203,262 ^(e) | 216,188 | 890 | 11,221 | 205,857 |
| Held-to-maturity securities^(b) | | | | | | | | |
| Mortgage-backed securities: | | | | | | | | |
| U.S. GSEs and government agencies | 110,517 | 29 | 13,201 | 97,345 | 113,492 | 35 | 13,709 | 99,818 |
| U.S. Residential | 10,293 | 3 | 1,206 | 9,090 | 10,503 | 3 | 1,244 | 9,262 |
| Commercial | 10,712 | 7 | 741 | 9,978 | 10,361 | 10 | 734 | 9,637 |
| Total mortgage-backed securities | 131,522 | 39 | 15,148 | 116,413 | 134,356 | 48 | 15,687 | 118,717 |
| U.S. Treasury and government agencies | 202,655 | – | 16,825 | 185,830 | 207,463 | – | 18,363 | 189,100 |
| Obligations of U.S. states and municipalities | 11,617 | 44 | 758 | 10,903 | 19,747 | 53 | 1,080 | 18,720 |
| Asset-backed securities: | | | | | | | | |
| Collateralized loan obligations | 61,095 | 42 | 951 | 60,186 | 61,414 | 4 | 1,522 | 59,896 |
| Other | 2,052 | – | 84 | 1,968 | 2,325 | – | 110 | 2,215 |
| Total held-to-maturity securities | 408,941 | 125 | 33,766 | 375,300 | 425,305 | 105 | 36,762 | 388,648 |
| Total investment securities, net of allowance for credit losses | \$ 618,817 | \$ 951 | \$ 41,206 | \$ 578,562 | \$ 641,493 | \$ 995 | \$ 47,983 | \$ 594,505 |

- (a) Represents the amount of portfolio layer method basis adjustments related to AFS securities hedged in a closed portfolio. Under U.S. GAAP portfolio layer method basis adjustments are not allocated to individual securities, however the amounts impact the unrealized gains or losses for the individual securities being hedged. Refer to Note 1 and Note 5 for additional information.
- (b) The Firm purchased \$520 million and \$4.1 billion of HTM securities for the three and six months ended June 30, 2023, respectively, and \$14.3 billion and \$27.5 billion for the three and six months ended June 30, 2022, respectively.
- (c) The amortized cost of investment securities is reported net of allowance for credit losses of \$104 million and \$96 million at June 30, 2023 and December 31, 2022, respectively.
- (d) Excludes \$2.5 billion of accrued interest receivable at both June 30, 2023 and December 31, 2022. The Firm did not reverse through interest income any accrued interest receivable for the three and six months ended June 30, 2023 and 2022. Refer to Note 10 of JPMorgan Chase's 2022 Form 10-K for further discussion of accounting policies for accrued interest receivable on investment securities.
- (e) As of June 30, 2023, included \$25.8 billion of AFS securities associated with the First Republic acquisition. Refer to Note 28 for additional information.

AFS securities impairment

The following tables present the fair value and gross unrealized losses by aging category for AFS securities at June 30, 2023 and December 31, 2022. The tables exclude U.S. Treasury and government agency securities and U.S. GSE and government agency MBS with unrealized losses of \$6.9 billion and \$9.6 billion, at June 30, 2023 and December 31, 2022, respectively; changes in the value of these securities are generally driven by changes in interest rates rather than changes in their credit profile given the explicit or implicit guarantees provided by the U.S. government.

| June 30, 2023 (in millions) | Available-for-sale securities with gross unrealized losses | | | | | |
|---|--|-------------------------|-------------------|-------------------------|------------------|-------------------------------|
| | Less than 12 months | | 12 months or more | | Total fair value | Total gross unrealized losses |
| | Fair value | Gross unrealized losses | Fair value | Gross unrealized losses | | |
| Available-for-sale securities | | | | | | |
| Mortgage-backed securities: | | | | | | |
| Residential: | | | | | | |
| U.S. | \$ 371 | \$ 7 | \$ 1,253 | \$ 112 | \$ 1,624 | \$ 119 |
| Non-U.S. | 4 | — | 1,635 | 6 | 1,639 | 6 |
| Commercial | 154 | 3 | 1,761 | 165 | 1,915 | 168 |
| Total mortgage-backed securities | 529 | 10 | 4,649 | 283 | 5,178 | 293 |
| Obligations of U.S. states and municipalities | 10,757 | 123 | 1,961 | 305 | 12,718 | 428 |
| Non-U.S. government debt securities | 8,745 | 64 | 5,316 | 504 | 14,061 | 568 |
| Corporate debt securities | 123 | 2 | 77 | 20 | 200 | 22 |
| Asset-backed securities: | | | | | | |
| Collateralized loan obligations | 20 | — | 5,066 | 72 | 5,086 | 72 |
| Other | 1,157 | 16 | 1,888 | 41 | 3,045 | 57 |
| Total available-for-sale securities with gross unrealized losses | \$ 21,331^(a) | \$ 215 | \$ 18,957 | \$ 1,225 | \$ 40,288 | \$ 1,440 |

| December 31, 2022 (in millions) | Available-for-sale securities with gross unrealized losses | | | | | |
|---|--|-------------------------|-------------------|-------------------------|------------------|-------------------------------|
| | Less than 12 months | | 12 months or more | | Total fair value | Total gross unrealized losses |
| | Fair value | Gross unrealized losses | Fair value | Gross unrealized losses | | |
| Available-for-sale securities | | | | | | |
| Mortgage-backed securities: | | | | | | |
| Residential: | | | | | | |
| U.S. | \$ 1,187 | \$ 71 | \$ 260 | \$ 40 | \$ 1,447 | \$ 111 |
| Non-U.S. | 2,848 | 25 | 70 | 2 | 2,918 | 27 |
| Commercial | 1,131 | 74 | 813 | 81 | 1,944 | 155 |
| Total mortgage-backed securities | 5,166 | 170 | 1,143 | 123 | 6,309 | 293 |
| Obligations of U.S. states and municipalities | 3,051 | 241 | 364 | 162 | 3,415 | 403 |
| Non-U.S. government debt securities | 6,941 | 321 | 3,848 | 357 | 10,789 | 678 |
| Corporate debt securities | 150 | 2 | 207 | 22 | 357 | 24 |
| Asset-backed securities: | | | | | | |
| Collateralized loan obligations | 3,010 | 61 | 2,701 | 64 | 5,711 | 125 |
| Other | 2,586 | 51 | 256 | 18 | 2,842 | 69 |
| Total available-for-sale securities with gross unrealized losses | \$ 20,904 | \$ 846 | \$ 8,519 | \$ 746 | \$ 29,423 | \$ 1,592 |

(a) Includes the impact of the First Republic acquisition, primarily impacting obligations of U.S. states and municipalities. Refer to Note 28 for additional information.

HTM securities – credit risk

Credit quality indicator

The primary credit quality indicator for HTM securities is the risk rating assigned to each security. At June 30, 2023 and December 31, 2022, all HTM securities were rated investment grade and were current and accruing, with approximately 99% and 98% rated at least AA+, respectively.

Allowance for credit losses on investment securities

The allowance for credit losses on investment securities was \$104 million and \$47 million as of June 30, 2023 and 2022, respectively, which included a cumulative-effect adjustment to retained earnings related to the transfer of HTM securities to AFS for the six months ended June 30, 2023.

Refer to Note 10 of JPMorgan Chase’s 2022 Form 10-K for further discussion of accounting policies for AFS and HTM securities.

Selected impacts of investment securities on the Consolidated statements of income

| (in millions) | Three months ended June 30, | | Six months ended June 30, | |
|-------------------------------------|--------------------------------|-----------------|------------------------------|-----------------|
| | 2023 | 2022 | 2023 | 2022 |
| Realized gains | \$ 198 | \$ 69 | \$ 329 | \$ 82 |
| Realized losses | (1,098) | (222) | (2,097) | (629) |
| Investment securities losses | \$ (900) | \$ (153) | \$ (1,768) | \$ (547) |
| Provision for credit losses | \$ 13 | \$ 6 | \$ 14 | \$ 5 |

Contractual maturities and yields

The following table presents the amortized cost and estimated fair value at June 30, 2023, of JPMorgan Chase's investment securities portfolio by contractual maturity.

| By remaining maturity June 30, 2023 (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 securities | | | | | |
| Mortgage-backed securities | | | | | |
| Amortized cost | \$ 15 | \$ 3,622 | \$ 5,077 | \$ 81,922 | \$ 90,636 |
| Fair value | 14 | 3,488 | 5,057 | 76,809 | 85,368 ^(d) |
| Average yield ^(a) | 2.18 % | 4.55 % | 5.98 % | 4.40 % | 4.49 % |
| U.S. Treasury and government agencies | | | | | |
| Amortized cost | \$ 7,471 | \$ 36,773 | \$ 13,276 | \$ 6,478 | \$ 63,998 |
| Fair value | 7,384 | 35,699 | 13,300 | 6,354 | 62,737 |
| Average yield ^(a) | 0.35 % | 4.56 % | 5.97 % | 6.52 % | 4.56 % |
| Obligations of U.S. states and municipalities | | | | | |
| Amortized cost | \$ 11 | \$ 72 | \$ 1,244 | \$ 22,952 | \$ 24,279 |
| Fair value | 11 | 70 | 1,243 | 22,699 | 24,023 ^(d) |
| Average yield ^(a) | 5.58 % | 3.82 % | 4.27 % | 5.60 % | 5.53 % |
| Non-U.S. government debt securities | | | | | |
| Amortized cost | \$ 13,373 | \$ 3,423 | \$ 3,352 | \$ 2,440 | \$ 22,588 |
| Fair value | 13,360 | 3,321 | 2,929 | 2,430 | 22,040 |
| Average yield ^(a) | 4.78 % | 2.97 % | 1.23 % | 3.61 % | 3.86 % |
| Corporate debt securities | | | | | |
| Amortized cost | \$ 199 | \$ 227 | \$ 14 | \$ — | \$ 440 |
| Fair value | 151 | 224 | 13 | — | 388 |
| Average yield ^(a) | 15.97 % | 11.75 % | 4.10 % | — % | 13.42 % |
| Asset-backed securities | | | | | |
| Amortized cost | \$ — | \$ 1,313 | \$ 3,875 | \$ 3,642 | \$ 8,830 |
| Fair value | — | 1,291 | 3,836 | 3,579 | 8,706 ^(d) |
| Average yield ^(a) | — % | 3.46 % | 5.98 % | 6.06 % | 5.64 % |
| Total available-for-sale securities | | | | | |
| Amortized cost ^(b) | \$ 21,069 | \$ 45,430 | \$ 26,838 | \$ 117,434 | \$ 210,771 |
| Fair value | 20,920 | 44,093 | 26,378 | 111,871 | 203,262 ^(d) |
| Average yield ^(a) | 3.32 % | 4.44 % | 5.30 % | 4.78 % | 4.63 % |
| Held-to-maturity securities | | | | | |
| Mortgage-backed securities | | | | | |
| Amortized cost | \$ 99 | \$ 3,835 | \$ 10,482 | \$ 117,142 | \$ 131,558 |
| Fair value | 97 | 3,555 | 9,212 | 103,549 | 116,413 |
| Average yield ^(a) | 6.21 % | 2.75 % | 2.53 % | 2.99 % | 2.95 % |
| U.S. Treasury and government agencies | | | | | |
| Amortized cost | \$ 60,878 | \$ 92,403 | \$ 49,374 | \$ — | \$ 202,655 |
| Fair value | 59,517 | 85,053 | 41,260 | — | 185,830 |
| Average yield ^(a) | 0.46 % | 0.93 % | 1.27 % | — % | 0.87 % |
| Obligations of U.S. states and municipalities | | | | | |
| Amortized cost | \$ — | \$ — | \$ 640 | \$ 11,015 | \$ 11,655 |
| Fair value | — | — | 608 | 10,295 | 10,903 |
| Average yield ^(a) | — % | — % | 4.39 % | 4.04 % | 4.06 % |
| Asset-backed securities | | | | | |
| Amortized cost | \$ — | \$ 74 | \$ 21,388 | \$ 41,685 | \$ 63,147 |
| Fair value | — | 74 | 21,139 | 40,941 | 62,154 |
| Average yield ^(a) | — % | 6.15 % | 5.87 % | 6.00 % | 5.96 % |
| Total held-to-maturity securities | | | | | |
| Amortized cost ^(b) | \$ 60,977 | \$ 96,312 | \$ 81,884 | \$ 169,842 | \$ 409,015 |
| Fair value | 59,614 | 88,682 | 72,219 | 154,785 | 375,300 |
| Average yield ^(a) | 0.47 % | 1.00 % | 2.66 % | 3.80 % | 2.42 % |

- (a) Average yield is computed using the effective yield of each security owned at the end of the period, weighted based on the amortized cost of each security. The effective yield considers the contractual coupon, amortization of premiums and accretion of discounts, and the effect of related hedging derivatives, including closed portfolio hedges. Taxable-equivalent amounts are used where applicable. The effective yield excludes unscheduled principal prepayments; and accordingly, actual maturities of securities may differ from their contractual or expected maturities as certain securities may be prepaid. However, for certain callable debt securities, the average yield is calculated to the earliest call date.
- (b) For purposes of this table, the amortized cost of available-for-sale securities excludes the allowance for credit losses of \$(30) million and the portfolio layer fair value hedge basis adjustments of \$(865) million at June 30, 2023. The amortized cost of held-to-maturity securities also excludes the allowance for credit losses of \$(74) million at June 30, 2023.
- (c) Substantially all of the Firm's U.S. residential MBS and collateralized mortgage obligations are due in 10 years or more, based on contractual maturity. The estimated weighted-average life, which reflects anticipated future prepayments, is approximately eight years for agency residential MBS, seven years for agency residential collateralized mortgage obligations, and six years for nonagency residential collateralized mortgage obligations.
- (d) Includes AFS securities associated with the First Republic acquisition, primarily impacting due after 10 years. Refer to Note 28 for additional information.

Note 11 – Securities financing activities

Refer to Note 11 of JPMorgan Chase’s 2022 Form 10-K for a discussion of accounting policies relating to securities financing activities. Refer to Note 3 for further information regarding securities financing agreements for which the fair value option has been elected. Refer to Note 25 for further information regarding assets pledged and collateral received in securities financing agreements.

The table below summarizes the gross and net amounts of the Firm’s securities financing agreements as of June 30, 2023 and December 31, 2022. When the Firm has obtained an appropriate legal opinion with respect to a master netting agreement with a counterparty and where other relevant netting criteria under U.S. GAAP are met, the Firm nets, on the Consolidated balance sheets, the balances outstanding under its securities financing agreements with the same counterparty. In addition, the Firm exchanges securities and/or cash collateral with its counterparty to reduce the economic exposure with the counterparty, but such collateral is not eligible for net Consolidated balance

sheet presentation. Where the Firm has obtained an appropriate legal opinion with respect to the counterparty master netting agreement, such collateral, along with securities financing balances that do not meet all these relevant netting criteria under U.S. GAAP, is presented in the table below as “Amounts not nettable on the Consolidated balance sheets,” and reduces the “Net amounts” presented. Where a legal opinion has not been either sought or obtained, the securities financing balances are presented gross in the “Net amounts” below. In transactions where the Firm is acting as the lender in a securities-for-securities lending agreement and receives securities that can be pledged or sold as collateral, the Firm recognizes the securities received at fair value within other assets and the obligation to return those securities within accounts payable and other liabilities on the Consolidated balance sheets.

| | | June 30, 2023 | | | | |
|--|---------------|---|--|--|----------------------------|--|
| (in millions) | Gross amounts | Amounts netted on the Consolidated balance sheets | Amounts presented on the Consolidated balance sheets | Amounts not nettable on the Consolidated balance sheets ^(b) | Net amounts ^(c) | |
| Assets | | | | | | |
| Securities purchased under resale agreements | \$ 561,426 | \$ (235,867) | \$ 325,559 | \$ (319,986) | \$ 5,573 | |
| Securities borrowed | 205,579 | (42,016) | 163,563 | (119,543) | 44,020 | |
| Liabilities | | | | | | |
| Securities sold under repurchase agreements | \$ 496,866 | \$ (235,867) | \$ 260,999 | \$ (226,664) | \$ 34,335 | |
| Securities loaned and other ^(a) | 50,551 | (42,016) | 8,535 | (8,457) | 78 | |

| | | December 31, 2022 | | | | |
|--|---------------|---|--|--|----------------------------|--|
| (in millions) | Gross amounts | Amounts netted on the Consolidated balance sheets | Amounts presented on the Consolidated balance sheets | Amounts not nettable on the Consolidated balance sheets ^(b) | Net amounts ^(c) | |
| Assets | | | | | | |
| Securities purchased under resale agreements | \$ 597,912 | \$ (282,411) | \$ 315,501 | \$ (304,120) | \$ 11,381 | |
| Securities borrowed | 228,279 | (42,910) | 185,369 | (131,578) | 53,791 | |
| Liabilities | | | | | | |
| Securities sold under repurchase agreements | \$ 480,793 | \$ (282,411) | \$ 198,382 | \$ (167,427) | \$ 30,955 | |
| Securities loaned and other ^(a) | 52,443 | (42,910) | 9,533 | (9,527) | 6 | |

- (a) Includes securities-for-securities lending agreements of \$5.0 billion and \$7.0 billion at June 30, 2023 and December 31, 2022, respectively, accounted for at fair value, where the Firm is acting as lender.
- (b) In some cases, collateral exchanged with a counterparty exceeds the net asset or liability balance with that counterparty. In such cases, the amounts reported in this column are limited to the related net asset or liability with that counterparty.
- (c) Includes securities financing agreements that provide collateral rights, but where an appropriate legal opinion with respect to the master netting agreement has not been either sought or obtained. At June 30, 2023 and December 31, 2022, included \$4.5 billion and \$6.0 billion, respectively, of securities purchased under resale agreements; \$39.6 billion and \$49.0 billion, respectively, of securities borrowed; \$33.3 billion and \$29.1 billion, respectively, of securities sold under repurchase agreements; and securities loaned and other which were not material at both June 30, 2023 and December 31, 2022.

The tables below present as of June 30, 2023, and December 31, 2022 the types of financial assets pledged in securities financing agreements and the remaining contractual maturity of the securities financing agreements.

| (in millions) | Gross liability balance | | | |
|---|---|-----------------------------|---|-----------------------------|
| | June 30, 2023 | | December 31, 2022 | |
| | Securities sold under repurchase agreements | Securities loaned and other | Securities sold under repurchase agreements | Securities loaned and other |
| Mortgage-backed securities | | | | |
| U.S. GSEs and government agencies | \$ 72,006 | \$ — | \$ 58,050 | \$ — |
| Residential - nonagency | 2,333 | — | 2,414 | — |
| Commercial - nonagency | 2,178 | — | 2,007 | — |
| U.S. Treasury, GSEs and government agencies | 223,411 | 987 | 191,254 | 1,464 |
| Obligations of U.S. states and municipalities | 2,038 | — | 1,735 | 5 |
| Non-U.S. government debt | 127,427 | 1,509 | 155,156 | 1,259 |
| Corporate debt securities | 36,575 | 1,882 | 37,121 | 461 |
| Asset-backed securities | 3,816 | — | 2,981 | — |
| Equity securities | 27,082 | 46,173 | 30,075 | 49,254 |
| Total | \$ 496,866 | \$ 50,551 | \$ 480,793 | \$ 52,443 |

| June 30, 2023 (in millions) | Remaining contractual maturity of the agreements | | | | Total |
|---|--|---------------|--------------|----------------------|------------|
| | Overnight and continuous | Up to 30 days | 30 - 90 days | Greater than 90 days | |
| Total securities sold under repurchase agreements | \$ 268,240 | \$ 120,621 | \$ 30,120 | \$ 77,885 | \$ 496,866 |
| Total securities loaned and other | 49,166 | 243 | 2 | 1,140 | 50,551 |

| December 31, 2022 (in millions) | Remaining contractual maturity of the agreements | | | | Total |
|---|--|---------------|--------------|----------------------|------------|
| | Overnight and continuous | Up to 30 days | 30 - 90 days | Greater than 90 days | |
| Total securities sold under repurchase agreements | \$ 205,235 | \$ 170,696 | \$ 37,120 | \$ 67,742 | \$ 480,793 |
| Total securities loaned and other | 50,138 | 1,285 | 3 | 1,017 | 52,443 |

Transfers not qualifying for sale accounting

At both June 30, 2023, and December 31, 2022, the Firm held \$692 million of financial assets for which the rights have been transferred to third parties; however, the transfers did not qualify as a sale in accordance with U.S. GAAP. These transfers have been recognized as collateralized financing transactions. The transferred assets are recorded in trading assets and loans, and the corresponding liabilities are recorded predominantly in short-term borrowings on the Consolidated balance sheets.

Note 12 – Loans

Loan accounting framework

The accounting for a loan depends on management’s strategy for the loan. The Firm accounts for loans based on the following categories:

- Originated or purchased loans held-for-investment (i.e., “retained”)
- Loans held-for-sale
- Loans at fair value

Refer to Note 12 of JPMorgan Chase's 2022 Form 10-K for a detailed discussion of loans, including accounting policies. Refer to Note 3 of this Form 10-Q for further information on the Firm's elections of fair value accounting under the fair value option. Refer to Note 2 of this Form 10-Q for information on loans carried at fair value and classified as trading assets.

On January 1, 2023 the Firm adopted the Financial Instruments - Credit Losses: Troubled Debt Restructurings and Vintage Disclosures accounting guidance as discussed in Note 1. The adoption of this guidance eliminated the existing accounting and disclosure requirements for TDRs, and implemented additional disclosure requirements for FDMs. The disclosure requirements for FDMs are effective for periods beginning on or after January 1, 2023. Refer to Note 12 of JPMorgan Chase's 2022 Form 10-K for a detailed discussion on loan modifications prior to January 1, 2023, which were accounted for and reported as TDRs. This new guidance also requires disclosure of current period gross charge-offs by vintage origination year, effective for periods beginning on or after January 1, 2023.

Loan portfolio

The Firm’s loan portfolio, including loans of \$149.8 billion associated with the First Republic acquisition, is divided into three portfolio segments, which are the same segments used by the Firm to determine the allowance for loan losses: Consumer, excluding credit card; Credit card; and Wholesale. 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.

| Consumer, excluding credit card | Credit card | Wholesale ^{(c)(d)} |
|---|---|--|
| <ul style="list-style-type: none"> • Residential real estate^(a) • Auto and other^(b) | <ul style="list-style-type: none"> • Credit card loans | <ul style="list-style-type: none"> • Secured by real estate • Commercial and industrial • Other^(e) |

(a) Includes scored mortgage and home equity loans held in CCB and AWM, and scored mortgage loans held in CIB.

(b) Includes scored auto, business banking loans and overdrafts in BWM and other consumer unsecured loans in CIB.

(c) Includes loans held in CIB, CB, AWM, Corporate as well as risk-rated BWM and auto dealer loans held in CCB, for which the wholesale methodology is applied when determining the allowance for loan losses.

(d) The wholesale portfolio segment's classes align with loan classifications as defined by the bank regulatory agencies, based on the loan's collateral, purpose, and type of borrower.

(e) Includes loans to financial institutions, states and political subdivisions, SPEs, nonprofits, personal investment companies and trusts, as well as loans to individuals and individual entities (predominantly Global Private Bank clients within AWM and J.P. Morgan Wealth Management within CCB). Refer to Note 14 of JPMorgan Chase's 2022 Form 10-K for more information on SPEs.

The following tables summarize the Firm’s loan balances by portfolio segment.

| June 30, 2023 (in millions) | Consumer, excluding credit card | Credit card | Wholesale | Total ^{(b)(c)} |
|------------------------------------|---------------------------------|-------------------|---------------------------|-------------------------|
| Retained | \$ 396,195 ^(a) | \$ 191,348 | \$ 668,145 ^(a) | \$ 1,255,688 |
| Held-for-sale | 549 | – | 5,043 | 5,592 |
| At fair value | 11,460 ^(a) | – | 27,329 | 38,789 |
| Total | \$ 408,204 | \$ 191,348 | \$ 700,517 | \$ 1,300,069 |
| December 31, 2022 (in millions) | Consumer, excluding credit card | Credit card | Wholesale | Total ^{(b)(c)} |
| Retained | \$ 300,753 | \$ 185,175 | \$ 603,670 | \$ 1,089,598 |
| Held-for-sale | 618 | – | 3,352 | 3,970 |
| At fair value | 10,004 | – | 32,075 | 42,079 |
| Total | \$ 311,375 | \$ 185,175 | \$ 639,097 | \$ 1,135,647 |

(a) Includes loans associated with the First Republic acquisition consisting of \$91.9 billion of retained loans and \$1.9 billion loans at fair value in consumer, excluding credit card and \$56.0 billion of retained loans in wholesale.

(b) Excludes \$6.0 billion and \$5.2 billion of accrued interest receivables as of June 30, 2023 and December 31, 2022, respectively. Accrued interest receivables written off was not material for the three and six months ended June 30, 2023 and 2022.

(c) Loans (other than those for which the fair value option has been elected) are presented net of unamortized discounts and premiums and net deferred loan fees or costs. These amounts were not material as of June 30, 2023, and December 31, 2022.

The following tables provide information about the carrying value of retained loans purchased, sold and reclassified to held-for-sale during the periods indicated. Loans that were reclassified to held-for-sale and sold in a subsequent period are excluded from the sales line of this table.

| Three months ended June 30, (in millions) | 2023 | | | | 2022 | | | |
|--|---------------------------------------|-------------|--------------------------|-----------|---------------------------------------|-------------|-----------|----------|
| | Consumer, excluding credit card | Credit card | Wholesale | Total | Consumer, excluding credit card | Credit card | Wholesale | Total |
| Purchases | \$ 92,002 ^{(b)(c)(d)} | \$ – | \$ 58,398 ^(b) | \$150,400 | \$ 973 ^{(c)(d)} | \$ – | \$ 228 | \$ 1,201 |
| Sales | 438 | – | 9,709 | 10,147 | 82 | – | 12,005 | 12,087 |
| Retained loans reclassified to held-for-sale ^(a) | 81 | – | 771 | 852 | 66 | – | 415 | 481 |

| Six months ended June 30, 2022 (in millions) | 2023 | | | | 2022 | | | |
|--|---------------------------------------|-------------|--------------------------|-----------|---------------------------------------|-------------|-----------|----------|
| | Consumer, excluding credit card | Credit card | Wholesale | Total | Consumer, excluding credit card | Credit card | Wholesale | Total |
| Purchases | \$ 92,081 ^{(b)(c)(d)} | \$ – | \$ 58,561 ^(b) | \$150,642 | \$ 1,092 ^{(c)(d)} | \$ – | \$ 394 | \$ 1,486 |
| Sales | 438 | – | 18,880 | 19,318 | 129 | – | 21,712 | 21,841 |
| Retained loans reclassified to held-for-sale ^(a) | 124 | – | 1,085 | 1,209 | 142 | – | 688 | 830 |

(a) Reclassifications of loans to held-for-sale are non-cash transactions.

(b) Includes loans acquired in the First Republic acquisition consisting of \$91.9 billion in Consumer, excluding credit card and \$58.4 billion in Wholesale.

(c) Includes purchases of residential real estate loans, including the Firm's voluntary repurchases of certain delinquent loans from loan pools as permitted by Government National Mortgage Association ("Ginnie Mae") guidelines for the three and six months ended June 30, 2023 and 2022. The Firm typically elects to repurchase these delinquent loans as it continues to service them and/or manage the foreclosure process in accordance with applicable requirements of Ginnie Mae, FHA, RHS, and/or VA.

(d) Excludes purchases of retained loans of \$1.6 billion and \$6.0 billion for the three months ended June 30, 2023 and 2022, and \$2.3 billion and \$9.2 billion for the six months ended June 30, 2023 and 2022, respectively, which are predominantly sourced through the correspondent origination channel and underwritten in accordance with the Firm's standards.

Gains and losses on sales of loans

Net gains/(losses) on sales of loans and lending-related commitments (including adjustments to record loans and lending-related commitments held-for-sale at the lower of cost or fair value) recognized in noninterest revenue for the three and six months ended June 30, 2023, was \$14 million and \$37 million, respectively, of which \$16 million and \$43 million, respectively, related to loans. Net gains/(losses) on sales of loans and lending-related commitments for the three and six months ended June 30, 2022, was \$(352) million and \$(314) million, respectively, of which \$(67) million and \$(32) million, respectively, related to loans. In addition, the sale of loans may also result in write downs, recoveries or changes in the allowance recognized in the provision for credit losses.

Consumer, excluding credit card loan portfolio

Consumer loans, excluding credit card loans, consist primarily of scored residential mortgages, home equity loans and lines of credit, auto and business banking loans, with a focus on serving the prime consumer credit market. The portfolio also includes home equity loans secured by junior liens, prime mortgage loans with an interest-only payment period and certain payment-option loans that may result in negative amortization.

The following table provides information about retained consumer loans, excluding credit card, by class.

| (in millions) | June 30, 2023 | December 31, 2022 |
|-----------------------------|---------------------------|----------------------|
| Residential real estate | \$ 328,010 ^(a) | \$ 237,561 |
| Auto and other | 68,185 | 63,192 |
| Total retained loans | \$ 396,195 | \$ 300,753 |

(a) Included \$91.9 billion of loans associated with the First Republic acquisition.

Delinquency rates are the primary credit quality indicator for consumer loans. Refer to Note 12 of JPMorgan Chase's 2022 Form 10-K for further information on consumer credit quality indicators.

Residential real estate

Delinquency is the primary credit quality indicator for retained residential real estate loans. The following tables provide information on delinquency and gross charge-offs for the six months ended June 30, 2023.

| (in millions, except ratios) | June 30, 2023 | | | | | | | | |
|--|---|------------------|------------------|------------------|------------------|------------------|-----------------------------|-------------------------|-------------------|
| | Term loans by origination year ^(f) | | | | | | Revolving loans | | |
| | 2023 | 2022 | 2021 | 2020 | 2019 | Prior to 2019 | Within the revolving period | Converted to term loans | Total |
| Loan delinquency^{(a)(b)} | | | | | | | | | |
| Current ^(c) | \$ 13,596 | \$ 65,317 | \$ 86,325 | \$ 57,052 | \$ 22,211 | \$ 65,271 | \$ 7,584 | \$ 8,877 | \$ 326,233 |
| 30-149 days past due | 3 | 19 | 44 | 29 | 41 | 710 | 39 | 216 | 1,101 |
| 150 or more days past due | – | 6 | 2 | 6 | 10 | 473 | 3 | 176 | 676 |
| Total retained loans | \$ 13,599 | \$ 65,342 | \$ 86,371 | \$ 57,087 | \$ 22,262 | \$ 66,454 | \$ 7,626 | \$ 9,269 | \$ 328,010 |
| % of 30+ days past due to total retained loans ^{(d)(e)} | 0.02 % | 0.04 % | 0.05 % | 0.06 % | 0.23 % | 1.75 % | 0.55 % | 4.23 % | 0.54 % |
| Gross charge-offs | \$ – | \$ – | \$ – | \$ – | \$ – | \$ 52 | \$ 14 | \$ 4 | \$ 70 |

| (in millions, except ratios) | December 31, 2022 | | | | | | | | |
|---|---|------------------|------------------|------------------|-----------------|------------------|-----------------------------|-------------------------|-------------------|
| | Term loans by origination year ^(f) | | | | | | Revolving loans | | |
| | 2022 | 2021 | 2020 | 2019 | 2018 | Prior to 2018 | Within the revolving period | Converted to term loans | Total |
| Loan delinquency^{(a)(b)} | | | | | | | | | |
| Current | \$ 39,934 | \$ 66,072 | \$ 43,315 | \$ 15,397 | \$ 6,339 | \$ 49,632 | \$ 5,589 | \$ 9,685 | \$ 235,963 |
| 30-149 days past due | 29 | 11 | 14 | 20 | 20 | 597 | 15 | 208 | 914 |
| 150 or more days past due | 1 | 1 | 6 | 10 | 7 | 480 | 4 | 175 | 684 |
| Total retained loans | \$ 39,964 | \$ 66,084 | \$ 43,335 | \$ 15,427 | \$ 6,366 | \$ 50,709 | \$ 5,608 | \$ 10,068 | \$ 237,561 |
| % of 30+ days past due to total retained loans ^(d) | 0.08 % | 0.02 % | 0.05 % | 0.19 % | 0.42 % | 2.07 % | 0.34 % | 3.80 % | 0.66 % |

- (a) Individual delinquency classifications include mortgage loans insured by U.S. government agencies which were not material at June 30, 2023 and December 31, 2022.
- (b) At June 30, 2023 and December 31, 2022, loans under payment deferral programs offered in response to the COVID-19 pandemic which are still within their deferral period and performing according to their modified terms are generally not considered delinquent.
- (c) Included \$5.6 billion, \$26.2 billion, \$22.0 billion, \$15.0 billion, \$7.5 billion, and \$12.9 billion of term loans originated in 2023, 2022, 2021, 2020, 2019 and prior to 2019, respectively, and \$2.5 billion of revolving loans within the revolving period associated with the First Republic acquisition.
- (d) Excludes mortgage loans that are 30 or more days past due insured by U.S. government agencies which were not material at June 30, 2023 and December 31, 2022. These amounts have been excluded based upon the government guarantee.
- (e) Included \$158 million of 30+ days past due loans associated with the First Republic acquisition.
- (f) Purchased loans are included in the year in which they were originated.

Approximately 37% of the total revolving loans are senior lien loans; the remaining balance are junior lien loans. The lien position the Firm holds is considered in the Firm's allowance for credit losses. Revolving loans that have been converted to term loans have higher delinquency rates than those that are still within the revolving period. That is primarily because the fully-amortizing payment that is generally required for those products is higher than the minimum payment options available for revolving loans within the revolving period.

Nonaccrual loans and other credit quality indicators

The following table provides information on nonaccrual and other credit quality indicators for retained residential real estate loans.

| (in millions, except weighted-average data) | June 30, 2023 | | December 31, 2022 | |
|---|---------------|----------------|-------------------|-------------------|
| Nonaccrual loans ^{(a)(b)(c)(d)(e)} | \$ | 3,641 | \$ | 3,745 |
| Current estimated LTV ratios^{(f)(g)(h)} | | | | |
| Greater than 125% and refreshed FICO scores: | | | | |
| Equal to or greater than 660 | \$ | 68 | \$ | 2 |
| Less than 660 | | 5 | | – |
| 101% to 125% and refreshed FICO scores: | | | | |
| Equal to or greater than 660 | | 569 | | 174 |
| Less than 660 | | 11 | | 6 |
| 80% to 100% and refreshed FICO scores: | | | | |
| Equal to or greater than 660 | | 17,260 | (l) | 12,034 |
| Less than 660 | | 254 | | 184 |
| Less than 80% and refreshed FICO scores: | | | | |
| Equal to or greater than 660 | | 298,791 | (l) | 215,096 |
| Less than 660 | | 9,526 | (l) | 8,659 |
| No FICO/LTV available | | 1,526 | | 1,406 |
| Total retained loans | \$ | 328,010 | (m) | \$ 237,561 |
| Weighted average LTV ratio ^{(f)(i)} | | 51 % | | 51 % |
| Weighted average FICO ^{(g)(i)} | | 771 | | 769 |
| Geographic region^{(j)(k)} | | | | |
| California | \$ | 128,038 | (n) | \$ 73,112 |
| New York | | 49,413 | (n) | 34,471 |
| Florida | | 22,518 | (n) | 18,870 |
| Texas | | 15,448 | | 14,968 |
| Massachusetts | | 14,351 | (n) | 6,380 |
| Illinois | | 11,052 | | 11,296 |
| Colorado | | 10,765 | | 9,968 |
| Washington | | 9,778 | | 9,060 |
| New Jersey | | 8,106 | | 7,108 |
| Connecticut | | 7,142 | | 5,432 |
| All other | | 51,399 | | 46,896 |
| Total retained loans | \$ | 328,010 | (m) | \$ 237,561 |

- (a) Includes collateral-dependent residential real estate loans that are charged down to the fair value of the underlying collateral less costs to sell. The Firm reports, in accordance with regulatory guidance, residential real estate loans that have been discharged under Chapter 7 bankruptcy and not reaffirmed by the borrower (“Chapter 7 loans”) as collateral-dependent nonaccrual loans, regardless of their delinquency status. At June 30, 2023, approximately 9% of Chapter 7 residential real estate loans were 30 days or more past due.
- (b) Mortgage loans insured by U.S. government agencies excluded from nonaccrual loans were not material at June 30, 2023 and December 31, 2022.
- (c) Generally, all consumer nonaccrual loans have an allowance. In accordance with regulatory guidance, certain nonaccrual loans that are considered collateral-dependent have been charged down to the lower of amortized cost or the fair value of their underlying collateral less costs to sell. If the value of the underlying collateral improves subsequent to charge down, the related allowance may be negative.
- (d) Interest income on nonaccrual loans recognized on a cash basis was \$44 million and \$45 million and \$89 million and \$90 million for the three and six months ended June 30, 2023 and 2022, respectively.
- (e) Generally excludes loans under payment deferral programs offered in response to the COVID-19 pandemic.
- (f) 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 using nationally recognized home price index valuation estimates incorporating actual data to the extent available and forecasted data where actual data is not available. Current estimated combined LTV for junior lien home equity loans considers all available lien positions, as well as unused lines, related to the property.
- (g) Refreshed FICO scores represent each borrower’s most recent credit score, which is obtained by the Firm on at least a quarterly basis.
- (h) Includes residential real estate loans, primarily held in LLCs in AWM that did not have a refreshed FICO score. These loans have been included in a FICO band based on management’s estimation of the borrower’s credit quality.
- (i) Excludes loans with no FICO and/or LTV data available.
- (j) The geographic regions presented in the table are ordered based on the magnitude of the corresponding loan balances at June 30, 2023.
- (k) Prior-period amounts have been revised to conform with the current presentation.
- (l) Included \$4.3 billion in equal to or greater than 660 FICO scores within 80% to 100% LTV ratio, and \$85.3 billion and \$1.2 billion in equal to or greater than 660 and less than 660 FICO scores, respectively, within less than 80% LTV ratio associated with the First Republic acquisition.
- (m) Included \$91.9 billion of loans associated with the First Republic acquisition.
- (n) Included \$55.5 billion, \$15.2 billion, \$3.6 billion and \$8.0 billion in California, New York, Florida and Massachusetts, respectively, associated with the First Republic acquisition.

Loan modifications

The Firm grants certain modifications of residential real estate loans to borrowers experiencing financial difficulty, which effective January 1, 2023, are reported as FDMs. The Firm's proprietary modification programs as well as government programs, including U.S. GSE programs, that generally provide various modifications to borrowers experiencing financial difficulty including, but not limited to, interest rate reductions, term extensions, other-than-insignificant payment delay and principal forgiveness that would otherwise have been required under the terms of the original agreement, are considered FDMs.

For the three and six months ended June 30, 2023, residential real estate FDMs were \$35 million and \$75 million, respectively. The financial effects of the FDMs, which were largely in the form of term extensions and interest rate reductions, included extending the weighted-average life of the loans by 15 years and 18 years, and reducing the weighted-average contractual interest rate from 6.90% to 4.21% and 6.75% to 4.01% for the three and six months ended June 30, 2023, respectively. There were no additional commitments to lend to borrowers experiencing financial difficulty whose loans have been modified as FDMs. In addition to FDMs, the Firm also had \$33 million and \$48 million of loans subject to a trial modification, and \$3 million and \$5 million of Chapter 7 loans for the three and six months ended June 30, 2023, respectively. The changes to the TDR accounting guidance eliminated the TDR reasonably expected and concession assessment criteria. Accordingly, trial modifications and Chapter 7 loans were considered TDRs, but not FDMs.

For periods ending prior to January 1, 2023, modifications of residential real estate loans where the Firm granted concessions to borrowers who were experiencing financial difficulty were generally accounted for and reported as TDRs. For the three and six months ended June 30, 2022, new TDRs were \$115 million and \$233 million, respectively. There were no additional commitments to lend to borrowers whose residential real estate loans have been modified in TDRs. Refer to Note 12 of JPMorgan Chase's 2022 Form 10-K for further information on TDRs.

Nature and extent of modifications

The following table provides information about how residential real estate loans were modified in TDRs during the period presented.

| | Three months ended June 30, | Six months ended June 30, |
|---|-----------------------------|---------------------------|
| | 2022 | 2022 |
| Number of loans approved for a trial modification | 1,165 | 2,691 |
| Number of loans permanently modified | 1,289 | 2,831 |
| Concession granted:^(a) | | |
| Interest rate reduction | 45 % | 56 % |
| Term or payment extension | 54 | 67 |
| Principal and/or interest deferred | 10 | 12 |
| Principal forgiveness | 1 | 1 |
| Other ^(b) | 46 | 36 |

(a) Represents concessions granted in permanent modifications as a percentage of the number of loans permanently modified. The sum of the percentages exceeds 100% because predominantly all of the modifications include more than one type of concession. Concessions offered on trial modifications are generally consistent with those granted on permanent modifications.

(b) Includes variable interest rate to fixed interest rate modifications and payment delays that meet the definition of a TDR.

Financial effects of modifications and redefaults

The following table provides information about the financial effects of the various concessions granted in modifications of residential real estate loans and about redefaults of certain loans modified in TDRs for the period presented.

| (in millions, except weighted-average data) | Three months ended June 30, | Six months ended June 30, |
|--|-----------------------------|---------------------------|
| | 2022 | 2022 |
| Weighted-average interest rate of loans with interest rate reductions - before TDR | 4.76 % | 4.55 % |
| Weighted-average interest rate of loans with interest rate reductions - after TDR | 3.36 | 3.31 |
| Weighted-average remaining contractual term (in years) of loans with term or payment extensions - before TDR | 22 | 23 |
| Weighted-average remaining contractual term (in years) of loans with term or payment extensions - after TDR | 38 | 39 |
| Charge-offs recognized upon permanent modification | \$ 1 | \$ 1 |
| Principal deferred | 4 | 11 |
| Principal forgiven | – | 1 |
| Balance of loans that redefaulted within one year of permanent modification ^(a) | \$ 27 | \$ 70 |

(a) Represents loans permanently modified in TDRs that experienced a payment default in the period presented, and for which the payment default occurred within one year of the modification. The dollar amount presented represents the balance of such loans at the end of the reporting period in which such loans defaulted.

Active and suspended foreclosure

At June 30, 2023 and December 31, 2022, the Firm had residential real estate loans, excluding those insured by U.S. government agencies, with a carrying value of \$566 million and \$565 million, respectively, that were not included in REO, but were in the process of active or suspended foreclosure.

Auto and other

Delinquency is the primary credit quality indicator for retained auto and other loans. The following tables provide information on delinquency and gross charge-offs for the six months ended June 30, 2023.

| June 30, 2023 | | | | | | | | | |
|---|--------------------------------|------------------|------------------|-----------------|-----------------|-----------------|-----------------------------|-------------------------|------------------|
| (in millions, except ratios) | Term loans by origination year | | | | | | Revolving loans | | Total |
| | 2023 | 2022 | 2021 | 2020 | 2019 | Prior to 2019 | Within the revolving period | Converted to term loans | |
| Loan delinquency | | | | | | | | | |
| Current | \$ 17,763 | \$ 18,062 | \$ 16,287 | \$ 8,801 | \$ 2,765 | \$ 1,041 | \$ 2,544 | \$ 113 | \$ 67,376 |
| 30-119 days past due | 121 | 234 | 216 | 79 | 48 | 28 | 14 | 15 | 755 |
| 120 or more days past due | – | 1 | 25 | 13 | – | 1 | 2 | 12 | 54 |
| Total retained loans | \$ 17,884 | \$ 18,297 | \$ 16,528 | \$ 8,893 | \$ 2,813 | \$ 1,070 | \$ 2,560 | \$ 140 | \$ 68,185 |
| % of 30+ days past due to total retained loans ^(a) | 0.68 % | 1.28 % | 1.26 % | 0.83 % | 1.71 % | 2.71 % | 0.63 % | 19.29 % | 1.11 % |
| Gross charge-offs | \$ 106 | \$ 168 | \$ 82 | \$ 28 | \$ 16 | \$ 30 | \$ – | \$ 1 | \$ 431 |

| December 31, 2022 | | | | | | | | | |
|---|--------------------------------|------------------|------------------|-----------------|-----------------|---------------|-----------------------------|-------------------------|------------------|
| (in millions, except ratios) | Term loans by origination year | | | | | | Revolving loans | | Total |
| | 2022 | 2021 | 2020 | 2019 | 2018 | Prior to 2018 | Within the revolving period | Converted to term loans | |
| Loan delinquency | | | | | | | | | |
| Current | \$ 22,187 | \$ 20,212 | \$ 11,401 | \$ 3,991 | \$ 1,467 | \$ 578 | \$ 2,342 | \$ 118 | \$ 62,296 |
| 30-119 days past due | 263 | 308 | 100 | 68 | 33 | 17 | 12 | 10 | 811 |
| 120 or more days past due | – | 53 | 24 | – | – | 1 | 2 | 5 | 85 |
| Total retained loans | \$ 22,450 | \$ 20,573 | \$ 11,525 | \$ 4,059 | \$ 1,500 | \$ 596 | \$ 2,356 | \$ 133 | \$ 63,192 |
| % of 30+ days past due to total retained loans ^(a) | 1.17 % | 1.15 % | 0.83 % | 1.68 % | 2.20 % | 3.02 % | 0.59 % | 11.28 % | 1.18 % |

(a) At June 30, 2023 and December 31, 2022, auto and other loans excluded \$50 million and \$153 million, respectively, of PPP loans guaranteed by the SBA that are 30 or more days past due. These amounts have been excluded based upon the SBA guarantee.

Nonaccrual and other credit quality indicators

The following table provides information on nonaccrual and other credit quality indicators for retained auto and other consumer loans.

| (in millions) | Total Auto and other | |
|---|----------------------|-------------------|
| | June 30, 2023 | December 31, 2022 |
| Nonaccrual loans^{(a)(b)(c)} | \$ 143 | \$ 129 |
| Geographic region^(d) | | |
| California | \$ 10,353 | \$ 9,689 |
| Texas | 8,070 | 7,216 |
| Florida | 5,344 | 4,847 |
| New York | 4,634 | 4,345 |
| Illinois | 3,062 | 2,839 |
| New Jersey | 2,462 | 2,219 |
| Pennsylvania | 1,873 | 1,822 |
| Georgia | 1,858 | 1,708 |
| Arizona | 1,700 | 1,551 |
| Ohio | 1,672 | 1,603 |
| All other | 27,157 | 25,353 |
| Total retained loans | \$ 68,185 | \$ 63,192 |

- (a) At June 30, 2023 and December 31, 2022, nonaccrual loans excluded \$39 million and \$101 million, respectively, of PPP loans 90 or more days past due and guaranteed by the SBA, of which \$38 million and \$76 million, respectively, were no longer accruing interest based on the guidelines set by the SBA. Typically the principal balance of the loans is insured and interest is guaranteed at a specified reimbursement rate subject to meeting the guidelines set by the SBA. There were no loans that were not guaranteed by the SBA that are 90 or more days past due and still accruing interest at June 30, 2023 and December 31, 2022.
- (b) Generally, all consumer nonaccrual loans have an allowance. In accordance with regulatory guidance, certain nonaccrual loans that are considered collateral-dependent have been charged down to the lower of amortized cost or the fair value of their underlying collateral less costs to sell. If the value of the underlying collateral improves subsequent to charge down, the related allowance may be negative.
- (c) Interest income on nonaccrual loans recognized on a cash basis was not material for the three and six months ended June 30, 2023 and 2022.
- (d) The geographic regions presented in this table are ordered based on the magnitude of the corresponding loan balances at June 30, 2023.

Loan modifications

The Firm grants certain modifications of auto and other loans to borrowers experiencing financial difficulty, which effective January 1, 2023, are reported as FDMs. For the three and six months ended June 30, 2023 and 2022, auto and other FDMs were not material and there were no additional commitments to lend to borrowers modified as FDMs.

For the three and six months ended June 30, 2022, auto and other TDRs were not material.

Credit card loan portfolio

The credit card portfolio segment includes credit card loans originated and purchased by the Firm. Delinquency rates are the primary credit quality indicator for credit card loans.

Refer to Note 12 of JPMorgan Chase's 2022 Form 10-K for further information on the credit card loan portfolio, including credit quality indicators.

The following tables provide information on delinquency and gross charge-offs for the six months ended June 30, 2023.

| (in millions, except ratios) | June 30, 2023 | | |
|---|-----------------------------|-------------------------|-------------------|
| | Within the revolving period | Converted to term loans | Total |
| Loan delinquency | | | |
| Current and less than 30 days past due and still accruing | \$ 187,340 | \$ 755 | \$ 188,095 |
| 30-89 days past due and still accruing | 1,580 | 68 | 1,648 |
| 90 or more days past due and still accruing | 1,570 | 35 | 1,605 |
| Total retained loans | \$ 190,490 | \$ 858 | \$ 191,348 |
| Loan delinquency ratios | | | |
| % of 30+ days past due to total retained loans | 1.65 % | 12.00 % | 1.70 % |
| % of 90+ days past due to total retained loans | 0.82 | 4.08 | 0.84 |
| Gross charge-offs | \$ 2,357 | \$ 75 | \$ 2,432 |

| (in millions, except ratios) | December 31, 2022 | | |
|---|-----------------------------|-------------------------|-------------------|
| | Within the revolving period | Converted to term loans | Total |
| Loan delinquency | | | |
| Current and less than 30 days past due and still accruing | \$ 181,793 | \$ 696 | \$ 182,489 |
| 30-89 days past due and still accruing | 1,356 | 64 | 1,420 |
| 90 or more days past due and still accruing | 1,230 | 36 | 1,266 |
| Total retained loans | \$ 184,379 | \$ 796 | \$ 185,175 |
| Loan delinquency ratios | | | |
| % of 30+ days past due to total retained loans | 1.40 % | 12.56 % | 1.45 % |
| % of 90+ days past due to total retained loans | 0.67 | 4.52 | 0.68 |

Other credit quality indicators

The following table provides information on other credit quality indicators for retained credit card loans.

| (in millions, except ratios) | June 30, 2023 | December 31, 2022 |
|---|-------------------|-------------------|
| Geographic region^(a) | | |
| California | \$ 29,258 | \$ 28,154 |
| Texas | 19,992 | 19,171 |
| New York | 15,511 | 15,046 |
| Florida | 13,439 | 12,905 |
| Illinois | 10,457 | 10,089 |
| New Jersey | 7,902 | 7,643 |
| Ohio | 5,898 | 5,792 |
| Colorado | 5,840 | 5,493 |
| Pennsylvania | 5,549 | 5,517 |
| Arizona | 4,647 | 4,487 |
| All other | 72,855 | 70,878 |
| Total retained loans | \$ 191,348 | \$ 185,175 |
| Percentage of portfolio based on carrying value with estimated refreshed FICO scores | | |
| Equal to or greater than 660 | 86.4 % | 86.8 % |
| Less than 660 | 13.4 | 13.0 |
| No FICO available | 0.2 | 0.2 |

(a) The geographic regions presented in the table are ordered based on the magnitude of the corresponding loan balances at June 30, 2023.

Loan modifications

The Firm grants certain modifications of credit card loans to borrowers experiencing financial difficulty, which effective January 1, 2023, are reported as FDMs. These modifications involve placing the customer on a fixed payment plan, generally for 60 months, and typically include reducing the interest rate on the credit card under long-term programs. If the cardholder does not comply with the modified payment terms, then the credit card loan continues to age and will ultimately be charged-off in accordance with the Firm's standard charge-off policy. In most cases, the Firm does not reinstate the borrower's line of credit.

The following tables provide information on credit card loan modifications considered FDMs.

| Three months ended June 30, 2023 (in millions) | Amortized cost basis | % of loan modifications to total retained credit card loans | Financial effect of loan modification |
|--|-------------------------|--|--|
| Loan modification | | | |
| Term extension and interest rate reduction ^{(a)(b)} | \$ 181 | 0.09 % | Term extension with a reduction in the weighted average contractual interest rate from 23.27% to 3.57% |
| Total | \$ 181 | | |

| Six months ended June 30, 2023 (in millions) | Amortized cost basis | % of loan modifications to total retained credit card loans | Financial effect of loan modification |
|--|-------------------------|--|--|
| Loan modification | | | |
| Term extension and interest rate reduction ^{(a)(b)} | \$ 326 | 0.17 % | Term extension with a reduction in the weighted average contractual interest rate from 22.96% to 3.54% |
| Total | \$ 326 | | |

(a) Term extension includes credit card loans whose terms have been modified under long-term programs by placing the customer on a fixed payment plan.
(b) The interest rates represent weighted average at enrollment.

For both the three and six months ended June 30, 2023, the Firm also had \$26 million of loans subject to trial modifications. The changes to the TDR accounting guidance eliminated the TDR reasonably expected and concession assessment criteria. Accordingly, trial modifications are not considered FDMs.

The following table provides information on the payment status of FDMs during the three and six months ended June 30, 2023.

| (in millions) | Amortized cost basis | |
|---|--------------------------------|------------------------------|
| | Three months ended June 30, | Six months ended June 30, |
| | 2023 | 2023 |
| Current and less than 30 days past due and still accruing | \$ 128 | \$ 264 |
| 30-89 days past due and still accruing | 32 | 38 |
| 90 or more days past due and still accruing | 21 | 24 |
| Total | \$ 181 | \$ 326 |

There were \$6 million FDMs that re-defaulted during both the three and six months ended June 30, 2023 which were a combination of term extension and interest rate reduction.

For credit card loans modified as FDMs, payment default is deemed to have occurred when the borrower misses two consecutive contractual payments. Defaulted modified credit card loans remain in the modification program and continue to be charged off in accordance with the Firm's standard charge-off policy.

For periods ending prior to January 1, 2023, modifications of credit card loans where the Firm granted concessions to borrowers who were experiencing financial difficulty were generally accounted for and reported as TDRs. Refer to Note 12 of JPMorgan Chase's 2022 Form 10-K for further information on TDRs.

Financial effects of modifications and redefaults

The following table provides information about the financial effects of the concessions granted on credit card loans modified in TDRs and redefaults. New enrollments were less than 1% of total retained credit card loans.

| (in millions, except weighted-average data) | Three months ended June 30, | Six months ended June 30, |
|--|--------------------------------|------------------------------|
| | 2022 | 2022 |
| Balance of new TDRs ^(a) | \$ 81 | \$ 163 |
| Weighted-average interest rate of loans - before TDR | 18.94 % | 18.47 % |
| Weighted-average interest rate of loans - after TDR | 4.62 | 4.75 |
| Balance of loans that redefaulted within one year of modification ^(b) | \$ 8 | \$ 17 |

(a) Represents the outstanding balance prior to modification.
(b) Represents loans modified in TDRs that experienced a payment default in the period presented, and for which the payment default occurred within one year of the modification. The amount presented represents the balance of such loans as of the end of the quarter in which they defaulted.

Wholesale loan portfolio

Wholesale loans include loans made to a variety of clients, ranging from large corporate and institutional clients, to small businesses and high-net-worth individuals. The primary credit quality indicator for wholesale loans is the internal risk rating assigned to each loan. Refer to Note 12 of JPMorgan Chase's 2022 Form 10-K for further information on these risk ratings.

Internal risk rating is the primary credit quality indicator for retained wholesale loans. The following tables provide information on internal risk rating and gross charge-offs for the six months ended June 30, 2023.

| (in millions, except ratios) | Secured by real estate | | Commercial and industrial | | Other ^(b) | | Total retained loans | |
|--|------------------------|-------------------|---------------------------|-------------------|----------------------|-------------------|----------------------|-------------------|
| | Jun 30, 2023 | Dec 31, 2022 | Jun 30, 2023 | Dec 31, 2022 | Jun 30, 2023 | Dec 31, 2022 | Jun 30, 2023 | Dec 31, 2022 |
| Loans by risk ratings | | | | | | | | |
| Investment-grade | \$ 120,652 | \$ 99,552 | \$ 74,505 | \$ 76,275 | \$ 256,821 | \$ 249,585 | \$ 451,978 | \$ 425,412 |
| Noninvestment-grade: | | | | | | | | |
| Noncriticized | 36,387 | 23,272 | 84,133 | 81,393 | 77,360 | 57,888 | 197,880 | 162,553 |
| Criticized performing | 4,314 | 3,662 | 9,980 | 8,974 | 1,400 | 1,106 | 15,694 | 13,742 |
| Criticized nonaccrual | 518 | 246 | 1,437 | 1,018 | 638 | 699 | 2,593 | 1,963 |
| Total noninvestment-grade | 41,219 | 27,180 | 95,550 | 91,385 | 79,398 | 59,693 | 216,167 | 178,258 |
| Total retained loans^(a) | \$ 161,871 | \$ 126,732 | \$ 170,055 | \$ 167,660 | \$ 336,219 | \$ 309,278 | \$ 668,145 | \$ 603,670 |
| % of investment-grade to total retained loans | 74.54 % | 78.55 % | 43.81 % | 45.49 % | 76.39 % | 80.70 % | 67.65 % | 70.47 % |
| % of total criticized to total retained loans | 2.99 | 3.08 | 6.71 | 5.96 | 0.61 | 0.58 | 2.74 | 2.60 |
| % of criticized nonaccrual to total retained loans | 0.32 | 0.19 | 0.85 | 0.61 | 0.19 | 0.23 | 0.39 | 0.33 |

(a) As of June 30, 2023 included \$33.9 billion of Secured by real estate loans, \$3.9 billion of Commercial and industrial loans, and \$18.2 billion of Other loans associated with the First Republic acquisition.

(b) Includes loans to financial institutions, states and political subdivisions, SPEs, nonprofits, personal investment companies and trusts, as well as loans to individuals and individual entities (predominantly Global Private Bank clients within AWM and J.P. Morgan Wealth Management within CCB). Refer to Note 14 of JPMorgan Chase's 2022 Form 10-K for more information on SPEs.

| (in millions) | Secured by real estate | | | | | | | | |
|---|--------------------------------|------------------|------------------|------------------|------------------|------------------|-----------------------------|-------------------------|-------------------|
| | June 30, 2023 | | | | | | | | |
| | Term loans by origination year | | | | | | Revolving loans | | |
| | 2023 | 2022 | 2021 | 2020 | 2019 | Prior to 2019 | Within the revolving period | Converted to term loans | Total |
| Loans by risk ratings | | | | | | | | | |
| Investment-grade | \$ 6,381 | \$ 29,986 | \$ 26,336 | \$ 17,251 | \$ 16,256 | \$ 23,159 | \$ 1,283 | \$ — | \$ 120,652 |
| Noninvestment-grade | 2,606 | 11,527 | 8,058 | 4,225 | 4,270 | 9,251 | 1,280 | 2 | 41,219 |
| Total retained loans^(a) | \$ 8,987 | \$ 41,513 | \$ 34,394 | \$ 21,476 | \$ 20,526 | \$ 32,410 | \$ 2,563 | \$ 2 | \$ 161,871 |
| Gross charge-offs | \$ — | \$ 25 | \$ 21 | \$ — | \$ — | \$ 47 | \$ — | \$ — | \$ 93 |

| (in millions) | Secured by real estate | | | | | | | | |
|------------------------------|--------------------------------|------------------|------------------|------------------|-----------------|------------------|-----------------------------|-------------------------|-------------------|
| | December 31, 2022 | | | | | | | | |
| | Term loans by origination year | | | | | | Revolving loans | | |
| | 2022 | 2021 | 2020 | 2019 | 2018 | Prior to 2018 | Within the revolving period | Converted to term loans | Total |
| Loans by risk ratings | | | | | | | | | |
| Investment-grade | \$ 24,134 | \$ 22,407 | \$ 14,773 | \$ 14,666 | \$ 5,277 | \$ 17,289 | \$ 1,006 | \$ — | \$ 99,552 |
| Noninvestment-grade | 6,072 | 5,602 | 3,032 | 3,498 | 2,395 | 5,659 | 920 | 2 | 27,180 |
| Total retained loans | \$ 30,206 | \$ 28,009 | \$ 17,805 | \$ 18,164 | \$ 7,672 | \$ 22,948 | \$ 1,926 | \$ 2 | \$ 126,732 |

(a) As of June 30, 2023 included \$3.0 billion, \$11.0 billion, \$6.3 billion, \$4.4 billion, \$3.0 billion, and \$5.4 billion of retained loans originated in 2023, 2022, 2021, 2020, 2019 and prior to 2019, respectively, and \$799 million of revolving loans within the revolving period associated with the First Republic acquisition.

| Commercial and industrial | | | | | | | | | |
|---|--------------------------------|------------------|------------------|-----------------|-----------------|-----------------|-----------------------------|-------------------------|-------------------|
| June 30, 2023 | | | | | | | | | |
| (in millions) | Term loans by origination year | | | | | | Revolving loans | | Total |
| | 2023 | 2022 | 2021 | 2020 | 2019 | Prior to 2019 | Within the revolving period | Converted to term loans | |
| Loans by risk ratings | | | | | | | | | |
| Investment-grade | \$ 10,777 | \$ 12,726 | \$ 6,324 | \$ 2,510 | \$ 1,314 | \$ 1,268 | \$ 39,585 | \$ 1 | \$ 74,505 |
| Noninvestment-grade | 10,510 | 19,667 | 11,130 | 2,827 | 1,828 | 1,445 | 48,051 | 92 | 95,550 |
| Total retained loans^(a) | \$ 21,287 | \$ 32,393 | \$ 17,454 | \$ 5,337 | \$ 3,142 | \$ 2,713 | \$ 87,636 | \$ 93 | \$ 170,055 |
| Gross charge-offs | \$ - | \$ 6 | \$ 20 | \$ 1 | \$ 2 | \$ 6 | \$ 149 | \$ 4 | \$ 188 |

| Commercial and industrial | | | | | | | | | |
|------------------------------|--------------------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------------------|-------------------------|-------------------|
| December 31, 2022 | | | | | | | | | |
| (in millions) | Term loans by origination year | | | | | | Revolving loans | | Total |
| | 2022 | 2021 | 2020 | 2019 | 2018 | Prior to 2018 | Within the revolving period | Converted to term loans | |
| Loans by risk ratings | | | | | | | | | |
| Investment-grade | \$ 21,072 | \$ 8,338 | \$ 3,045 | \$ 1,995 | \$ 748 | \$ 989 | \$ 40,087 | \$ 1 | \$ 76,275 |
| Noninvestment-grade | 24,088 | 12,444 | 3,459 | 2,506 | 525 | 1,014 | 47,267 | 82 | 91,385 |
| Total retained loans | \$ 45,160 | \$ 20,782 | \$ 6,504 | \$ 4,501 | \$ 1,273 | \$ 2,003 | \$ 87,354 | \$ 83 | \$ 167,660 |

(a) As of June 30, 2023 included \$231 million, \$764 million, \$444 million, \$346 million, \$92 million, and \$270 million of retained loans originated in 2023, 2022, 2021, 2020, 2019 and prior to 2019, respectively, and \$1.7 billion of revolving loans within the revolving period associated with the First Republic acquisition.

| Other ^(a) | | | | | | | | | |
|---|--------------------------------|------------------|------------------|------------------|-----------------|-----------------|-----------------------------|-------------------------|-------------------|
| June 30, 2023 | | | | | | | | | |
| (in millions) | Term loans by origination year | | | | | | Revolving loans | | Total |
| | 2023 | 2022 | 2021 | 2020 | 2019 | Prior to 2019 | Within the revolving period | Converted to term loans | |
| Loans by risk ratings | | | | | | | | | |
| Investment-grade | \$ 24,067 | \$ 21,496 | \$ 11,927 | \$ 10,970 | \$ 4,139 | \$ 7,700 | \$ 173,951 | \$ 2,571 | \$ 256,821 |
| Noninvestment-grade | 6,821 | 12,769 | 6,803 | 2,368 | 760 | 2,083 | 47,735 | 59 | 79,398 |
| Total retained loans^(b) | \$ 30,888 | \$ 34,265 | \$ 18,730 | \$ 13,338 | \$ 4,899 | \$ 9,783 | \$ 221,686 | \$ 2,630 | \$ 336,219 |
| Gross charge-offs | \$ - | \$ - | \$ 5 | \$ 5 | \$ - | \$ - | \$ 3 | \$ - | \$ 13 |

| Other ^(a) | | | | | | | | | |
|------------------------------|--------------------------------|------------------|------------------|-----------------|-----------------|-----------------|-----------------------------|-------------------------|-------------------|
| December 31, 2022 | | | | | | | | | |
| (in millions) | Term loans by origination year | | | | | | Revolving loans | | Total |
| | 2022 | 2021 | 2020 | 2019 | 2018 | Prior to 2018 | Within the revolving period | Converted to term loans | |
| Loans by risk ratings | | | | | | | | | |
| Investment-grade | \$ 32,121 | \$ 15,864 | \$ 13,015 | \$ 4,529 | \$ 2,159 | \$ 7,251 | \$ 171,049 | \$ 3,597 | \$ 249,585 |
| Noninvestment-grade | 16,829 | 7,096 | 1,821 | 699 | 451 | 475 | 32,240 | 82 | 59,693 |
| Total retained loans | \$ 48,950 | \$ 22,960 | \$ 14,836 | \$ 5,228 | \$ 2,610 | \$ 7,726 | \$ 203,289 | \$ 3,679 | \$ 309,278 |

(a) Includes loans to financial institutions, states and political subdivisions, SPEs, nonprofits, personal investment companies and trusts, as well as loans to individuals and individual entities (predominantly Global Private Bank clients within AWM and J.P. Morgan Wealth Management within CCB). Refer to Note 14 of JPMorgan Chase's 2022 Form 10-K for more information on SPEs.

(b) As of June 30, 2023 included \$128 million, \$615 million, \$708 million, \$877 million, \$168 million, and \$1.3 billion of retained loans originated in 2023, 2022, 2021, 2020, 2019 and prior to 2019, respectively, \$14.3 billion of revolving loans within the revolving period, and \$55 million converted to term loans associated with the First Republic acquisition.

The following table presents additional information on retained loans secured by real estate, which consists of loans secured wholly or substantially by a lien or liens on real property at origination.

| (in millions, except ratios) | Multifamily | | Other commercial | | Total retained loans secured by real estate | |
|---|--------------|--------------|------------------|--------------|---|--------------|
| | Jun 30, 2023 | Dec 31, 2022 | Jun 30, 2023 | Dec 31, 2022 | Jun 30, 2023 | Dec 31, 2022 |
| Retained loans secured by real estate | \$ 100,732 | \$ 79,139 | \$ 61,139 | \$ 47,593 | \$ 161,871 ^(a) | \$ 126,732 |
| Criticized | 2,141 | 1,916 | 2,691 | 1,992 | 4,832 | 3,908 |
| % of criticized to total retained loans secured by real estate | 2.13 % | 2.42 % | 4.40 % | 4.19 % | 2.99 % | 3.08 % |
| Criticized nonaccrual | \$ 56 | \$ 51 | \$ 462 | \$ 195 | \$ 518 | \$ 246 |
| % of criticized nonaccrual loans to total retained loans secured by real estate | 0.06 % | 0.06 % | 0.76 % | 0.41 % | 0.32 % | 0.19 % |

(a) Included \$21.0 billion and \$13.0 billion of Multifamily and Other commercial loans associated with the First Republic acquisition.

Geographic distribution and delinquency

The following table provides information on the geographic distribution and delinquency for retained wholesale loans.

| (in millions) | Secured by real estate | | Commercial and industrial | | Other | | Total retained loans | |
|--|------------------------|-------------------|---------------------------|-------------------|-------------------|-------------------|----------------------|-------------------|
| | Jun 30, 2023 | Dec 31, 2022 | Jun 30, 2023 | Dec 31, 2022 | Jun 30, 2023 | Dec 31, 2022 | Jun 30, 2023 | Dec 31, 2022 |
| Loans by geographic distribution^{(a)(b)} | | | | | | | | |
| Total U.S. | \$ 158,936 | \$ 123,740 | \$ 129,316 | \$ 125,324 | \$ 257,319 | \$ 230,525 | \$ 545,571 | \$ 479,589 |
| Total non-U.S. | 2,935 | 2,992 | 40,739 | 42,336 | 78,900 | 78,753 | 122,574 | 124,081 |
| Total retained loans | \$ 161,871 | \$ 126,732 | \$ 170,055 | \$ 167,660 | \$ 336,219 | \$ 309,278 | \$ 668,145 | \$ 603,670 |
| Loan delinquency | | | | | | | | |
| Current and less than 30 days past due and still accruing | \$ 161,138 | \$ 126,083 | \$ 167,082 | \$ 165,415 | \$ 334,237 | \$ 307,511 | \$ 662,457 | \$ 599,009 |
| 30-89 days past due and still accruing | 215 | 402 | 1,317 | 1,127 | 1,232 | 1,015 | 2,764 | 2,544 |
| 90 or more days past due and still accruing ^(c) | — | 1 | 219 | 100 | 112 | 53 | 331 | 154 |
| Criticized nonaccrual | 518 | 246 | 1,437 | 1,018 | 638 | 699 | 2,593 | 1,963 |
| Total retained loans | \$ 161,871 | \$ 126,732 | \$ 170,055 | \$ 167,660 | \$ 336,219 | \$ 309,278 | \$ 668,145 | \$ 603,670 |

(a) The U.S. and non-U.S. distribution is determined based predominantly on the domicile of the borrower.

(b) Borrowers associated with the First Republic acquisition are predominantly domiciled in the U.S.

(c) Represents loans that are considered well-collateralized and therefore still accruing interest.

Nonaccrual loans

The following table provides information on retained wholesale nonaccrual loans.

| (in millions) | Secured by real estate | | Commercial and industrial | | Other | | Total retained loans | |
|---|------------------------|---------------|---------------------------|-----------------|---------------|---------------|----------------------|-----------------|
| | Jun 30, 2023 | Dec 31, 2022 | Jun 30, 2023 | Dec 31, 2022 | Jun 30, 2023 | Dec 31, 2022 | Jun 30, 2023 | Dec 31, 2022 |
| Nonaccrual loans | | | | | | | | |
| With an allowance | \$ 281 | \$ 172 | \$ 1,035 | \$ 686 | \$ 340 | \$ 487 | \$ 1,656 | \$ 1,345 |
| Without an allowance ^(a) | 237 | 74 | 402 | 332 | 298 | 212 | 937 | 618 |
| Total nonaccrual loans^(b) | \$ 518 | \$ 246 | \$ 1,437 | \$ 1,018 | \$ 638 | \$ 699 | \$ 2,593 | \$ 1,963 |

(a) When the discounted cash flows or collateral value equals or exceeds the amortized cost of the loan, the loan does not require an allowance. This typically occurs when the loans have been partially charged off and/or there have been interest payments received and applied to the loan balance.

(b) Interest income on nonaccrual loans recognized on a cash basis was not material for the three and six months ended June 30, 2023 and 2022.

Loan modifications

The Firm grants certain modifications of wholesale loans to borrowers experiencing financial difficulty, which effective January 1, 2023, are reported as FDMs. The following tables provide information about Commercial and industrial and Other loan modifications considered FDMs.

| (in millions) | Commercial and industrial | | | | | |
|--|----------------------------------|---|---|--------------------------------|---|---|
| | Three months ended June 30, 2023 | | | Six months ended June 30, 2023 | | |
| | Amortized cost basis | % of loan modifications to total retained Commercial and industrial loans | Financial effect of loan modification | Amortized cost basis | % of loan modifications to total retained Commercial and industrial loans | Financial effect of loan modification |
| Loan modification | | | | | | |
| Single modifications | | | | | | |
| Term extension | \$ 306 | 0.18 % | Extended loans by a weighted-average of 8 months | \$ 423 | 0.25 % | Extended loans by a weighted-average of 10 months |
| Other-than-insignificant payment delay | 5 | – % | Provided payment deferrals with delayed amounts primarily re-amortized over the remaining tenor | 5 | – % | Provided payment deferrals with delayed amounts primarily re-amortized over the remaining tenor |
| Multiple modifications | | | | | | |
| Interest Rate Reduction and Term Extension | \$ 1 | – % | Reduced weighted-average contractual interest by -191 bps and extended loans by a weighted-average of 17 months | \$ 1 | – % | Reduced weighted-average contractual interest by -191 bps and extended loans by a weighted-average of 17 months |
| Term extension and principal forgiveness | – | – % | | 40 | 0.02 % | Extended loans by a weighted-average of 64 months and reduced amortized cost basis of the loans by \$23mm |
| Total | \$ 312 | | | \$ 469 | | |

| (in millions) | Other | | | | | |
|----------------------------------|----------------------------------|---|---|--------------------------------|---|---|
| | Three months ended June 30, 2023 | | | Six months ended June 30, 2023 | | |
| | Amortized cost basis | % of loan modifications to total retained Other loans | Financial effect of loan modification | Amortized cost basis | % of loan modifications to total retained Other loans | Financial effect of loan modification |
| Loan modification | | | | | | |
| Single modifications | | | | | | |
| Interest rate reduction | \$ 11 | – % | Reduced weighted-average contractual interest by 654 bps | \$ 11 | – % | Reduced weighted-average contractual interest by 654 bps |
| Term extension | 38 | 0.01 % | Extended loans by a weighted-average of 3 months | 54 | 0.02 % | Extended loans by a weighted-average of 6 months |
| Multiple modifications | | | | | | |
| Payment Delay and Term Extension | \$ 235 | 0.07 % | Provided payment deferrals with delayed amounts primarily recaptured at the end of the deferral period and extended loans by a weighted-average of 144 months | \$ 235 | 0.07 % | Provided payment deferrals with delayed amounts primarily recaptured at the end of the deferral period and extended loans by a weighted-average of 144 months |
| Total | \$ 284 | | | \$ 300 | | |

The following tables provide information on the payment status of Commercial and industrial and Other FDMs during the three and six months ended June 30, 2023.

| (in millions) | Amortized cost basis | | | |
|---|----------------------------------|--------------------------------|----------------------------------|--------------------------------|
| | Commercial and industrial | | Other | |
| | Three months ended June 30, 2023 | Six months ended June 30, 2023 | Three months ended June 30, 2023 | Six months ended June 30, 2023 |
| Current and less than 30 days past due and still accruing | \$ 242 | \$ 331 | \$ – | \$ – |
| 30-89 days past due and still accruing | – | – | – | – |
| 90 or more days past due and still accruing | 3 | 3 | – | – |
| Criticized nonaccrual | 67 | 135 | 284 | 300 |
| Total | \$ 312 | \$ 469 | \$ 284 | \$ 300 |

The following table provides information on Commercial and industrial FDMs that re-defaulted during the three and six months ended June 30, 2023. There were no Other FDM re-defaults during the three and six months ended June 30, 2023.

| (in millions) | Amortized cost basis | |
|----------------------------|-------------------------------------|-----------------------------------|
| | Three months ended June 30, 2023 | Six months ended June 30, 2023 |
| Loan modification | | |
| Term extension | 3 | 7 |
| Total^(a) | 3 | 7 |

(a) Represents FDMs that were 30 days or more past due

Additional commitments to lend to borrowers experiencing financial difficulty whose Commercial and industrial loans have been modified as FDMs were \$438 million and \$1.3 billion for the three and six months ended June 30, 2023.

There were no additional commitments to lend to borrowers experiencing financial difficulties whose Other loans have been modified as FDMs for the three and six months ended June 30, 2023.

For the three and six months ended June 30, 2023, Secured by real estate FDMs were \$77 million and \$85 million respectively. The financial effects of FDMs were largely term extensions which extended the loans by a weighted-average of nine months. There were no re-defaults during the three months ended June 30, 2023 and \$1 million in modified term extensions that re-defaulted during the six months ended June 30, 2023. There were no additional commitments to lend to borrowers experiencing financial difficulty whose loans have been modified as FDMs for the three and six months ended June 30, 2023.

Prior to January 1, 2023, certain loan modifications were considered TDRs.

For the three and six months ended June 30, 2022, new TDRs were \$60 million and \$479 million, respectively. New TDRs for the three and six months ended June 30, 2022 reflected extended maturity dates and covenant waivers primarily in the Commercial and Industrial loan class. For the three and six months ended June 30, 2022, the impact of these modifications were not material to the Firm.

As a result of the elimination of the requirement to assess whether a modification is reasonably expected or involves a concession, the population of loans considered FDMs is greater than those previously considered TDRs.

Note 13 – Allowance for credit losses

The Firm's allowance for credit losses represents management's estimate of expected credit losses over the remaining expected life of the Firm's financial assets measured at amortized cost and certain off-balance sheet lending-related commitments.

On January 1, 2023 the Firm adopted the Financial Instruments - Credit Losses: Troubled Debt Restructurings accounting guidance as described in Note 1.

The adoption of this guidance eliminated the requirement to measure the allowance for TDRs using a DCF methodology and allowed the option of a non-DCF portfolio-based approach for modified loans to borrowers experiencing financial difficulty. If a DCF methodology is still applied for these modified loans, the discount rate must be the post-modification effective interest rate, instead of the pre-modification effective interest rate.

The Firm elected to change from an asset-specific allowance approach to its non-DCF, portfolio-based allowance approach for modified loans to troubled borrowers for all portfolios except collateral-dependent loans and nonaccrual risk-rated loans, for which the asset-specific allowance approach will continue to apply.

This guidance was adopted under the modified retrospective method which resulted in a net decrease to the allowance for credit losses of \$587 million and an increase to retained earnings of \$446 million, after-tax predominantly driven by residential real estate and credit card.

Refer to Note 13 of JPMorgan Chase's 2022 Form 10-K for a detailed discussion of the allowance for credit losses and the related accounting policies.

Allowance for credit losses and related information

The table below summarizes information about the allowances for credit losses and includes a breakdown of loans and lending-related commitments by impairment methodology. Refer to Note 10 of JPMorgan Chase's 2022 Form 10-K and Note 10 of this Form 10-Q for further information on the allowance for credit losses on investment securities.

| Six months ended June 30, (in millions) | 2023 | | | | 2022 | | | |
|--|---------------------------------------|-------------------|-------------------|---------------------|---------------------------------------|-------------------|-------------------|---------------------|
| | Consumer, excluding credit card | Credit card | Wholesale | Total | Consumer, excluding credit card | Credit card | Wholesale | Total |
| Allowance for loan losses | | | | | | | | |
| Beginning balance at January 1, | \$ 2,040 | \$ 11,200 | \$ 6,486 | \$ 19,726 | \$ 1,765 | \$ 10,250 | \$ 4,371 | \$ 16,386 |
| Cumulative effect of a change in accounting principle ^(a) | (489) | (100) | 2 | (587) | NA | NA | NA | NA |
| Gross charge-offs | 501 | 2,432 | 294 | 3,227 | 384 | 1,505 | 123 | 2,012 |
| Gross recoveries collected | (247) | (386) | (46) | (679) | (311) | (419) | (43) | (773) |
| Net charge-offs/(recoveries) | 254 | 2,046 | 248 | 2,548 | 73 | 1,086 | 80 | 1,239 |
| Provision for loan losses | 751 | 2,546 | 2,067 | 5,364 | 237 | 1,236 | 1,125 | 2,598 |
| Other | — | — | 25 | 25 | — | — | 5 | 5 |
| Ending balance at June 30, | \$ 2,048 | \$ 11,600 | \$ 8,332 | \$ 21,980 | \$ 1,929 | \$ 10,400 | \$ 5,421 | \$ 17,750 |
| Allowance for lending-related commitments | | | | | | | | |
| Beginning balance at January 1, | \$ 76 | \$ — | \$ 2,306 | \$ 2,382 | \$ 113 | \$ — | \$ 2,148 | \$ 2,261 |
| Provision for lending-related commitments | 52 | — | (253) | (201) | (2) | — | (37) | (39) |
| Other | 1 | — | 4 | 5 | (1) | — | 1 | — |
| Ending balance at June 30, | \$ 129 | \$ — | \$ 2,057 | \$ 2,186 | \$ 110 | \$ — | \$ 2,112 | \$ 2,222 |
| Total allowance for investment securities | | | | 104 | NA | NA | NA | 47 |
| Total allowance for credit losses^{(b)(c)} | \$ 2,177 | \$ 11,600 | \$ 10,389 | \$ 24,270 | \$ 2,039 | \$ 10,400 | \$ 7,533 | \$ 20,019 |
| Allowance for loan losses by impairment methodology | | | | | | | | |
| Asset-specific ^(d) | \$ (971) | \$ — | \$ 478 | \$ (493) | \$ (676) | \$ 227 | \$ 332 | \$ (117) |
| Portfolio-based | 3,019 | 11,600 | 7,854 | 22,473 | 2,605 | 10,173 | 5,089 | 17,867 |
| Total allowance for loan losses | \$ 2,048 | \$ 11,600 | \$ 8,332 | \$ 21,980 | \$ 1,929 | \$ 10,400 | \$ 5,421 | \$ 17,750 |
| Loans by impairment methodology | | | | | | | | |
| Asset-specific ^(d) | \$ 3,439 | \$ — | \$ 2,587 | \$ 6,026 | \$ 12,683 | \$ 827 | \$ 2,408 | \$ 15,918 |
| Portfolio-based | 392,756 | 191,348 | 665,558 | 1,249,662 | 289,948 | 164,667 | 581,857 | 1,036,472 |
| Total retained loans | \$ 396,195 | \$ 191,348 | \$ 668,145 | \$ 1,255,688 | \$ 302,631 | \$ 165,494 | \$ 584,265 | \$ 1,052,390 |
| Collateral-dependent loans | | | | | | | | |
| Net charge-offs | \$ 5 | \$ — | \$ 77 | \$ 82 | \$ (15) | \$ — | \$ 8 | \$ (7) |
| Loans measured at fair value of collateral less cost to sell | 3,388 | — | 762 | 4,150 | 3,935 | — | 607 | 4,542 |
| Allowance for lending-related commitments by impairment methodology | | | | | | | | |
| Asset-specific | \$ — | \$ — | \$ 65 | \$ 65 | \$ — | \$ — | \$ 78 | \$ 78 |
| Portfolio-based | 129 | — | 1,992 | 2,121 | 110 | — | 2,034 | 2,144 |
| Total allowance for lending-related commitments^(e) | \$ 129 | \$ — | \$ 2,057 | \$ 2,186 | \$ 110 | \$ — | \$ 2,112 | \$ 2,222 |
| Lending-related commitments by impairment methodology | | | | | | | | |
| Asset-specific | \$ — | \$ — | \$ 332 | \$ 332 | \$ — | \$ — | \$ 397 | \$ 397 |
| Portfolio-based ^(f) | 32,428 | — | 521,408 | 553,836 | 26,809 | — | 458,038 | 484,847 |
| Total lending-related commitments | \$ 32,428 | \$ — | \$ 521,740 | \$ 554,168 | \$ 26,809 | \$ — | \$ 458,435 | \$ 485,244 |

- (a) Represents the impact to the allowance for loan losses upon the adoption of the Financial Instruments - Credit Losses: Troubled Debt Restructurings accounting guidance.
- (b) At June 30, 2023, in addition to the allowance for credit losses in the table above, the Firm also had an allowance for credit losses of \$18 million associated with certain accounts receivable in CIB.
- (c) As of June 30, 2023 included \$1.2 billion allowance for credit losses associated with the First Republic acquisition.
- (d) Includes collateral-dependent loans, including those for which foreclosure is deemed probable, and nonaccrual risk-rated loans for all periods presented. Prior periods also include non collateral-dependent TDRs or reasonably expected TDRs and modified PCD loans.
- (e) The allowance for lending-related commitments is reported in accounts payable and other liabilities on the Consolidated balance sheets.
- (f) At June 30, 2023 and 2022, lending-related commitments excluded \$18.4 billion and \$13.7 billion, respectively, for the consumer, excluding credit card portfolio segment; \$881.5 billion and \$774.0 billion, respectively, for the credit card portfolio segment; and \$19.3 billion and \$29.1 billion, respectively, for the wholesale portfolio segment, which were not subject to the allowance for lending-related commitments. Prior period amount for wholesale lending-related commitments, including the amount not subject to allowance, has been revised to conform with the current presentation.

Discussion of changes in the allowance

The allowance for credit losses as of June 30, 2023 was \$24.3 billion, reflecting a net addition of \$2.7 billion from December 31, 2022.

The net addition to the allowance for credit losses included \$1.5 billion, consisting of:

- \$819 million in **wholesale**, predominantly driven by net downgrade activity, updates to certain assumptions related to office real estate in CB in the second quarter of 2023, and the impact of the additional weight placed on the adverse scenarios in the first quarter of 2023, and
- \$649 million in **consumer**, predominantly driven by Card Services, reflecting loan growth, the net effect of changes in the Firm's macroeconomic outlook, including the impact from the weighted average U.S. unemployment rate peaking in the third quarter of 2024, and the additional weight placed on the adverse scenarios in the first quarter of 2023, partially offset by reduced borrower uncertainty.

The net addition also included \$1.2 billion to establish the allowance for the First Republic loans and lending-related commitments in the second quarter of 2023.

The Firm has maintained the additional weight placed on the relative adverse scenario in the first quarter of 2023, reflecting an increased probability of a moderate recession due to tightening financial conditions.

The allowance for credit losses also reflected a reduction of \$587 million as a result of the adoption of changes to the TDR accounting guidance on January 1, 2023. Refer to Note 1 for further information.

The Firm's allowance for credit losses is estimated using a weighted average of five internally developed macroeconomic scenarios. The adverse scenarios incorporate more punitive macroeconomic factors than the central case assumptions provided in the table below, resulting in a weighted average U.S. unemployment rate peaking at 5.8% in the third quarter of 2024, and a 1.5% lower U.S. real GDP exiting the fourth quarter of 2024.

The Firm's central case assumptions reflected U.S. unemployment rates and U.S. real GDP as follows:

| | Assumptions at June 30, 2023 | | |
|--|------------------------------|-------|-------|
| | 4Q23 | 2Q24 | 4Q24 |
| U.S. unemployment rate ^(a) | 4.2 % | 4.9 % | 5.0 % |
| YoY growth in U.S. real GDP ^(b) | 0.5 % | – % | 1.0 % |

| | Assumptions at December 31, 2022 | | |
|--|----------------------------------|-------|-------|
| | 2Q23 | 4Q23 | 2Q24 |
| U.S. unemployment rate ^(a) | 3.8 % | 4.3 % | 5.0 % |
| YoY growth in U.S. real GDP ^(b) | 1.5 % | 0.4 % | – % |

(a) Reflects quarterly average of forecasted U.S. unemployment rate.

(b) The year over year growth in U.S. real GDP in the forecast horizon of the central scenario is calculated as the percentage change in U.S. real GDP levels from the prior year.

Subsequent changes to this forecast and related estimates will be reflected in the provision for credit losses in future periods.

Refer to Note 13 and Note 10 of JPMorgan Chase's 2022 Form 10-K for a description of the policies, methodologies and judgments used to determine the Firm's allowance for credit losses on loans, lending-related commitments, and investment securities.

Refer to Consumer Credit Portfolio on pages 65-69, Wholesale Credit Portfolio on pages 70-79 and Note 12 for additional information on the consumer and wholesale credit portfolios.

Refer to Critical Accounting Estimates Used by the Firm on pages 91-93 for further information on the allowance for credit losses and related management judgments.

Note 14 - Variable interest entities

Refer to Note 1 and Note 14 of JPMorgan Chase's 2022 Form 10-K for a further description of the Firm's accounting policies and involvement with VIEs.

The following table summarizes the most significant types of Firm-sponsored VIEs by business segment. The Firm considers a "Firm-sponsored" VIE to include any entity where: (1) JPMorgan Chase is the primary 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 asset-backed commercial paper conduit.

| Line of Business | Transaction Type | Activity | Form 10-Q page references |
|------------------|--|---|---------------------------|
| CCB | Credit card securitization trusts | Securitization of originated credit card receivables | 165 |
| | Mortgage securitization trusts | Servicing and securitization of both originated and purchased residential mortgages | 165-167 |
| CIB | Mortgage and other securitization trusts | Securitization of both originated and purchased residential and commercial mortgages, and other consumer loans | 165-167 |
| | Multi-seller conduits | Assisting clients in accessing the financial markets in a cost-efficient manner and structuring transactions to meet investor needs | 167 |
| | Municipal bond vehicles | Financing of municipal bond investments | 167 |

The Firm also invests in and provides financing and other services to VIEs sponsored by third parties. Refer to pages 168-169 of this Note for more information on consolidated VIE assets and liabilities as well as the VIEs sponsored by third parties.

Significant Firm-sponsored VIEs

Credit card securitizations

As a result of the Firm's continuing involvement, the Firm is considered to be the primary beneficiary of its Firm-sponsored credit card securitization trust, the Chase Issuance Trust.

Firm-sponsored mortgage and other securitization trusts

The Firm securitizes (or has securitized) originated and purchased residential mortgages, commercial mortgages and other consumer loans primarily in its CCB and CIB 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.

The following tables present the total unpaid principal amount of assets held in Firm-sponsored private-label securitization entities, including those in which the Firm has continuing involvement, and those that are consolidated by the Firm. Continuing involvement includes servicing the loans, holding senior interests or subordinated interests (including amounts required to be held pursuant to credit

risk retention rules), recourse or guarantee arrangements, and derivative contracts. In certain instances, the Firm's only continuing involvement is servicing the loans. The Firm's maximum loss exposure from retained and purchased interests is the carrying value of these interests.

| June 30, 2023 (in millions) | Principal amount outstanding | | | JPMorgan Chase interest in securitized assets in nonconsolidated VIEs ^{(c)(d)(e)} | | | |
|---|--|---|--|--|-----------------------|------------------------|--|
| | Total assets held by securitization VIEs | Assets held in consolidated securitization VIEs | Assets held in nonconsolidated securitization VIEs with continuing involvement | Trading assets | Investment securities | Other financial assets | Total interests held by JPMorgan Chase |
| Securitization-related^(a) | | | | | | | |
| Residential mortgage: | | | | | | | |
| Prime/Alt-A and option ARMs | \$ 56,604 | \$ 715 | \$ 38,439 | \$ 681 | \$ 2,060 | \$ 23 | \$ 2,764 |
| Subprime | 9,300 | — | 1,353 | 4 | — | — | 4 |
| Commercial and other ^(b) | 162,779 | — | 127,826 | 893 | 5,443 | 668 | 7,004 |
| Total | \$ 228,683 | \$ 715 | \$ 167,618 | \$ 1,578 | \$ 7,503 | \$ 691 | \$ 9,772 |

| December 31, 2022 (in millions) | Principal amount outstanding | | | JPMorgan Chase interest in securitized assets in nonconsolidated VIEs ^{(c)(d)(e)} | | | |
|---|--|---|--|--|-----------------------|------------------------|--|
| | Total assets held by securitization VIEs | Assets held in consolidated securitization VIEs | Assets held in nonconsolidated securitization VIEs with continuing involvement | Trading assets | Investment securities | Other financial assets | Total interests held by JPMorgan Chase |
| Securitization-related^(a) | | | | | | | |
| Residential mortgage: | | | | | | | |
| Prime/Alt-A and option ARMs | \$ 55,362 | \$ 754 | \$ 37,058 | \$ 744 | \$ 1,918 | \$ — | \$ 2,662 |
| Subprime | 9,709 | — | 1,743 | 10 | — | — | 10 |
| Commercial and other ^(b) | 164,915 | — | 127,037 | 888 | 5,373 | 670 | 6,931 |
| Total | \$ 229,986 | \$ 754 | \$ 165,838 | \$ 1,642 | \$ 7,291 | \$ 670 | \$ 9,603 |

(a) Excludes U.S. GSEs and government agency securitizations and re-securitizations, which are not Firm-sponsored.

(b) Consists of securities backed by commercial real estate loans and non-mortgage-related consumer receivables.

(c) Excludes the following: retained servicing; securities retained from loan sales and securitization activity related to U.S. GSEs and government agencies; interest rate and foreign exchange derivatives primarily used to manage interest rate and foreign exchange risks of securitization entities; senior securities of \$104 million and \$134 million at June 30, 2023 and December 31, 2022, respectively, and subordinated securities which were \$92 million and \$34 million at June 30, 2023 and December 31, 2022, respectively, which the Firm purchased in connection with CIB's secondary market-making activities.

(d) Includes interests held in re-securitization transactions.

(e) As of both June 30, 2023 and December 31, 2022, 84% of the Firm's retained securitization interests, which are predominantly carried at fair value and include amounts required to be held pursuant to credit risk retention rules, were risk-rated "A" or better, on an S&P-equivalent basis. The retained interests in prime residential mortgages consisted of \$2.7 billion and \$2.6 billion of investment-grade retained interests at June 30, 2023 and December 31, 2022, respectively, and noninvestment-grade retained interests were not material at both June 30, 2023 and December 31, 2022. The retained interests in commercial and other securitization trusts consisted of \$5.9 billion and \$5.8 billion of investment-grade retained interests at June 30, 2023 and December 31, 2022 respectively, and \$1.1 billion of noninvestment-grade retained interests at both June 30, 2023 and December 31, 2022, respectively.

Residential mortgage

The Firm securitizes residential mortgage loans originated by CCB, as well as residential mortgage loans purchased from third parties by either CCB or CIB.

Commercial mortgages and other consumer securitizations

CIB originates and securitizes commercial mortgage loans, and engages in underwriting and trading activities involving the securities issued by securitization trusts.

Re-securitizations

The following table presents the principal amount of securities transferred to re-securitization VIEs.

| (in millions) | Three months ended June 30, | | Six months ended June 30, | |
|--|--------------------------------|----------|------------------------------|-----------|
| | 2023 | 2022 | 2023 | 2022 |
| Transfers of securities to VIEs | | | | |
| U.S. GSEs and government agencies | \$ 6,261 | \$ 7,373 | \$ 9,667 | \$ 13,449 |

The Firm did not transfer any private label securities to re-securitization VIEs during the three and six months ended June 30, 2023 and 2022, respectively and retained interests in any such Firm-sponsored VIEs as of June 30, 2023 and December 31, 2022 were not material.

The following table presents information on the Firm's interests in nonconsolidated re-securitization VIEs.

| (in millions) | Nonconsolidated re-securitization VIEs | |
|--|---|----------------------|
| | June 30, 2023 | December 31, 2022 |
| U.S. GSEs and government agencies | | |
| Interest in VIEs | \$ 3,412 | \$ 2,580 |

As of June 30, 2023, and December 31, 2022, the Firm did not consolidate any U.S. GSE and government agency re-securitization VIEs or any Firm-sponsored private-label re-securitization VIEs.

Multi-seller conduits

In the normal course of business, JPMorgan Chase makes markets in and invests in commercial paper issued by the Firm-administered multi-seller conduits. The Firm held \$12.4 billion and \$13.8 billion of the commercial paper issued by the Firm-administered multi-seller conduits at June 30, 2023, and December 31, 2022, respectively, which have been eliminated in consolidation. The Firm's investments reflect the Firm's funding needs and capacity and were not driven by market illiquidity. Other than the amounts required to be held pursuant to credit risk retention rules, the Firm is not obligated under any agreement to purchase the commercial paper issued by the Firm-administered multi-seller conduits.

Deal-specific liquidity facilities, program-wide liquidity and credit enhancement provided by the Firm have been eliminated in consolidation. The Firm or the Firm-administered multi-seller conduits provide lending-related commitments to certain clients of the Firm-administered multi-seller conduits. The unfunded commitments were \$11.3 billion and \$10.6 billion at June 30, 2023, and December 31, 2022, respectively, and are reported as off-balance sheet lending-related commitments in other unfunded commitments to extend credit. Refer to Note 24 for more information on off-balance sheet lending-related commitments.

Municipal bond vehicles

Municipal bond vehicles or tender option bond ("TOB") trusts allow institutions to finance their municipal bond investments at short-term rates. TOB transactions are known as customer TOB trusts and non-customer TOB trusts. Customer TOB trusts are sponsored by a third party. The Firm serves as sponsor for all non-customer TOB transactions.

Consolidated VIE assets and liabilities

The following table presents information on assets and liabilities related to VIEs consolidated by the Firm as of June 30, 2023 and December 31, 2022.

| June 30, 2023 (in millions) | Assets | | | | Liabilities | | |
|---|-----------------|--------------------|----------------------|-----------------------------|---|----------------------|-------------------|
| | Trading assets | Loans | Other ^(c) | Total assets ^(d) | Beneficial interests in VIE assets ^(e) | Other ^(f) | Total liabilities |
| VIE program type | | | | | | | |
| Firm-sponsored credit card trusts | \$ — | \$ 9,168 | \$ 82 | \$ 9,250 | \$ 999 | \$ 2 | \$ 1,001 |
| Firm-administered multi-seller conduits | 1 | 28,598 | 169 | 28,768 | 16,383 | 31 | 16,414 |
| Municipal bond vehicles | 2,313 | — | 21 | 2,334 | 2,133 | 10 | 2,143 |
| Mortgage securitization entities ^(a) | — | 733 | 10 | 743 | 132 | 60 | 192 |
| Other | 54 | 626 ^(b) | 250 | 930 | — | 144 | 144 |
| Total | \$ 2,368 | \$ 39,125 | \$ 532 | \$ 42,025 | \$ 19,647 | \$ 247 | \$ 19,894 |

| December 31, 2022 (in millions) | Assets | | | | Liabilities | | |
|---|-----------------|----------------------|----------------------|-----------------------------|---|----------------------|-------------------|
| | Trading assets | Loans | Other ^(c) | Total assets ^(d) | Beneficial interests in VIE assets ^(e) | Other ^(f) | Total liabilities |
| VIE program type | | | | | | | |
| Firm-sponsored credit card trusts | \$ — | \$ 9,699 | \$ 100 | \$ 9,799 | \$ 1,999 | \$ 2 | \$ 2,001 |
| Firm-administered multi-seller conduits | — | 22,819 | 170 | 22,989 | 9,236 | 39 | 9,275 |
| Municipal bond vehicles | 2,089 | — | 7 | 2,096 | 1,232 | 10 | 1,242 |
| Mortgage securitization entities ^(a) | — | 781 | 10 | 791 | 143 | 67 | 210 |
| Other | 62 | 1,112 ^(b) | 263 | 1,437 | — | 161 | 161 |
| Total | \$ 2,151 | \$ 34,411 | \$ 550 | \$ 37,112 | \$ 12,610 | \$ 279 | \$ 12,889 |

(a) Includes residential mortgage securitizations.

(b) Primarily includes purchased supply chain finance receivables and purchased auto loan securitizations in CIB.

(c) Includes assets classified as cash and other assets on the Consolidated balance sheets.

(d) The assets of the consolidated VIEs included in the program types above are used to settle the liabilities of those entities. The assets and liabilities include third-party assets and liabilities of consolidated VIEs and exclude intercompany balances that eliminate in consolidation.

(e) 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 VIEs". The holders of these beneficial interests generally do not have recourse to the general credit of JPMorgan Chase. Included in beneficial interests in VIE assets are long-term beneficial interests of \$1.1 billion and \$2.1 billion at June 30, 2023, and December 31, 2022, respectively.

(f) Includes liabilities classified as accounts payable and other liabilities on the Consolidated balance sheets.

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, remarketing 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 generally does not consolidate the VIE, but it records and reports these positions on its Consolidated balance sheets in the same manner it would record and report positions in respect of any other third-party transaction.

Tax credit vehicles

The Firm holds investments in unconsolidated tax credit vehicles, which are limited partnerships and similar entities that own and operate affordable housing, energy, and other projects. These entities are primarily considered VIEs. A third party is typically the general partner or managing

member and has control over the significant activities of the tax credit vehicles, and accordingly the Firm does not consolidate tax credit vehicles. The Firm generally invests in these partnerships as a limited partner and earns a return primarily through the receipt of tax credits allocated to the projects. The maximum loss exposure, represented by equity investments and funding commitments, was \$32.4 billion and \$30.2 billion at June 30, 2023, and December 31, 2022, of which \$12.6 billion and \$10.6 billion was unfunded at June 30, 2023, and December 31, 2022, respectively. The Firm assesses each project and to reduce the risk of loss, may withhold varying amounts of its capital investment until the project qualifies for tax credits. Refer to Note 25 of JPMorgan Chase's 2022 Form 10-K for further information on affordable housing tax credits and Note 24 of this Form 10-Q for more information on off-balance sheet lending-related commitments.

Customer municipal bond vehicles (TOB trusts)

The Firm may provide various services to customer TOB trusts, including remarketing agent, liquidity or tender option provider. In certain customer TOB transactions, the Firm, as liquidity provider, has entered into a reimbursement agreement with the Residual holder.

In those transactions, upon the termination of the vehicle, the Firm has recourse to the third-party Residual holders for any shortfall. The Firm does not have any intent to protect Residual holders from potential losses on any of the underlying municipal bonds. The Firm does not consolidate customer TOB trusts, 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 maximum exposure as a liquidity provider to customer TOB trusts at June 30, 2023 and December 31, 2022 was \$5.9 billion and \$5.8 billion, respectively. The fair value of assets held by such VIEs at both June 30, 2023 and December 31, 2022 was \$8.2 billion.

Loan securitizations

The Firm has securitized and sold a variety of loans, including residential mortgages, credit card receivables, commercial mortgages and other consumer loans.

Securitization activity

The following table provides information related to the Firm's securitization activities for the three and six months ended June 30, 2023 and 2022, related to assets held in Firm-sponsored securitization entities that were not consolidated by the Firm, and where sale accounting was achieved at the time of the securitization.

| (in millions) | Three months ended June 30, | | | | Six months ended June 30, | | | |
|--|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| | 2023 | | 2022 | | 2023 | | 2022 | |
| | Residential mortgage ^(d) | Commercial and other ^(e) | Residential mortgage ^(d) | Commercial and other ^(e) | Residential mortgage ^(d) | Commercial and other ^(e) | Residential mortgage ^(d) | Commercial and other ^(e) |
| Principal securitized | \$ 2,216 | \$ 376 | \$ 3,028 | \$ 3,950 | \$ 3,289 | \$ 376 | \$ 9,523 | \$ 7,058 |
| All cash flows during the period:^(a) | | | | | | | | |
| Proceeds received from loan sales as financial instruments ^{(b)(c)} | \$ 2,123 | \$ 380 | \$ 2,754 | \$ 3,869 | \$ 3,153 | \$ 380 | \$ 9,129 | \$ 6,975 |
| Servicing fees collected | 6 | 1 | 20 | — | 12 | 1 | 44 | — |
| Cash flows received on interests | 86 | 91 | 127 | 54 | 160 | 178 | 282 | 125 |

(a) Excludes re-securitization transactions.

(b) Predominantly includes Level 2 assets.

(c) The carrying value of the loans accounted for at fair value approximated the proceeds received upon loan sale.

(d) Represents prime mortgages. Excludes loan securitization activity related to U.S. GSEs and government agencies.

(e) Includes commercial mortgage and other consumer loans.

Loans and excess MSR sold to U.S. government-sponsored enterprises and loans in securitization transactions pursuant to Ginnie Mae guidelines

In 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 and certain originated excess MSR on a nonrecourse basis, predominantly to U.S. GSEs. These loans and excess MSR are sold primarily for the purpose of securitization by the U.S. GSEs, who provide certain guarantee provisions (e.g., credit enhancement of the loans). The Firm also sells loans into securitization transactions pursuant to Ginnie Mae guidelines; these loans are typically insured or guaranteed by another U.S. government agency. The Firm does not consolidate the securitization vehicles underlying these transactions as it is not the primary beneficiary. 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. Refer to Note 24 of this Form 10-Q for additional information about the Firm's loan sales- and securitization-related indemnifications and Note 15 for additional information about the impact of the Firm's sale of certain excess MSR.

The following table summarizes the activities related to loans sold to the U.S. GSEs, and loans in securitization transactions pursuant to Ginnie Mae guidelines.

| (in millions) | Three months ended June 30, | | Six months ended June 30, | |
|--|--------------------------------|------------------|------------------------------|------------------|
| | 2023 | 2022 | 2023 | 2022 |
| Carrying value of loans sold | \$ 6,323 | \$ 10,721 | \$ 9,021 | \$ 34,389 |
| Proceeds received from loan sales as cash | 33 | 4 | 40 | 13 |
| Proceeds from loan sales as securities ^{(a)(b)} | 6,220 | 10,551 | 8,882 | 33,809 |
| Total proceeds received from loan sales^(c) | \$ 6,253 | \$ 10,555 | \$ 8,922 | \$ 33,822 |
| Gains/(losses) on loan sales ^{(d)(e)} | \$ - | \$ - | \$ - | \$ - |

(a) Includes securities from U.S. GSEs and Ginnie Mae that are generally sold shortly after receipt or retained as part of the Firm's investment securities portfolio.

(b) Included in level 2 assets.

(c) Excludes the value of MSRs retained upon the sale of loans.

(d) Gains/(losses) on loan sales include the value of MSRs.

(e) The carrying value of the loans accounted for at fair value approximated the proceeds received upon loan sale.

Options to repurchase delinquent loans

In addition to the Firm's obligation to repurchase certain loans due to material breaches of representations and warranties as discussed in Note 24, the Firm also has the option to repurchase delinquent loans that it services for Ginnie Mae loan pools, as well as for other U.S. government

agencies under certain arrangements. The Firm typically elects to repurchase delinquent loans from Ginnie Mae loan pools as it continues to service them and/or manage the foreclosure process in accordance with the applicable requirements, and such loans continue to be insured or guaranteed. When the Firm's repurchase option becomes exercisable, such loans must be reported on the Consolidated balance sheets as a loan with a corresponding liability. Refer to Note 12 for additional information.

The following table presents loans the Firm repurchased or had an option to repurchase, real estate owned, and foreclosed government-guaranteed residential mortgage loans recognized on the Firm's Consolidated balance sheets as of June 30, 2023 and December 31, 2022. Substantially all of these loans and real estate are insured or guaranteed by U.S. government agencies.

| (in millions) | June 30, 2023 | December 31, 2022 |
|--|------------------|----------------------|
| Loans repurchased or option to repurchase ^(a) | \$ 752 | \$ 839 |
| Real estate owned | 9 | 10 |
| Foreclosed government-guaranteed residential mortgage loans ^(b) | 23 | 27 |

(a) Predominantly all of these amounts relate to loans that have been repurchased from Ginnie Mae loan pools.

(b) Relates to voluntary repurchases of loans, which are included in accrued interest and accounts receivable.

Loan delinquencies and liquidation losses

The table below includes information about components of and delinquencies related to nonconsolidated securitized financial assets held in Firm-sponsored private-label securitization entities, in which the Firm has continuing involvement as of June 30, 2023, and December 31, 2022.

| (in millions) | Securitized assets | | 90 days past due | | Net liquidation losses/(recoveries) | | | |
|--------------------------------|--------------------|----------------------|------------------|----------------------|-------------------------------------|----------------|------------------------------|----------------|
| | | | | | Three months ended June 30, | | Six months ended June 30, | |
| | June 30, 2023 | December 31, 2022 | June 30, 2023 | December 31, 2022 | 2023 | 2022 | 2023 | 2022 |
| Securitized loans | | | | | | | | |
| Residential mortgage: | | | | | | | | |
| Prime / Alt-A & option ARMs | \$ 38,439 | \$ 37,058 | \$ 482 | \$ 511 | \$ 3 | \$ (21) | \$ 10 | \$ (27) |
| Subprime | 1,353 | 1,743 | 141 | 212 | 2 | (3) | 4 | (3) |
| Commercial and other | 127,826 | 127,037 | 1,231 | 948 | - | 5 | 19 | 11 |
| Total loans securitized | \$ 167,618 | \$ 165,838 | \$ 1,854 | \$ 1,671 | \$ 5 | \$ (19) | \$ 33 | \$ (19) |

Note 15 – Goodwill and Mortgage servicing rights

Refer to Note 15 of JPMorgan Chase’s 2022 Form 10-K for a discussion of the accounting policies related to goodwill and mortgage servicing rights.

Goodwill

The following table presents goodwill attributed to the reportable business segments and Corporate.

| (in millions) | June 30, 2023 | December 31, 2022 |
|------------------------------|------------------|----------------------|
| Consumer & Community Banking | \$ 32,116 | \$ 32,121 |
| Corporate & Investment Bank | 8,253 | 8,008 |
| Commercial Banking | 2,985 | 2,985 |
| Asset & Wealth Management | 8,344 | 7,902 |
| Corporate | 682 | 646 |
| Total goodwill | \$ 52,380 | \$ 51,662 |

The following table presents changes in the carrying amount of goodwill.

| (in millions) | Three months ended June 30, | | Six months ended June 30, | |
|--------------------------------------|--------------------------------|------------------|------------------------------|------------------|
| | 2023 | 2022 | 2023 | 2022 |
| Balance at beginning of period | \$ 52,144 | \$ 50,298 | \$ 51,662 | \$ 50,315 |
| Changes during the period from: | | | | |
| Business combinations ^(a) | 236 | 470 | 687 | 470 |
| Other ^(b) | – | (71) | 31 | (88) |
| Balance at June 30, | \$ 52,380 | \$ 50,697 | \$ 52,380 | \$ 50,697 |

- (a) For the three and six months ended June 30, 2023, represents estimated goodwill associated with the acquisition of Aumni Inc. in CIB in the second quarter, and the acquisition of the remaining 51% interest in CIFM in AWM in the first quarter. For the three and six months ended June 30, 2022, represents estimated goodwill associated with the acquisitions of Frosch Travel Group, LLC in CCB and Volkswagen Payments S.A. in CIB.
- (b) Predominantly foreign currency adjustments.

Goodwill impairment testing

Goodwill 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 that there may be an impairment. Refer to Note 15 of JPMorgan Chase’s 2022 Form 10-K for a further discussion of the Firm’s goodwill impairment testing.

Unanticipated declines in business performance, increases in credit losses, increases in capital requirements, as well as deterioration in economic or market conditions, adverse regulatory or legislative changes or increases in the estimated market cost of equity, could cause the estimated fair values of the Firm’s reporting units to decline in the future, which could result in a material impairment charge to earnings in a future period related to some portion of the associated goodwill.

As of June 30, 2023, the Firm reviewed current economic conditions, estimated market cost of equity, as well as actual business results and projections of business performance. Based on such reviews, the Firm has concluded that goodwill was not impaired as of June 30, 2023, or December 31, 2022, nor was goodwill written off due to impairment during the six months ended June 30, 2023 or 2022.

Mortgage servicing rights

MSRs represent the fair value of expected future cash flows for performing servicing activities for others. The fair value considers estimated future servicing fees and ancillary revenue, offset by estimated costs to service the loans, and generally declines over time as net servicing cash flows are received, effectively amortizing the MSR asset against contractual servicing and ancillary fee income. MSRs are either purchased from third parties or recognized upon sale or securitization of mortgage loans if servicing is retained. Refer to Notes 2 and 15 of JPMorgan Chase's 2022 Form 10-K for a further description of the MSR asset, interest rate risk management, and the valuation of MSRs.

The following table summarizes MSR activity for the three and six months ended June 30, 2023 and 2022.

| (in millions, except where otherwise noted) | As of or for the three months ended June 30, | | As of or for the six months ended June 30, | |
|---|--|-----------------|--|-----------------|
| | 2023 | 2022 | 2023 | 2022 |
| Fair value at beginning of period | \$ 7,755 | \$ 7,294 | \$ 7,973 | \$ 5,494 |
| MSR activity: | | | | |
| Originations of MSRs | 78 | 181 | 110 | 596 |
| Purchase of MSRs ^(a) | 468 | 160 | 467 | 875 |
| Disposition of MSRs ^(b) | (92) | (614) | (90) | (671) |
| Net additions/(dispositions) | 454 | (273) | 487 | 800 |
| Changes due to collection/realization of expected cash flows | (255) | (236) | (495) | (468) |
| Changes in valuation due to inputs and assumptions: | | | | |
| Changes due to market interest rates and other ^(c) | 283 | 653 | 261 | 1,547 |
| Changes in valuation due to other inputs and assumptions: | | | | |
| Projected cash flows (e.g., cost to service) | 2 | — | 2 | — |
| Discount rates | — | — | — | — |
| Prepayment model changes and other ^(d) | (10) | 1 | 1 | 66 |
| Total changes in valuation due to other inputs and assumptions | (8) | 1 | 3 | 66 |
| Total changes in valuation due to inputs and assumptions | 275 | 654 | 264 | 1,613 |
| Fair value at June 30, | \$ 8,229 | \$ 7,439 | \$ 8,229 | \$ 7,439 |
| Changes in unrealized gains/(losses) included in income related to MSRs held at June 30, | \$ 275 | \$ 654 | \$ 264 | \$ 1,613 |
| Contractual service fees, late fees and other ancillary fees included in income | 388 | 395 | 776 | 765 |
| Third-party mortgage loans serviced at June 30, (in billions) | 605 | 576 | 605 | 576 |
| Servicer advances, net of an allowance for uncollectible amounts, at June 30 ^(e) | 595 | 1,166 | 595 | 1,166 |

- (a) Includes purchase price adjustments associated with MSRs purchased in the prior quarter, primarily as a result of loans that prepaid within 90 days of settlement, allowing the Firm to recover the purchase price.
- (b) Includes excess MSRs transferred to agency-sponsored trusts in exchange for stripped mortgage-backed securities ("SMBS"). In each transaction, a portion of the SMBS was acquired by third parties at the transaction date; the Firm acquired the remaining balance of those SMBS as trading securities.
- (c) Represents both the impact of changes in estimated future prepayments due to changes in market interest rates, and the difference between actual and expected prepayments.
- (d) Represents changes in prepayments other than those attributable to changes in market interest rates.
- (e) Represents amounts the Firm pays as the servicer (e.g., scheduled principal and interest, 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 servicer advances is minimal because reimbursement of the advances is typically senior to all cash payments to investors. In addition, the Firm maintains the right to stop payment to investors if the collateral is insufficient to cover the advance. However, certain of these servicer advances may not be recoverable if they were not made in accordance with applicable rules and agreements.

The following table presents the components of mortgage fees and related income (including the impact of MSR risk management activities) for the three and six months ended June 30, 2023 and 2022.

| (in millions) | Three months ended June 30, | | Six months ended June 30, | |
|---|-----------------------------|---------------|---------------------------|---------------|
| | 2023 | 2022 | 2023 | 2022 |
| CCB mortgage fees and related income | | | | |
| Production revenue | \$ 102 | \$ 150 | \$ 177 | \$ 361 |
| Net mortgage servicing revenue: | | | | |
| Operating revenue: | | | | |
| Loan servicing revenue | 402 | 435 | 802 | 803 |
| Changes in MSR asset fair value due to collection/realization of expected cash flows | (255) | (236) | (495) | (468) |
| Total operating revenue | 147 | 199 | 307 | 335 |
| Risk management: | | | | |
| Changes in MSR asset fair value due to market interest rates and other ^(a) | 283 | 653 | 261 | 1,547 |
| Other changes in MSR asset fair value due to other inputs and assumptions in model ^(b) | (8) | 1 | 3 | 66 |
| Changes in derivative fair value and other | (250) | (626) | (251) | (1,476) |
| Total risk management | 25 | 28 | 13 | 137 |
| Total net mortgage servicing revenue | 172 | 227 | 320 | 472 |
| Total CCB mortgage fees and related income | 274 | 377 | 497 | 833 |
| All other | 4 | 1 | 2 | 5 |
| Mortgage fees and related income | \$ 278 | \$ 378 | \$ 499 | \$ 838 |

(a) Represents both the impact of changes in estimated future prepayments due to changes in market interest rates, and the difference between actual and expected prepayments.

(b) Represents the aggregate impact of changes in model inputs and assumptions such as projected cash flows (e.g., cost to service), discount rates and changes in prepayments other than those attributable to changes in market interest rates (e.g., changes in prepayments due to changes in home prices).

Changes in fair value based on variations in assumptions generally cannot be easily extrapolated, because the relationship of the change in the assumptions to the change in fair value are often highly interrelated and may not be linear. In the following 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 would either magnify or counteract the impact of the initial change.

The table below outlines the key economic assumptions used to determine the fair value of the Firm's MSRs at June 30, 2023, and December 31, 2022, and outlines hypothetical sensitivities of those fair values to immediate adverse changes in those assumptions, as defined below.

| (in millions, except rates) | Jun 30, 2023 | Dec 31, 2022 |
|---|--------------|--------------|
| Weighted-average prepayment speed assumption (constant prepayment rate) | 6.27 % | 6.12 % |
| Impact on fair value of 10% adverse change | \$ (186) | \$ (183) |
| Impact on fair value of 20% adverse change | (361) | (356) |
| Weighted-average option adjusted spread ^(a) | 5.77 % | 5.77 % |
| Impact on fair value of a 100 basis point adverse change | \$ (348) | \$ (341) |
| Impact on fair value of a 200 basis point adverse change | (668) | (655) |

(a) Includes the impact of operational risk and regulatory capital.

Note 16 – Deposits

Refer to Note 17 of JPMorgan Chase’s 2022 Form 10-K for further information on deposits.

As of June 30, 2023 and December 31, 2022, noninterest-bearing and interest-bearing deposits were as follows.

| (in millions) | June 30, 2023 | December 31, 2022 |
|---|---------------------|----------------------|
| U.S. offices | | |
| Noninterest-bearing (included \$47,870 and \$26,363 at fair value) ^(a) | \$ 656,778 | \$ 644,902 |
| Interest-bearing (included \$572 and \$586 at fair value) ^(a) | 1,311,893 | 1,276,346 |
| Total deposits in U.S. offices | 1,968,671 | 1,921,248 |
| Non-U.S. offices | | |
| Noninterest-bearing (included \$1,331 and \$1,398 at fair value) ^(a) | 24,268 | 27,005 |
| Interest-bearing (included \$1,795 and \$273 at fair value) ^(a) | 406,023 | 391,926 |
| Total deposits in non-U.S. offices | 430,291 | 418,931 |
| Total deposits | \$ 2,398,962 | \$ 2,340,179 |

(a) Includes structured notes classified as deposits for which the fair value option has been elected. Refer to Note 3 for further discussion.

As of June 30, 2023 and December 31, 2022, time deposits in denominations that met or exceeded the insured limit were as follows.

| (in millions) | June 30, 2023 | December 31, 2022 |
|---------------------------------|-------------------|----------------------|
| U.S. offices | \$ 98,725 | \$ 64,622 |
| Non-U.S. offices ^(a) | 85,937 | 77,907 |
| Total | \$ 184,662 | \$ 142,529 |

(a) Represents all time deposits in non-U.S. offices as these deposits typically exceed the insured limit.

As of June 30, 2023, the remaining maturities of interest-bearing time deposits in each of the 12-month periods ending June 30 were as follows.

| June 30, (in millions) | U.S. | Non-U.S. | Total |
|---------------------------|------------------|------------------|-------------------|
| 2024 | 145,737 | 83,015 | 228,752 |
| 2025 | 1,213 | 194 | 1,407 |
| 2026 | 309 | 71 | 380 |
| 2027 | 160 | 25 | 185 |
| 2028 | 95 | 1,087 | 1,182 |
| After 5 years | 533 | 214 | 747 |
| Total | \$148,047 | \$ 84,606 | \$ 232,653 |

Note 17 – Leases

Refer to Note 18 of JPMorgan Chase’s 2022 Form 10-K for a further discussion on leases.

Firm as lessee

At June 30, 2023, JPMorgan Chase and its subsidiaries were obligated under a number of noncancellable leases, predominantly operating leases for premises and equipment used primarily for business purposes.

Operating lease liabilities and right-of-use (“ROU”) assets are recognized at the lease commencement date based on the present value of the future minimum lease payments over the lease term.

The carrying values of the Firm’s operating leases were as follows:

| (in millions) | June 30, 2023 | December 31, 2022 |
|---------------------|-------------------------|----------------------|
| Right-of-use assets | \$ 8,399 ^(a) | \$ 7,782 |
| Lease liabilities | 8,756 ^(a) | 8,183 |

(a) Includes \$756 million of right-of-use assets and corresponding lease liabilities, associated with the First Republic acquisition.

The Firm’s net rental expense was \$448 million and \$484 million for the three months ended June 30, 2023 and 2022 and \$935 million and \$976 million for the six months ended June 30, 2023 and 2022, respectively.

Firm as lessor

The Firm’s lease financings are predominantly auto operating leases, and are included in other assets on the Firm’s Consolidated balance sheets.

The following table presents the Firm’s operating lease income, included within other income, and the related depreciation expense, included within technology, communications and equipment expense, on the Consolidated statements of income:

| (in millions) | Three months ended June 30, | | Six months ended June 30, | |
|------------------------|--------------------------------|--------|------------------------------|----------|
| | 2023 | 2022 | 2023 | 2022 |
| Operating lease income | \$ 716 | \$ 945 | \$ 1,471 | \$ 1,993 |
| Depreciation expense | 457 | 668 | 876 | 1,379 |

Note 18 – Long-term debt

JPMorgan Chase issues long-term debt denominated in various currencies, 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; changes in fair value are recorded in principal transactions revenue in the Consolidated statements of income, except for unrealized gains/(losses) due to DVA which are recorded in OCI. The following table is a summary of long-term debt carrying values (including unamortized premiums and discounts, issuance costs, valuation adjustments and fair value adjustments, where applicable) by remaining contractual maturity as of June 30, 2023.

| By remaining maturity (in millions, except rates) | June 30, 2023 | | | | December 31, 2022 | |
|---|-------------------------------|------------------|-------------------|-------------------|-------------------------------------|-------------------|
| | Under 1 year | 1-5 years | After 5 years | Total | Total | |
| Parent company | | | | | | |
| Senior debt: | Fixed rate | \$ 6,709 | \$ 84,418 | \$ 96,845 | \$ 187,972 | \$ 194,515 |
| | Variable rate | 367 | 7,226 | 2,200 | 9,793 | 11,565 |
| | Interest rates ^(f) | 2.29 % | 2.82 % | 3.53 % | 3.15 % | 3.06 % |
| Subordinated debt: | Fixed rate | \$ – | \$ 8,815 | \$ 8,877 | \$ 17,692 | \$ 19,693 |
| | Variable rate | – | – | – | – | – |
| | Interest rates ^(f) | – % | 4.54 % | 4.69 % | 4.62 % | 4.50 % |
| | Subtotal | \$ 7,076 | \$ 100,459 | \$ 107,922 | \$ 215,457 | \$ 225,773 |
| Subsidiaries | | | | | | |
| Federal Home Loan Banks advances: | Fixed rate | \$ 7,443 | \$ 17,609 | \$ 42 | \$ 25,094 ^(g) | \$ 93 |
| | Variable rate | 7,000 | 4,000 | – | 11,000 | 11,000 |
| | Interest rates ^(f) | 4.64 % | 4.29 % | 6.07 % | 4.43 % | 4.32 % |
| Purchase Money Note ^(a) : | Fixed rate | \$ – | \$ 48,883 | \$ – | \$ 48,883 | NA |
| | Interest rates ^(f) | – % | 3.40 % | – % | 3.40 % | NA |
| Senior debt: | Fixed rate | \$ 3,000 | \$ 7,333 | \$ 6,395 | \$ 16,728 | \$ 15,383 |
| | Variable rate | 17,426 | 21,968 | 5,451 | 44,845 | 41,506 |
| | Interest rates ^(f) | 3.95 % | 4.98 % | 1.52 % | 1.88 % | 2.02 % |
| Subordinated debt: | Fixed rate | \$ – | \$ 258 | \$ – | \$ 258 | \$ 262 |
| | Variable rate | – | – | – | – | – |
| | Interest rates ^(f) | – % | 8.25 % | – % | 8.25 % | 8.25 % |
| | Subtotal | \$ 34,869 | \$ 100,051 | \$ 11,888 | \$ 146,808 | \$ 68,244 |
| Junior subordinated debt: | Fixed rate | \$ – | \$ – | \$ 540 | \$ 540 | \$ 550 |
| | Variable rate | – | 357 | 916 | 1,273 | 1,298 |
| | Interest rates ^(f) | – % | 5.86 % | 7.17 % | 6.91 % | 6.33 % |
| | Subtotal | \$ – | \$ 357 | \$ 1,456 | \$ 1,813 | \$ 1,848 |
| Total long-term debt^{(b)(c)(d)} | | \$ 41,945 | \$ 200,867 | \$ 121,266 | \$ 364,078 ^{(h)(i)} | \$ 295,865 |
| Long-term beneficial interests: | Fixed rate | \$ – | \$ 999 | \$ – | \$ 999 | \$ 1,999 |
| | Variable rate | – | – | 132 | 132 | 143 |
| | Interest rates ^(f) | – % | 3.97 % | 3.59 % | 3.93 % | 2.81 % |
| Total long-term beneficial interests^(e) | | \$ – | \$ 999 | \$ 132 | \$ 1,131 | \$ 2,142 |

- (a) As of June 30, 2023, reflects the Purchase Money Note associated with the First Republic acquisition. Refer to Note 28 for additional information.
- (b) Included long-term debt of \$87.7 billion and \$13.8 billion secured by assets totaling \$221.2 billion and \$208.3 billion at June 30, 2023 and December 31, 2022, respectively. The amount of long-term debt secured by assets does not include amounts related to hybrid instruments.
- (c) Included \$78.6 billion and \$72.3 billion of long-term debt accounted for at fair value at June 30, 2023 and December 31, 2022, respectively.
- (d) Included \$11.2 billion and \$10.3 billion of outstanding zero-coupon notes at June 30, 2023 and December 31, 2022, respectively. The aggregate principal amount of these notes at their respective maturities is \$45.7 billion and \$45.3 billion, respectively. The aggregate principal amount reflects the contractual principal payment at maturity, which may exceed the contractual principal payment at the Firm's next call date, if applicable.
- (e) Included on the Consolidated balance sheets in beneficial interests issued by consolidated VIEs. Also included amounts accounted for at fair value which were not material at June 30, 2023 and December 31, 2022. Excluded short-term commercial paper and other short-term beneficial interests of \$18.5 billion and \$10.5 billion at June 30, 2023 and December 31, 2022, respectively.
- (f) The interest rates shown are the weighted average of contractual rates in effect at June 30, 2023 and December 31, 2022, respectively, 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 interest rates shown exclude structured notes accounted for at fair value.
- (g) As of June 30, 2023, included \$25.0 billion of FHLB advances associated with the First Republic acquisition. Refer to Note 28 for additional information.
- (h) As of June 30, 2023, long-term debt in the aggregate of \$191.7 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 instruments.
- (i) The aggregate carrying values of debt that matures in each of the 12-month periods ending June 30, 2024, 2025, 2026, 2027 and 2028 is \$41.9 billion, \$58.5 billion, \$38.0 billion, \$29.2 billion and \$75.2 billion, respectively.

The weighted-average contractual interest rates for total long-term debt excluding structured notes accounted for at fair value were 3.45% and 3.26% as of June 30, 2023 and December 31, 2022, 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 issuances. 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 related derivative instruments, were 5.02% and 4.89% as of June 30, 2023 and December 31, 2022, respectively.

JPMorgan Chase & Co. has guaranteed certain long-term debt of its subsidiaries, including structured notes. These guarantees rank pari passu with the Firm's other unsecured and unsubordinated indebtedness. The amount of such guaranteed long-term debt and structured notes was \$34.5 billion and \$28.2 billion at June 30, 2023 and December 31, 2022, respectively.

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.

Note 19 - Preferred stock

Refer to Note 21 of JPMorgan Chase's 2022 Form 10-K for a further discussion on preferred stock.

The following is a summary of JPMorgan Chase's non-cumulative preferred stock outstanding as of June 30, 2023 and December 31, 2022, and the quarterly dividend declarations for the three and six months ended June 30, 2023 and 2022.

| | Shares ^(a) | | Carrying value (in millions) | | Issue date | Contractual rate in effect at June 30, 2023 | Earliest redemption date ^(b) | Floating annualized rate ^(c) | Dividend declared per share | | | |
|------------------------------|-----------------------|----------------------|---------------------------------|----------------------|------------|---|---|---|--------------------------------|-----------|------------------------------|-----------------------|
| | June 30, 2023 | December 31, 2022 | June 30, 2023 | December 31, 2022 | | | | | Three months ended June 30, | | Six months ended June 30, | |
| | | | | | | | | | 2023 | 2022 | 2023 | 2022 |
| Fixed-rate: | | | | | | | | | | | | |
| Series DD | 169,625 | 169,625 | \$ 1,696 | \$ 1,696 | 9/21/2018 | 5.750 % | 12/1/2023 | NA | \$ 143.75 | \$ 143.75 | \$287.50 | \$287.50 |
| Series EE | 185,000 | 185,000 | 1,850 | 1,850 | 1/24/2019 | 6.000 | 3/1/2024 | NA | 150.00 | 150.00 | 300.00 | 300.00 |
| Series GG | 90,000 | 90,000 | 900 | 900 | 11/7/2019 | 4.750 | 12/1/2024 | NA | 118.75 | 118.75 | 237.50 | 237.50 |
| Series JJ | 150,000 | 150,000 | 1,500 | 1,500 | 3/17/2021 | 4.550 | 6/1/2026 | NA | 113.75 | 113.75 | 227.50 | 227.50 |
| Series LL | 185,000 | 185,000 | 1,850 | 1,850 | 5/20/2021 | 4.625 | 6/1/2026 | NA | 115.63 | 115.63 | 231.26 | 231.26 |
| Series MM | 200,000 | 200,000 | 2,000 | 2,000 | 7/29/2021 | 4.200 | 9/1/2026 | NA | 105.00 | 105.00 | 210.00 | 210.00 |
| Fixed-to-floating-rate: | | | | | | | | | | | | |
| Series I | — | — | \$ — | \$ — | 4/23/2008 | — % | 4/30/2018 | SOFR + 3.47% | \$ — | \$ 119.03 | \$— | \$211.16 |
| Series Q | 150,000 | 150,000 | 1,500 | 1,500 | 4/23/2013 | LIBOR + 3.25 | 5/1/2023 | SOFR + 3.25 | 218.48 | 128.75 | 347.23 | 257.50 ^(d) |
| Series R | 150,000 | 150,000 | 1,500 | 1,500 | 7/29/2013 | 6.000 | 8/1/2023 | SOFR + 3.30 | 150.00 | 150.00 | 300.00 | 300.00 |
| Series S | 200,000 | 200,000 | 2,000 | 2,000 | 1/22/2014 | 6.750 | 2/1/2024 | SOFR + 3.78 | 168.75 | 168.75 | 337.50 | 337.50 |
| Series U | 100,000 | 100,000 | 1,000 | 1,000 | 3/10/2014 | 6.125 | 4/30/2024 | SOFR + 3.33 | 153.13 | 153.13 | 306.25 | 306.25 |
| Series V | — | — | — | — | 6/9/2014 | — | 7/1/2019 | SOFR + 3.32 | — | 108.36 | — | 194.76 |
| Series X | 160,000 | 160,000 | 1,600 | 1,600 | 9/23/2014 | 6.100 | 10/1/2024 | SOFR + 3.33 | 152.50 | 152.50 | 305.00 | 305.00 |
| Series Z | — | — | — | — | 4/21/2015 | — | 5/1/2020 | SOFR + 3.80 | — | — | — | — |
| Series CC | 125,750 | 125,750 | 1,258 | 1,258 | 10/20/2017 | LIBOR + 2.58 | 11/1/2022 | SOFR + 2.58 | 201.36 | 115.63 | 384.15 | 231.25 ^(e) |
| Series FF | 225,000 | 225,000 | 2,250 | 2,250 | 7/31/2019 | 5.000 | 8/1/2024 | SOFR + 3.38 | 125.00 | 125.00 | 250.00 | 250.00 |
| Series HH | 300,000 | 300,000 | 3,000 | 3,000 | 1/23/2020 | 4.600 | 2/1/2025 | SOFR + 3.125 | 115.00 | 115.00 | 230.00 | 230.00 |
| Series II | 150,000 | 150,000 | 1,500 | 1,500 | 2/24/2020 | 4.000 | 4/1/2025 | SOFR + 2.745 | 100.00 | 100.00 | 200.00 | 200.00 |
| Series KK | 200,000 | 200,000 | 2,000 | 2,000 | 5/12/2021 | 3.650 | 6/1/2026 | CMT + 2.85 | 91.25 | 91.25 | 182.50 | 182.50 |
| Total preferred stock | 2,740,375 | 2,740,375 | \$ 27,404 | \$ 27,404 | | | | | | | | |

(a) Represented by depositary shares.

(b) Fixed-to-floating rate notes convert to a floating rate at the earliest redemption date.

(c) On March 1, 2023, the Firm announced that, after June 30, 2023, CME Term SOFR will be the replacement reference rate for certain outstanding securities issued by the Firm that used U.S. dollar LIBOR as the reference rate, including fixed-to-floating rate preferred stock. References in the table to "SOFR" mean a floating annualized rate equal to three-month term SOFR (plus a spread adjustment of 0.26% per annum) plus the spreads noted. The reference to "CMT" means a floating annualized rate equal to the five-year Constant Maturity Treasury ("CMT") rate plus the spread noted.

(d) The dividend rate for Series Q preferred stock became floating and payable quarterly starting on May 1, 2023; prior to which the dividend rate was fixed at 5.15% or \$257.50 per share payable semiannually. The dividend rate for each quarterly dividend period commencing August 1, 2023 will be three-month term SOFR (plus a spread adjustment of 0.26% per annum) plus the spread of 3.25%.

(e) The dividend rate for Series CC preferred stock became floating and payable quarterly starting on November 1, 2022; prior to which the dividend rate was fixed at 4.625% or \$231.25 per share payable semiannually. The dividend rate for each quarterly dividend period commencing August 1, 2023 will be three-month term SOFR (plus a spread adjustment of 0.26% per annum) plus the spread of 2.58%.

Each series of preferred stock has a liquidation value and redemption price per share of \$10,000, plus accrued but unpaid dividends. The aggregate liquidation value was \$27.8 billion at June 30, 2023.

Redemptions

On October 31, 2022, the Firm redeemed all \$2.9 billion of its fixed to floating rate non-cumulative perpetual preferred stock, Series I.

On October 3, 2022, the Firm redeemed all \$2.5 billion of its fixed-to-floating rate non-cumulative preferred stock, Series V.

On February 1, 2022, the Firm redeemed all \$2.0 billion of its fixed-to-floating rate non-cumulative preferred stock, Series Z.

Note 20 – Earnings per share

Refer to Note 23 of JPMorgan Chase’s 2022 Form 10-K for a discussion of the computation of basic and diluted earnings per share (“EPS”). The following table presents the calculation of basic and diluted EPS for the three and six months ended June 30, 2023 and 2022.

| (in millions, except per share amounts) | Three months ended June 30, | | Six months ended June 30, | |
|--|--------------------------------|-----------------|------------------------------|------------------|
| | 2023 | 2022 | 2023 | 2022 |
| Basic earnings per share | | | | |
| Net income | \$ 14,472 | \$ 8,649 | \$ 27,094 | \$ 16,931 |
| Less: Preferred stock dividends | 373 | 410 | 729 | 807 |
| Net income applicable to common equity | 14,099 | 8,239 | 26,365 | 16,124 |
| Less: Dividends and undistributed earnings allocated to participating securities | 88 | 44 | 161 | 85 |
| Net income applicable to common stockholders | \$ 14,011 | \$ 8,195 | \$ 26,204 | \$ 16,039 |
| Total weighted-average basic shares outstanding | 2,943.8 | 2,962.2 | 2,956.1 | 2,969.6 |
| Net income per share | \$ 4.76 | \$ 2.77 | \$ 8.86 | \$ 5.40 |
| Diluted earnings per share | | | | |
| Net income applicable to common stockholders | \$ 14,011 | \$ 8,195 | \$ 26,204 | \$ 16,039 |
| Total weighted-average basic shares outstanding | 2,943.8 | 2,962.2 | 2,956.1 | 2,969.6 |
| Add: Dilutive impact of unvested PSUs, nondividend-earning RSUs and SARs | 4.5 | 4.1 | 4.4 | 4.1 |
| Total weighted-average diluted shares outstanding | 2,948.3 | 2,966.3 | 2,960.5 | 2,973.7 |
| Net income per share | \$ 4.75 | \$ 2.76 | \$ 8.85 | \$ 5.39 |

Note 21 - Accumulated other comprehensive income/(loss)

AOCI includes the after-tax change in unrealized gains and losses on investment securities, foreign currency translation adjustments (including the impact of related derivatives), fair value changes of excluded components on fair value hedges, cash flow hedging activities, net gain/(loss) related to the Firm's defined benefit pension and OPEB plans, and fair value option-elected liabilities arising from changes in the Firm's own credit risk (DVA).

| As of or for the three months ended June 30, 2023 (in millions) | Unrealized gains/(losses) on investment securities | Translation adjustments, net of hedges | Fair value hedges | Cash flow hedges | Defined benefit pension and OPEB plans | DVA on fair value option elected liabilities | Accumulated other comprehensive income/(loss) |
|---|---|--|----------------------|---------------------|--|--|--|
| Balance at April 1, 2023 | \$ (6,912) | \$ (1,348) | \$ (54) | \$ (4,858) | \$ (1,506) | \$ 260 | \$ (14,418) |
| Net change | 757 | 70 | 11 | (497) | (6) | (207) | 128 |
| Balance at June 30, 2023 | \$ (6,155) ^(a) | \$ (1,278) | \$ (43) | \$ (5,355) | \$ (1,512) | \$ 53 | \$ (14,290) |

| As of or for the three months ended June 30, 2022 (in millions) | Unrealized gains/(losses) on investment securities | Translation adjustments, net of hedges | Fair value hedges | Cash flow hedges | Defined benefit pension and OPEB plans | DVA on fair value option elected liabilities | Accumulated other comprehensive income/(loss) |
|---|---|--|----------------------|---------------------|--|--|--|
| Balance at April 1, 2022 | \$ (4,813) | \$ (996) | \$ (21) | \$ (3,087) | \$ (143) | \$ (507) | \$ (9,567) |
| Net change | (4,031) | (679) | 51 | (1,348) | 20 | 1,185 | (4,802) |
| Balance at June 30, 2022 | \$ (8,844) ^(a) | \$ (1,675) | \$ 30 | \$ (4,435) | \$ (123) | \$ 678 | \$ (14,369) |

| As of or for the six months ended June 30, 2023 (in millions) | Unrealized gains/(losses) on investment securities | Translation adjustments, net of hedges | Fair value hedges | Cash flow hedges | Defined benefit pension and OPEB plans | DVA on fair value option elected liabilities | Accumulated other comprehensive income/(loss) |
|---|---|--|----------------------|---------------------|--|--|--|
| Balance at January 1, 2023 | \$ (9,124) | \$ (1,545) | \$ (33) | \$ (5,656) | \$ (1,451) | \$ 468 | \$ (17,341) |
| Net change | 2,969 | 267 | (10) | 301 | (61) | (415) | 3,051 |
| Balance at June 30, 2023 | \$ (6,155) ^(a) | \$ (1,278) | \$ (43) | \$ (5,355) | \$ (1,512) | \$ 53 | \$ (14,290) |

| As of or for the six months ended June 30, 2022 (in millions) | Unrealized gains/(losses) on investment securities | Translation adjustments, net of hedges | Fair value hedges | Cash flow hedges | Defined benefit pension and OPEB plans | DVA on fair value option elected liabilities | Accumulated other comprehensive income/(loss) |
|---|---|--|----------------------|---------------------|--|--|--|
| Balance at January 1, 2022 | \$ 2,640 | \$ (934) | \$ (131) | \$ (296) | \$ (210) | \$ (1,153) | \$ (84) |
| Net change | (11,484) | (741) | 161 | (4,139) | 87 | 1,831 | (14,285) |
| Balance at June 30, 2022 | \$ (8,844) ^(a) | \$ (1,675) | \$ 30 | \$ (4,435) | \$ (123) | \$ 678 | \$ (14,369) |

(a) As of June 30, 2023 includes after-tax net unamortized unrealized gains/(losses) of \$(29) million related to HTM securities that have been transferred to AFS as permitted by the new hedge accounting guidance adopted on January 1, 2023. As of June 30, 2023 and 2022 includes after-tax net unamortized unrealized gains/(losses) of \$(1.1) billion and \$(1.4) billion, related to AFS securities that have been transferred to HTM, respectively. Refer to Note 10 of this Form 10-Q, and Note 10 of JPMorgan Chase's 2022 Form 10-K for further information.

The following table presents the pre-tax and after-tax changes in the components of OCI.

| Three months ended June 30, (in millions) | 2023 | | | 2022 | | |
|---|---------------|--------------|---------------|-------------------|---------------|-------------------|
| | Pre-tax | Tax effect | After-tax | Pre-tax | Tax effect | After-tax |
| Unrealized gains/(losses) on investment securities: | | | | | | |
| Net unrealized gains/(losses) arising during the period | \$ 95 | \$ (21) | \$ 74 | \$ (5,456) | \$ 1,308 | \$ (4,148) |
| Reclassification adjustment for realized (gains)/losses included in net income ^(a) | 900 | (217) | 683 | 153 | (36) | 117 |
| Net change | 995 | (238) | 757 | (5,303) | 1,272 | (4,031) |
| Translation adjustments^(b): | | | | | | |
| Translation | 126 | 10 | 136 | (3,550) | 193 | (3,357) |
| Hedges | (88) | 22 | (66) | 3,524 | (846) | 2,678 |
| Net change | 38 | 32 | 70 | (26) | (653) | (679) |
| Fair value hedges, net change^(c): | 15 | (4) | 11 | 67 | (16) | 51 |
| Cash flow hedges: | | | | | | |
| Net unrealized gains/(losses) arising during the period | (1,119) | 268 | (851) | (1,750) | 420 | (1,330) |
| Reclassification adjustment for realized (gains)/losses included in net income ^(d) | 465 | (111) | 354 | (24) | 6 | (18) |
| Net change | (654) | 157 | (497) | (1,774) | 426 | (1,348) |
| Defined benefit pension and OPEB plans, net change: | (8) | 2 | (6) | 33 | (13) | 20 |
| DVA on fair value option elected liabilities, net change: | (273) | 66 | (207) | 1,558 | (373) | 1,185 |
| Total other comprehensive income/(loss) | \$ 113 | \$ 15 | \$ 128 | \$ (5,445) | \$ 643 | \$ (4,802) |

| Six months ended June 30, (in millions) | 2023 | | | 2022 | | |
|---|-----------------|-----------------|-----------------|--------------------|-----------------|--------------------|
| | Pre-tax | Tax effect | After-tax | Pre-tax | Tax effect | After-tax |
| Unrealized gains/(losses) on investment securities: | | | | | | |
| Net unrealized gains/(losses) arising during the period | \$ 2,137 | \$ (511) | \$ 1,626 | \$ (15,658) | \$ 3,758 | \$ (11,900) |
| Reclassification adjustment for realized (gains)/losses included in net income ^(a) | 1,768 | (425) | 1,343 | 547 | (131) | 416 |
| Net change | 3,905 | (936) | 2,969 | (15,111) | 3,627 | (11,484) |
| Translation adjustments^(b): | | | | | | |
| Translation | 1,099 | (31) | 1,068 | (3,891) | 217 | (3,674) |
| Hedges | (1,051) | 250 | (801) | 3,862 | (929) | 2,933 |
| Net change | 48 | 219 | 267 | (29) | (712) | (741) |
| Fair value hedges, net change^(c): | (13) | 3 | (10) | 212 | (51) | 161 |
| Cash flow hedges: | | | | | | |
| Net unrealized gains/(losses) arising during the period | (552) | 132 | (420) | (5,186) | 1,245 | (3,941) |
| Reclassification adjustment for realized (gains)/losses included in net income ^(d) | 948 | (227) | 721 | (261) | 63 | (198) |
| Net change | 396 | (95) | 301 | (5,447) | 1,308 | (4,139) |
| Defined benefit pension and OPEB plans, net change: | (79) | 18 | (61) | 123 | (36) | 87 |
| DVA on fair value option elected liabilities, net change: | (547) | 132 | (415) | 2,417 | (586) | 1,831 |
| Total other comprehensive loss | \$ 3,710 | \$ (659) | \$ 3,051 | \$ (17,835) | \$ 3,550 | \$ (14,285) |

- (a) The pre-tax amount is reported in Investment securities gains/(losses) in the Consolidated statements of income.
- (b) Reclassifications of pre-tax realized gains/(losses) on translation adjustments and related hedges are reported in other income/expense in the Consolidated statements of income. During the six months ended June 30, 2023, the Firm reclassified a net pre-tax loss of \$(5) million to other revenue related to the acquisition of CFM of which \$(41) million related to the net investment hedge loss. The amounts were not material for the three months ended June 30, 2023 and for the three and six months ended June 30, 2022.
- (c) Represents changes in fair value of cross-currency swaps attributable to changes in cross-currency basis spreads, which are excluded from the assessment of hedge effectiveness and recorded in other comprehensive income. The initial cost of cross-currency basis spreads is recognized in earnings as part of the accrual of interest on the cross currency swaps.
- (d) The pre-tax amounts are primarily recorded in noninterest revenue, net interest income and compensation expense in the Consolidated statements of income.

Note 22 – Restricted cash and other restricted assets

Refer to Note 26 of JPMorgan Chase’s 2022 Form 10-K for a detailed discussion of the Firm’s restricted cash and other restricted assets.

Certain of the Firm’s cash and other assets are restricted as to withdrawal or usage. These restrictions are imposed by various regulatory authorities based on the particular activities of the Firm’s subsidiaries.

The Firm is also subject to rules and regulations established by other U.S. and non-U.S. regulators. As part of its compliance with the respective regulatory requirements, the Firm’s broker-dealer activities are subject to certain restrictions on cash and other assets.

The following table presents the components of the Firm’s restricted cash:

| (in billions) | June 30, 2023 | December 31, 2022 |
|---|------------------|----------------------|
| Segregated for the benefit of securities and cleared derivative customers | \$ 17.0 | \$ 18.7 |
| Cash reserves at non-U.S. central banks and held for other general purposes | 8.6 | 8.1 |
| Total restricted cash^(a) | \$ 25.6 | \$ 26.8 |

(a) Comprises \$24.3 billion and \$25.4 billion in deposits with banks, and \$1.3 billion and \$1.4 billion in cash and due from banks on the Consolidated balance sheet as of June 30, 2023 and December 31, 2022, respectively.

Also, as of June 30, 2023 and December 31, 2022, the Firm had the following other restricted assets:

- Cash and securities pledged with clearing organizations for the benefit of customers of \$36.9 billion and \$42.4 billion, respectively.
- Securities with a fair value of \$23.4 billion and \$31.7 billion, respectively, were also restricted in relation to customer activity.

Note 23 – Regulatory capital

Refer to Note 27 of JPMorgan Chase’s 2022 Form 10-K for a detailed discussion on regulatory capital.

The Federal Reserve establishes capital requirements, including well-capitalized requirements, for the consolidated financial holding company. The Office of the Comptroller of the Currency ("OCC") establishes similar minimum capital requirements and standards for the Firm’s principal IDI subsidiary, JPMorgan Chase Bank, N.A.

Under the risk-based capital and leverage-based guidelines of the Federal Reserve, JPMorgan Chase is required to maintain minimum ratios for CET1 capital, Tier 1 capital, Total capital, Tier 1 leverage and the SLR. Failure to meet these minimum requirements could cause the Federal Reserve to take action. IDI subsidiaries are also subject to these capital requirements established by their respective primary regulators.

The following table presents the risk-based regulatory capital ratio requirements and well-capitalized ratios to which the Firm and its IDI subsidiaries were subject as of June 30, 2023 and December 31, 2022.

| | Standardized capital ratio requirements | | Advanced capital ratio requirements | | Well-capitalized ratios | |
|----------------------------------|---|--------------------|-------------------------------------|--------------------|-------------------------|--------------------|
| | BHC ^{(a)(b)} | IDI ^(c) | BHC ^{(a)(b)} | IDI ^(c) | BHC ^(d) | IDI ^(e) |
| Risk-based capital ratios | | | | | | |
| CET1 capital | 12.5 % | 7.0 % | 11.0 % | 7.0 % | NA | 6.5 % |
| Tier 1 capital | 14.0 | 8.5 | 12.5 | 8.5 | 6.0 % | 8.0 |
| Total capital | 16.0 | 10.5 | 14.5 | 10.5 | 10.0 | 10.0 |

Note: The table above is as defined by the regulations issued by the Federal Reserve, OCC and FDIC and to which the Firm and its IDI subsidiaries are subject.

- (a) Represents the regulatory capital ratio requirements applicable to the Firm. The CET1, Tier 1 and Total capital ratio requirements each include a respective minimum requirement plus a GSIB surcharge of 4.0% as calculated under Method 2; plus a 4.0% SCB for Basel III Standardized ratios and a fixed 2.5% capital conservation buffer for Basel III Advanced ratios. The countercyclical buffer is currently set to 0% by the federal banking agencies.
- (b) For the period ended December 31, 2022, the CET1, Tier 1, and Total capital ratio requirements under Basel III Standardized applicable to the Firm were 12.0%, 13.5% and 15.5%, respectively; the Basel III Advanced CET1, Tier 1, and Total capital ratio requirements applicable to the Firm were 10.5%, 12.0%, and 14.0%, respectively.
- (c) Represents requirements for JPMorgan Chase’s IDI subsidiaries. The CET1, Tier 1 and Total capital ratio requirements include a fixed capital conservation buffer requirement of 2.5% that is applicable to the IDI subsidiaries. The IDI subsidiaries are not subject to the GSIB surcharge.
- (d) Represents requirements for bank holding companies pursuant to regulations issued by the Federal Reserve.
- (e) Represents requirements for IDI subsidiaries pursuant to regulations issued under the FDIC Improvement Act.

The following table presents the leverage-based regulatory capital ratio requirements and well-capitalized ratios to which the Firm and its IDI subsidiaries were subject as of June 30, 2023 and December 31, 2022.

| | Capital ratio requirements ^(a) | | Well-capitalized ratios | |
|--------------------------------------|---|-------|-------------------------|-------|
| | BHC | IDI | BHC ^(b) | IDI |
| Leverage-based capital ratios | | | | |
| Tier 1 leverage | 4.0 % | 4.0 % | NA | 5.0 % |
| SLR | 5.0 | 6.0 | NA | 6.0 |

Note: The table above is as defined by the regulations issued by the Federal Reserve, OCC and FDIC and to which the Firm and its IDI subsidiaries are subject.

- (a) Represents minimum SLR requirement of 3.0%, as well as supplementary leverage buffer requirements of 2.0% and 3.0% for BHC and IDI subsidiaries, respectively.
- (b) The Federal Reserve's regulations do not establish well-capitalized thresholds for these measures for BHCs.

CECL regulatory capital transition

Beginning January 1, 2022, the \$2.9 billion CECL capital benefit, provided by the Federal Reserve in response to the COVID-19 pandemic, is being phased out at 25% per year over a three-year period. As of June 30, 2023, the Firm’s CET1 capital reflected the remaining \$1.4 billion benefit associated with the CECL capital transition provisions.

Additionally, effective January 1, 2023, the Firm phased out 50% of the other CECL capital transition provisions which impacted Tier 2 capital, adjusted average assets, total leverage exposure and RWA, as applicable.

Refer to Note 27 of JPMorgan Chase’s 2022 Form 10-K for further information on CECL capital transition provisions.

The following tables present risk-based capital metrics under both the Basel III Standardized and Basel III Advanced approaches and leverage-based capital metrics for JPMorgan Chase and JPMorgan Chase Bank, N.A. As of June 30, 2023 and December 31, 2022, JPMorgan Chase and JPMorgan Chase Bank, N.A. were well-capitalized and met all capital requirements to which each was subject.

| June 30, 2023 (in millions, except ratios) | Basel III Standardized | | Basel III Advanced | |
|--|-------------------------|------------------------------|--------------------------|------------------------------|
| | JPMorgan Chase & Co. | JPMorgan Chase Bank, N.A. | JPMorgan Chase & Co. | JPMorgan Chase Bank, N.A. |
| Risk-based capital metrics:^(a) | | | | |
| CET1 capital | \$ 235,827 | \$ 279,233 | \$ 235,827 | \$ 279,233 |
| Tier 1 capital | 262,585 | 279,236 | 262,585 | 279,236 |
| Total capital | 295,281 | 298,582 | 281,953 ^(b) | 285,500 |
| Risk-weighted assets | 1,706,927 | 1,642,804 | 1,694,714 ^(b) | 1,541,700 |
| CET1 capital ratio | 13.8 % | 17.0 % | 13.9 % | 18.1 % |
| Tier 1 capital ratio | 15.4 | 17.0 | 15.5 | 18.1 |
| Total capital ratio | 17.3 | 18.2 | 16.6 | 18.5 |

| December 31, 2022 (in millions, except ratios) | Basel III Standardized | | Basel III Advanced | |
|---|-------------------------|------------------------------|-------------------------|------------------------------|
| | JPMorgan Chase & Co. | JPMorgan Chase Bank, N.A. | JPMorgan Chase & Co. | JPMorgan Chase Bank, N.A. |
| Risk-based capital metrics:^(a) | | | | |
| CET1 capital | \$ 218,934 | \$ 269,668 | \$ 218,934 | \$ 269,668 |
| Tier 1 capital | 245,631 | 269,672 | 245,631 | 269,672 |
| Total capital | 277,769 | 288,433 | 264,583 | 275,255 |
| Risk-weighted assets | 1,653,538 | 1,597,072 | 1,609,773 | 1,475,602 |
| CET1 capital ratio | 13.2 % | 16.9 % | 13.6 % | 18.3 % |
| Tier 1 capital ratio | 14.9 | 16.9 | 15.3 | 18.3 |
| Total capital ratio | 16.8 | 18.1 | 16.4 | 18.7 |

(a) The capital metrics reflect the CECL capital transition provisions.

(b) Includes the impacts of certain assets associated with the First Republic acquisition to which the Standardized approach has been applied as permitted by the transition provisions in the U.S. capital rules.

| Three months ended (in millions, except ratios) | June 30, 2023 | | December 31, 2022 | |
|--|-------------------------|------------------------------|-------------------------|------------------------------|
| | JPMorgan Chase & Co. | JPMorgan Chase Bank, N.A. | JPMorgan Chase & Co. | JPMorgan Chase Bank, N.A. |
| Leverage-based capital metrics:^(a) | | | | |
| Adjusted average assets ^(b) | \$ 3,796,579 | \$ 3,308,478 | \$ 3,703,873 | \$ 3,249,912 |
| Tier 1 leverage ratio | 6.9 % | 8.4 % | 6.6 % | 8.3 % |
| Total leverage exposure | \$ 4,492,761 | \$ 3,993,500 | \$ 4,367,092 | \$ 3,925,502 |
| SLR | 5.8 % | 7.0 % | 5.6 % | 6.9 % |

(a) The capital metrics reflect the CECL capital transition provisions.

(b) Adjusted average assets, for purposes of calculating the leverage ratios, includes quarterly average assets adjusted for on-balance sheet assets that are subject to deduction from Tier 1 capital, predominantly goodwill, inclusive of estimated equity method goodwill, and other intangible assets.

Note 24 – Off-balance sheet lending-related financial instruments, guarantees, and other commitments

JPMorgan Chase provides lending-related financial instruments (e.g., commitments and guarantees) to address the financing needs of its customers and clients. The contractual amount of these financial instruments represents the maximum possible credit risk to the Firm should the customer or client draw upon the commitment or the Firm be required to fulfill its obligation under the guarantee, and should the customer or client subsequently fail to perform according to the terms of the contract. Most of these commitments and guarantees have historically been refinanced, extended, cancelled, or expired 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 expected future credit exposure or funding requirements. Refer to Note 28 of JPMorgan Chase's 2022 Form 10-K for a further discussion of lending-related commitments and guarantees, and the Firm's related accounting policies.

To provide for expected credit losses in wholesale and certain consumer lending-related commitments, an allowance for credit losses on lending-related commitments is maintained. Refer to Note 13 for further information 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 June 30, 2023, and December 31, 2022. The amounts in the table below for credit card, home equity and certain scored business banking 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 and certain scored business banking lines of credit by providing the borrower notice or, in some cases as permitted by law, without notice. In addition, the Firm typically closes credit card lines when the borrower is 60 days or more past due. The Firm may reduce or close HELOCs 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

| By remaining maturity (in millions) | Contractual amount | | | | | Carrying value ⁽ⁱ⁾ | | |
|---|------------------------------|--|---|--------------------------------|--------------------|-------------------------------|-------------------------|----------------------|
| | June 30, 2023 | | | | | Dec 31, 2022 | Jun 30, 2023 | Dec 31, 2022 |
| | Expires in 1 year or less | Expires after 1 year through 3 years | Expires after 3 years through 5 years | Expires after 5 years | Total | Total | | |
| Lending-related | | | | | | | | |
| Consumer, excluding credit card: | | | | | | | | |
| Residential real estate ^(a) | \$ 9,164 | \$ 5,873 | \$ 6,304 | \$ 12,692 | \$ 34,033 | \$ 21,287 | \$ 714 ^(j) | \$ 75 |
| Auto and other | 14,203 | 324 | — | 2,286 | 16,813 | 12,231 | 236 ^(j) | — |
| Total consumer, excluding credit card | 23,367 | 6,197 | 6,304 | 14,978 | 50,846 | 33,518 | 950 | 75 |
| Credit card ^(b) | 881,485 | — | — | — | 881,485 | 821,284 | — | — |
| Total consumer^(c) | 904,852 | 6,197 | 6,304 | 14,978 | 932,331 | 854,802 | 950 | 75 |
| Wholesale: | | | | | | | | |
| Other unfunded commitments to extend credit ^(d) | 123,374 | 160,273 | 202,330 | 23,345 | 509,322 | 440,407 | 3,564 ^{(h)(j)} | 2,328 ^(h) |
| Standby letters of credit and other financial guarantees ^(d) | 14,960 | 8,073 | 4,274 | 1,099 | 28,406 | 27,439 | 517 | 408 |
| Other letters of credit ^(d) | 3,022 | 233 | 106 | — | 3,361 | 4,134 | 23 | 6 |
| Total wholesale^(c) | 141,356 | 168,579 | 206,710 | 24,444 | 541,089 | 471,980 | 4,104 | 2,742 |
| Total lending-related | \$1,046,208 | \$ 174,776 | \$ 213,014 | \$ 39,422 | \$1,473,420 | \$1,326,782 | \$ 5,054 | \$ 2,817 |
| Other guarantees and commitments | | | | | | | | |
| Securities lending indemnification agreements and guarantees ^(e) | \$ 296,547 | \$ — | \$ — | \$ — | \$ 296,547 | \$ 283,386 | \$ — | \$ — |
| Derivatives qualifying as guarantees | 3,861 | 228 | 11,959 | 40,852 | 56,900 | 59,180 | 181 | 649 |
| Unsettled resale and securities borrowed agreements | 108,556 | 585 | — | — | 109,141 | 116,975 | — | (2) |
| Unsettled repurchase and securities loaned agreements | 92,811 | 547 | — | — | 93,358 | 66,407 | — | (7) |
| Loan sale and securitization-related indemnifications: | | | | | | | | |
| Mortgage repurchase liability | NA | NA | NA | NA | NA | NA | 76 | 76 |
| Loans sold with recourse | NA | NA | NA | NA | 768 | 820 | 27 | 28 |
| Exchange & clearing house guarantees and commitments ^(f) | 140,102 | — | — | — | 140,102 | 191,068 | — | — |
| Other guarantees and commitments^(g) | 6,569 | 848 | 166 | 3,574 | 11,157 | 8,634 | 43 | 53 |

(a) Includes certain commitments to purchase loans from correspondents.

(b) Also includes commercial card lending-related commitments primarily in CB and CIB.

(c) Predominantly all consumer and wholesale lending-related commitments are in the U.S.

(d) As of June 30, 2023, and December 31, 2022, reflected the contractual amount net of risk participations totaling \$87 million and \$71 million, respectively, for other unfunded commitments to extend credit; \$8.0 billion and \$8.2 billion, respectively, for standby letters of credit and other financial guarantees; \$425 million and \$512 million, respectively, for other letters of credit. In regulatory filings with the Federal Reserve these commitments are shown gross of risk participations.

(e) As of June 30, 2023, and December 31, 2022, collateral held by the Firm in support of securities lending indemnification agreements was \$312.6 billion and \$298.5 billion, respectively. Securities lending collateral primarily consists of cash, G7 government securities, and securities issued by U.S. GSEs and government agencies.

(f) As of June 30, 2023, and December 31, 2022, includes guarantees to the Fixed Income Clearing Corporation under the sponsored member repo program and commitments and guarantees associated with the Firm's membership in certain clearing houses.

(g) As of June 30, 2023, and December 31, 2022, primarily includes unfunded commitments related to certain tax-oriented equity investments, unfunded commitments to purchase secondary market loans, and other equity investment commitments.

(h) As of June 30, 2023 and December 31, 2022 includes net markdowns on held-for-sale positions related to unfunded commitments in the bridge financing portfolio.

(i) For lending-related products, the carrying value includes the allowance for lending-related commitments and the guarantee liability; for derivative-related products, and lending-related commitments for which the fair value option was elected, the carrying value represents the fair value.

(j) As of June 30, 2023, includes fair value adjustments associated with the First Republic acquisition for residential real estate lending-related commitments totaling \$576 million, for auto and other lending-related commitments totaling \$236 million and for other unfunded commitments to extend credit totaling \$1.6 billion. Refer to Note 28 for additional information.

Other unfunded commitments to extend credit

Other unfunded commitments to extend credit generally consist of commitments for working capital and general corporate purposes, extensions of credit to support commercial paper facilities and bond financings in the event that those obligations cannot be remarketed to new investors, as well as committed liquidity facilities to clearing organizations. The Firm also issues commitments under multipurpose facilities which could be drawn upon in several forms, including the issuance of a standby letter of credit.

The following table summarizes the contractual amount and carrying value of standby letters of credit and other financial guarantees and other letters of credit arrangements as of June 30, 2023, and December 31, 2022.

Standby letters of credit, other financial guarantees and other letters of credit

| (in millions) | June 30, 2023 | | December 31, 2022 | |
|---|--|-------------------------|--|-------------------------|
| | 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) | \$ 19,574 | \$ 2,385 | \$ 19,205 | \$ 3,040 |
| Noninvestment-grade ^(a) | 8,832 | 976 | 8,234 | 1,094 |
| Total contractual amount | \$ 28,406 | \$ 3,361 | \$ 27,439 | \$ 4,134 |
| Allowance for lending-related commitments | \$ 146 | \$ 23 | \$ 82 | \$ 6 |
| Guarantee liability | 371 | — | 326 | — |
| Total carrying value | \$ 517 | \$ 23 | \$ 408 | \$ 6 |
| Commitments with collateral | \$ 16,414 | \$ 549 | \$ 15,296 | \$ 795 |

(a) The ratings scale is based on the Firm's internal risk ratings. Refer to Note 12 for further information on internal risk ratings.

Derivatives qualifying as guarantees

The Firm transacts in certain derivative contracts that have the characteristics of a guarantee under U.S. GAAP. Refer to Note 28 of JPMorgan Chase's 2022 Form 10-K for further information on these derivatives.

The following table summarizes the derivatives qualifying as guarantees as of June 30, 2023, and December 31, 2022.

| (in millions) | June 30, 2023 | December 31, 2022 |
|--|---------------|-------------------|
| Notional amounts | | |
| Derivative guarantees | \$ 56,900 | \$ 59,180 |
| Stable value contracts with contractually limited exposure | 31,715 | 31,820 |
| Maximum exposure of stable value contracts with contractually limited exposure | 1,442 | 2,063 |
| Fair value | | |
| Derivative payables | 181 | 649 |

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. Refer to Note 5 for a further discussion of credit derivatives.

Standby letters of credit and other financial guarantees

Standby letters of credit and other financial guarantees are conditional lending commitments issued by the Firm to guarantee the performance of a client or customer to a third party under certain arrangements, such as commercial paper facilities, bond financings, acquisition financings, trade financings and similar transactions.

Merchant charge-backs

Under the rules of payment networks, in its role as a merchant acquirer, the Firm's Merchant Services business in CIB Payments, retains a contingent liability for disputed processed credit and debit card transactions that result in a charge-back to the merchant. If a dispute is resolved in the cardholder's favor, the Firm will (through the cardholder's issuing bank) credit or refund the amount to the cardholder and will charge back the transaction to the merchant. If the Firm is unable to collect the amount from the merchant, the Firm will bear the loss for the amount credited or refunded to the cardholder. The Firm mitigates this risk by withholding future settlements, retaining cash reserve accounts or obtaining other collateral. In addition, the Firm recognizes a valuation allowance that covers the payment or performance risk related to charge-backs.

Loan sales and securitization-related indemnifications

In connection with the Firm's mortgage loan sale and securitization activities with GSEs the Firm has made representations and warranties that the loans sold meet certain requirements, and that may require the Firm to repurchase mortgage loans and/or indemnify the loan purchaser if such representations and warranties are breached by the Firm.

The liability related to repurchase demands associated with private label securitizations is separately evaluated by the Firm in establishing its litigation reserves. Refer to Note 26 of this Form 10-Q and Note 30 of JPMorgan Chase's 2022 Form 10-K for additional information regarding litigation.

Sponsored member repo program

The Firm acts as a sponsoring member to clear eligible overnight and term resale and repurchase agreements through the Government Securities Division of the Fixed Income Clearing Corporation ("FICC") on behalf of clients that become sponsored members under the FICC's rules. The Firm also guarantees to the FICC the prompt and full payment and performance of its sponsored member clients' respective obligations under the FICC's rules. The Firm minimizes its liability under these guarantees by obtaining a security interest in the cash or high-quality securities collateral that the clients place with the clearing house therefore the Firm expects the risk of loss to be remote. The Firm's maximum possible exposure, without taking into consideration the associated collateral, is included in the Exchange & clearing house guarantees and commitments line on page 185. Refer to Note 11 of JPMorgan Chase's 2022 Form 10-K for additional information on credit risk mitigation practices on resale agreements and the types of collateral pledged under repurchase agreements.

Guarantees of subsidiaries

The Parent Company has guaranteed certain long-term debt and structured notes of its subsidiaries, including JPMorgan Chase Financial Company LLC ("JPMFC"), a 100%-owned finance subsidiary. All securities issued by JPMFC are fully and unconditionally guaranteed by the Parent Company and no other subsidiary of the Parent Company guarantees these securities. These guarantees, which rank pari passu with the Firm's unsecured and unsubordinated indebtedness, are not included in the table on page 185 of this Note. Refer to Note 20 of JPMorgan Chase's 2022 Form 10-K for additional information.

Note 25 – Pledged assets and collateral

Refer to Note 29 of JPMorgan Chase's 2022 Form 10-K for a discussion of the Firm's pledged assets and collateral.

Pledged assets

The Firm pledges financial assets that it owns to maintain potential borrowing capacity at discount windows with Federal Reserve banks, various other central banks and FHLBs. Additionally, the Firm pledges assets for other purposes, including to collateralize repurchase and other securities financing agreements, to cover short sales and to collateralize derivative contracts and deposits. Certain of these pledged assets may be sold or repledged or otherwise used by the secured parties and are parenthetically identified on the Consolidated balance sheets as assets pledged.

The following table presents the Firm's pledged assets.

| (in billions) | June 30, 2023 | December 31, 2022 |
|--|-------------------|----------------------|
| Assets that may be sold or repledged or otherwise used by secured parties | \$ 161.3 | \$ 110.8 |
| Assets that may not be sold or repledged or otherwise used by secured parties ^(a) | 288.4 | 114.8 |
| Assets pledged at Federal Reserve banks and FHLBs ^(b) | 621.8 | 567.6 |
| Total pledged assets | \$ 1,071.5 | \$ 793.2 |

(a) As of June 30, 2023, included \$120.0 billion of assets pledged to the FDIC as part of the shared-loss agreements associated with the First Republic acquisition. Refer to Note 28 for additional information.

(b) As of June 30, 2023, included \$23.7 billion of assets pledged to the FHLB associated with the First Republic acquisition.

Total pledged assets do not include assets of consolidated VIEs; these assets are used to settle the liabilities of those entities. Refer to Note 14 for additional information on assets and liabilities of consolidated VIEs. Refer to Note 11 for additional information on the Firm's securities financing activities. Refer to Note 20 of JPMorgan Chase's 2022 Form 10-K for additional information on the Firm's long-term debt.

Collateral

The Firm accepts financial assets as collateral that it is permitted to sell or repledge, deliver or otherwise use. This collateral is generally obtained under resale and other securities financing agreements, prime brokerage-related held-for-investment customer receivables and derivative contracts. Collateral is generally used under repurchase and other securities financing agreements, to cover short sales and to collateralize derivative contracts and deposits.

The following table presents the fair value of collateral accepted.

| (in billions) | June 30, 2023 | December 31, 2022 |
|--|------------------|----------------------|
| Collateral permitted to be sold or repledged, delivered, or otherwise used | \$ 1,303.7 | \$ 1,346.9 |
| Collateral sold, repledged, delivered or otherwise used | 986.3 | 1,019.4 |

Note 26 – Litigation

Contingencies

As of June 30, 2023, the Firm and its subsidiaries and affiliates are defendants or respondents in numerous legal proceedings, including private, civil litigations, government investigations or regulatory enforcement matters. The litigations range from individual actions involving a single plaintiff to class action lawsuits with potentially millions of class members. Investigations and regulatory enforcement matters 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 several 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 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 \$1.3 billion at June 30, 2023. This estimated aggregate range of reasonably possible losses was based upon information available as of that date for those proceedings in which the Firm believes that an estimate of reasonably possible loss can be made. For certain matters, the Firm does not believe that such an estimate can be made, as of that date. The Firm's estimate of the aggregate range of reasonably possible losses involves significant judgment, given:

- the number, variety and varying stages of the proceedings, including the fact that many are in preliminary stages,
- the existence in many such proceedings of multiple defendants, including the Firm, whose share of liability (if any) 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 uncertainty of the various potential outcomes of such proceedings, including where the Firm has made assumptions concerning future rulings by the court or other adjudicator, or about the behavior or incentives of adverse parties or regulatory authorities, and those assumptions prove to be incorrect.

In addition, the outcome of a particular proceeding may be a result which the Firm did not take into account in its estimate because the Firm had deemed the likelihood of that outcome to be remote. Accordingly, the Firm's estimate of the aggregate range of reasonably possible losses will change from time to time, and actual losses may vary significantly.

Set forth below are descriptions of the Firm's material legal proceedings.

1MDB Litigation. J.P. Morgan (Suisse) SA was named as a defendant in a civil litigation filed in May 2021 in Malaysia by 1Malaysia Development Berhad ("1MDB"), a Malaysian state-owned and controlled investment fund. J.P. Morgan (Suisse) SA was served in August 2022. The claim alleges "dishonest assistance" against J.P. Morgan (Suisse) SA in relation to payments of \$300 million and \$500 million, from 2009 and 2010, respectively, received from 1MDB and paid into an account at J.P. Morgan Suisse (SA) held by 1MDB PetroSaudi Limited, a joint venture company between 1MDB and PetroSaudi Holdings (Cayman) Limited. In September 2022, the Firm filed an application challenging the validity of service and the Malaysian Court's jurisdiction to hear the claim. In April 2023, 1MDB discontinued its claim against J.P. Morgan (Suisse) SA, but requested permission of the Court to refile in the future, which the Court took under consideration.

Amrapali. India's Enforcement Directorate ("ED") is investigating J.P. Morgan India Private Limited in connection with investments made in 2010 and 2012 by two offshore funds formerly managed by JPMorgan Chase entities into residential housing projects developed by the Amrapali Group ("Amrapali"). In 2017, numerous creditors filed civil claims against Amrapali, including petitions brought by home buyers relating to delays in delivering or failure to deliver residential units. The home buyers' petitions have been overseen by the Supreme Court of India and are ongoing. In August 2021, the ED issued an order fining J.P. Morgan India Private Limited approximately \$31.5 million. The Firm is appealing the order and the fine. Relatedly, in July 2019, the Supreme Court of India issued an order making preliminary findings that Amrapali and other parties, including unspecified JPMorgan Chase entities and the offshore funds that had invested in the projects, violated certain currency control and money laundering provisions, and ordering the ED to conduct a further inquiry under India's Prevention of Money Laundering Act ("PMLA") and Foreign Exchange Management Act ("FEMA"). In May 2020, the ED attached approximately \$25 million from J.P. Morgan India Private Limited in connection with the criminal PMLA investigation. The Firm is responding to and cooperating with the PMLA investigation.

Foreign Exchange Investigations and Litigation. The Firm previously reported settlements with certain government authorities relating to its foreign exchange ("FX") sales and trading activities and controls related to those activities. Among those resolutions, in May 2015, the Firm pleaded guilty to a single violation of federal antitrust law. The Department of Labor ("DOL") granted the Firm exemptions that permit the Firm and its affiliates to continue to rely on the Qualified Professional Asset Manager exemption under the Employee Retirement Income Security Act ("ERISA")

through the ten-year disqualification period following the antitrust plea. The only remaining FX-related governmental inquiry is a South Africa Competition Commission matter which is currently pending before the South Africa Competition Tribunal.

With respect to civil litigation matters, in August 2018, the United States District Court for the Southern District of New York granted final approval to the Firm's settlement of a consolidated class action brought by U.S.-based plaintiffs, which principally alleged violations of federal antitrust laws based on an alleged conspiracy to manipulate foreign exchange rates and also sought damages on behalf of persons who transacted in FX futures and options on futures. Although certain members of the settlement class filed requests to the Court to be excluded from the class, an agreement to resolve their claims was reached in December 2022. The District Court denied certification of a putative class action against the Firm and other foreign exchange dealers on behalf of certain parties who purchased foreign currencies at allegedly inflated rates and granted summary judgment against the named plaintiffs in March 2023. Those plaintiffs have filed a notice of appeal. In addition, some FX-related individual and putative class actions based on similar alleged underlying conduct have been filed outside the U.S., including in the U.K., Israel, the Netherlands, Brazil and Australia. An agreement to resolve one of the UK actions was reached in December 2022. In July 2023, the U.K. Court of Appeal overturned the Competition Appeal Tribunal's earlier denial of a request for class certification on an opt-out basis. In Israel, a settlement in principle has been reached in the putative class action, which remains subject to court approval.

Interchange Litigation. Groups of merchants and retail associations filed a series of class action complaints alleging that Visa and Mastercard, as well as certain banks, conspired to set the price of credit and debit card interchange fees and enacted related rules in violation of antitrust laws. In 2012, the parties initially settled the cases for a cash payment, but that settlement was reversed on appeal and remanded to the United States District Court for the Eastern District of New York.

The original class action was divided into two separate actions, one seeking primarily monetary relief and the other seeking primarily injunctive relief. In September 2018, the parties to the monetary class action finalized an agreement which amends and supersedes the prior settlement agreement. Pursuant to this settlement, the defendants collectively contributed an additional \$900 million to the approximately \$5.3 billion previously held in escrow from the original settlement. In December 2019, the amended settlement agreement was approved by the District Court. In March 2023, the United States Court of Appeals for the Second Circuit affirmed the District Court's approval of the settlement, and two merchants have filed petitions for rehearing of the Appellate Court's approval. Based on the percentage of merchants that opted out of the amended class settlement, \$700 million has been returned to the

defendants from the settlement escrow in accordance with the settlement agreement. The injunctive class action continues separately, and in September 2021, the District Court granted plaintiffs' motion for class certification in part, and denied the motion in part.

Of the merchants who opted out of the amended damages class settlement, certain merchants filed individual actions raising similar allegations against Visa and Mastercard, as well as against the Firm and other banks. While some of those actions remain pending, the defendants have reached settlements with the merchants who opted out representing approximately 65% of the combined Mastercard-branded and Visa-branded payment card sales volume.

Jeffrey Epstein Litigation. JPMorgan Chase Bank, N.A. was named as a defendant in two lawsuits filed in the United States District Court for the Southern District of New York alleging that JPMorgan Chase Bank, N.A. knowingly facilitated Jeffrey Epstein's sex trafficking and other unlawful conduct by providing banking services to Epstein until 2013. One case, which was filed in November 2022, was a putative class action filed by an alleged sex-trafficking victim of Epstein, and the other case, which was filed in December 2022, was brought on behalf of the government of the United States Virgin Islands and also alleges certain Virgin Islands statutory claims. In March 2023, the Court granted in part and denied in part JPMorgan Chase Bank, N.A.'s motions to dismiss these complaints, allowing some claims to proceed in both lawsuits. Also in March 2023, JPMorgan Chase Bank, N.A. filed third-party complaints impleading the Firm's former employee, James Edward Staley, into the two lawsuits, asserting claims for indemnification, contribution, breach of fiduciary duty and violation of the faithless servant doctrine. In May 2023, the Court denied Staley's motion to dismiss the impleader complaints. In June 2023, the Court granted the putative class' motion for class certification and granted a preliminary approval of a settlement between the class and JPMorgan Chase Bank, N.A., pursuant to which JPMorgan Chase Bank, N.A. will pay \$290 million to a fund for Epstein survivors. The actions involving the government of the United States Virgin Islands and Staley are proceeding.

LIBOR and Other Benchmark Rate Investigations and Litigation. JPMorgan Chase has responded to inquiries from various governmental agencies and entities around the world relating primarily to the British Bankers Association's ("BBA") London Interbank Offered Rate ("LIBOR") for various currencies and the European Banking Federation's Euro Interbank Offered Rate ("EURIBOR"). The Swiss Competition Commission's investigation relating to EURIBOR, to which the Firm and one other bank remain subject, continues. In December 2016, the European Commission issued a decision against the Firm and other banks finding an infringement of European antitrust rules relating to EURIBOR. The Firm has filed an appeal of that decision with the European General Court, and that appeal is pending.

In addition, the Firm has been named as a defendant along with other banks in various individual and putative class actions related to benchmark rates, including U.S. dollar LIBOR. In actions related to U.S. dollar LIBOR during the period that it was administered by the BBA, the Firm has obtained dismissal of certain actions and resolved certain other actions, and others are in various stages of litigation. The United States District Court for the Southern District of New York has granted class certification of antitrust claims related to bonds and interest rate swaps sold directly by the defendants, including the Firm. A consolidated putative class action related to the period that U.S. dollar LIBOR was administered by ICE Benchmark Administration has been dismissed. In addition, a group of individual plaintiffs filed a lawsuit asserting antitrust claims, alleging that the Firm and other defendants were engaged in an unlawful agreement to set U.S. dollar LIBOR and conspired to monopolize the market for LIBOR-based consumer loans and credit cards. In September 2022, the Court dismissed plaintiffs' complaint in its entirety, and plaintiffs filed an amended complaint asserting similar antitrust claims, which defendants have moved to dismiss. The Firm's settlements of putative class actions related to the Singapore Interbank Offered Rate and the Singapore Swap Offer Rate, and the Australian Bank Bill Swap Reference Rate received final court approval in November 2022, while the settlement related to Swiss franc LIBOR remains subject to court approval.

Securities Lending Antitrust Litigation. JPMorgan Chase Bank, N.A., J.P. Morgan Securities LLC, J.P. Morgan Prime, Inc., and J.P. Morgan Strategic Securities Lending Corp. are named as defendants in a putative class action filed in the United States District Court for the Southern District of New York. The complaint asserts violations of federal antitrust law and New York State common law in connection with an alleged conspiracy to prevent the emergence of anonymous exchange trading for securities lending transactions. Defendants' motion to dismiss the complaint was denied. Plaintiffs have moved to certify a class in this action, which defendants have opposed. The parties have reached an agreement in principle to settle this action, subject to final documentation and court approval.

Shareholder Litigation. Several shareholder putative class actions, as well as shareholder derivative actions purporting to act on behalf of the Firm, have been filed against the Firm, its Board of Directors and certain of its current and former officers.

Certain of these shareholder suits relate to historical trading practices by former employees in the precious metals and U.S. treasuries markets and related conduct which were the subject of the Firm's resolutions with the DOJ, CFTC and SEC in September 2020, and fiduciary activities that were separately the subject of a resolution between JPMorgan Chase Bank, N.A. and the OCC in November 2020. One of these shareholder derivative suits was filed in the Supreme Court of the State of New York in May 2022, asserting breach of fiduciary duty and unjust enrichment claims relating to the historical trading practices and related conduct and fiduciary activities which

were the subject of the resolutions described above. In December 2022, the court granted defendants' motion to dismiss this action in full, and in January 2023, the plaintiff filed a notice of appeal, which remains pending. A second shareholder derivative action was filed in the United States District Court for the Eastern District of New York in December 2022 relating to the historical trading practices and related conduct, which asserts breach of fiduciary duty and contribution claims and alleges that the shareholder is excused from making a demand to commence litigation because such a demand would have been futile. Defendants have moved to dismiss the complaint. In addition, a consolidated putative class action is pending in the United States District Court for the Eastern District of New York on behalf of shareholders who acquired shares of JPMorgan Chase common stock during the putative class period, alleging that certain SEC filings of the Firm were materially false or misleading because they did not disclose certain information relating to the historical trading practices and conduct. Defendants have moved to dismiss the amended complaint in this action.

A separate shareholder derivative suit was filed in March 2022 in the United States District Court for the Eastern District of New York asserting breaches of fiduciary duty and violations of federal securities laws based on the alleged failure of the Board of Directors to exercise adequate oversight over the Firm's compliance with records preservation requirements which were the subject of resolutions between certain of the Firm's subsidiaries and the SEC and the CFTC. Defendants' motion to dismiss the amended complaint is pending.

Two shareholder derivative suits were filed in May and June 2023, respectively, in the United States District Court for the Southern District of New York asserting breaches of fiduciary duty and unjust enrichment based on the alleged failure of the Board of Directors and James Dimon to exercise adequate oversight with respect to the Firm's provision of banking services to Jeffrey Epstein. These actions allege that the shareholders are excused from making a demand to commence litigation because such a demand would have been futile. These actions were consolidated and defendants have moved to dismiss the amended complaint filed by the plaintiffs.

* * *

In addition to the various legal proceedings discussed above, JPMorgan Chase and its subsidiaries are named as defendants or are 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. 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. In accordance with the provisions of U.S. GAAP for contingencies, the Firm accrues for a litigation-related liability when it is probable

that such a 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, upward or downward, as appropriate, based on management's best judgment after consultation with counsel. The Firm's legal expense was \$420 million and \$73 million for the three months ended June 30, 2023 and 2022, respectively. 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 will be the eventual outcomes of the currently pending matters, the timing of their ultimate resolution or the eventual losses, fines, penalties or consequences related to those matters. JPMorgan Chase believes, based upon its current knowledge and after consultation with counsel, consideration of the material legal proceedings described above and after taking into account its current litigation reserves and its estimated aggregate range of possible losses, that the other 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 that the ultimate resolution of these matters will not significantly exceed the reserves it has currently accrued or that a matter will not have material reputational consequences. 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.

Note 27 – Business segments

The Firm is managed on an LOB basis. There are four major reportable business segments - Consumer & Community Banking, Corporate & Investment Bank, Commercial Banking and Asset & Wealth Management. In addition, there is a Corporate 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 the Firm's Operating Committee. Segment results are presented on a managed basis. Refer to Segment results below, and Note 32 of JPMorgan Chase's 2022 Form 10-K for a further discussion of JPMorgan Chase's business segments.

Segment results

The following table provides a summary of the Firm's segment results as of or for the three and six months ended June 30, 2023 and 2022, on a managed basis. 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 reportable business segments) on an FTE basis.

Accordingly, revenue from investments that receive tax credits and tax-exempt securities is presented in the managed results on a basis comparable to taxable investments and securities. Refer to Note 32 of JPMorgan Chase's 2022 Form 10-K for additional information on the Firm's managed basis.

Capital allocation

The amount of capital assigned to each business segment is referred to as equity. At least annually, the assumptions, judgments and methodologies used to allocate capital are reassessed and, as a result, the capital allocated to the LOBs may change. As of June 30, 2023, the Firm updated its line of business capital allocations to reflect the impact of the First Republic acquisition. Refer to Line of business equity on page 93 of JPMorgan Chase's 2022 Form 10-K for additional information on capital allocation.

Segment results and reconciliation^(a)

| As of or for the three months ended June 30, (in millions, except ratios) | Consumer & Community Banking | | Corporate & Investment Bank | | Commercial Banking | | Asset & Wealth Management | |
|---|------------------------------|-------------------------|-----------------------------|-------------------------|--------------------|---------------|---------------------------|-----------------|
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| Noninterest revenue | \$ 3,543 | \$ 3,850 ^(b) | \$ 10,802 | \$ 8,805 ^(b) | \$ 835 | \$ 904 | \$ 3,358 | \$ 3,084 |
| Net interest income | 13,690 | 8,708 | 1,717 | 3,198 | 3,153 | 1,779 | 1,585 | 1,222 |
| Total net revenue | 17,233 | 12,558 | 12,519 | 12,003 | 3,988 | 2,683 | 4,943 | 4,306 |
| Provision for credit losses | 1,862 | 761 | 38 | 59 | 1,097 | 209 | 145 | 44 |
| Noninterest expense | 8,313 | 7,658 ^(b) | 6,894 | 6,810 ^(b) | 1,300 | 1,156 | 3,163 | 2,919 |
| Income/(loss) before income tax expense/(benefit) | 7,058 | 4,139 | 5,587 | 5,134 | 1,591 | 1,318 | 1,635 | 1,343 |
| Income tax expense/(benefit) | 1,752 | 1,031 ^(b) | 1,495 | 1,417 ^(b) | 383 | 324 | 409 | 339 |
| Net income/(loss) | \$ 5,306 | \$ 3,108 | \$ 4,092 | \$ 3,717 | \$ 1,208 | \$ 994 | \$ 1,226 | \$ 1,004 |
| Average equity | \$ 54,346 | \$ 50,000 | \$ 108,000 | \$ 103,000 | \$ 29,505 | \$ 25,000 | \$ 16,670 | \$ 17,000 |
| Total assets | 620,193 | 500,219 | 1,432,054 | 1,403,558 | 305,280 | 242,456 | 247,118 | 235,553 |
| ROE | 38 % | 24 % | 15 % | 14 % | 16 % | 15 % | 29 % | 23 % |
| Overhead ratio | 48 | 61 | 55 | 57 | 33 | 43 | 64 | 68 |

| As of or for the three months ended June 30, (in millions, except ratios) | Corporate | | Reconciling Items ^(a) | | Total | |
|---|-----------------|-----------------|----------------------------------|--------------|------------------|-----------------|
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| Noninterest revenue | \$ 1,980 | \$ (244) | \$ (990) | \$ (812) | \$ 19,528 | \$ 15,587 |
| Net interest income | 1,738 | 324 | (104) | (103) | 21,779 | 15,128 |
| Total net revenue | 3,718 | 80 | (1,094) | (915) | 41,307 | 30,715 |
| Provision for credit losses | (243) | 28 | – | – | 2,899 | 1,101 |
| Noninterest expense | 1,152 | 206 | – | – | 20,822 | 18,749 |
| Income/(loss) before income tax expense/(benefit) | 2,809 | (154) | (1,094) | (915) | 17,586 | 10,865 |
| Income tax expense/(benefit) | 169 | 20 | (1,094) | (915) | 3,114 | 2,216 |
| Net income/(loss) | \$ 2,640 | \$ (174) | \$ – | \$ – | \$ 14,472 | \$ 8,649 |
| Average equity | \$ 69,364 | \$ 52,986 | \$ – | \$ – | \$ 277,885 | \$ 247,986 |
| Total assets | 1,263,595 | 1,459,528 | NA | NA | 3,868,240 | 3,841,314 |
| ROE | NM | NM | NM | NM | 20 % | 13 % |
| Overhead ratio | NM | NM | NM | NM | 50 | 61 |

(a) Segment managed results reflect revenue on an FTE 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.

(b) In the first quarter of 2023, the allocations of revenue and expense to CCB associated with a Merchant Services revenue sharing agreement were discontinued and are now retained in Payments in CIB. Prior-period amounts have been revised to conform with the current presentation.

Segment results and reconciliation^(a)

| As of or for the six months ended June 30, (in millions, except ratios) | Consumer & Community Banking | | Corporate & Investment Bank | | Commercial Banking | | Asset & Wealth Management | |
|---|------------------------------|-------------------------|-----------------------------|--------------------------|--------------------|-----------------|---------------------------|-----------------|
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| Noninterest revenue | \$ 7,166 | \$ 7,705 ^(b) | \$ 22,325 | \$ 18,809 ^(b) | \$ 1,616 | \$ 1,771 | \$ 6,691 | \$ 6,323 |
| Net interest income | 26,523 | 17,035 | 3,794 | 6,770 | 5,883 | 3,310 | 3,036 | 2,298 |
| Total net revenue | 33,689 | 24,740 | 26,119 | 25,579 | 7,499 | 5,081 | 9,727 | 8,621 |
| Provision for credit losses | 3,264 | 1,439 | 96 | 504 | 1,514 | 366 | 173 | 198 |
| Noninterest expense | 16,378 | 15,313 ^(b) | 14,377 | 14,173 ^(b) | 2,608 | 2,285 | 6,254 | 5,779 |
| Income/(loss) before income tax expense/(benefit) | 14,047 | 7,988 | 11,646 | 10,902 | 3,377 | 2,430 | 3,300 | 2,644 |
| Income tax expense/(benefit) | 3,498 | 1,972 ^(b) | 3,133 | 2,813 ^(b) | 822 | 586 | 707 | 632 |
| Net income/(loss) | \$ 10,549 | \$ 6,016 | \$ 8,513 | \$ 8,089 | \$ 2,555 | \$ 1,844 | \$ 2,593 | \$ 2,012 |
| Average equity | \$ 53,180 | \$ 50,000 | \$ 108,000 | \$ 103,000 | \$ 29,005 | \$ 25,000 | \$ 16,337 | \$ 17,000 |
| Total assets | 620,193 | 500,219 | 1,432,054 | 1,403,558 | 305,280 | 242,456 | 247,118 | 235,553 |
| ROE | 39 % | 23 % | 15 % | 15 % | 17 % | 14 % | 31 % | 23 % |
| Overhead ratio | 49 | 62 | 55 | 55 | 35 | 45 | 64 | 67 |

| As of or for the six months ended June 30, (in millions, except ratios) | Corporate | | Reconciling Items ^(a) | | Total | |
|---|-----------------|-------------------|----------------------------------|----------------|------------------|------------------|
| | 2023 | 2022 | 2023 | 2022 | 2023 | 2022 |
| Noninterest revenue | \$ 1,225 | \$ (589) | \$ (1,857) | \$ (1,587) | \$ 37,166 | \$ 32,432 |
| Net interest income | 3,478 | (212) | (224) | (201) | 42,490 | 29,000 |
| Total net revenue | 4,703 | (801) | (2,081) | (1,788) | 79,656 | 61,432 |
| Provision for credit losses | 127 | 57 | — | — | 5,174 | 2,564 |
| Noninterest expense | 1,312 | 390 | — | — | 40,929 | 37,940 |
| Income/(loss) before income tax expense/(benefit) | 3,264 | (1,248) | (2,081) | (1,788) | 33,553 | 20,928 |
| Income tax expense/(benefit) | 380 | (218) | (2,081) | (1,788) | 6,459 | 3,997 |
| Net income/(loss) | \$ 2,884 | \$ (1,030) | \$ — | \$ — | \$ 27,094 | \$ 16,931 |
| Average equity | \$ 68,038 | \$ 55,234 | \$ — | \$ — | \$ 274,560 | \$ 250,234 |
| Total assets | 1,263,595 | 1,459,528 | NA | NA | 3,868,240 | 3,841,314 |
| ROE | NM | NM | NM | NM | 19 % | 13 % |
| Overhead ratio | NM | NM | NM | NM | 51 | 62 |

(a) Segment managed results reflect revenue on an FTE 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.

(b) In the first quarter of 2023, the allocations of revenue and expense to CCB associated with a Merchant Services revenue sharing agreement were discontinued and are now retained in Payments in CIB. Prior-period amounts have been revised to conform with the current presentation.

Note 28 – Business combinations

On May 1, 2023, JPMorgan Chase acquired certain assets and assumed certain liabilities of First Republic Bank (the "First Republic acquisition") from the Federal Deposit Insurance Corporation ("FDIC"), as receiver, for \$67.9 billion, resulting in an estimated bargain purchase gain of \$2.7 billion recorded in other income. The estimated bargain purchase gain represents the excess of the estimated fair value of the net assets acquired above the purchase price. The First Republic acquisition further advances the Firm's wealth management strategy and is complementary to the Firm's existing franchises.

The Firm has determined that this acquisition constitutes a business combination under U.S. GAAP. Accordingly, the initial recognition of the assets acquired and liabilities assumed were generally measured at their estimated fair values as of May 1, 2023. The determination of those fair values required management to make certain market-based assumptions about expected future cash flows, discount rates and other valuation inputs at the time of the acquisition. The Firm believes that the fair value estimates of the assets acquired and liabilities assumed provide a reasonable basis for determining the estimated bargain purchase gain.

The Firm and the FDIC have not yet completed the settlement process under which the purchase price, and the identification of the assets acquired and liabilities assumed, will be finalized. The finalization of this settlement process may impact the amount of the estimated bargain purchase gain. The purchase and assumption agreement entered into with the FDIC allows for final settlement to occur up to a year after the acquisition date.

In addition, the purchase price and the estimated bargain purchase gain could change pending management's finalization of its acquisition date fair value estimates for certain of the assets acquired and liabilities assumed (such as loans and commitments, intangible assets and leases), which may take place up to one year from the acquisition date, as permitted by U.S. GAAP.

In connection with the First Republic acquisition, the Firm and the FDIC entered into two shared-loss agreements with respect to certain loans and lending-related commitments (the "shared-loss assets"): the Commercial Shared-Loss Agreement ("CSLA") and the Single-Family Shared-Loss Agreement ("SFSLA"). The CSLA covers 80% of credit losses, on a pari-passu basis, over 5 years with a subsequent 3-year recovery period for certain acquired commercial loans and other real estate exposure. The SFSLA covers 80% of credit losses, on a pari-passu basis, for 7 years for certain acquired loans secured by mortgages on real property or shares in cooperative property constituting a primary residence. The indemnification assets which represent the fair value of the CSLA and SFSLA are reflected in the total assets acquired.

As part of the consideration paid, JPMorgan Chase issued a five-year, \$50 billion secured note to the FDIC (the "Purchase Money Note"). The Purchase Money Note bears interest at a fixed rate of 3.4% and is secured by certain of the acquired loans. The Purchase Money Note is prepayable upon notice to the FDIC.

The Firm had placed a \$5 billion deposit with First Republic Bank on March 16, 2023, as part of \$30 billion of deposits provided by a consortium of large U.S. banks. The Firm's \$5 billion deposit was effectively settled as part of the acquisition and the associated allowance for credit losses was released upon closing. The Firm subsequently repaid the remaining \$25 billion of deposits to the consortium of banks, including accrued interest through the payment date on May 9, 2023.

The computation of the purchase price, the estimated fair value of the assets acquired and liabilities assumed as part of the First Republic acquisition and the related estimated bargain purchase gain are presented below.

| (in millions) | Fair value purchase price allocation as of May 1, 2023 | |
|--|--|----------------|
| Purchase price consideration | | |
| Amounts paid/due to the FDIC, net of cash acquired ^(a) | \$ | 13,589 |
| Purchase Money Note (at fair value) | | 48,848 |
| Settlement of First Republic deposit and other related party transactions ^(b) | | 5,447 |
| Contingent consideration - Shared-loss agreements | | 15 |
| Purchase price consideration | \$ | 67,899 |
| Assets | | |
| Securities | \$ | 30,285 |
| Loans | | 152,335 |
| Core deposit and customer relationship intangibles | | 1,462 |
| Indemnification assets - Shared-loss agreements | | 675 |
| Accounts receivable and other assets ^(c) | | 7,551 |
| Total assets acquired | \$ | 192,308 |
| Liabilities | | |
| Deposits | \$ | 87,507 |
| FHLB advances | | 27,919 |
| Lending-related commitments | | 2,409 |
| Accounts payable and other liabilities ^(c) | | 3,006 |
| Deferred tax liabilities | | 856 |
| Total liabilities assumed | \$ | 121,697 |
| Fair value of net assets acquired | \$ | 70,611 |
| Estimated gain on acquisition, after income taxes | \$ | 2,712 |

(a) Includes \$10.6 billion of cash paid to the FDIC at acquisition and \$3.7 billion payable to the FDIC, less cash acquired of \$680 million.

(b) Includes \$447 million of securities financing transactions with First Republic Bank that were effectively settled on the acquisition date.

(c) Other assets include \$1.2 billion in tax-oriented investments and \$756 million of lease right-of-use assets. Other liabilities include the related tax-oriented investment liabilities of \$669 million and lease liabilities of \$756 million. Refer to Note 14 and Note 17 for additional information.

The issuance of the \$50 billion Purchase Money Note, the effective settlement of the Firm's \$5 billion deposit and \$447 million of securities financing with First Republic Bank, and the \$3.7 billion payable to the FDIC as part of the purchase price consideration are considered non-cash transactions.

The following describes the accounting policies and fair value methodologies generally used by the Firm for the following assets acquired and liabilities assumed: core deposit and customer relationship intangibles, shared-loss agreements and the related indemnification assets, Purchase Money Note, and FHLB advances.

Refer to JPMorgan Chase's 2022 Form 10-K for a discussion of the Firm's accounting policies and valuation methodologies for securities, loans, deposits, and lending-related commitments.

Core deposit and customer relationship intangibles

Core deposit and certain wealth management customer relationship intangibles were acquired as part of the First Republic transaction. The core deposit intangible of \$1.3 billion was valued by discounting estimated after-tax cost savings over the remaining useful life of the deposits using the favorable source of funds method. The after-tax cost savings were estimated based on the difference between the cost of maintaining the core deposit base relative to the cost of next best alternative funding sources available to market participants. The customer relationship intangibles of \$187 million were valued by discounting estimated after-tax earnings over their remaining useful lives using the multi-period excess earnings method. Both intangible asset valuations utilized assumptions that the Firm believes a market participant would use to estimate fair values, such as growth and attrition rates, projected fee income as well

as related costs to service the relationships, and discount rates. The core deposit and customer relationship intangibles will be amortized over a projected period of future cash flows of approximately 7 years. As of June 30, 2023, the carrying values of the core deposit and customer relationship intangibles were \$1.2 billion and \$183 million, respectively, reflecting accumulated amortization of approximately \$30 million and \$4 million, respectively.

Indemnification assets - Shared-loss agreements

The indemnification assets represent forecasted recoveries from the FDIC associated with the shared-loss assets over the respective shared loss recovery periods. The indemnification assets were recorded at fair value in other assets on the Consolidated balance sheets on the acquisition date. The fair values of the indemnification assets were estimated based on the timing of the forecasted losses underlying the related allowance for credit losses.

The subsequent quarterly remeasurement of the indemnification assets will be based on changes in amount and timing of forecasted losses in the allowance for credit losses associated with the shared loss assets and will be recorded in other income. Under certain circumstances, the Firm may be required to make a payment to the FDIC upon termination of the shared-loss agreements based on the level of actual losses and recoveries on the shared-loss assets. The estimated potential future payment is reflected as contingent consideration as part of the purchase price consideration.

Purchase Money Note and FHLB advances

The Purchase Money Note is recorded in long-term debt on the Consolidated balance sheets. The fair value of the Purchase Money Note was estimated based on a discounted cash flow methodology and incorporated estimated market discount rates.

The FHLB advances assumed in the acquisition are recorded in short-term borrowings and in long-term debt. The fair value of the FHLB advances was based on a discounted cash flow methodology and considered the observed FHLB advance issuance rates.

Loans

The following table presents the unpaid principal balance and estimated fair value of the loans acquired as of May 1, 2023.

| (in millions) | May 1, 2023 | |
|-------------------------|-------------------|-------------------|
| | UPB | Fair value |
| Residential real estate | \$ 106,240 | \$ 91,906 |
| Auto and other | 3,092 | 2,031 |
| Total consumer | 109,332 | 93,937 |
| Secured by real estate | 37,119 | 33,605 |
| Commercial & industrial | 4,333 | 3,933 |
| Other | 22,597 | 20,860 |
| Total wholesale | 64,049 | 58,398 |
| Total loans | \$ 173,381 | \$ 152,335 |

Unaudited pro forma condensed combined financial information

Included in the Firm's Consolidated statements of income are noninterest revenue, net interest income and net income contributed by First Republic since the acquisition date of May 1, 2023 of \$3.1 billion, \$897 million and \$2.4 billion, respectively, for the three and six months ended June 30, 2023.

The following table presents certain unaudited pro forma financial information for the three and six months ended June 30, 2023 and 2022 as if the First Republic acquisition had occurred on January 1, 2022, including recognition of the estimated bargain purchase gain of \$2.7 billion and the provision for credit losses of \$1.2 billion. Additional adjustments include the interest on the Purchase Money Note and the impact of amortizing and accreting certain estimated fair value adjustments related to intangible assets and loans.

The Firm expects to achieve operating cost savings and other business synergies resulting from the acquisition that are not reflected in the pro forma amounts. The pro forma information is not necessarily indicative of the historical results of operations had the acquisition occurred on January 1, 2022, nor is it indicative of the results of operations in future periods, particularly in light of recent changes in market and economic conditions.

| (in millions) | Three months ended June 30, | | Six months ended June 30, | |
|---------------------|-----------------------------|-----------|---------------------------|-----------|
| | 2023 | 2022 | 2023 | 2022 |
| Noninterest revenue | \$ 16,924 | \$ 15,853 | \$ 34,832 | \$ 35,675 |
| Net interest income | 22,184 | 16,180 | 44,084 | 30,997 |
| Net income | 13,565 | 9,086 | 26,726 | 18,887 |



Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of JPMorgan Chase & Co.:

Results of Review of Interim Financial Statements

We have reviewed the accompanying consolidated balance sheet of JPMorgan Chase & Co. and its subsidiaries (the “Firm”) as of June 30, 2023, and the related consolidated statements of income, comprehensive income and changes in stockholders’ equity for the three-month and six-month periods ended June 30, 2023 and 2022 and the consolidated statements of cash flows for the six-month periods ended June 30, 2023 and 2022, including the related notes (collectively referred to as the “interim financial statements”). Based on our reviews, we are not aware of any material modifications that should be made to the accompanying interim financial statements for them to be in conformity with accounting principles generally accepted in the United States of America.

We have previously audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheet of the Firm as of December 31, 2022, and the related consolidated statements of income, comprehensive income, changes in stockholders’ equity and of cash flows for the year then ended (not presented herein), and in our report dated February 21, 2023, which included a paragraph describing a change in the manner of accounting for credit losses on certain financial instruments in 2020, we expressed an unqualified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying consolidated balance sheet information as of December 31, 2022, is fairly stated, in all material respects, in relation to the consolidated balance sheet from which it has been derived.

Basis for Review Results

These interim financial statements are the responsibility of the Firm’s management. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Firm in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB. We conducted our review in accordance with the standards of the PCAOB. A review of interim financial information consists principally of applying analytical procedures and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with the standards of the PCAOB, the objective of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an opinion.

August 3, 2023

JPMorgan Chase & Co.
Consolidated average balance sheets, interest and rates (unaudited)
(Taxable-equivalent interest and rates; in millions, except rates)

| | Three months ended June 30, 2023 | | | Three months ended June 30, 2022 | | |
|---|----------------------------------|-------------------------|---------------------|----------------------------------|-------------------------|---------------------|
| | Average balance | Interest ^(f) | Rate (annualized) | Average balance | Interest ^(f) | Rate (annualized) |
| Assets | | | | | | |
| Deposits with banks | \$ 495,018 | \$ 5,189 | 4.20 % | \$ 694,644 | \$ 1,079 | 0.62 % |
| Federal funds sold and securities purchased under resale agreements | 326,563 | 3,767 | 4.63 | 305,132 | 543 | 0.71 |
| Securities borrowed | 191,393 | 1,866 | 3.91 | 207,437 | 173 | 0.33 |
| Trading assets - debt instruments | 391,945 | 4,025 | 4.12 | 273,736 | 2,058 | 3.02 |
| Taxable securities | 578,876 | 4,194 | 2.91 | 644,037 | 2,289 | 1.43 |
| Nontaxable securities ^(a) | 32,676 | 390 | 4.79 | 28,762 | 309 | 4.31 |
| Total investment securities | 611,552 | 4,584 | 3.01 ^(g) | 672,799 | 2,598 | 1.55 ^(g) |
| Loans | 1,238,237 | 20,351 | 6.59 | 1,093,106 | 11,656 | 4.28 |
| All other interest-earning assets ^(b) | 89,072 | 1,966 | 8.85 | 139,040 | 642 | 1.85 |
| Total interest-earning assets | 3,343,780 | 41,748 | 5.01 | 3,385,894 | 18,749 | 2.22 |
| Allowance for loan losses | (20,055) | | | (17,194) | | |
| Cash and due from banks | 25,228 | | | 28,712 | | |
| Trading assets - equity and other instruments | 169,558 | | | 151,309 | | |
| Trading assets - derivative receivables | 63,339 | | | 84,483 | | |
| Goodwill, MSRs and other intangible Assets | 62,530 | | | 59,355 | | |
| All other noninterest-earning assets | 207,008 | | | 219,084 | | |
| Total assets | \$ 3,851,388 | | | \$ 3,911,643 | | |
| Liabilities | | | | | | |
| Interest-bearing deposits | \$ 1,715,699 | \$ 9,591 | 2.24 % | \$ 1,790,421 | \$ 898 | 0.20 % |
| Federal funds purchased and securities loaned or sold under repurchase agreements | 263,718 | 3,400 | 5.17 | 233,376 | 445 | 0.76 |
| Short-term borrowings ^(c) | 35,335 | 428 | 4.87 | 50,833 | 113 | 0.91 |
| Trading liabilities - debt and all other interest-bearing liabilities ^{(d)(e)} | 293,269 | 2,373 | 3.25 | 274,435 | 471 | 0.69 |
| Beneficial interests issued by consolidated VIEs | 15,947 | 197 | 4.95 | 10,577 | 30 | 1.11 |
| Long-term debt | 294,239 | 3,876 | 5.28 | 246,195 | 1,561 | 2.54 |
| Total interest-bearing liabilities | 2,618,207 | 19,865 | 3.04 | 2,605,837 | 3,518 | 0.54 |
| Noninterest-bearing deposits | 671,715 | | | 741,891 | | |
| Trading liabilities - equity and other instruments ^(e) | 28,513 | | | 40,937 | | |
| Trading liabilities - derivative payables | 46,934 | | | 61,026 | | |
| All other liabilities, including the allowance for lending-related commitments | 180,730 | | | 181,128 | | |
| Total liabilities | 3,546,099 | | | 3,630,819 | | |
| Stockholders' equity | | | | | | |
| Preferred stock | 27,404 | | | 32,838 | | |
| Common stockholders' equity | 277,885 | | | 247,986 | | |
| Total stockholders' equity | 305,289 | | | 280,824 | | |
| Total liabilities and stockholders' equity | \$ 3,851,388 | | | \$ 3,911,643 | | |
| Interest rate spread | | | 1.97 % | | | 1.68 % |
| Net interest income and net yield on interest-earning assets | | \$ 21,883 | 2.62 | | \$ 15,231 | 1.80 |

(a) Represents securities which are tax-exempt for U.S. federal income tax purposes.

(b) Includes brokerage-related held-for-investment customer receivables, which are classified in accrued interest and accounts receivable, and all other interest-earning assets, which are classified in other assets on the Consolidated Balance Sheets.

(c) Includes commercial paper.

(d) All other interest-bearing liabilities include brokerage-related customer payables.

(e) The combined balance of trading liabilities - debt and equity instruments was \$153.7 billion and \$140.2 billion for the three months ended June 30, 2023 and 2022, respectively.

(f) Interest includes the effect of certain related hedging derivatives. Taxable-equivalent amounts are used where applicable.

(g) The annualized rate for securities based on amortized cost was 2.96% and 1.52% for the three months ended June 30, 2023 and 2022, respectively, and does not give effect to changes in fair value that are reflected in AOCI.

JPMorgan Chase & Co.
Consolidated average balance sheets, interest and rates (unaudited)
(Taxable-equivalent interest and rates; in millions, except rates)

| | Six months ended June 30, 2023 | | | Six months ended June 30, 2022 | | |
|---|--------------------------------|-------------------------|---------------------|--------------------------------|-------------------------|---------------------|
| | Average balance | Interest ^(f) | Rate (annualized) | Average balance | Interest ^(f) | Rate (annualized) |
| Assets | | | | | | |
| Deposits with banks | \$ 500,311 | \$ 10,008 | 4.03 % | \$ 718,346 | \$ 1,317 | 0.37 % |
| Federal funds sold and securities purchased under resale agreements | 319,911 | 6,898 | 4.35 | 300,070 | 940 | 0.63 |
| Securities borrowed | 192,114 | 3,582 | 3.76 | 212,704 | 86 | 0.08 |
| Trading assets - debt instruments | 374,908 | 7,685 | 4.13 | 272,931 | 3,833 | 2.83 |
| Taxable securities | 587,750 | 8,161 | 2.80 | 643,340 | 4,268 | 1.34 |
| Nontaxable securities ^(a) | 29,022 | 698 | 4.85 | 28,647 | 616 | 4.34 |
| Total investment securities | 616,772 | 8,859 | 2.90 ^(g) | 671,987 | 4,884 | 1.47 ^(g) |
| Loans | 1,184,231 | 38,105 | 6.49 | 1,080,939 | 22,317 | 4.16 |
| All other interest-earning assets ^(b) | 92,372 | 3,735 | 8.15 | 136,902 | 966 | 1.42 |
| Total interest-earning assets | 3,280,619 | 78,872 | 4.85 | 3,393,879 | 34,343 | 2.04 |
| Allowance for loan losses | (19,593) | | | (16,807) | | |
| Cash and due from banks | 25,640 | | | 28,340 | | |
| Trading assets - equity and other instruments | 160,868 | | | 154,093 | | |
| Trading assets - derivative receivables | 63,929 | | | 75,956 | | |
| Goodwill, MSRs and other intangible Assets | 61,697 | | | 58,455 | | |
| All other noninterest-earning assets | 207,913 | | | 215,313 | | |
| Total assets | \$ 3,781,073 | | | \$ 3,909,229 | | |
| Liabilities | | | | | | |
| Interest-bearing deposits | \$ 1,692,993 | \$ 17,228 | 2.05 % | \$ 1,785,896 | \$ 1,080 | 0.12 % |
| Federal funds purchased and securities loaned or sold under repurchase agreements | 258,045 | 6,204 | 4.85 | 241,749 | 558 | 0.47 |
| Short-term borrowings ^(c) | 37,039 | 849 | 4.63 | 49,360 | 157 | 0.64 |
| Trading liabilities - debt and all other interest-bearing liabilities ^{(d)(e)} | 285,467 | 4,344 | 3.07 | 268,762 | 662 | 0.50 |
| Beneficial interests issued by consolidated VIEs | 14,722 | 344 | 4.71 | 10,733 | 48 | 0.90 |
| Long-term debt | 271,912 | 7,189 | 5.33 | 250,165 | 2,637 | 2.13 |
| Total interest-bearing liabilities | 2,560,178 | 36,158 | 2.85 | 2,606,665 | 5,142 | 0.40 |
| Noninterest-bearing deposits | 661,138 | | | 738,083 | | |
| Trading liabilities - equity and other instruments ^(e) | 29,137 | | | 42,159 | | |
| Trading liabilities - derivative payables | 48,139 | | | 57,792 | | |
| All other liabilities, including the allowance for lending-related commitments | 180,517 | | | 181,116 | | |
| Total liabilities | 3,479,109 | | | 3,625,815 | | |
| Stockholders' equity | | | | | | |
| Preferred stock | 27,404 | | | 33,180 | | |
| Common stockholders' equity | 274,560 | | | 250,234 | | |
| Total stockholders' equity | 301,964 | | | 283,414 | | |
| Total liabilities and stockholders' equity | \$ 3,781,073 | | | \$ 3,909,229 | | |
| Interest rate spread | | | 2.00 % | | | 1.64 % |
| Net interest income and net yield on interest-earning assets | | \$ 42,714 | 2.63 | | \$ 29,201 | 1.74 |

(a) Represents securities which are tax-exempt for U.S. federal income tax purposes.

(b) Includes brokerage-related held-for-investment customer receivables, which are classified in accrued interest and accounts receivable, and all other interest-earning assets, which are classified in other assets on the Consolidated Balance Sheets.

(c) Includes commercial paper.

(d) All other interest-bearing liabilities include brokerage-related customer payables.

(e) The combined balance of trading liabilities - debt and equity instruments was \$148.5 billion and \$140.2 billion for the six months ended June 30, 2023 and 2022, respectively.

(f) Interest includes the effect of certain related hedging derivatives. Taxable-equivalent amounts are used where applicable.

(g) The annualized rate for securities based on amortized cost was 2.85% and 1.45% for the six months ended June 30, 2023 and 2022, respectively, and does not give effect to changes in fair value that are reflected in AOCI.

GLOSSARY OF TERMS AND ACRONYMS

2022 Form 10-K: Annual report on Form 10-K for year ended December 31, 2022, filed with the U.S. Securities and Exchange Commission.

ABS: Asset-backed securities

Active foreclosures: Loans referred to foreclosure where formal foreclosure proceedings are ongoing. Includes both judicial and non-judicial states.

AFS: Available-for-sale

Allowance for loan losses to total retained loans: represents period-end allowance for loan losses divided by retained loans.

Amortized cost: Amount at which a financing receivable or investment is originated or acquired, adjusted for accretion or amortization of premium, discount, and net deferred fees or costs, collection of cash, charge-offs, foreign exchange, and fair value hedge accounting adjustments. For AFS securities, amortized cost is also reduced by any impairment losses recognized in earnings. Amortized cost is not reduced by the allowance for credit losses, except where explicitly presented net.

AOCI: Accumulated other comprehensive income/(loss)

ARM(s): Adjustable rate mortgage(s)

AUC: “Assets under custody”: Represents assets held directly or indirectly on behalf of clients under safekeeping, custody and servicing arrangements.

Auto loan and lease origination volume: Dollar amount of auto loans and leases originated.

AWM: Asset & Wealth Management

Beneficial interests 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.

BHC: Bank holding company

BWM: Banking & Wealth Management

Bridge Financing Portfolio: A portfolio of held-for-sale unfunded loan commitments and funded loans. The unfunded commitments include both short-term bridge loan commitments that will ultimately be replaced by longer term financing as well as term loan commitments. The funded loans include term loans and funded revolver facilities.

CB: Commercial Banking

CCAR: Comprehensive Capital Analysis and Review

CCB: Consumer & Community Banking

CDS: Credit default swaps

CECL: Current Expected Credit Losses

CEO: Chief Executive Officer

CET1 capital: Common equity Tier 1 capital

CFO: Chief Financial Officer

CFTC: Commodity Futures Trading Commission

CIB: Corporate & Investment Bank

CIO: Chief Investment Office

Client assets: Represent assets under management as well as custody, brokerage, administration and deposit accounts.

Client deposits and other third-party liabilities: Deposits, as well as deposits that are swept to on-balance sheet liabilities (e.g., commercial paper, federal funds purchased and securities loaned or sold under repurchase agreements) as part of client cash management programs.

Client investment assets: Represent assets under management as well as custody, brokerage and annuity accounts, and deposits held in investment accounts.

CLTV: Combined loan-to-value

CMT: Constant Maturity Treasury

Collateral-dependent: A loan is considered to be collateral-dependent when repayment of the loan is expected to be provided substantially through the operation or sale of the collateral when the borrower is experiencing financial difficulty, including when foreclosure is deemed probable based on borrower delinquency.

Commercial Card: provides a wide range of payment services to corporate and public sector clients worldwide through the commercial card products. Services include procurement, corporate travel and entertainment, expense management services, and business-to-business payment solutions.

Credit derivatives: Financial instruments whose value is derived from the credit risk associated with the debt of a third-party issuer (the reference entity) which allow one party (the protection purchaser) to transfer that risk to another party (the protection seller). Upon the occurrence of a credit event by the reference entity, which may include, among other events, the bankruptcy or failure to pay its obligations, or certain restructurings of the debt of the reference entity, neither party 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 at the time of settling the credit derivative contract. The determination as to whether a credit event has occurred is generally made by the relevant International Swaps and Derivatives Association (“ISDA”) Determinations Committee.

Criticized: Criticized loans, lending-related commitments and derivative receivables that are classified as special mention, substandard and doubtful categories for regulatory purposes and are generally consistent with a rating of CCC+/Caa1 and below, as defined by S&P and Moody’s.

CRR: Capital Requirements Regulation

CVA: Credit valuation adjustment

Deposit margin: Represents net interest income expressed as a percentage of average deposits.

DVA: Debit valuation adjustment

EC: European Commission

Eligible HQLA: Eligible high-quality liquid assets, for purposes of calculating the LCR, is the amount of unencumbered HQLA that satisfy certain operational considerations as defined in the LCR rule.

Eligible LTD: Long-term debt satisfying certain eligibility criteria

Embedded derivatives: are implicit or explicit terms or features of a financial instrument that affect some or all of the cash flows or the value of the instrument in a manner similar to a derivative. An instrument containing such terms or features is referred to as a “hybrid.” The component of the hybrid that is the non-derivative instrument is referred to as the “host.” For example, callable debt is a hybrid instrument that contains a plain vanilla debt instrument (i.e., the host) and an embedded option that allows the issuer to redeem the debt issue at a specified date for a specified amount (i.e., the embedded derivative). However, a floating rate instrument is not a hybrid composed of a fixed-rate instrument and an interest rate swap.

EPS: Earnings per share

ERISA: Employee Retirement Income Security Act of 1974

ESG: Environmental, Social and Governance

ETD: “Exchange-traded derivatives”: Derivative contracts that are executed on an exchange and settled via a central clearing house.

EU: European Union

Expense categories:

- **Volume- and/or revenue-related** expenses generally correlate with changes in the related business/ transaction volume or revenue. Examples of volume- and revenue-related expenses include commissions and incentive compensation, depreciation expense related to operating lease assets, and brokerage expense related to equities trading transaction volume.
- **Investments** include expenses associated with supporting medium- to longer-term strategic plans of the Firm. Examples of investments include initiatives in technology (including related compensation), marketing, and compensation for new bankers and client advisors.
- **Structural** expenses are those associated with the day-to-day cost of running the bank and are expenses not covered by the above two categories. Examples of structural expenses include employee salaries and benefits, as well as noncompensation costs such as real estate and all other expenses.

Fannie Mae: Federal National Mortgage Association

IASB: Financial Accounting Standards Board

FCA: Financial Conduct Authority

FDIC: Federal Deposit Insurance Corporation

FDM: “Financial difficulty modification” applies to loan modifications effective January 1, 2023, and is deemed to occur when the Firm modifies specific terms of the original loan agreement. The following types of modifications are considered FDMs: principal forgiveness, interest rate reduction, other-than-insignificant payment delay, term extension or a combination of these modifications.

Federal Reserve: The Board of the Governors of the Federal Reserve System

FFIEC: Federal Financial Institutions Examination Council

FHA: Federal Housing Administration

FHLB: Federal Home Loan Bank

FICO score: A measure of consumer credit risk based on information in consumer credit reports produced by Fair Isaac Corporation. Because certain aged data is excluded from credit reports based on rules in the Fair Credit Reporting Act, FICO scores may not reflect all historical information about a consumer.

FICC: Fixed Income Clearing Corporation

FINRA: Financial Industry Regulatory Authority

Firm: JPMorgan Chase & Co.

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.

Freddie Mac: Federal Home Loan Mortgage Corporation

Free-standing derivatives: is a derivative contract entered into either separate and apart from any of the Firm’s other financial instruments or equity transactions. Or, in conjunction with some other transaction and is legally detachable and separately exercisable.

FTE: Fully taxable-equivalent

FVA: Funding valuation adjustment

FX: Foreign exchange

G7: “Group of Seven nations”: Countries in the G7 are Canada, France, Germany, Italy, Japan, the U.K. and the U.S.

G7 government securities: Securities issued by the government of one of the G7 nations.

Ginnie Mae: Government National Mortgage Association

GSIB: Global systemically important banks

HELOC: Home equity line of credit

Home equity – senior lien: represents loans and commitments where JPMorgan Chase holds the first security interest on the property.

Home equity – junior lien: represents loans and commitments where JPMorgan Chase holds a security interest that is subordinate in rank to other liens.

HQLA: High-quality liquid assets

HTM: Held-to-maturity

IBOR: Interbank Offered Rate

IDI: Insured depository institutions

IHC: JPMorgan Chase Holdings LLC, an intermediate holding company

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.

IR: Interest rate

ISDA: International Swaps and Derivatives Association

JPMorgan Chase: JPMorgan Chase & Co.

JPMorgan Chase Bank, N.A.: JPMorgan Chase Bank, National Association

JPMorgan Chase Foundation or Foundation: a not-for-profit organization that makes contributions for charitable and educational purposes.

J.P. Morgan Securities: J.P. Morgan Securities LLC

JPMSE: J.P. Morgan SE

LCR: Liquidity coverage ratio

LIBOR: London Interbank Offered Rate

LLC: Limited Liability Company

LOB: Line of business

LTV: "Loan-to-value ratio": For residential real estate loans, the relationship, expressed as a percentage, 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 metropolitan statistical area ("MSA") level. These MSA-level home price indices consist of 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 available lien positions, as well as unused lines, related to the property. Combined LTV ratios are used for junior lien home equity products.

Macro businesses: the macro businesses include Rates, Currencies and Emerging Markets, Fixed Income Financing and Commodities in CIB's Fixed Income Markets.

Managed basis: A non-GAAP presentation of Firmwide financial results that includes reclassifications to present

revenue on a fully taxable-equivalent basis. Management also uses this 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.

Markets: consists of CIB's Fixed Income Markets and Equity Markets businesses.

Master netting agreement: A single agreement with a counterparty that permits multiple transactions governed by that agreement to be terminated or accelerated and settled through a single payment in a single currency in the event of a default (e.g., bankruptcy, failure to make a required payment or securities transfer or deliver collateral or margin when due).

MBS: Mortgage-backed securities

MD&A: Management's discussion and analysis

Measurement alternative: Measures equity securities without readily determinable fair values at cost less impairment (if any), plus or minus observable price changes from an identical or similar investment of the same issuer.

Merchant Services: offers merchants payment processing capabilities, fraud and risk management, data and analytics, and other payments services. Through Merchant Services, merchants of all sizes can accept payments via credit and debit cards and payments in multiple currencies.

MEV: Macroeconomic variable

Moody's: Moody's Investor Services

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) a high CLTV ratio; (iii) loans secured by non-owner occupied properties; or (iv) a debt-to-income ratio above normal limits. A substantial proportion of the Firm's 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 are made to borrowers with good credit records who meet specific underwriting requirements, including prescriptive requirements related to income and overall debt levels. New prime mortgage borrowers provide full documentation and generally have reliable payment histories.

Subprime

Subprime loans are loans that, prior to mid-2008, were offered to certain 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.

MREL: Minimum requirements for own funds and eligible liabilities

MSR: Mortgage servicing rights

NA: Data is not applicable or available for the period presented.

Net Capital Rule: Rule 15c3-1 under the Securities Exchange Act of 1934.

Net charge-off/(recovery) rate: represents net charge-offs/(recoveries) (annualized) divided by average retained loans for the reporting period.

Net interchange income includes the following components:

- **Interchange income:** Fees earned by credit and debit card issuers on sales transactions.
- **Rewards costs:** The cost to the Firm for points earned by cardholders enrolled in credit card rewards programs generally tied to sales transactions.
- **Partner payments:** Payments to co-brand credit card partners based on the cost of loyalty program rewards earned by cardholders on credit card transactions.

Net yield on interest-earning assets: The average rate for interest-earning assets less the average rate paid for all sources of funds.

NFA: National Futures Association

NM: Not meaningful

Nonaccrual loans: Loans for which interest income is not recognized on an accrual basis. Loans (other than credit card loans and certain consumer loans insured by U.S. government agencies) are placed on nonaccrual status when full payment of principal and interest is not expected, regardless of delinquency status, or when principal and

interest has been in default for a period of 90 days or more unless the loan is both well-secured and in the process of collection. Collateral-dependent loans are typically maintained on nonaccrual status.

Nonperforming assets: Nonperforming assets include nonaccrual loans, nonperforming derivatives and certain assets acquired in loan satisfactions, predominantly real estate owned and other commercial and personal property.

NSFR: Net Stable Funding Ratio

OCC: Office of the Comptroller of the Currency

OCI: Other comprehensive income/(loss)

OPEB: Other postretirement employee benefit

OTC: "Over-the-counter derivatives": Derivative contracts that are negotiated, executed and settled bilaterally between two derivative counterparties, where one or both counterparties is a derivatives dealer.

OTC cleared: "Over-the-counter cleared derivatives": Derivative contracts that are negotiated and executed bilaterally, but subsequently settled via a central clearing house, such that each derivative counterparty is only exposed to the default of that clearing house.

Overhead ratio: Noninterest expense as a percentage of total net revenue.

Parent Company: JPMorgan Chase & Co.

Participating securities: represents unvested share-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 share-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.

PCD: "Purchased credit deteriorated" assets represent acquired financial assets that as of the date of acquisition have experienced a more-than-insignificant deterioration in credit quality since origination, as determined by the Firm.

Pillar 1: The Basel framework consists of a three "Pillar" approach. Pillar 1 establishes minimum capital requirements, defines eligible capital instruments, and prescribes rules for calculating RWA.

Pillar 3: The Basel framework consists of a three "Pillar" approach. Pillar 3 encourages market discipline through disclosure requirements which allow market participants to assess the risk and capital profiles of banks.

PPP: Paycheck Protection Program under the Small Business Association ("SBA")

PRA: Prudential Regulation Authority

Pre-provision profit/(loss): represents 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.

Principal transactions revenue: Principal transactions revenue is driven by many factors, including the bid-offer spread, which is the difference between the price at which the Firm is willing to buy a financial or other instrument and the price at which the Firm is willing to sell that instrument. It also consists of realized (as a result of closing out or termination of transactions, or interim cash payments) and unrealized (as a result of changes in valuation) gains and losses on financial and other instruments (including those accounted for under the fair value option) primarily used in client-driven market-making activities and on private equity investments. In connection with its client-driven market-making activities, the Firm transacts in debt and equity instruments, derivatives and commodities (including physical commodities inventories and financial instruments that reference commodities). Principal transactions revenue also includes certain realized and unrealized gains and losses related to hedge accounting and specified risk-management activities, including: (a) certain derivatives designated in qualifying hedge accounting relationships (primarily fair value hedges of commodity and foreign exchange risk), (b) certain derivatives used for specific risk management purposes, primarily to mitigate credit risk and foreign exchange risk, and (c) other derivatives.

PSU(s): Performance share units

Regulatory VaR: Daily aggregated VaR calculated in accordance with regulatory rules.

REO: Real estate owned

Reported basis: Financial statements prepared under U.S. GAAP, which excludes the impact of taxable-equivalent adjustments.

Retained loans: Loans that are held-for-investment (i.e. excludes loans held-for-sale and loans at fair value).

Revenue wallet: Total fee revenue based on estimates of investment banking fees generated across the industry (i.e., the revenue wallet) from investment banking transactions in M&A, equity and debt underwriting, and loan syndications. Source: Dealogic, a third-party provider of investment banking competitive analysis and volume based league tables for the above noted industry products.

RHS: Rural Housing Service of the U.S. Department of Agriculture

ROE: Return on equity

ROTCE: Return on tangible common equity

ROU assets: Right-of-use assets

RSU(s): Restricted stock units

RWA: "Risk-weighted assets": Basel III establishes two comprehensive approaches for calculating RWA (a

Standardized approach and an Advanced approach) which include capital requirements for credit risk, market risk, and in the case of Basel III Advanced, also operational risk. Key differences in the calculation of credit risk RWA between the Standardized and Advanced approaches are that for Basel III Advanced, credit risk RWA is based on risk-sensitive approaches which largely rely on the use of internal credit models and parameters, whereas for Basel III Standardized, credit risk RWA is generally based on supervisory risk-weightings which vary primarily by counterparty type and asset class. Market risk RWA is calculated on a generally consistent basis between Basel III Standardized and Basel III Advanced.

S&P: Standard and Poors

SA-CCR: Standardized Approach for Counterparty Credit Risk

SAR as it pertains to Hong Kong: Special Administrative Region

SAR(s) as it pertains to employee stock awards: Stock appreciation rights

SCB: Stress capital buffer

Scored portfolios: Consumer loan portfolios that predominantly include residential real estate loans, credit card loans, auto loans to individuals and certain small business loans.

SEC: U.S. Securities and Exchange Commission

Securitized Products Group: Comprised of Securitized Products and tax-oriented investments.

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 track record. After these goals are achieved, the intent is to remove the Firm's capital from the investment.

Shelf securities: Securities registered with the SEC under a shelf registration statement that have not been issued, offered or sold. These securities are not included in league tables until they have actually been issued.

Single-name: Single reference-entities

SLR: Supplementary leverage ratio

SOFR: Secured Overnight Financing Rate

SPES: Special purpose entities

Structural interest rate risk: represents interest rate risk of the non-trading assets and liabilities of the Firm.

Structured notes: Structured notes are financial instruments whose cash flows are linked to the movement in one or more indexes, interest rates, foreign exchange rates, commodities prices, prepayment rates, underlying reference pool of loans or other market variables. The notes typically contain embedded (but not separable or detachable) derivatives. Contractual cash flows for principal, interest, or both can vary in amount and timing

throughout the life of the note based on non-traditional indexes or non-traditional uses of traditional interest rates or indexes.

Suspended foreclosures: Loans referred to foreclosure where formal foreclosure proceedings have started but are currently on hold, which could be due to bankruptcy or loss mitigation. Includes both judicial and non-judicial states.

Taxable-equivalent basis: In presenting managed results, the total net revenue for each of the business segments and the Firm is presented on a tax-equivalent basis. Accordingly, revenue from investments that receive tax credits and tax-exempt securities is presented in the managed results on a basis comparable to taxable investments and securities; the corresponding income tax impact related to tax-exempt items is recorded within income tax expense.

TBVPS: Tangible book value per share

TCE: Tangible common equity

TDR: “Troubled debt restructuring” applies to loan modifications granted prior to January 1, 2023 and is deemed to occur when the Firm modifies the original terms of a loan agreement by granting a concession to a borrower that is experiencing financial difficulty. Loans with short-term and other insignificant modifications that are not considered concessions are not TDRs.

TLAC: Total Loss Absorbing Capacity

U.K.: United Kingdom

U.S.: United States of America

U.S. GAAP: Accounting principles generally accepted in the United States of America.

U.S. government agencies: U.S. government agencies include, but are not limited to, agencies such as Ginnie Mae and FHA, and do not include Fannie Mae and Freddie Mac which are U.S. government-sponsored enterprises (“U.S. GSEs”). In general, obligations of U.S. government agencies are fully and explicitly guaranteed as to the timely payment of principal and interest by the full faith and credit of the U.S. government in the event of a default.

U.S. GSE(s): “U.S. government-sponsored enterprises” are quasi-governmental, privately-held entities established or chartered by the U.S. government to serve public purposes as specified by the U.S. Congress to improve the flow of credit to specific sectors of the economy and provide certain essential services to the public. U.S. GSEs include Fannie Mae and Freddie Mac, but do not include Ginnie Mae or FHA. U.S. GSE obligations are not explicitly guaranteed as to the timely payment of principal and interest by the full faith and credit of the U.S. government.

U.S. Treasury: U.S. Department of the Treasury

Unaudited: Financial statements and/or information that have not been subject to auditing procedures by an independent registered public accounting firm.

VA: U.S. Department of Veterans Affairs

VaR: “Value-at-risk” is a measure of the dollar amount of potential loss from adverse market moves in an ordinary market environment.

VIes: Variable interest entities

Warehouse loans: consist of prime mortgages originated with the intent to sell that are accounted for at fair value and classified as loans.

LINE OF BUSINESS METRICS

CONSUMER & COMMUNITY BANKING (“CCB”)

Debit and credit card sales volume: Dollar amount of card member purchases, net of returns.

Deposit margin: Represents net interest income expressed as a percentage of average deposits.

Home Lending Production and Home Lending Servicing revenue comprises the following:

Net mortgage servicing revenue: Includes operating revenue earned from servicing third-party mortgage loans, which is recognized over the period in which the service is provided; changes in the fair value of MSR; the impact of risk management activities associated with MSR; and gains and losses on securitization of excess mortgage servicing. Net mortgage servicing revenue also includes gains and losses on sales and lower of cost or fair value adjustments of certain repurchased loans insured by U.S. government agencies.

Production revenue: Includes fees and income recognized as earned on mortgage loans originated with the intent to sell, and the impact of risk management activities associated with the mortgage pipeline and warehouse loans. Production revenue also includes gains and losses on sales and lower of cost or fair value adjustments on mortgage loans held-for-sale (excluding certain repurchased loans insured by U.S. government agencies), and changes in the fair value of financial instruments measured under the fair value option.

Mortgage origination channels comprise the following:

Retail: Borrowers who buy or refinance 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.

Correspondent: Banks, thrifts, other mortgage banks and other financial institutions that sell closed loans to the Firm.

Credit card: is a business that primarily issues credit cards to consumers and small businesses.

Net revenue rate: Represents Card Services net revenue (annualized) expressed as a percentage of average loans for the period.

Auto loan and lease origination volume: Dollar amount of auto loans and leases originated.

CORPORATE & INVESTMENT BANK (“CIB”)

Definition of selected CIB revenue:

Investment Banking: incorporates all revenue associated with investment banking activities, and is reported net of investment banking revenue shared with other LOBs.

Payments is a full service provider of cash management solutions, which primarily includes merchant acquiring, cross border and domestic payments, liquidity and account services, and global trade for multinational corporations, e-commerce and marketplace operators, and financial institutions.

Lending: includes net interest income, fees, gains or losses on loan sale activity, gains or losses on securities received as part of a loan restructuring, and the risk management results related to the credit portfolio.

Fixed Income Markets: primarily includes revenue related to market-making across global fixed income markets, including foreign exchange, interest rate, credit and commodities markets.

Equity Markets: primarily includes revenue related to market-making across global equity products, including cash instruments, derivatives, convertibles and prime brokerage.

Securities Services: primarily includes custody, fund accounting and administration, and securities lending products sold principally to asset managers, insurance companies and public and private investment funds. Also includes collateral management and depositary receipts businesses which provide collateral management products, and depositary bank services for American and global depositary receipt programs.

Description of certain business metrics:

Assets under custody (“AUC”): represents activities associated with the safekeeping and servicing of assets on which Securities Services earns fees.

Investment banking fees: represents advisory, equity underwriting, bond underwriting and loan syndication fees.

COMMERCIAL BANKING (“CB”)

Commercial Banking provides comprehensive financial solutions, including lending, payments, investment banking and asset management products across three primary client segments: Middle Market Banking, Corporate Client Banking and Commercial Real Estate Banking. Other includes amounts not aligned with a primary client segment.

Middle Market Banking: covers small and midsized companies, local governments and nonprofit clients.

Corporate Client Banking: covers large corporations.

Commercial Real Estate Banking: covers investors, developers, and owners of multifamily, office, retail, industrial and affordable housing properties.

CB product revenue comprises the following:

Lending: includes a variety of financing alternatives, which are primarily provided on a secured basis; collateral includes receivables, inventory, equipment, real estate or other assets. Products include term loans, revolving lines of credit, bridge financing, asset-based structures, leases, and standby letters of credit.

Payments: includes cash management solutions, which primarily includes merchant acquiring, cross border and domestic payments, liquidity and account services, and global trade solutions offered to CB clients.

Investment banking: includes revenue from a range of products providing CB clients with sophisticated capital-raising alternatives, as well as balance sheet and risk management tools through advisory, equity underwriting, and loan syndications. Revenue from fixed income and equity market products used by CB clients is also included.

Other: revenue primarily includes tax-equivalent adjustments generated from Community Development Banking and activity derived from principal transactions.

ASSET & WEALTH MANAGEMENT (“AWM”)

Assets under management (“AUM”): represent assets managed by AWM on behalf of its Private Banking, Global Institutional and Global Funds clients. Includes “Committed capital not Called.”

Client assets: represent assets under management, as well as custody, brokerage, administration and deposit accounts.

Multi-asset: Any fund or account that allocates assets under management to more than one asset class.

Alternative assets: The following types of assets constitute alternative investments - hedge funds, currency, real estate, private equity and other investment funds designed to focus on nontraditional strategies.

AWM’s lines of business consist of the following:

Asset Management: offers multi-asset investment management solutions across equities, fixed income, alternatives and money market funds to institutional and retail investors providing for a broad range of clients’ investment needs.

Global Private Bank: provides retirement products and services, brokerage, custody, trusts and estates, loans, mortgages, deposits and investment management to high net worth clients.

AWM’s client segments consist of the following:

Private Banking: clients include high- and ultra-high-net-worth individuals, families, money managers and business owners.

Global Institutional: clients include both corporate and public institutions, endowments, foundations, nonprofit organizations and governments worldwide.

Global Funds: clients include financial intermediaries and individual investors.

Asset Management has two high-level measures of its overall fund performance:

Percentage of mutual fund assets under management in funds rated 4- or 5-star: Mutual fund rating services rank funds based on their risk-adjusted performance over various periods. A 5-star rating is the best rating and represents the top 10% of industry-wide ranked funds. A 4-star rating represents the next 22.5% of industry-wide ranked funds. A 3-star rating represents the next 35% of industry-wide ranked funds. A 2-star rating represents the next 22.5% of industry-wide ranked funds. A 1-star rating is the worst rating and represents the bottom 10% of industry-wide ranked funds. An overall Morningstar rating is derived from a weighted average of the performance associated with a fund’s three-, five- and ten- year (if applicable) Morningstar Rating metrics. For U.S.-domiciled funds, separate star ratings are provided at the individual share class level. The Nomura “star rating” is based on three-year risk-adjusted performance only. Funds with fewer than three years of history are not rated and hence excluded from these rankings. All ratings, the assigned peer

categories and the asset values used to derive these rankings are sourced from the applicable fund rating provider. Where applicable, the fund rating providers redenominate asset values into U.S. dollars. The percentage of AUM is based on star ratings at the share class level for U.S.-domiciled funds, and at a “primary share class” level to represent the star rating of all other funds, except for Japan, for which Nomura provides ratings at the fund level. The performance data may have been different if all share classes had been included. Past performance is not indicative of future results.

Percentage of mutual fund assets under management in funds ranked in the 1st or 2nd quartile (one, three, and five years): All quartile rankings, the assigned peer categories and the asset values used to derive these rankings are sourced from the fund rating providers. Quartile rankings are based on the net-of-fee absolute return of each fund. Where applicable, the fund rating providers redenominate asset values into U.S. dollars. The percentage of AUM is based on fund performance and associated peer rankings at the share class level for U.S.-domiciled funds, at a “primary share class” level to represent the quartile ranking for U.K., Luxembourg and Hong Kong funds and at the fund level for all other funds. The performance data may have been different if all share classes had been included. Past performance is not indicative of future results.

“Primary share class” means the C share class for European funds and Acc share class for Hong Kong and Taiwan funds. If these share classes are not available, the oldest share class is used as the primary share class.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Refer to the Market Risk Management section of Management's discussion and analysis and pages 131-138 of JPMorgan Chase's 2022 Form 10-K for a discussion of the quantitative and qualitative disclosures about market risk.

Item 4. Controls and Procedures.

As of the end of the period covered by this report, an evaluation was carried out under the supervision and with the participation of the Firm's management, including its Chairman and Chief Executive Officer and its Chief Financial Officer, of the effectiveness of its disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934). Based on that evaluation, the Chairman and Chief Executive Officer and the Chief Financial Officer concluded that these disclosure controls and procedures were effective. Refer to Exhibits 31.1 and 31.2 for the Certifications furnished by the Chairman and Chief Executive Officer and Chief Financial Officer, respectively.

The Firm is committed to maintaining high standards of internal control over financial reporting. Nevertheless, because of its inherent limitations, internal control over financial reporting may not prevent or detect all misstatements. Deficiencies or lapses in internal controls may occur from time to time, and there can be no assurance that any such deficiencies will not result in significant deficiencies or material weaknesses in internal control in the future and collateral consequences therefrom. Refer to "Management's report on internal control over financial reporting" on page 155 of JPMorgan Chase's 2022 Form 10-K for further information.

On May 1, 2023, the Firm acquired certain assets and assumed certain liabilities of First Republic Bank from the FDIC. The Firm has included internal controls over these acquired assets and assumed liabilities in its evaluation of the effectiveness of disclosure controls and procedures. Otherwise, there was no change in the Firm's internal control over financial reporting (as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934) that occurred during the three months ended June 30, 2023, that has materially affected, or is reasonably likely to materially affect, the Firm's internal control over financial reporting.

Part II - Other Information

Item 1. Legal Proceedings.

Refer to the discussion of the Firm's material legal proceedings in Note 26 of this Form 10-Q for information that updates the disclosures set forth under Part I, Item 3: Legal Proceedings, in JPMorgan Chase's 2022 Form 10-K.

Item 1A. Risk Factors.

The following discussion supplements the discussion of risk factors affecting the Firm as set forth in Part I, Item 1A: Risk Factors on pages 9-32 of JPMorgan Chase's 2022 Form 10-K and Forward-Looking Statements on page 95 of this Form 10-Q. The discussion of risk factors, as so supplemented, sets forth the material risk factors that could affect JPMorgan Chase's financial condition and operations. Readers should not consider any descriptions of such factors to be a complete set of all potential risks that could affect the Firm.

JPMorgan Chase's acquisition of certain assets and liabilities of First Republic Bank may not result in all of the benefits anticipated.

On May 1, 2023, JPMorgan Chase Bank, N.A. acquired certain assets and assumed certain liabilities of First Republic Bank from the FDIC (the "First Republic acquisition"). There can be no assurance that the First Republic acquisition will have the anticipated positive results, including with respect to:

- the total cost of integration
- the time required to complete the integration
- the amount of longer-term cost savings
- the overall performance of the assets and liabilities acquired in the First Republic acquisition, or
- an improved price for JPMorgan Chase's common stock.

Integration of an acquired business can be complex and costly, and typically will involve the combination of relevant accounting and data processing systems and management controls, as well as managing relevant relationships with employees, clients, suppliers and other business partners. Integration efforts could divert management attention and resources, which could adversely affect JPMorgan Chase's operations or results. In addition, JPMorgan Chase could incur unanticipated costs or losses in connection with the First Republic acquisition and its integration efforts.

Acquisitions may also result in business disruptions that cause JPMorgan Chase to lose clients and customers, or cause clients and customers to move their business to competing financial institutions. It is possible that the integration process could result in the disruption of ongoing businesses or inconsistencies in standards, controls, procedures and policies that could adversely affect JPMorgan Chase's ability to maintain relationships with clients, customers, depositors and employees. In addition, the loss of key employees in connection with the First Republic acquisition could adversely affect JPMorgan Chase's ability to successfully conduct its business.

Supervision and regulation

Refer to the Supervision and regulation section on pages 4-8 of JPMorgan Chase's 2022 Form 10-K for information on Supervision and Regulation.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

The Firm did not have any unregistered sale of equity securities during the three months ended June 30, 2023.

Repurchases under the common share repurchase program

Refer to Capital Risk Management on pages 48-53 of this Form 10-Q and pages 86-96 of JPMorgan Chase's 2022 Form 10-K for information regarding repurchases under the Firm's common share repurchase program.

The Firm is authorized to purchase up to \$30 billion under its common share repurchase program previously approved by the Board of Directors.

Shares repurchased pursuant to the common share repurchase program during the six months ended June 30, 2023 were as follows.

| Six months ended June 30, 2023 | Total number of shares of common stock repurchased | Average price paid per share of common stock ^(a) | Aggregate purchase price of common stock repurchases (in millions) ^(a) | Dollar value of remaining authorized repurchase (in millions) ^{(a)(b)} |
|--------------------------------|--|---|---|---|
| First quarter | 21,995,253 | \$ 133.67 | \$ 2,940 | \$ 26,693 |
| April | 5,327,553 | \$ 134.39 | \$ 716 | \$ 25,977 |
| May | 6,251,030 | 136.77 | 855 | 25,122 |
| June | 5,132,716 | 140.66 | 722 | 24,400 |
| Second quarter | 16,711,299 | \$ 137.20 | \$ 2,293 | \$ 24,400 |
| Year-to-date | 38,706,552 | \$ 135.19 | \$ 5,233 | \$ 24,400 |

(a) Excludes excise tax and commissions cost. As part of the Inflation Reduction Act of 2022, a 1% excise tax was imposed on net share repurchases effective January 1, 2023.

(b) Represents the amount remaining under the \$30 billion repurchase program.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

Director and executive officer trading arrangements

The following table provides information concerning Rule 10b5-1 trading arrangements adopted in the second quarter of 2023 by any director or any executive officer who is subject to the filing requirements of Section 16 of the Securities Exchange Act of 1934. These trading arrangements are intended to satisfy the affirmative defense of Rule 10b5-1(c). Certain of the Firm's directors and executive officers may participate in employee stock purchase plans, 401(k) plans or dividend reinvestment plans of the Firm that have been designed to comply with Rule 10b5-1(c). No non-Rule 10b5-1 trading arrangements were adopted by any director or executive officer during the second quarter of 2023. Additionally, no Rule 10b5-1 or non-Rule 10b5-1 trading arrangements were terminated by any director or executive officer in the second quarter of 2023.

| Name | Title | Adoption date | Duration ^(a) | Aggregate number of shares to be sold |
|-----------------|-----------------|---------------|----------------------------------|---------------------------------------|
| Stacey Friedman | General Counsel | May 6, 2023 | May 6, 2023 - December 29, 2023 | 8,620 |
| Marianne Lake | Co-CEO, CCB | May 12, 2023 | May 12, 2023 - December 29, 2023 | 32,243 |

(a) Subject to compliance with Rule 10b5-1, duration could cease earlier than the final date shown above to the extent that the aggregate number of shares to be sold under the trading arrangement have been sold.

Iran threat reduction disclosure

Pursuant to Section 219 of the Iran Threat Reduction and Syria Human Rights Act of 2012, which added Section 13(r) to the Securities Exchange Act of 1934, an issuer is required to disclose in its annual or quarterly reports, as applicable, whether it or any of its affiliates knowingly engaged in certain activities, transactions or dealings relating to Iran or with individuals or entities designated pursuant to certain Executive Orders. Disclosure may be required even where the activities, transactions or dealings were conducted in compliance with applicable law. As of the date of this report, the Firm is not aware of any activity, transaction or dealing by any of its affiliates during the quarter ended June 30, 2023 that requires disclosure under Section 219.

During the first quarter of 2023, a foreign-incorporated subsidiary of JPMorgan Chase & Co. processed a transaction in the amount of EUR 9.90 for its client, a non-U.S. subsidiary of a U.S. insurance provider, where the transaction originated from an external account held by an individual designated under 31 C.F.R. Part 594. The transaction, which was received into the client's account held at the foreign-incorporated subsidiary of JPMorgan Chase & Co., was for the premium of a non-life insurance product that is now suspended and no funds were made available to the designated individual. The transaction was processed in error. JPMorgan Chase & Co. charged a fee of \$0.006 for this transaction. JPMorgan Chase & Co. does not intend to engage in such transactions in the future.

Item 6. Exhibits.

| Exhibit No. | Description of Exhibit |
|--------------------|---|
| 15 | Letter re: Unaudited Interim Financial Information. ^(a) |
| 22 | Subsidiary Guarantors and Issuers of Guaranteed Securities. ^(a) |
| 31.1 | Certification. ^(a) |
| 31.2 | Certification. ^(a) |
| 32 | Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. ^(b) |
| 101.INS | The instance document does not appear in the interactive data file because its XBRL tags are embedded within the Inline XBRL document. ^(c) |
| 101.SCH | XBRL Taxonomy Extension Schema Document. ^(a) |
| 101.CAL | XBRL Taxonomy Extension Calculation Linkbase Document. ^(a) |
| 101.DEF | XBRL Taxonomy Extension Definition Linkbase Document. ^(a) |
| 101.LAB | XBRL Taxonomy Extension Label Linkbase Document. ^(a) |
| 101.PRE | XBRL Taxonomy Extension Presentation Linkbase Document. ^(a) |
| 104 | Cover Page Interactive Data File (embedded within the Inline XBRL document and included in Exhibit 101). |

(a) Filed herewith.

(b) Furnished herewith. 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.

(c) Pursuant to Rule 405 of Regulation S-T, includes the following financial information included in the Firm’s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2023, formatted in XBRL (eXtensible Business Reporting Language) interactive data files: (i) the Consolidated statements of income (unaudited) for the three and six months ended June 30, 2023 and 2022, (ii) the Consolidated statements of comprehensive income (unaudited) for the three and six months ended June 30, 2023 and 2022, (iii) the Consolidated balance sheets (unaudited) as of June 30, 2023, and December 31, 2022, (iv) the Consolidated statements of changes in stockholders’ equity (unaudited) for the three and six months ended June 30, 2023 and 2022, (v) the Consolidated statements of cash flows (unaudited) for the six months ended June 30, 2023 and 2022, and (vi) the Notes to Consolidated Financial Statements (unaudited).

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 thereunto duly authorized.

JPMorgan Chase & Co.

(Registrant)

By: _____ /s/ Elena Korablina

Elena Korablina

Managing Director and Firmwide Controller

(Principal Accounting Officer)

Date: August 3, 2023

Exhibit 15



August 3, 2023

Securities and Exchange Commission
100 F Street, N.E.
Washington, DC 20549

Re: JPMorgan Chase & Co.

Registration Statements on Form S-3
(No. 333-270004)
(No. 333-270004-01)
(No. 333-263304)

Registration Statements on Form S-8
(No. 333-272306)
(No. 333-272303)
(No. 333-272302)
(No. 333-272299)
(No. 333-219702)
(No. 333-219701)
(No. 333-219699)
(No. 333-185584)
(No. 333-185582)
(No. 333-185581)
(No. 333-175681)
(No. 333-158325)
(No. 333-142109)
(No. 333-125827)
(No. 333-112967)

Commissioners:

We are aware that our report dated August 3, 2023 on our review of interim financial information of JPMorgan Chase & Co. and its subsidiaries (the "Firm"), which appears in this Quarterly Report on Form 10-Q, is incorporated by reference in the Registration Statements of the Firm referred to above. Pursuant to Rule 436(c) under the Securities Act of 1933, such report should not be considered a part of such Registration Statements, and is not a report within the meaning of Sections 7 and 11 of that Act.

Very truly yours,

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP, 300 Madison Avenue, New York, NY 10017

Exhibit 22
JPMorgan Chase & Co.

JPMorgan Chase & Co. guarantee of subsidiary issuances

| Securities | Guarantor |
|--|----------------------|
| JPMorgan Chase Financial Company LLC has issued, from time to time, its Global Medium-Term Notes, Series A, under the Indenture dated February 19, 2016 (“Series A Notes”), that are each fully and unconditionally guaranteed by JPMorgan Chase & Co. In addition, JPMorgan Chase Financial Company LLC may issue, from time to time, debt securities (including its Series A Notes) and warrants that are each fully and unconditionally guaranteed by JPMorgan Chase & Co. under the Registration Statement on Form S-3 (Registration Statement Nos. 333-270004 and 333-270004-01), which was declared effective on April 13, 2023. | JPMorgan Chase & Co. |

Exhibit 31.1
JPMorgan Chase & Co.

CERTIFICATION

I, James Dimon, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of JPMorgan Chase & Co.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent function):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 3, 2023

/s/ James Dimon

James Dimon
Chairman and Chief Executive Officer

Exhibit 31.2
JPMorgan Chase & Co.

CERTIFICATION

I, Jeremy Barnum, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of JPMorgan Chase & Co.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent function):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 3, 2023

/s/ Jeremy Barnum

Jeremy Barnum
Executive Vice President and Chief Financial Officer

Exhibit 32
JPMorgan Chase & Co.

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of JPMorgan Chase & Co. on Form 10-Q for the period ended June 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of JPMorgan Chase & Co., certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of JPMorgan Chase & Co.

Date: August 3, 2023

By: /s/ James Dimon

James Dimon
Chairman and Chief Executive Officer

Date: August 3, 2023

By: /s/ Jeremy Barnum

Jeremy Barnum
Executive Vice President and Chief Financial Officer

This certification accompanies this Quarterly Report on Form 10-Q and 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.

A signed original of this written statement required by Section 906 has been provided to, and will be retained by, JPMorgan Chase & Co. and furnished to the Securities and Exchange Commission or its staff upon request.