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 September 30, 2022	Commission file number 1-5805

JPMorgan Chase & Co.

(Exact name of registrant as specified in its charter)

Delaware	13-2624428
(State or other jurisdiction of incorporation or organization)	(I.R.S. employer identification no.)
383 Madison Avenue,	
New York, New York	10179
(Address of principal executive offices)	(Zip Code)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
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 September 30, 2022: 2,933,204,888

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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)	3Q22	2Q22	1Q22	4Q21	3Q21	Nine months ended Sept 30, 2022	2021
Selected income statement data							
Total net revenue	**$ 32,716**	$ 30,715	$ 30,717	$ 29,257	$ 29,647	**$ 94,148**	$ 92,392
Total noninterest expense	**19,178**	18,749	19,191	17,888	17,063	**57,118**	53,455
Pre-provision profit[(a)]	**13,538**	11,966	11,526	11,369	12,584	**37,030**	38,937
Provision for credit losses	**1,537**	1,101	1,463	(1,288)	(1,527)	**4,101**	(7,968)
Income before income tax expense	**12,001**	10,865	10,063	12,657	14,111	**32,929**	46,905
Income tax expense	**2,264**	2,216	1,781	2,258	2,424	**6,261**	8,970
Net income	**$ 9,737**	$ 8,649	$ 8,282	$ 10,399	$ 11,687	**$ 26,668**	$ 37,935
Earnings per share data							
Net income: Basic	**$ 3.13**	$ 2.77	$ 2.64	$ 3.33	$ 3.74	**$ 8.53**	$ 12.05
Diluted	**3.12**	2.76	2.63	3.33	3.74	**8.51**	12.02
Average shares: Basic	**2,961.2**	2,962.2	2,977.0	2,977.3	2,999.9	**2,966.8**	3,036.4
Diluted	**2,965.4**	2,966.3	2,981.0	2,981.8	3,005.1	**2,970.9**	3,041.7
Market and per common share data							
Market capitalization	**306,520**	330,237	400,379	466,206	483,748	**306,520**	483,748
Common shares at period-end	**2,933.2**	2,932.6	2,937.1	2,944.1	2,955.3	**2,933.2**	2,955.3
Book value per share	**87.00**	86.38	86.16	88.07	86.36	**87.00**	86.36
Tangible book value per share (“TBVPS”)[(a)]	**69.90**	69.53	69.58	71.53	69.87	**69.90**	69.87
Cash dividends declared per share	**1.00**	1.00	1.00	1.00	1.00	**3.00**	2.80
Selected ratios and metrics							
Return on common equity (“ROE”)[(b)]	**15 %**	13 %	13 %	16 %	18 %	**14 %**	20 %
Return on tangible common equity (“ROTCE”)[(a)(b)]	**18**	17	16	19	22	**17**	24
Return on assets[(b)]	**1.01**	0.89	0.86	1.08	1.24	**0.92**	1.37
Overhead ratio	**59**	61	62	61	58	**61**	58
Loans-to-deposits ratio	**46**	45	42	44	43	**46**	43
Firm Liquidity coverage ratio (“LCR”) (average)[(c)]	**113**	110	110	111	112	**113**	112
JPMorgan Chase Bank, N.A. LCR (average)[(c)]	**165**	169	181	178	174	**165**	174
Common equity Tier 1 (“CET1”) capital ratio[(d)]	**12.5**	12.2	11.9	13.1	12.9	**12.5**	12.9
Tier 1 capital ratio[(d)]	**14.1**	14.1	13.7	15.0	15.0	**14.1**	15.0
Total capital ratio[(d)]	**16.0**	15.7	15.4	16.8	16.9	**16.0**	16.9
Tier 1 leverage ratio[(c)(d)]	**6.2**	6.2	6.2	6.5	6.6	**6.2**	6.6
Supplementary leverage ratio (“SLR”)[(c)(d)]	**5.3**	5.3	5.2	5.4	5.5	**5.3**	5.5
Selected balance sheet data (period-end)							
Trading assets	**$ 506,487**	$ 465,577	$ 511,528	$ 433,575	$ 515,901	**$ 506,487**	$ 515,901
Investment securities, net of allowance for credit losses	**618,246**	663,718	679,460	672,232	595,132	**618,246**	595,132
Loans	**1,112,633**	1,104,155	1,073,285	1,077,714	1,044,615	**1,112,633**	1,044,615
Total assets	**3,773,884**	3,841,314	3,954,687	3,743,567	3,757,576	**3,773,884**	3,757,576
Deposits	**2,408,615**	2,471,544	2,561,207	2,462,303	2,402,353	**2,408,615**	2,402,353
Long-term debt	**287,473**	288,212	293,239	301,005	298,465	**287,473**	298,465
Common stockholders’ equity	**255,180**	253,305	253,061	259,289	255,203	**255,180**	255,203
Total stockholders’ equity	**288,018**	286,143	285,899	294,127	290,041	**288,018**	290,041
Headcount	**288,474**	278,494	273,948	271,025	265,790	**288,474**	265,790
Credit quality metrics							
Allowances for credit losses	**$ 20,797**	$ 20,019	$ 19,591	$ 18,689	$ 20,528	**$ 20,797**	$ 20,528
Allowance for loan losses to total retained loans	**1.70 %**	1.69 %	1.69 %	1.62 %	1.86 %	**1.70 %**	1.86 %
Nonperforming assets	**$ 7,243**	$ 7,845	$ 8,605	$ 8,346	$ 8,882	**$ 7,243**	$ 8,882
Net charge-offs	**727**	657	582	550	524	**1,966**	2,315
Net charge-off rate	**0.27 %**	0.25 %	0.24 %	0.22 %	0.21 %	**0.25 %**	0.32 %

(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 19-20 for a further discussion of these measures.
(b) Quarterly ratios are based upon annualized amounts.
(c) For the nine months ended September 30, 2022 and 2021, the percentage represents average ratios for the three months ended September 30, 2022 and 2021.
(d) The capital metrics reflect the relief provided by the Federal Reserve Board in response to the COVID-19 pandemic, including the Current Expected Credit Losses (“CECL”) capital transition provisions. Refer to Capital Risk Management on pages 45-50 of this Form 10-Q and pages 86-96 of JPMorgan Chase’s 2021 Form 10-K for additional information.

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 third quarter of 2022.

This Quarterly Report on Form 10-Q for the third quarter of 2022 ("Form 10-Q") should be read together with JPMorgan Chase's Annual Report on Form 10-K for the year ended December 31, 2021 ("2021 Form 10-K"). Refer to the Glossary of terms and acronyms and line of business metrics on pages 184-192 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 89 of this Form 10-Q and Part I, Item 1A, Risk Factors, on pages 9-33 of the 2021 Form 10-K 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 $3.8 trillion in assets and $288.0 billion in stockholders' equity as of September 30, 2022. 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. as of September 30, 2022. 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 Note 25 of this Form 10-Q and Note 32 of JPMorgan Chase's 2021 Form 10-K for a description of the Firm's business segments and the products and services they provide to their respective client bases.

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 2021 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 September 30, 2022	2021	Change	Nine months ended September 30, 2022	2021	Change
Selected income statement data						
Noninterest revenue	**$ 15,198**	$ 16,567	(8)%	**$ 47,630**	$ 53,682	(11)%
Net interest income	**17,518**	13,080	34	**46,518**	38,710	20
Total net revenue	**$ 32,716**	$ 29,647	10	**$ 94,148**	$ 92,392	2
Total noninterest expense	**19,178**	17,063	12	**57,118**	53,455	7
Pre-provision profit	**13,538**	12,584	8	**37,030**	38,937	(5)
Provision for credit losses	**1,537**	(1,527)	NM	**4,101**	(7,968)	NM
Net income	**9,737**	11,687	(17)	**26,668**	37,935	(30)
Diluted earnings per share	**$ 3.12**	$ 3.74	(17)	**$ 8.51**	$ 12.02	(29)
Selected ratios and metrics						
Return on common equity	**15%**	18%		**14%**	20%	
Return on tangible common equity	**18**	22		**17**	24	
Book value per share	**$ 87.00**	$ 86.36	1	**$ 87.00**	$ 86.36	1
Tangible book value per share	**69.90**	69.87	–	**69.90**	69.87	–
Capital ratios[(a)]						
CET1 capital	**12.5%**	12.9%		**12.5%**	12.9%	
Tier 1 capital	**14.1**	15.0		**14.1**	15.0	
Total capital	**16.0**	16.9		**16.0**	16.9	
Memo:						
NII excluding Markets[(b)]	**$ 16,923**	$ 11,217	51	**$ 42,357**	$ 32,855	29
NIR excluding Markets[(b)]	**9,797**	12,955	(24)	31,040	39,994	(22)
Markets[(b)]	**6,771**	6,269	8	23,314	22,106	5
Total net revenue - managed basis	**$ 33,491**	$ 30,441	10	**$ 96,711**	$ 94,955	2

(a) The capital metrics reflect the relief provided by the Federal Reserve Board in response to the COVID-19 pandemic, including the CECL capital transition provisions. Refer to Capital Risk Management on pages 45-50 of this Form 10-Q and pages 86-96 of JPMorgan Chase's 2021 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 third quarter of 2022 versus the third quarter of 2021, unless otherwise specified.

Firmwide overview

For the third quarter of 2022, JPMorgan Chase reported net income of $9.7 billion, down 17%, earnings per share of $3.12, an ROE of 15% and ROTCE of 18%.

Total net revenue was up 10%, and reflected:

- Net interest income of $17.5 billion, up 34%, driven by higher rates, partially offset by lower Markets net interest income. Net interest income excluding Markets was $16.9 billion, up 51%.
- Noninterest revenue was $15.2 billion, down 8%, driven by
  - lower Investment Banking fees,
  - $959 million of net investment securities losses in Corporate, and
  - lower net production revenue in Home Lending,

  largely offset by
  - higher CIB Markets revenue.

Noninterest expense was $19.2 billion, up 12%, driven by higher structural expense and continued investments in the business, including compensation, technology and marketing.

The **provision for credit losses** was $1.5 billion, reflecting:

- a net addition of $808 million to the allowance for credit losses, consisting of a net addition of $937 million in wholesale, driven by loan growth and lending-related commitment activity, as well as the impact of updates to the Firm's macroeconomic scenarios, partially offset by a net reduction of $143 million in consumer, driven by Home Lending, and
- $727 million of net charge-offs, up $203 million, predominantly driven by CCB.

The prior year provision was a net benefit of $1.5 billion, reflecting a net reduction in the allowance for credit losses of $2.1 billion and net charge-offs of $524 million.

The total **allowance for credit losses** was $20.8 billion at September 30, 2022. The Firm had an allowance for loan losses to retained loans coverage ratio of 1.70%, compared with 1.86% in the prior year.

The Firm’s **nonperforming assets** totaled $7.2 billion at September 30, 2022, a net decrease of $1.6 billion from the prior year, driven by lower nonaccrual loans, reflecting loan sales and improved credit performance in consumer, and paydowns in wholesale.

Firmwide **average loans** of $1.1 trillion were up 7%, driven by higher loans across the lines of business.

Firmwide **average deposits** of $2.4 trillion were up 3%, reflecting an increase in CCB driven by growth from new and existing accounts across both consumer and small business customers, and growth in time deposits in AWM, partially offset by declines in both Payments and Securities Services in CIB and in non-operating deposits in CB.

Selected capital and other metrics

The Firm’s **CET1 capital** was $210 billion, and the Standardized and Advanced CET1 ratios were 12.5% and 13.0%, respectively.

The Firm’s **SLR** was 5.3%.

The Firm's **TBVPS** was $69.90, relatively flat versus the prior year.

As of September 30, 2022, the Firm had average eligible **High Quality Liquid Assets** (“HQLA”) of approximately $716 billion and **unencumbered marketable securities** with a fair value of approximately $771 billion, resulting in approximately $1.5 trillion of liquidity sources. Refer to Liquidity Risk Management on pages 51-56 for additional information.

Refer to Consolidated Result of Operations and Consolidated Balance Sheets Analysis on pages 10-15 and pages 16-17, respectively, for a further discussion of the Firm's results.

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 19-20 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 third quarter of 2022.

CCB ROE 33%	• Average deposits up 9%; client investment assets down 10% • Average loans up 2% year-over-year ("YoY") and up 1% quarter-over-quarter ("QoQ"); Card net charge-off rate of 1.40% • Debit and credit card sales volume[(a)] up 13% • Active mobile customers[(b)] up 10%
CIB ROE 13%	• #1 ranking for Global Investment Banking fees with 8.1% wallet share year-to-date • Total Markets revenue of $6.8 billion, up 8%, with Fixed Income Markets up 22% and Equity Markets down 11%
CB ROE 14%	• Gross Investment Banking revenue of $761 million, down 43% • Average loans up 13% YoY and up 4% QoQ; average deposits down 6%
AWM ROE 28%	• Assets under management ("AUM") of $2.6 trillion, down 13% • Average loans up 8% YoY and flat QoQ; average deposits up 10%

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

Refer to the Business Segment Results on pages 21-43 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 nine months of 2022, consisting of:

$1.9 trillion	Total credit provided and capital raised (including loans and commitments)[(a)]
$196 billion	Credit for consumers
$24 billion	Credit for U.S. small businesses
$799 billion	Credit for corporations
$799 billion	Capital raised for corporate clients and non-U.S. government entities
$51 billion	Credit and capital raised for nonprofit and U.S. government entities[(a)]

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

Recent events

On September 12, 2022, JPMorgan Chase announced that it had signed an agreement to acquire Renovite Technologies, Inc. ("Renovite"), a cloud-native payments technology company.

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 89 and page 155 of JPMorgan Chase's 2021 Form 10-K 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 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 the fourth quarter of 2022 and full-year 2022 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.

Fourth quarter and full-year 2022

Management expects net interest income to be approximately $19 billion in the fourth quarter of 2022, which would result in approximately $66 billion for full-year 2022, market dependent.

Management expects net interest income excluding Markets to also be approximately $19 billion in the fourth quarter of 2022, with Markets NII expected to be around zero, which would result in approximately $61.5 billion for full-year 2022, market dependent.

Management expects full-year 2022 adjusted expense to be approximately $77 billion, which includes increased investments in technology, distribution and marketing, and higher structural expense.

Management expects the full-year 2022 net charge-off rate in Card to be approximately 1.5%.

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 19-20.

Business Developments

War in Ukraine

The duration and potential outcomes of the war in Ukraine remain uncertain. The Firm has taken steps to close positions and reduce exposures connected with the war, and continues to assist clients with fulfilling or terminating pre-existing obligations and managing their Russia-related risks.

The Firm's exposure to Russia and Russia-associated clients and counterparties is not material to its financial condition or results of operations. However, the secondary impacts of the war in Ukraine, including increased market volatility, inflationary pressures and the effects of financial and economic sanctions imposed by various governments, could have adverse effects on the Firm's businesses.

The Firm also continues to monitor and manage the operational risks associated with the war, including compliance with the financial and economic sanctions and the increased risk of cyber attacks.

Refer to Wholesale Credit Portfolio on pages 64-72, Allowance for Credit Losses on pages 73-75, Market Risk Management on pages 77-81, Country Risk Management on pages 82-83 and Operational Risk Management on page 84 for additional information.

For purposes of this Form 10-Q, "Russia" refers to exposure to clients and counterparties of the Firm for which the largest proportion of their assets is located, or the largest proportion of their revenue is derived, in Russia, based on the Firm's internal country risk management framework; and "Russia-associated" refers to exposure to clients and counterparties of the Firm with respect to which economic or financial sanctions relating to the war in Ukraine have been imposed or which have close association with Russia.

Interbank Offered Rate ("IBOR") transition

JPMorgan Chase and other market participants continue to make progress with respect to the transition from the use of the London Interbank Offered Rate ("LIBOR") and other IBORs to comply with the International Organization of Securities Commission's standards for transaction-based benchmark rates. The cessation of the publication of the principal tenors of the U.S. dollar LIBOR (i.e., overnight, one-month, three-month, six-month and 12-month LIBOR) is scheduled for June 30, 2023.

The Firm continues its client outreach with respect to U.S. dollar LIBOR-linked loans and continues to monitor and evaluate client, industry, market, regulatory and legislative developments. Refer to Business Developments on pages 50-51 of JPMorgan Chase's 2021 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 nine months ended September 30, 2022 and 2021, 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 85-87 of this Form 10-Q and pages 150-153 of JPMorgan Chase's 2021 Form 10-K for a discussion of the Critical Accounting Estimates Used by the Firm that affect the Consolidated Results of Operations.

Revenue

	Three months ended September 30,			Nine months ended September 30,		
(in millions)	**2022**	2021	Change	**2022**	2021	Change
Investment banking fees	**$ 1,674**	$ 3,282	(49)%	**$ 5,268**	$ 9,722	(46)%
Principal transactions	**5,383**	3,546	52	**15,478**	14,122	10
Lending- and deposit-related fees	**1,731**	1,801	(4)	**5,443**	5,248	4
Asset management, administration and commissions	**5,069**	5,257	(4)	**15,671**	15,480	1
Investment securities losses	**(959)**	(256)	(275)	**(1,506)**	(397)	(279)
Mortgage fees and related income	**314**	600	(48)	**1,152**	1,855	(38)
Card income	**1,086**	1,005	8	**3,194**	4,002	(20)
Other income[(a)]	**900**	1,332	(32)	**2,930**	3,650	(20)
Noninterest revenue	**15,198**	16,567	(8)	**47,630**	53,682	(11)
Net interest income	**17,518**	13,080	34	**46,518**	38,710	20
Total net revenue	**$ 32,716**	$ 29,647	10 %	**$ 94,148**	$ 92,392	2 %

(a) Included operating lease income of $870 million and $1.2 billion for the three months ended September 30, 2022 and 2021, respectively and $2.9 billion and $3.8 billion for the nine months ended September 30, 2022 and 2021, respectively.

Quarterly results

Investment banking fees decreased in CIB, reflecting:

- lower equity and debt underwriting fees as volatile market conditions continued to have a negative impact on issuance activity, and
- lower advisory fees driven by a lower level of announced deals.

Refer to CIB segment results on pages 28-33 and Note 5 for additional information.

Principal transactions revenue increased primarily in CIB, reflecting:

- higher revenue in Fixed Income Markets, as elevated volatility drove a strong performance in the macro businesses, particularly Rates and Currencies & Emerging Markets, and
- higher revenue associated with Derivatives in Equity Markets.

Credit Adjustments & Other was a loss of $31 million, compared with a gain of $108 million in the prior year.

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

Refer to CIB results on pages 28-33, and Note 5 for additional information.

Lending- and deposit-related fees decreased as a result of lower cash management fees on higher credits earned by clients, in CB and CIB. Refer to CIB and CB segment results on pages 28-33, pages 34-37 and Note 5 for additional information.

Asset management, administration and commissions revenue decreased, reflecting:

- lower asset management fees in AWM resulting from lower average market levels, largely offset by the removal of most money market fund fee waivers,
- lower brokerage commissions largely in AWM reflecting reduced volumes, and
- lower administration fees in CIB on reduced assets under custody reflecting lower market levels,

partially offset by

- higher travel-related commissions in CCB.

Refer to CCB, CIB and AWM segment results on pages 23-27, pages 28-33 and pages 38-41 and Note 5 for additional information.

Investment securities losses reflected higher net losses on sales of U.S. GSE and government agency MBS and U.S. Treasuries associated with repositioning the investment securities portfolios in Treasury and CIO. Refer to Corporate segment results on pages 42-43 and Note 9 for additional information.

Mortgage fees and related income decreased due to:

- lower production revenue from lower margins and volume,

partially offset by

- higher net mortgage servicing revenue due to a net gain in MSR risk management, compared with a net loss in the prior year driven by updates to model inputs.

Refer to CCB segment results on pages 23-27 and Notes 5 and 14 for additional information.

Card income increased, reflecting higher revenue on volume growth in commercial card and merchant processing in CIB and CB.

Card income in CCB was relatively flat as the impact from the increase in debit and credit card sales volume was offset by higher amortization related to new account origination costs. Refer to CCB, CIB and CB segment results on pages 23-27, pages 28-33 and pages 34-37 and Note 5 for additional information.

Other income decreased reflecting:

- lower auto operating lease income in CCB as a result of a decline in volume, and
- net losses on equity investments in CIB, compared with a gain in the prior year,

partially offset by

- the impact of movements in foreign exchange rates related to net investment hedges in Treasury and CIO, primarily as a result of the strengthening of the U.S. dollar.

Refer to Note 4 for additional information on net investment hedges.

Net interest income increased driven by higher rates, partially offset by lower Markets NII.

The Firm's average interest-earning assets were $3.3 trillion, up $125 billion, and the yield was 3.05%, up 125 basis points ("bps"). The net yield on these assets, on an FTE basis, was 2.09%, an increase of 47 bps. The net yield excluding Markets was 2.81%, up 90 bps.

Refer to the Consolidated average balance sheets, interest and rates schedule on page 182 for further information. 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 19-20 for a further discussion of Net yield excluding Markets.

Year-to-date results

Investment banking fees decreased in CIB, reflecting:

- lower equity and debt underwriting fees as volatile market conditions resulted in lower issuance activity, and
- lower advisory fees driven by a lower level of announced deals.

Principal transactions revenue increased reflecting:

- higher net revenue in Fixed Income Markets, driven by a strong performance in the macro businesses, particularly Currencies & Emerging Markets and Rates, partially offset by lower revenue in Securitized Products and Credit, and
- higher revenue associated with Derivatives and Prime Brokerage in Equity Markets,

largely offset by

- a loss of $773 million in Credit Adjustments & Other in CIB, compared with a gain of $338 million in the prior year. The loss in the current year reflected funding spread widening and, to a lesser extent, losses on exposures relating to commodities and Russia and Russia-associated counterparties,
- net markdowns predominantly recorded in the second quarter of 2022 on held-for-sale positions, primarily unfunded commitments, in the bridge financing portfolio in CIB and CB,
- net losses on certain legacy private equity investments in Corporate, compared with net gains in the prior year, and
- net losses in Treasury and CIO related to cash deployment transactions, which were more than offset by the related net interest income earned on these transactions.

Lending- and deposit-related fees increased due to higher service fee volume in CCB. Refer to CCB segment results on pages 23-27 and Note 5 for additional information.

Asset management, administration and commissions revenue increased, predominantly driven by:

- higher travel-related commissions in CCB,
- higher asset management fees, including in AWM due to the removal of most money market fund fee waivers and net inflows, largely offset by lower market levels and
- higher annuity sales in CCB,

partially offset by

- lower administration fees in CIB on reduced assets under custody reflecting lower market levels.

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

Mortgage fees and related income decreased due to:

- lower production revenue from lower margins and volume,

largely offset by

- higher net mortgage servicing revenue resulting from
  - a net gain in MSR risk management, compared with a net loss in the prior year driven by updates to model inputs, and
  - higher operating revenue on a higher level of third-party loans serviced.

Card income decreased due to higher amortization related to new account origination costs in Card, partially offset by higher revenue on volume growth in commercial card and merchant processing in CIB and CB.

Other income decreased reflecting:

- lower auto operating lease income in CCB as a result of a decline in volume,
- net losses on certain investments in CIB and AWM, compared with net gains in the prior year,

partially offset by

- proceeds from an insurance settlement in the first quarter of 2022 in Corporate,
- higher net gains related to certain other Corporate investments,
- a gain on an equity-method investment received in partial satisfaction of a loan in CB, and
- the absence of weather-related write-downs recorded in the prior year on certain renewable energy investments in CIB.

Net interest income increased driven by higher rates and balance sheet growth, partially offset by lower Markets NII, as well as lower NII from PPP loans.

The Firm's average interest-earning assets were $3.4 trillion, up $203 billion, and the yield was 2.38%, up 56 basis points ("bps"). The net yield on these assets, on an FTE basis, was 1.85%, an increase of 21 bps. The net yield excluding Markets was 2.34%, up 42 bps.

Provision for credit losses

(in millions)	Three months ended September 30, 2022	2021	Change	Nine months ended September 30, 2022	2021	Change
Consumer, excluding credit card	**$ (69)**	$ (31)	(123)%	**$ 166**	$ (1,823)	NM
Credit card	**592**	(355)	NM	**1,828**	(3,917)	NM
Total consumer	**523**	(386)	NM	**1,994**	(5,740)	NM
Wholesale	**1,000**	(1,127)	NM	**2,088**	(2,223)	NM
Investment securities	**14**	(14)	NM	**19**	(5)	NM
Total provision for credit losses	**$ 1,537**	$ (1,527)	NM	**$ 4,101**	$ (7,968)	NM

Quarterly results

The provision for credit losses was $1.5 billion, reflecting a net addition of $808 million to the allowance for credit losses and $727 million of net charge-offs. The net addition to the allowance for credit losses consisted of:

- $937 million in **wholesale,** driven by loan growth and lending-related commitment activity, as well as the impact of updates to the Firm's macroeconomic scenarios,

partially offset by

- a net reduction of $143 million in **consumer,** driven by Home Lending.

The allowance for loan losses in Card was flat as the addition to the allowance resulting from higher outstanding balances was offset by a reduction related to a decrease in uncertainty associated with borrower behavior as the effects of the pandemic gradually recede.

Net charge-offs increased $203 million, predominantly driven by CCB.

The prior year included a $2.1 billion net reduction in the allowance for credit losses and net charge-offs of $524 million.

Refer to CCB segment results on pages 23-27, CIB on pages 28-33, CB on pages 34-37, AWM on pages 38-41, Allowance for Credit Losses on pages 73-75, and Notes 9 and 12 for additional information on the credit portfolio and the allowance for credit losses.

Year-to-date results

The provision for credit losses was $4.1 billion, reflecting a net addition of $2.1 billion to the allowance for credit losses and $2.0 billion of net charge-offs. The net addition to the allowance for credit losses consisted of:

- $1.9 billion in **wholesale,** driven by
  - loan growth predominantly in CB and CIB, and
  - updates to the Firm's macroeconomic forecast, including deterioration in the macroeconomic scenarios and the increased weight placed on the adverse scenarios beginning in the first quarter of 2022;
- $168 million in **consumer,** primarily driven by Card, reflecting higher outstanding balances, predominantly offset by a reduction in the allowance related to a decrease in uncertainty associated with borrower behavior as the effects of the pandemic gradually recede.

Net charge-offs decreased $349 million driven by Card, reflecting the ongoing financial strength of U.S. consumers. However, median deposit balances continue to decline, impacted by the growth in consumer spending.

The prior year included a $10.3 billion net reduction in the allowance for credit losses and net charge-offs of $2.3 billion.

Noninterest expense

	Three months ended September 30,			Nine months ended September 30,		
(in millions)	**2022**	2021	Change	**2022**	2021	Change
Compensation expense	**$ 10,539**	$ 9,087	16 %	**$ 31,627**	$ 29,502	7 %
Noncompensation expense:						
Occupancy	**1,162**	1,109	5	**3,425**	3,314	3
Technology, communications and equipment[(a)]	**2,366**	2,473	(4)	**7,102**	7,480	(5)
Professional and outside services	**2,481**	2,523	(2)	**7,522**	7,111	6
Marketing	**1,017**	712	43	**2,818**	2,089	35
Other expense[(b)]	**1,613**	1,159	39	**4,624**	3,959	17
Total noncompensation expense	**8,639**	7,976	8	**25,491**	23,953	6
Total noninterest expense	**$ 19,178**	$ 17,063	12 %	**$ 57,118**	$ 53,455	7 %

(a) Includes depreciation expense associated with auto operating lease assets.
(b) Included Firmwide legal expense of $47 million and $76 million for the three months ended September 30, 2022 and 2021, respectively and $239 million and $289 million for the nine months ended September 30, 2022 and 2021, respectively.

Quarterly results

Compensation expense increased driven by higher structural expense and investments in the business, as well as higher revenue-related expense in CIB.

Noncompensation expense increased as a result of:

- higher investments in the business, including marketing in CCB, and technology, and
- higher structural expense, including travel and entertainment and regulatory assessments,

partially offset by

- lower volume-related expense, primarily depreciation expense in CCB on lower auto lease assets.

Year-to-date results

Compensation expense increased driven by higher structural expense and investments in the business, partially offset by lower revenue-related compensation in CIB.

Noncompensation expense increased as a result of:

- higher investments in the business, including marketing in CCB, and technology, and
- higher structural expense, including travel and entertainment, regulatory assessments, outside services and other employee-related expense,

partially offset by

- lower volume-related expense, predominantly driven by CCB, reflecting lower depreciation expense on lower auto lease assets, partially offset by higher operating losses.

The prior year included a $550 million contribution to the Firm's Foundation.

Income tax expense

(in millions)	Three months ended September 30, 2022	2021	Change	Nine months ended September 30, 2022	2021	Change
Income before income tax expense	**$12,001**	$14,111	(15)%	**$32,929**	$46,905	(30)%
Income tax expense	**2,264**	2,424	(7)	**6,261**	8,970	(30)
Effective tax rate	**18.9 %**	17.2 %		**19.0 %**	19.1 %	

Quarterly results

The **effective tax rate** increased and reflects the absence of an income tax benefit in the prior year related to the Firm's 2020 U.S federal tax return, largely offset by benefits related to tax audit settlements and changes in the level and mix of income and expenses subject to U.S. federal, state and local taxes in the current year.

Year-to-date results

The **effective tax rate** was relatively flat compared to the nine months ended September 30, 2021, as benefits from tax audit settlements in the current year were offset by the absence of an income tax benefit in the prior year related to the Firm's 2020 U.S. federal tax return.

Consolidated balance sheets analysis

The following is a discussion of the significant changes between September 30, 2022, and December 31, 2021.

Selected Consolidated balance sheets data

(in millions)	September 30, 2022	December 31, 2021	Change
Assets			
Cash and due from banks	**$ 24,654**	$ 26,438	(7)%
Deposits with banks	**619,533**	714,396	(13)
Federal funds sold and securities purchased under resale agreements	**301,878**	261,698	15
Securities borrowed	**193,216**	206,071	(6)
Trading assets	**506,487**	433,575	17
Available-for-sale securities	**188,140**	308,525	(39)
Held-to-maturity securities, net of allowance for credit losses	**430,106**	363,707	18
Investment securities, net of allowance for credit losses	**618,246**	672,232	(8)
Loans	**1,112,633**	1,077,714	3
Allowance for loan losses	**(18,185)**	(16,386)	11
Loans, net of allowance for loan losses	**1,094,448**	1,061,328	3
Accrued interest and accounts receivable	**143,905**	102,570	40
Premises and equipment	**27,199**	27,070	–
Goodwill, MSRs and other intangible assets	**60,806**	56,691	7
Other assets	**183,512**	181,498	1
Total assets	**$ 3,773,884**	$ 3,743,567	1 %

Cash and due from banks and deposits with banks decreased primarily as a result of lower deposits and loan growth. 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 driven by Markets, reflecting:

- the impact of netting on client-driven market-making activities and collateral requirements, as well as
- higher demand for securities to cover short positions.

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

Refer to Note 10 for additional information on securities purchased under resale agreements and securities borrowed.

Trading assets increased driven by:

- higher derivative receivables, primarily foreign exchange and commodities as a result of market movements, as well as higher levels of debt instruments related to client-driven market-making activities in Fixed Income Markets, and
- higher deployment of funds in Treasury and CIO.

Refer to Notes 2 and 4 for additional information.

Investment securities reflects the transfer of $73.2 billion of securities from the available-for-sale ("AFS") portfolio to the held-to-maturity ("HTM") portfolio in the second quarter of 2022.

- The decrease in AFS securities was also due to paydowns, as well as unrealized losses, which are recognized in accumulated other comprehensive income ("AOCI"), largely offset by net purchases
- The increase in HTM was also due to purchases, partially offset by paydowns.

Refer to Corporate segment results on pages 42-43, Investment Portfolio Risk Management on page 76, and Notes 2 and 9 for additional information.

Loans increased, reflecting:

- higher originations and revolver utilization in CB,
- higher balances in Card driven by growth in revolving balances on higher consumer spending and net new originations, and
- higher wholesale loans in CIB,

partially offset by

- lower mortgage warehouse loans in Home Lending as sales outpaced originations due to higher interest rates, and
- the impact from PPP loan forgiveness in CBB.

The **allowance for loan losses** increased, reflecting a net addition of $1.8 billion to the allowance for loan losses, consisting of:

- $1.6 billion in **wholesale**, resulting from
  - loan growth predominantly in CB and CIB, and
  - updates to the Firm's macroeconomic forecast, including deterioration in the macroeconomic scenarios and the increased weight placed on the adverse scenarios beginning in the first quarter of 2022, and
- $204 million in **consumer** driven by Card, reflecting higher outstanding balances, predominantly offset by a reduction in the allowance related to a decrease in uncertainty associated with borrower behavior as the

effects of the pandemic gradually recede.

There was also a $290 million addition to the allowance for lending-related commitments recognized in other liabilities on the Consolidated balance sheets.

Refer to Credit and Investment Risk Management on pages 57-76, and Notes 2, 3, 11 and 12 for a more detailed discussion of loans and the allowance for loan losses.

Accrued interest and accounts receivable increased predominantly due to higher client receivables related to client-driven activities in Markets, including prime brokerage.

Goodwill, MSRs and other intangibles increased, reflecting:

- higher MSRs as a result of higher market interest rates and net additions, partially offset by the realization of expected cash flows, and
- additions to goodwill associated with the acquisitions of Global Shares PLC and Figg, Inc. in the third quarter of 2022, and Frosch Travel Group, LLC and Volkswagen Payments S.A. in the second quarter of 2022.

Refer to Note 14 for additional information.

Selected Consolidated balance sheets data (continued)

(in millions)	September 30, 2022	December 31, 2021	Change
Liabilities			
Deposits	$ 2,408,615	$ 2,462,303	(2)%
Federal funds purchased and securities loaned or sold under repurchase agreements	239,939	194,340	23
Short-term borrowings	47,866	53,594	(11)
Trading liabilities	189,878	164,693	15
Accounts payable and other liabilities	300,016	262,755	14
Beneficial interests issued by consolidated variable interest entities (“VIEs”)	12,079	10,750	12
Long-term debt	287,473	301,005	(4)
Total liabilities	3,485,866	3,449,440	1
Stockholders’ equity	288,018	294,127	(2)
Total liabilities and stockholders’ equity	$ 3,773,884	$ 3,743,567	1 %

Deposits decreased reflecting:

- a reduction in non-operating deposits in CB, and in AWM net outflows into investments as a result of the rising interest rate environment,

partially offset by

- growth from new consumer and small business accounts in CCB that more than offset the decline in deposits in existing accounts as spending continued to grow, and
- an increase in Corporate driven by the Firm's international consumer growth initiatives.

Refer to Liquidity Risk Management on pages 51-56 and Notes 2 and 15 for additional information.

Federal funds purchased and securities loaned or sold under repurchase agreements increased due to:

- higher secured financing of trading assets and the impact of netting on client-driven market-making activities in Markets,

partially offset by

- lower secured financing of AFS investment securities in Treasury and CIO. Refer to Liquidity Risk Management on pages 51-56 and Note 10 for additional information.

Short-term borrowings decreased as a result of lower financing requirements in Markets. Refer to Liquidity Risk Management on pages 51-56 for additional information.

Trading liabilities increased due to client-driven market-making activities, which resulted in higher levels of short positions in debt instruments, as well as higher derivative payables as a result of market movements in Markets. Refer to Notes 2 and 4 for additional information.

Accounts payable and other liabilities increased predominantly due to higher client payables related to client-driven activities primarily in Markets, including prime brokerage.

Beneficial interests issued by consolidated VIEs increased driven by higher levels of Firm-administered multi-seller conduit commercial paper issued to third parties. Refer to Liquidity Risk Management on pages 51-56 and Notes 13 and 22 for additional information, specifically Firm-sponsored VIEs and loan securitization trusts.

Long-term debt decreased driven by:

- a decline in the fair value of structured notes in Markets, and fair value hedge accounting adjustments in Treasury and CIO related to higher rates,

largely offset by

- net issuances in Markets and Treasury and CIO.

Refer to Liquidity Risk Management on pages 51-56 for additional information.

Stockholders’ equity decreased as a result of net unrealized losses in AOCI, which were predominantly driven by the impact of higher rates on the AFS portfolio and cash flow hedges in Treasury and CIO. Refer to Consolidated statements of changes in stockholders’ equity on page 93, and Note 19 for additional information.

Consolidated cash flows analysis

The following is a discussion of cash flow activities during the nine months ended September 30, 2022 and 2021.

(in millions)	Nine months ended September 30, 2022	2021
Net cash provided by/(used in)		
Operating activities	**$ 5,897**	$ (7,011)
Investing activities	**(86,289)**	(29,186)
Financing activities	**16,087**	278,015
Effect of exchange rate changes on cash	**(32,342)**	(9,558)
Net increase/(decrease) in cash and due from banks and deposits with banks	**$ (96,647)**	$ 232,260

Operating activities

- 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.
- In 2021, cash used resulted from higher securities borrowed and accrued interest and accounts receivable, partially offset by higher accounts payable and other liabilities.

Investing activities

- In 2022, cash used resulted from net loan originations and higher securities purchased under resale agreements, partially offset by net proceeds of investment securities.
- In 2021, cash used resulted from net loan originations and net purchases of investment securities, partially offset by lower securities purchased under resale agreements.

Financing activities

- In 2022, cash provided reflected higher securities loaned or sold under repurchase agreements and net proceeds from long- and short-term borrowings, largely offset by lower deposits.
- In 2021, cash provided reflected higher deposits and 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 16-17, Capital Risk Management on pages 45-50, and Liquidity Risk Management on pages 51-56, and the Consolidated Statements of Cash Flows on page 94 of this Form 10-Q, and pages 97-104 of JPMorgan Chase’s 2021 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 90-94.

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 2021 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.

	Three months ended September 30,					
	2022			2021		
(in millions, except ratios)	Reported	Fully taxable-equivalent adjustments(a)	Managed basis	Reported	Fully taxable-equivalent adjustments(a)	Managed basis
Other income	**$ 900**	**$ 663**	**$ 1,563**	$ 1,332	$ 690	$ 2,022
Total noninterest revenue	**15,198**	**663**	**15,861**	16,567	690	17,257
Net interest income	**17,518**	**112**	**17,630**	13,080	104	13,184
Total net revenue	**32,716**	**775**	**33,491**	29,647	794	30,441
Total noninterest expense	**19,178**	**NA**	**19,178**	17,063	NA	17,063
Pre-provision profit	**13,538**	**775**	**14,313**	12,584	794	13,378
Provision for credit losses	**1,537**	**NA**	**1,537**	(1,527)	NA	(1,527)
Income before income tax expense	**12,001**	**775**	**12,776**	14,111	794	14,905
Income tax expense	**2,264**	**775**	**3,039**	2,424	794	3,218
Net income	**$ 9,737**	**NA**	**$ 9,737**	$ 11,687	NA	$ 11,687
Overhead ratio	**59 %**	**NM**	**57 %**	58 %	NM	56 %

	Nine months ended September 30,					
	2022			2021		
(in millions, except ratios)	Reported	Fully taxable-equivalent adjustments(a)	Managed basis	Reported	Fully taxable-equivalent adjustments(a)	Managed basis
Other income	**$ 2,930**	**$ 2,250**	**$ 5,180**	$ 3,650	$ 2,241	$ 5,891
Total noninterest revenue	**47,630**	**2,250**	**49,880**	53,682	2,241	55,923
Net interest income	**46,518**	**313**	**46,831**	38,710	322	39,032
Total net revenue	**94,148**	**2,563**	**96,711**	92,392	2,563	94,955
Total noninterest expense	**57,118**	**NA**	**57,118**	53,455	NA	53,455
Pre-provision profit	**37,030**	**2,563**	**39,593**	38,937	2,563	41,500
Provision for credit losses	**4,101**	**NA**	**4,101**	(7,968)	NA	(7,968)
Income before income tax expense	**32,929**	**2,563**	**35,492**	46,905	2,563	49,468
Income tax expense	**6,261**	**2,563**	**8,824**	8,970	2,563	11,533
Net Income	**$ 26,668**	**NA**	**$ 26,668**	$ 37,935	NA	$ 37,935
Overhead ratio	**61 %**	**NM**	**59 %**	58 %	NM	56 %

(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 September 30, 2022	2021	Change	Nine months ended September 30, 2022	2021	Change
Net interest income – reported	**$ 17,518**	$ 13,080	34 %	**$ 46,518**	$ 38,710	20 %
Fully taxable-equivalent adjustments	**112**	104	8	**313**	322	(3)
Net interest income – managed basis[(a)]	**$ 17,630**	$ 13,184	34	**$ 46,831**	$ 39,032	20
Less: Markets net interest income[(b)]	**707**	1,967	(64)	**4,474**	6,177	(28)
Net interest income excluding Markets[(a)]	**$ 16,923**	$ 11,217	51	**$ 42,357**	$ 32,855	29
Average interest-earning assets	**$3,344,949**	$3,219,786	4	**$3,377,390**	$3,174,858	6
Less: Average Markets interest-earning assets[(b)]	**952,488**	894,892	6	**957,837**	881,547	9
Average interest-earning assets excluding Markets	**$2,392,461**	$2,324,894	3 %	**$2,419,553**	$2,293,311	6 %
Net yield on average interest-earning assets – managed basis	**2.09 %**	1.62 %		**1.85 %**	1.64 %	
Net yield on average Markets interest-earning assets[(b)]	**0.29**	0.87		**0.62**	0.94	
Net yield on average interest-earning assets excluding Markets	**2.81 %**	1.91 %		**2.34 %**	1.92 %	
Noninterest revenue – reported	**$ 15,198**	$ 16,567	(8)%	**$ 47,630**	$ 53,682	(11)%
Fully taxable-equivalent adjustments	**663**	690	(4)	**2,250**	2,241	–
Noninterest revenue – managed basis	**$ 15,861**	$ 17,257	(8)	**$ 49,880**	$ 55,923	(11)
Less: Markets noninterest revenue[(b)]	**6,064**	4,302	41	**18,840**	15,929	18
Noninterest revenue excluding Markets	**$ 9,797**	$ 12,955	(24)	**$ 31,040**	$ 39,994	(22)
Memo: Total Markets net revenue[(b)]	**$ 6,771**	$ 6,269	8	**$ 23,314**	$ 22,106	5

(a) Interest includes the effect of related hedges. Taxable-equivalent amounts are used where applicable.
(b) Refer to page 32 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 Sep 30, 2022	Period-end Dec 31, 2021	Average: Three months ended September 30, 2022	2021	Average: Nine months ended September 30, 2022	2021
Common stockholders' equity	**$ 255,180**	$ 259,289	**$ 252,944**	$ 253,556	**$ 251,147**	$ 250,011
Less: Goodwill	**51,461**	50,315	**51,323**	49,457	**50,739**	49,323
Less: Other intangible assets	**1,205**	882	**1,208**	849	**1,076**	868
Add: Certain deferred tax liabilities[(a)]	**2,509**	2,499	**2,512**	2,480	**2,504**	2,465
Tangible common equity	**$ 205,023**	$ 210,591	**$ 202,925**	$ 205,730	**$ 201,836**	$ 202,285
Return on tangible common equity	**NA**	NA	**18 %**	22 %	**17 %**	24 %
Tangible book value per share	**$ 69.90**	$ 71.53	**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.

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 19-20 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, 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.

Capital allocation

The amount of capital assigned to each business segment is referred to as equity. Periodically, the assumptions and methodologies used to allocate capital are reassessed and as a result, the capital allocated to the LOBs may change. Refer to Line of business equity on page 48, and page 93 of JPMorgan Chase's 2021 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 2021 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 September 30,	Consumer & Community Banking			Corporate & Investment Bank			Commercial Banking		
(in millions, except ratios)	**2022**	2021	Change	**2022**	2021	Change	**2022**	2021	Change
Total net revenue	**$ 14,331**	$ 12,521	14%	**$ 11,875**	$ 12,396	(4)%	**$ 3,048**	$ 2,520	21%
Total noninterest expense	**8,047**	7,238	11	**6,618**	5,871	13	**1,180**	1,032	14
Pre-provision profit/(loss)	**6,284**	5,283	19	**5,257**	6,525	(19)	**1,868**	1,488	26
Provision for credit losses	**529**	(459)	NM	**513**	(638)	NM	**618**	(363)	NM
Net income/(loss)	**4,334**	4,351 [a]	–	**3,532**	5,647 [a]	(37)	**946**	1,409 [a]	(33)
Return on equity (“ROE”)	**33%**	34%		**13 %**	26%		**14 %**	22%	

Three months ended September 30,	Asset & Wealth Management			Corporate			Total		
(in millions, except ratios)	**2022**	2021	Change	**2022**	2021	Change	**2022**	2021	Change
Total net revenue	**$ 4,539**	$ 4,300	6%	**$ (302)**	$ (1,296)	77%	**$ 33,491**	$ 30,441	10%
Total noninterest expense	**3,028**	2,762	10	**305**	160	91	**19,178**	17,063	12
Pre-provision profit/(loss)	**1,511**	1,538	(2)	**(607)**	(1,456)	58	**14,313**	13,378	7
Provision for credit losses	**(102)**	(60)	(70)	**(21)**	(7)	(200)	**1,537**	(1,527)	NM
Net income/(loss)	**1,219**	1,196 [a]	2	**(294)**	(916) [a]	68	**9,737**	11,687	(17)
ROE	**28 %**	33%		**NM**	NM		**15 %**	18%	

Nine months ended September 30,	Consumer & Community Banking			Corporate & Investment Bank			Commercial Banking		
(in millions, except ratios)	**2022**	2021	Change	**2022**	2021	Change	**2022**	2021	Change
Total net revenue	**$ 39,174**	$ 37,798	4%	**$ 37,351**	$ 40,215	(7)%	**$ 8,129**	$ 7,396	10%
Total noninterest expense	**23,490**	21,502	9	**20,661**	19,498	6	**3,465**	2,982	16
Pre-provision profit/(loss)	**15,684**	16,296	(4)	**16,690**	20,717	(19)	**4,664**	4,414	6
Provision for credit losses	**1,968**	(5,929)	NM	**1,017**	(1,048)	NM	**984**	(858)	NM
Net income/(loss)	**10,329**	16,783 [a]	(38)	**11,642**	16,591 [a]	(30)	**2,790**	4,012 [a]	(30)
ROE	**27%**	44%		**14 %**	26% [a]		**14 %**	21%	

Nine months ended September 30,	Asset & Wealth Management			Corporate			Total		
(in millions, except ratios)	**2022**	2021	Change	**2022**	2021	Change	**2022**	2021	Change
Total net revenue	**$ 13,160**	$ 12,484	5%	**$ (1,103)**	$ (2,938)	62%	**$ 96,711**	$ 94,955	2%
Total noninterest expense	**8,807**	7,922	11	**695**	1,551	(55)	**57,118**	53,455	7
Pre-provision profit/(loss)	**4,353**	4,562	(5)	**(1,798)**	(4,489)	60	**39,593**	41,500	(5)
Provision for credit losses	**96**	(191)	NM	**36**	58	(38)	**4,101**	(7,968)	NM
Net income/(loss)	**3,231**	3,612 [a]	(11)	**(1,324)**	(3,063) [a]	57	**26,668**	37,935	(30)
ROE	**25 %**	34%		**NM**	NM		**14%**	20%	

(a) In the first quarter of 2022, the Firm changed its methodology for allocating income taxes to the LOBs, with no impact to Firmwide net income. 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 nine months ended September 30, 2022 versus the corresponding period in the prior year, unless otherwise specified.

Refer to pages 63-66 of JPMorgan Chase's 2021 Form 10-K and Line of Business Metrics on page 190 for a further discussion of the business profile of CCB.

Selected income statement data

	Three months ended September 30,			Nine months ended September 30,		
(in millions, except ratios)	**2022**	2021	Change	**2022**	2021	Change
Revenue						
Lending- and deposit-related fees	**$ 822**	$ 786	5%	**$ 2,482**	$ 2,281	9%
Asset management, administration and commissions	**939**	893	5	**2,815**	2,564	10
Mortgage fees and related income	**313**	596	(47)	**1,146**	1,847	(38)
Card income	**665**	651	2	**1,933**	2,888	(33)
All other income	**1,023**	1,212	(16)	**3,194**	3,872	(18)
Noninterest revenue	**3,762**	4,138	(9)	**11,570**	13,452	(14)
Net interest income	**10,569**	8,383	26	**27,604**	24,346	13
Total net revenue	**14,331**	12,521	14	**39,174**	37,798	4
Provision for credit losses	**529**	(459)	NM	**1,968**	(5,929)	NM
Noninterest expense						
Compensation expense	**3,345**	3,012	11	**9,753**	8,965	9
Noncompensation expense[(a)]	**4,702**	4,226	11	**13,737**	12,537	10
Total noninterest expense	**8,047**	7,238	11	**23,490**	21,502	9
Income before income tax expense	**5,755**	5,742	–	**13,716**	22,225	(38)
Income tax expense	**1,421**	1,391 [(d)]	2	**3,387**	5,442 [(d)]	(38)
Net income	**$ 4,334**	$ 4,351 [(d)]	–	**$ 10,329**	$ 16,783 [(d)]	(38)
Revenue by line of business						
Consumer & Business Banking[(b)]	**$ 8,010**	$ 6,157	30	**$ 20,630**	$ 17,808	16
Home Lending	**920**	1,400	(34)	**3,090**	4,207	(27)
Card & Auto	**5,401**	4,964	9	**15,454**	15,783	(2)
Mortgage fees and related income details:						
Production revenue	**93**	614	(85)	**454**	1,888	(76)
Net mortgage servicing revenue[(c)]	**220**	(18)	NM	**692**	(41)	NM
Mortgage fees and related income	**$ 313**	$ 596	(47)%	**$ 1,146**	$ 1,847	(38)%
Financial ratios						
Return on equity	**33 %**	34 %		**27 %**	44 %	
Overhead ratio	**56**	58		**60**	57	

(a) Included depreciation expense on leased assets of $605 million and $769 million for the three months ended September 30, 2022 and 2021, respectively, and $2.0 billion and $2.5 billion for the nine months ended September 30, 2022 and 2021, respectively.
(b) Effective in the fourth quarter of 2022, Consumer & Business Banking was renamed Banking & Wealth Management.
(c) Included MSR risk management results of $54 million and $(145) million for the three months ended September 30, 2022 and 2021, respectively, and $191 million and $(363) million for the nine months ended September 30, 2022 and 2021, respectively.
(d) In the first quarter of 2022, the Firm changed its methodology for allocating income taxes to the LOBs, with no impact to Firmwide net income. Prior-period amounts have been revised to conform with the current presentation.

Quarterly results

Net income was $4.3 billion, relatively flat compared to the prior year.

Net revenue was $14.3 billion, an increase of 14%.

Net interest income was $10.6 billion, up 26%, driven by:

- higher margins and growth in deposits in CBB, and higher revolving loans in Card,

partially offset by

- a reduction associated with PPP loan forgiveness in CBB and lower NII in Home Lending predominantly due to tighter loan spreads.

Noninterest revenue was $3.8 billion, down 9%, driven by:

- lower production revenue from lower margins and volume in Home Lending, and
- lower auto operating lease income as a result of a decline in volume,

partially offset by

- higher net mortgage servicing revenue due to a net gain in MSR risk management compared with a net loss in the prior year driven by updates to model inputs,
- higher travel-related commissions,
- a gain on warrants associated with an equity investment, and
- card income was relatively flat as the impact from the increase in debit and credit card sales volume was offset by higher amortization related to new account origination costs.

Refer to Note 14 for further information regarding changes in the value of the MSR asset and related hedges, and mortgage fees and related income. Refer to Note 5 for additional information on card income.

Noninterest expense was $8.0 billion, up 11%, reflecting:

- investments in the business and increased structural expenses, predominantly driven by compensation, marketing and technology,

partially offset by

- lower volume- and revenue-related expenses driven by lower depreciation expense on lower auto lease assets.

The provision for credit losses was $529 million, reflecting:

- net charge-offs of $679 million, up $188 million, largely driven by loan growth in Card,

partially offset by

- a $150 million reserve release in Home Lending.

The allowance for loan losses in Card was flat as the addition to the allowance resulting from higher outstanding balances was offset by a reduction related to a decrease in uncertainty associated with borrower behavior as the effects of the pandemic gradually recede.

The prior year included a $950 million reduction in the allowance for credit losses across CCB.

Refer to Credit and Investment Risk Management on pages 57-76 and Allowance for Credit Losses on pages 73-75 for a further discussion of the credit portfolios and the allowance for credit losses.

Year-to-date results

Net income was $10.3 billion, down 38%, predominantly driven by a net increase in the provision for credit losses compared with a net benefit in the prior year.

Net revenue was $39.2 billion, an increase of 4%.

Net interest income was $27.6 billion, up 13%, predominantly driven by:

- growth in deposits and higher margins in CBB, and higher revolving loans in Card,

partially offset by

- a reduction associated with PPP loan forgiveness in CBB, and lower NII in Home Lending driven by tighter loan spreads.

Noninterest revenue was $11.6 billion, down 14%, driven by:

- lower production revenue from lower margins and volume in Home Lending,
- lower card income reflecting higher amortization related to new account origination costs, and
- lower auto operating lease income as a result of a decline in volume,

partially offset by

- higher net mortgage servicing revenue due to a net gain in MSR risk management compared with a net loss in the prior year driven by updates to model inputs and higher operating revenue on a higher level of third-party loans serviced,
- higher asset management, administration and commissions revenue predominantly driven by travel-related commissions and increased annuity sales, and
- higher deposit-related fees due to higher service fee volume.

Noninterest expense was $23.5 billion, up 9%, reflecting:

- investments in the business and increased structural expenses, largely driven by compensation, marketing and technology,

partially offset by

- lower volume- and revenue-related expenses, largely driven by lower depreciation expense on lower auto lease assets, partially offset by higher operating losses.

The provision for credit losses was $2.0 billion, reflecting:

- net charge-offs of $1.8 billion, down $403 million, driven by Card, reflecting the ongoing financial strength of U.S. consumers. However, median deposit balances continue to decline, impacted by the growth in consumer spending, and
- a $125 million net addition to the allowance for credit losses driven by Card, reflecting higher outstanding balances, predominantly offset by a reduction related to a decrease in uncertainty associated with borrower behavior as the effects of the pandemic gradually recede.

The prior year included an $8.2 billion reduction in the allowance for credit losses across CCB.

Selected metrics

(in millions, except headcount)	As of or for the three months ended September 30, 2022	2021	Change	As of or for the nine months ended September 30, 2022	2021	Change
Selected balance sheet data (period-end)						
Total assets	**$ 500,752**	$ 493,169	2%	**$ 500,752**	$ 493,169	2 %
Loans:						
Consumer & Business Banking[a]	**30,230**	40,659	(26)	**30,230**	40,659	(26)
Home Lending[b]	**174,618**	179,489	(3)	**174,618**	179,489	(3)
Card	**170,462**	143,166	19	**170,462**	143,166	19
Auto	**67,201**	68,391	(2)	**67,201**	68,391	(2)
Total loans	**442,511**	431,705	3	**442,511**	431,705	3
Deposits	**1,173,241**	1,093,852	7	**1,173,241**	1,093,852	7
Equity	**50,000**	50,000	–	**50,000**	50,000	–
Selected balance sheet data (average)						
Total assets	**$ 498,858**	$ 491,512	1	**$ 494,704**	$ 487,107	2
Loans:						
Consumer & Business Banking	**30,788**	43,256	(29)	**32,264**	47,469	(32)
Home Lending[c]	**176,852**	181,150	(2)	**176,891**	180,276	(2)
Card	**168,125**	141,950	18	**158,721**	137,687	15
Auto	**66,979**	67,785	(1)	**68,258**	67,313	1
Total loans	**442,744**	434,141	2	**436,134**	432,745	1
Deposits	**1,174,227**	1,076,323	9	**1,169,474**	1,034,947	13
Equity	**50,000**	50,000	–	**50,000**	50,000	–
Headcount	**133,803**	126,586	6%	**133,803**	126,586	6 %

(a) At September 30, 2022 and 2021, included $791 million and $11.1 billion of loans, respectively, in Business Banking under the PPP. Refer to Credit Portfolio on page 109 of JPMorgan Chase's 2021 Form 10-K for a further discussion on the PPP.
(b) At September 30, 2022 and 2021, Home Lending loans held-for-sale and loans at fair value were $4.1 billion and $14.5 billion, respectively.
(c) Average Home Lending loans held-for sale and loans at fair value were $5.9 billion and $17.1 billion for the three months ended September 30, 2022 and 2021, respectively, and $8.3 billion and $14.6 billion for the nine months ended September 30, 2022 and 2021, respectively.

Selected metrics

(in millions, except ratio data)	As of or for the three months ended September 30, 2022	2021	Change	As of or for the nine months ended September 30, 2022	2021	Change
Credit data and quality statistics						
Nonaccrual loans[(a)(b)(c)]	**$ 3,936**	$ 5,000	(21)%	**$ 3,936**	$ 5,000	(21)%
Net charge-offs/(recoveries)						
Consumer & Business Banking	**105**	66	59	**275**	203	35
Home Lending	**(59)**	(74)	20	**(196)**	(204)	4
Card	**592**	495	20	**1,678**	2,233	(25)
Auto	**41**	4	NM	**86**	14	NM
Total net charge-offs/(recoveries)	**$ 679**	$ 491	38	**$ 1,843**	$ 2,246	(18)
Net charge-off/(recovery) rate						
Consumer & Business Banking[(d)]	**1.35 %**	0.61 %		**1.14 %**	0.57 %	
Home Lending	**(0.14)**	(0.18)		**(0.16)**	(0.16)	
Card	**1.40**	1.39		**1.41**	2.18	
Auto	**0.24**	0.02		**0.17**	0.03	
Total net charge-off/(recovery) rate	**0.62 %**	0.47 %		**0.58 %**	0.72 %	
30+ day delinquency rate						
Home Lending[(e)(f)]	**0.78 %**	1.06 %		**0.78 %**	1.06 %	
Card	**1.23**	1.00		**1.23**	1.00	
Auto	**0.75**	0.46		**0.75**	0.46	
90+ day delinquency rate - Card	**0.57 %**	0.49 %		**0.57 %**	0.49 %	
Allowance for loan losses						
Consumer & Business Banking	**$ 722**	$ 797	(9)	**$ 722**	$ 797	(9)
Home Lending	**667**	630	6	**667**	630	6
Card	**10,400**	11,650	(11)	**10,400**	11,650	(11)
Auto	**715**	813	(12)	**715**	813	(12)
Total allowance for loan losses	**$ 12,504**	$ 13,890	(10)%	**$ 12,504**	$ 13,890	(10)%

(a) At September 30, 2022 and 2021, nonaccrual loans excluded mortgage loans 90 or more days past due and insured by U.S. government agencies of $219 million and $355 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 September 30, 2022 and 2021, generally excludes loans that were under payment deferral programs offered in response to the COVID-19 pandemic. Refer to Consumer Credit Portfolio on pages 110-116 of JPMorgan Chase's 2021 Form 10-K for further information on consumer payment assistance activity. Includes loans to customers that have exited COVID-19 related payment deferral programs and are 90 or more days past due, predominantly all of which were considered collateral-dependent at time of exit.

(c) At September 30, 2022 and 2021, nonaccrual loans excluded $57 million and $5 million of PPP loans 90 or more days past due and guaranteed by the SBA, respectively.

(d) At September 30, 2022 and 2021, included $791 million and $11.1 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 page 109 of JPMorgan Chase's 2021 Form 10-K for a further discussion of the PPP.

(e) At September 30, 2022 and 2021, the principal balance of loans under payment deferral programs offered in response to the COVID-19 pandemic was $454 million and $3.1 billion in Home Lending, respectively. Loans that are performing according to their modified terms are generally not considered delinquent. Refer to Consumer Credit Portfolio on pages 110-116 of JPMorgan Chase's 2021 Form 10-K for further information on consumer payment assistance activity.

(f) At September 30, 2022 and 2021, excluded mortgage loans insured by U.S. government agencies of $284 million and $432 million, respectively, that are 30 or more days past due. These amounts have been excluded based upon the government guarantee.

Selected metrics

(in billions, except ratios and where otherwise noted)	As of or for the three months ended September 30, 2022	2021	Change	As of or for the nine months ended September 30, 2022	2021	Change
Business Metrics						
Number of branches	**4,802**	4,854	(1)%	**4,802**	4,854	(1)%
Active digital customers (in thousands)[a]	**61,985**	57,961	7	**61,985**	57,961	7
Active mobile customers (in thousands)[b]	**48,904**	44,333	10	**48,904**	44,333	10
Debit and credit card sales volume	**$ 395.8**	$ 349.9	13	**$ 1,144.3**	$ 984.5	16
Consumer & Business Banking						
Average deposits	**$ 1,156.9**	$ 1,056.3	10	**$ 1,152.2**	$ 1,015.5	13
Deposit margin	**1.83 %**	1.29 %		**1.46 %**	1.29 %	
Business banking origination volume	**$ 1.0**	$ 0.8	17	**$ 3.2**	$ 13.1 [f]	(75)
Client investment assets[c]	**615.0**	681.5	(10)	**615.0**	681.5	(10)
Number of client advisors	**5,017**	4,689	7	**5,017**	4,689	7
Home Lending						
Mortgage origination volume by channel						
Retail	**$ 7.8**	$ 23.7	(67)	**$ 33.9**	$ 69.4	(51)
Correspondent	**4.3**	17.9	(76)	**24.8**	51.1	(51)
Total mortgage origination volume[d]	**$ 12.1**	$ 41.6	(71)	**$ 58.7**	$ 120.5	(51)
Third-party mortgage loans serviced (period-end)	**$ 586.7**	$ 509.3	15	**586.7**	$ 509.3	15
MSR carrying value (period-end)	**8.1**	5.3	53	**8.1**	5.3	53
Ratio of MSR carrying value (period-end) to third-party mortgage loans serviced (period-end)	**1.38 %**	1.04 %		**1.38 %**	1.04 %	
MSR revenue multiple[e]	**4.93 x**	3.85 x		**4.93 x**	3.85 x	
Credit Card						
Credit card sales volume, excluding commercial card	**$ 272.3**	$ 232.0	17	**$ 779.9**	$ 639.4	22
Net revenue rate	**9.92 %**	9.74 %		**9.79 %**	10.84 %	
Auto						
Loan and lease origination volume	**$ 7.5**	$ 11.5	(35)	**$ 22.9**	$ 35.1	(35)
Average auto operating lease assets	**13.5**	18.8	(28)%	**14.9**	19.5	(24)%

(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) 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 38-41 for additional information.
(d) Firmwide mortgage origination volume was $15.2 billion and $46.1 billion for the three months ended September 30, 2022 and 2021, respectively, and $73.3 billion and $134.2 billion for the nine months ended September 30, 2022 and 2021, respectively.
(e) Represents the ratio of MSR carrying value (period-end) to third-party mortgage loans serviced (period-end) divided by the ratio of annualized loan servicing-related revenue to third-party mortgage loans serviced (average).
(f) Included origination volume under the PPP of $10.6 billion for the nine months ended September 30, 2021. The program ended on May 31, 2021 for new applications.

CORPORATE & INVESTMENT BANK

Refer to pages 67-72 of JPMorgan Chase's 2021 Form 10-K and Line of Business Metrics on page 190 for a further discussion of the business profile of CIB.

Selected income statement data

	Three months ended September 30,			Nine months ended September 30,		
(in millions, except ratios)	**2022**	2021	Change	**2022**	2021	Change
Revenue						
Investment banking fees	**$ 1,762**	$ 3,297	(47)%	**$ 5,462**	$ 9,857	(45)%
Principal transactions	**5,258**	3,577	47	**15,529**	13,648	14
Lending- and deposit-related fees	**589**	634	(7)	**1,871**	1,860	1
Asset management, administration and commissions	**1,198**	1,240	(3)	**3,867**	3,772	3
All other income	**424**	313	35	**1,208**	924	31
Noninterest revenue	**9,231**	9,061	2	**27,937**	30,061	(7)
Net interest income	**2,644**	3,335	(21)	**9,414**	10,154	(7)
Total net revenue[a]	**11,875**	12,396	(4)	**37,351**	40,215	(7)
Provision for credit losses	**513**	(638)	NM	**1,017**	(1,048)	NM
Noninterest expense						
Compensation expense	**3,311**	2,827	17	**10,827**	10,738	1
Noncompensation expense	**3,307**	3,044	9	**9,834**	8,760	12
Total noninterest expense	**6,618**	5,871	13	**20,661**	19,498	6
Income before income tax expense	**4,744**	7,163	(34)	**15,673**	21,765	(28)
Income tax expense	**1,212**	1,516 [b]	(20)	**4,031**	5,174 [b]	(22)
Net income	**$ 3,532**	$ 5,647 [b]	(37)%	**$ 11,642**	$ 16,591 [b]	(30)%
Financial ratios						
Return on equity	**13 %**	26 %		**14 %**	26 % [b]	
Overhead ratio	**56**	47		**55**	48	
Compensation expense as percentage of total net revenue	**28**	23		**29**	27	

(a) 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 $626 million and $641 million for the three months ended September 30, 2022 and 2021, respectively, and $2.1 billion for both the nine months ended September 30, 2022 and 2021.

(b) In the first quarter of 2022, the Firm changed its methodology for allocating income taxes to the LOBs, with no impact to Firmwide net income. Prior-period amounts have been revised to conform with the current presentation.

Selected income statement data

	Three months ended September 30,			Nine months ended September 30,		
(in millions)	**2022**	2021	Change	**2022**	2021	Change
Revenue by business						
Investment Banking	**$ 1,713**	$ 3,025	(43)%	**$ 5,121**	$ 9,300	(45)%
Payments	**1,989**	1,624	22	**5,306**	4,469	19
Lending	**323**	244	32	**1,054**	738	43
Total Banking	**4,025**	4,893	(18)	**11,481**	14,507	(21)
Fixed Income Markets	**4,469**	3,672	22	**14,878**	13,531	10
Equity Markets	**2,302**	2,597	(11)	**8,436**	8,575	(2)
Securities Services	**1,110**	1,126	(1)	**3,329**	3,264	2
Credit Adjustments & Other[a]	**(31)**	108	NM	**(773)**	338	NM
Total Markets & Securities Services	**7,850**	7,503	5	**25,870**	25,708	1
Total net revenue	**$ 11,875**	$ 12,396	(4)%	**$ 37,351**	$ 40,215	(7)%

(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.

Quarterly results

Net income was $3.5 billion, down 37%.

Net revenue was $11.9 billion, down 4%.

Banking revenue was $4.0 billion, down 18%.

- Investment Banking revenue was $1.7 billion, down 43%, driven by lower Investment Banking fees, down 47%, reflecting lower fees across products. The Firm ranked #1 for Global Investment Banking fees, according to Dealogic.
  - Equity underwriting fees were $290 million, down 72%, and debt underwriting fees were $624 million, down 40%, as volatile market conditions resulted in lower issuance activity.
  - Advisory fees were $848 million, down 31%, driven by a lower level of announced deals.
- Payments revenue was $2.0 billion, up 22%, and included the net impact of equity investments. Excluding this net impact, Payments revenue was $ 2.1 billion, up 41%, driven by improved deposit margins and growth in fees on higher volumes.
- Lending revenue was $323 million, up 32%, driven by higher net interest income on higher loans.

Markets & Securities Services revenue was $7.9 billion, up 5%. Markets revenue was $6.8 billion, up 8%.

- Fixed Income Markets revenue was $4.5 billion, up 22%, as elevated volatility drove strong performance in the macro businesses, particularly in Currencies & Emerging Markets and Rates, partially offset by lower revenue in Securitized Products.
- Equity Markets revenue was $2.3 billion, down 11%, predominantly driven by lower revenue across products compared to a record third quarter in the prior year.
- Securities Services revenue was $1.1 billion, down 1%, driven by lower market levels and lower deposits, predominantly offset by improved deposit margins.
- Credit Adjustments & Other was a loss of $31 million, compared with a gain of $108 million in the prior year.

Noninterest expense was $6.6 billion, up 13%, predominantly driven by higher structural expense, investments in the business and revenue-related expense, including compensation.

The provision for credit losses was $513 million, predominantly driven by an addition to the allowance for credit losses associated with loan and lending-related commitment activity and the impact of updates to the Firm's macroeconomic scenarios.

The provision for credit losses in the prior year was a net benefit of $638 million.

Refer to Credit and Investment Risk Management on pages 57-76 and Allowance for Credit Losses on pages 73-75 for further discussions of the credit portfolios and the allowance for credit losses.

Year-to-date results

Net income was $11.6 billion, down 30%.

Net revenue was $37.4 billion, down 7%.

Banking revenue was $11.5 billion, down 21%.

- Investment Banking revenue was $5.1 billion, down 45%, driven by lower Investment Banking fees, down 45%, reflecting lower fees across products, and $225 million of markdowns on held-for-sale positions, primarily unfunded commitments, in the bridge financing portfolio in the second quarter of 2022. The Firm ranked #1 for Global Investment Banking fees, according to Dealogic.
  - Equity underwriting fees were $784 million, down 75%, and debt underwriting fees were $2.4 billion, down 39%, as volatile market conditions resulted in lower issuance activity.
  - Advisory fees were $2.3 billion, down 18%, driven by a lower level of announced deals.
- Payments revenue was $5.3 billion, up 19%, and included the net impact of equity investments. Excluding this net impact, Payments revenue was $5.4 billion, up 25% driven by improved deposit margins and growth in fees on higher volumes.
- Lending revenue was $1.1 billion, up 43%, driven by higher net interest income on higher loans, as well as fair value gains on hedges of accrual loans, compared with losses in the prior year.

Markets & Securities Services revenue was $25.9 billion, up 1%. Markets revenue was $23.3 billion, up 5%.

- Fixed Income Markets revenue was $14.9 billion, up 10%, driven by higher revenue in macro businesses, particularly in Currencies & Emerging Markets, partially offset by lower revenue in Securitized Products.
- Equity Markets revenue was $8.4 billion, down 2%, driven by lower revenue in Cash Equities, largely offset by Derivatives.
- Securities Services revenue was $3.3 billion, up 2%, driven by improved deposit margins and growth in fees, largely offset by lower market levels and lower deposits.
- Credit Adjustments & Other was a loss of $773 million, reflecting funding spread widening, and to a lesser extent losses on exposure relating to commodities and Russia and Russia-associated counterparties, compared with a gain of $338 million in the prior year.

Noninterest expense was $20.7 billion, up 6%, predominantly driven by higher structural expense and investments in the business, including higher compensation, as well as higher legal expense, partially offset by lower volume- and revenue-related expense primarily revenue-related compensation.

The provision for credit losses was $1.0 billion, predominantly driven by a net addition to the allowance for credit losses, reflecting the impact of updates to the Firm's macroeconomic forecast and loan growth.

The provision for credit losses in the prior year was a net benefit of $1.0 billion, driven by a net reduction in the allowance for credit losses.

Selected metrics

(in millions, except headcount)	As of or for the three months ended September 30, 2022	2021	Change	As of or for the nine months ended September 30, 2022	2021	Change
Selected balance sheet data (period-end)						
Total assets	**$ 1,384,618**	$ 1,355,752	2 %	**$ 1,384,618**	$ 1,355,752	2 %
Loans:						
Loans retained[(a)]	**180,604**	151,211	19	**180,604**	151,211	19
Loans held-for-sale and loans at fair value[(b)]	**40,357**	52,436	(23)	**40,357**	52,436	(23)
Total loans	**220,961**	203,647	9	**220,961**	203,647	9
Equity	**103,000**	83,000	24	**103,000**	83,000	24
Selected balance sheet data (average)						
Total assets	**$ 1,403,247**	$ 1,331,240	5	**$ 1,413,662**	$ 1,332,244	6
Trading assets-debt and equity instruments	**386,895**	442,623	(13)	**405,655**	461,728	(12)
Trading assets-derivative receivables	**83,084**	64,730	28	**77,846**	69,159	13
Loans:						
Loans retained[(a)]	**$ 176,469**	$ 149,826	18	**$ 169,175**	$ 142,286	19
Loans held-for-sale and loans at fair value[(b)]	**45,150**	53,712	(16)	**48,176**	50,616	(5)
Total loans	**$ 221,619**	$ 203,538	9	**$ 217,351**	$ 192,902	13
Equity	**103,000**	83,000	24	**103,000**	83,000	24
Headcount	**71,797**	66,267	8 %	**71,797**	66,267	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 CIB Markets, including loans held for securitization.

Selected metrics

(in millions, except ratios)	As of or for the three months ended September 30, 2022	2021	Change	As of or for the nine months ended September 30, 2022	2021	Change
Credit data and quality statistics						
Net charge-offs/(recoveries)	**$ 17**	$ 2	NM	**$ 75**	$ (17)	NM
Nonperforming assets:						
Nonaccrual loans:						
Nonaccrual loans retained[(a)]	**$ 583**	$ 547	7	**$ 583**	$ 547	7
Nonaccrual loans held-for-sale and loans at fair value[(b)]	**824**	1,234	(33)	**824**	1,234	(33)
Total nonaccrual loans	**1,407**	1,781	(21)	**1,407**	1,781	(21)
Derivative receivables	**339**	393	(14)	**339**	393	(14)
Assets acquired in loan satisfactions	**85**	95	(11)	**85**	95	(11)
Total nonperforming assets	**$ 1,831**	$ 2,269	(19)	**$ 1,831**	$ 2,269	(19)
Allowance for credit losses:						
Allowance for loan losses	**$ 2,032**	$ 1,442	41	**$ 2,032**	$ 1,442	41
Allowance for lending-related commitments	**1,582**	1,426	11	**1,582**	1,426	11
Total allowance for credit losses	**$ 3,614**	$ 2,868	26 %	**$ 3,614**	$ 2,868	26 %
Net charge-off/(recovery) rate[(c)]	**0.04 %**	0.01 %		**0.06 %**	(0.02)%	
Allowance for loan losses to period-end loans retained	**1.13**	0.95		**1.13**	0.95	
Allowance for loan losses to period-end loans retained, excluding trade finance and conduits[(d)]	**1.49**	1.29		**1.49**	1.29	
Allowance for loan losses to nonaccrual loans retained[(a)]	**349**	264		**349**	264	
Nonaccrual loans to total period-end loans	**0.64 %**	0.87 %		**0.64 %**	0.87 %	

(a) Allowance for loan losses of $111 million and $138 million were held against these nonaccrual loans at September 30, 2022 and 2021, respectively.
(b) At September 30, 2022 and 2021, nonaccrual loans excluded mortgage loans 90 or more days past due and insured by U.S. government agencies of $143 million and $289 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.

Investment banking fees

(in millions)	Three months ended September 30, 2022	2021	Change	Nine months ended September 30, 2022	2021	Change
Advisory	**$ 848**	$ 1,228	(31)%	**$ 2,313**	$ 2,824	(18)%
Equity underwriting	**290**	1,032	(72)	**784**	3,151	(75)
Debt underwriting[(a)]	**624**	1,037	(40)	**2,365**	3,882	(39)
Total investment banking fees	**$ 1,762**	$ 3,297	(47)%	**$ 5,462**	$ 9,857	(45)%

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

League table results – wallet share

	Three months ended September 30,				Nine months ended September 30,				Full-year 2021	
	2022		2021		**2022**		2021			
	Rank	Share	Rank	Share	Rank	Share	Rank	Share	Rank	Share
Based on fees[(a)]										
M&A[(b)]										
Global	**# 2**	**9.6 %**	# 2	9.1 %	**# 2**	**8.2 %**	# 2	8.9 %	# 2	9.6 %
U.S.	**3**	**9.1**	3	10.0	**2**	**8.8**	2	9.7	2	10.7
Equity and equity-related[(c)]										
Global	**2**	**5.8**	2	9.7	**2**	**5.8**	2	9.3	2	8.8
U.S.	**1**	**15.6**	2	12.9	**1**	**14.2**	2	11.8	2	11.7
Long-term debt[(d)]										
Global	**2**	**6.4**	2	7.5	**1**	**7.4**	1	8.7	1	8.4
U.S.	**2**	**12.2**	2	10.6	**1**	**12.3**	1	12.5	1	12.1
Loan syndications										
Global	**1**	**9.8**	2	8.7	**1**	**11.1**	1	11.2	1	10.9
U.S.	**1**	**12.8**	2	10.2	**1**	**11.9**	1	13.1	1	12.6
Global investment banking fees[(e)]	**# 1**	**8.1 %**	# 2	8.8 %	**# 1**	**8.1 %**	# 1	9.3 %	# 1	9.3 %

(a) Source: Dealogic as of October 3, 2022. 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 5 and 6 for a description of the composition of these income statement line items. Refer to Markets revenue on page 70 of JPMorgan Chase's 2021 Form 10-K for further information.

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

	Three months ended September 30,			Three months ended September 30,		
	2022			2021		
(in millions)	Fixed Income Markets	Equity Markets	Total Markets	Fixed Income Markets	Equity Markets	Total Markets
Principal transactions	**$ 3,113**	**$ 2,070**	**$ 5,183**	$ 1,624	$ 1,864	$ 3,488
Lending- and deposit-related fees	**75**	**7**	**82**	83	4	87
Asset management, administration and commissions	**141**	**458**	**599**	127	467	594
All other income	**211**	**(11)**	**200**	173	(40)	133
Noninterest revenue	**3,540**	**2,524**	**6,064**	2,007	2,295	4,302
Net interest income	**929**	**(222)**	**707**	1,665	302	1,967
Total net revenue	**$ 4,469**	**$ 2,302**	**$ 6,771**	$ 3,672	$ 2,597	$ 6,269

	Nine months ended September 30,			Nine months ended September 30,		
	2022			2021		
(in millions)	Fixed Income Markets	Equity Markets	Total Markets	Fixed Income Markets	Equity Markets	Total Markets
Principal transactions	**$ 9,436**	**$ 6,802**	**$ 16,238**	$ 7,113	$ 6,225	$ 13,338
Lending- and deposit-related fees	**229**	**15**	**244**	234	12	246
Asset management, administration and commissions	**425**	**1,535**	**1,960**	377	1,496	1,873
All other income	**494**	**(96)**	**398**	532	(60)	472
Noninterest revenue	**10,584**	**8,256**	**18,840**	8,256	7,673	15,929
Net interest income	**4,294**	**180**	**4,474**	5,275	902	6,177
Total net revenue	**$ 14,878**	**$ 8,436**	**$ 23,314**	$ 13,531	$ 8,575	$ 22,106

Selected metrics

	As of or for the three months ended September 30,			As of or for the nine months ended September 30,		
(in millions, except where otherwise noted)	**2022**	2021	Change	**2022**	2021	Change
Assets under custody ("AUC") by asset class (period-end) (in billions):						
Fixed Income	**$ 14,025**	$ 15,799	(11)%	**$ 14,025**	$ 15,799	(11)%
Equity	**9,767**	12,276	(20)	**9,767**	12,276	(20)
Other[(a)]	**3,365**	3,887	(13)	**3,365**	3,887	(13)
Total AUC	**$ 27,157**	$ 31,962	(15)	**$ 27,157**	$ 31,962	(15)
Merchant processing volume (in billions)[(b)]	**$ 545.4**	$ 470.9	16	**$ 1,575.2**	$ 1,371.8	15
Client deposits and other third-party liabilities (average)[(c)]	**$ 669,215**	$ 714,376	(6)%	**$ 700,095**	$ 714,039	(2)%

(a) Consists of mutual funds, unit investment trusts, currencies, annuities, insurance contracts, options and other contracts.
(b) Represents total merchant processing volume across CIB, CCB and CB.
(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 September 30, 2022	2021	Change	As of or for the nine months ended September 30, 2022	2021	Change
Total net revenue[a]						
Europe/Middle East/Africa	**$ 3,653**	$ 3,201	14 %	**$ 12,625**	$ 11,045	14 %
Asia-Pacific	**2,060**	1,973	4	**6,068**	6,026	1
Latin America/Caribbean	**549**	526	4	**1,690**	1,480	14
Total international net revenue	**6,262**	5,700	10	**20,383**	18,551	10
North America	**5,613**	6,696	(16)	**16,968**	21,664	(22)
Total net revenue	**$ 11,875**	$ 12,396	(4)	**$ 37,351**	$ 40,215	(7)
Loans retained (period-end)[a]						
Europe/Middle East/Africa	**$ 38,244**	$ 32,922	16	**$ 38,244**	$ 32,922	16
Asia-Pacific	**16,670**	14,544	15	**16,670**	14,544	15
Latin America/Caribbean	**8,035**	6,495	24	**8,035**	6,495	24
Total international loans	**62,949**	53,961	17	**62,949**	53,961	17
North America	**117,655**	97,250	21	**117,655**	97,250	21
Total loans retained	**$ 180,604**	$ 151,211	19	**$ 180,604**	$ 151,211	19
Client deposits and other third-party liabilities (average)[b]						
Europe/Middle East/Africa	**$ 240,548**	$ 245,895	(2)	**$ 253,300**	$ 243,279	4
Asia-Pacific	**123,024**	131,110	(6)	**129,059**	131,836	(2)
Latin America/Caribbean	**38,231**	47,374	(19)	**41,207**	46,607	(12)
Total international	**$ 401,803**	$ 424,379	(5)	**$ 423,566**	$ 421,722	–
North America	**267,412**	289,997	(8)	**276,529**	292,317	(5)
Total client deposits and other third-party liabilities	**$ 669,215**	$ 714,376	(6)	**$ 700,095**	$ 714,039	(2)
AUC (period-end)[b] **(in billions)**						
North America	**$ 18,285**	$ 20,792	(12)	**$ 18,285**	$ 20,792	(12)
All other regions	**8,872**	11,170	(21)	**8,872**	11,170	(21)
Total AUC	**$ 27,157**	$ 31,962	(15)%	**$ 27,157**	$ 31,962	(15)%

(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.

COMMERCIAL BANKING

Refer to pages 73-75 of JPMorgan Chase's 2021 Form 10-K and Line of Business Metrics on page 191 for a discussion of the business profile of CB.

Selected income statement data

(in millions)	Three months ended September 30, 2022	2021	Change	Nine months ended September 30, 2022	2021	Change
Revenue						
Lending- and deposit-related fees	$ 288	$ 355	(19)%	$ 1,000	$ 1,036	(3)%
All other income	548	633	(13)	1,607	1,819	(12)
Noninterest revenue	836	988	(15)	2,607	2,855	(9)
Net interest income	2,212	1,532	44	5,522	4,541	22
Total net revenue[(a)]	3,048	2,520	21	8,129	7,396	10
Provision for credit losses	618	(363)	NM	984	(858)	NM
Noninterest expense						
Compensation expense	577	511	13	1,689	1,477	14
Noncompensation expense	603	521	16	1,776	1,505	18
Total noninterest expense	1,180	1,032	14	3,465	2,982	16
Income before income tax expense	1,250	1,851	(32)	3,680	5,272	(30)
Income tax expense	304	442 (b)	(31)	890	1,260 (b)	(29)
Net income	$ 946	$ 1,409 (b)	(33)%	$ 2,790	$ 4,012 (b)	(30)%

(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 $80 million for both the three months ended September 30, 2022 and 2021 and $222 million and $231 million for the nine months ended September 30, 2022 and 2021, respectively.

(b) In the first quarter of 2022, the Firm changed its methodology for allocating income taxes to the LOBs, with no impact to Firmwide net income. Prior-period amounts have been revised to conform with the current presentation.

Selected income statement data (continued)

(in millions, except ratios)	Three months ended September 30, 2022	2021	Change	Nine months ended September 30, 2022	2021	Change
Revenue by product						
Lending	$ 1,176	$ 1,138	3 %	$ 3,339	$ 3,478	(4)%
Payments	1,568	947	66	3,754	2,704	39
Investment banking[(a)]	274	416	(34)	816	1,136	(28)
Other	30	19	58	220	78	182
Total net revenue	$ 3,048	$ 2,520	21	$ 8,129	$ 7,396	10
Investment banking revenue, gross[(b)]	$ 761	$ 1,343	(43)	$ 2,278	$ 3,636	(37)
Revenue by client segments						
Middle Market Banking	$ 1,366	$ 1,017	34	$ 3,515	$ 2,942	19
Corporate Client Banking	1,052	878	20	2,809	2,580	9
Commercial Real Estate Banking	624	602	4	1,795	1,805	(1)
Other	6	23	(74)	10	69	(86)
Total net revenue	$ 3,048	$ 2,520	21 %	$ 8,129	$ 7,396	10 %
Financial ratios						
Return on equity	14 %	22 %		14 %	21 %	
Overhead ratio	39	41		43	40	

(a) Includes CB's share of revenue from investment banking products sold to CB clients through the CIB.

(b) Refer to Business Segment Results on page 21 for discussion of revenue sharing.

Quarterly results

Net income was $946 million, down 33%, reflecting a net increase in the provision for credit losses compared with a net benefit in the prior year.

Net revenue was $3.0 billion, up 21% compared to the prior year. Net interest income was $2.2 billion, up 44%, driven by the impact of higher deposit margins and growth in loans, predominantly offset by the impact of higher funding costs on loans and lower deposits.

Noninterest revenue was $836 million, down 15%, driven by lower investment banking revenue and deposit-related fees, partially offset by mark-ups on held-for-sale positions, primarily unfunded commitments in the bridge financing portfolio.

Noninterest expense was $1.2 billion, up 14%, largely driven by higher structural and volume- and revenue-related expense, including compensation.

The provision for credit losses was $618 million, reflecting a net addition to the allowance for credit losses, largely driven by growth in loans and lending-related commitments and the impact of updates to the Firm's macroeconomic scenarios, compared with a net benefit of $363 million in the prior year.

Refer to Credit and Investment Risk Management on pages 57-76 and Allowance for Credit Losses on pages 73-75 for further discussions of the credit portfolios and the allowance for credit losses.

Year-to-date results

Net income was $2.8 billion, down 30%, reflecting a net increase in the provision for credit losses compared with a net benefit in the prior year.

Net revenue was $8.1 billion, up 10% compared to the prior year. Net interest income was $5.5 billion, up 22%, driven by the impact of higher deposit margins and growth in loans, largely offset by the impact of higher funding costs on loans.

Noninterest revenue was $2.6 billion, down 9%, driven by lower investment banking revenue and net markdowns on held-for-sale positions, primarily unfunded commitments, in the bridge financing portfolio, partially offset by a gain on an equity method investment received in partial satisfaction of a loan.

Noninterest expense was $3.5 billion, up 16%, predominantly driven by higher volume- and revenue-related and structural expense, including compensation.

The provision for credit losses was $1.0 billion, reflecting a net addition to the allowance for credit losses, driven by growth in loans and lending-related commitments and the impact of updates to the Firm's macroeconomic forecast, compared with a net benefit of $858 million in the prior year.

Selected metrics

(in millions, except headcount)	As of or for the three months ended September 30, 2022	2021	Change	As of or for the nine months ended September 30, 2022	2021	Change
Selected balance sheet data (period-end)						
Total assets	**$ 247,485**	$ 227,670	9 %	**$ 247,485**	$ 227,670	9 %
Loans:						
Loans retained	**231,829**	201,283	15	**231,829**	201,283	15
Loans held-for-sale and loans at fair value	**137**	3,412	(96)	**137**	3,412	(96)
Total loans	**$ 231,966**	$ 204,695	13	**$ 231,966**	$ 204,695	13
Equity	**25,000**	24,000	4	**25,000**	24,000	4
Period-end loans by client segment						
Middle Market Banking[(a)]	**$ 71,707**	$ 58,918	22	**$ 71,707**	$ 58,918	22
Corporate Client Banking	**52,940**	45,107	17	**52,940**	45,107	17
Commercial Real Estate Banking	**107,241**	100,458	7	**107,241**	100,458	7
Other	**78**	212	(63)	**78**	212	(63)
Total loans[(a)]	**$ 231,966**	$ 204,695	13	**$ 231,966**	$ 204,695	13
Selected balance sheet data (average)						
Total assets	**$ 246,318**	$ 222,760	11	**$ 239,772**	$ 224,955	7
Loans:						
Loans retained	**227,539**	199,789	14	**218,255**	202,002	8
Loans held-for-sale and loans at fair value	**1,589**	2,790	(43)	**1,578**	2,840	(44)
Total loans	**$ 229,128**	$ 202,579	13	**$ 219,833**	$ 204,842	7
Average loans by client segment						
Middle Market Banking	**$ 70,002**	$ 59,032	19	**$ 66,387**	$ 60,243	10
Corporate Client Banking	**52,432**	43,330	21	**48,645**	44,154	10
Commercial Real Estate Banking	**106,546**	100,120	6	**104,659**	100,213	4
Other	**148**	97	53	**142**	232	(39)
Total loans	**$ 229,128**	$ 202,579	13	**$ 219,833**	$ 204,842	7
Client deposits and other third-party liabilities	**$ 281,336**	$ 300,595	(6)	**$ 299,430**	$ 293,981	2
Equity	**25,000**	24,000	4	**25,000**	24,000	4
Headcount	**14,299**	12,584	14 %	**14,299**	12,584	14 %

(a) At September 30, 2022 and 2021, total loans included $205 million and $2.0 billion of loans, respectively, under the PPP, of which $187 million and $1.9 billion were in Middle Market Banking, respectively. Refer to Credit Portfolio on page 109 of JPMorgan Chase's 2021 Form 10-K for a further discussion of the PPP.

Selected metrics (continued)

(in millions, except ratios)	As of or for the three months ended September 30, 2022	2021	Change	As of or for the nine months ended September 30, 2022	2021	Change
Credit data and quality statistics						
Net charge-offs/(recoveries)	**$ 42**	$ 31	35 %	**$ 49**	$ 63	(22)%
Nonperforming assets						
Nonaccrual loans:						
Nonaccrual loans retained[(a)]	**$ 836** [(c)]	$ 735	14 %	**$ 836**	$ 735	14 %
Nonaccrual loans held-for-sale and loans at fair value	**—**	—	—	**—**	—	—
Total nonaccrual loans	**$ 836**	$ 735	14	**$ 836**	$ 735	14
Assets acquired in loan satisfactions	**7**	16	(56)	**7**	16	(56)
Total nonperforming assets	**$ 843**	$ 751	12	**$ 843**	$ 751	12
Allowance for credit losses:						
Allowance for loan losses	**$ 3,050**	$ 2,354	30	**$ 3,050**	$ 2,354	30
Allowance for lending-related commitments	**864**	711	22	**864**	711	22
Total allowance for credit losses	**$ 3,914**	$ 3,065	28 %	**$ 3,914**	$ 3,065	28 %
Net charge-off/(recovery) rate[(b)]	**0.07 %**	0.06 %		**0.03 %**	0.04 %	
Allowance for loan losses to period-end loans retained	**1.32**	1.17		**1.32**	1.17	
Allowance for loan losses to nonaccrual loans retained[(a)]	**365**	320		**365**	320	
Nonaccrual loans to period-end total loans	**0.36**	0.36		**0.36**	0.36	

(a) Allowance for loan losses of $150 million and $123 million was held against nonaccrual loans retained at September 30, 2022 and 2021, respectively.
(b) Loans held-for-sale and loans at fair value were excluded when calculating the net charge-off/(recovery) rate.
(c) At September 30, 2022, nonaccrual loans excluded $27 million of PPP loans 90 or more days past due and guaranteed by the SBA.

ASSET & WEALTH MANAGEMENT

Refer to pages 76-78 of JPMorgan Chase's 2021 Form 10-K and Line of Business Metrics on pages 191-192 for a discussion of the business profile of AWM.

Selected income statement data

	Three months ended September 30,			Nine months ended September 30,		
(in millions, except ratios)	**2022**	2021	Change	**2022**	2021	Change
Revenue						
Asset management, administration and commissions	**$ 3,044**	$ 3,096	(2)%	**$ 9,196**	$ 9,003	2 %
All other income	**82**	216	(62)	**253**	620	(59)
Noninterest revenue	**3,126**	3,312	(6)	**9,449**	9,623	(2)
Net interest income	**1,413**	988	43	**3,711**	2,861	30
Total net revenue	**4,539**	4,300	6	**13,160**	12,484	5
Provision for credit losses	**(102)**	(60)	(70)	**96**	(191)	NM
Noninterest expense						
Compensation expense	**1,649**	1,387	19	**4,687**	4,132	13
Noncompensation expense	**1,379**	1,375	–	**4,120**	3,790	9
Total noninterest expense	**3,028**	2,762	10	**8,807**	7,922	11
Income before income tax expense	**1,613**	1,598	1	**4,257**	4,753	(10)
Income tax expense	**394**	402 (a)	(2)	**1,026**	1,141 (a)	(10)
Net income	**$ 1,219**	$ 1,196 (a)	2	**$ 3,231**	$ 3,612 (a)	(11)
Revenue by line of business						
Asset Management	**$ 2,209**	$ 2,337	(5)	**$ 6,660**	$ 6,758	(1)
Global Private Bank	**2,330**	1,963	19	**6,500**	5,726	14
Total net revenue	**$ 4,539**	$ 4,300	6 %	**$ 13,160**	$ 12,484	5 %
Financial ratios						
Return on equity	**28 %**	33 %		**25 %**	34 %	
Overhead ratio	**67**	64		**67**	63	
Pre-tax margin ratio:						
Asset Management	**31**	36		**31**	36	
Global Private Bank	**40**	38		**34**	40	
Asset & Wealth Management	**36**	37		**32**	38	

(a) In the first quarter of 2022, the Firm changed its methodology for allocating income taxes to the LOBs, with no impact to Firmwide net income. Prior-period amounts have been revised to conform with the current presentation.

Quarterly results

Net income was $1.2 billion, up 2%.

Net revenue was $4.5 billion, up 6%. Net interest income was $1.4 billion, up 43%. Noninterest revenue was $3.1 billion, down 6%.

Revenue from Asset Management was $2.2 billion, down 5%, largely driven by:

- lower asset management fees reflecting a decline in market levels and the impact of net outflows, largely offset by the removal of most money market fund fee waivers, and
- net investment valuation losses compared to net gains in the prior year,

largely offset by

- higher performance fees.

Revenue from Global Private Bank was $2.3 billion, up 19%, driven by:

- improved margins and growth in deposits and to a lesser extent in loans,

partially offset by

- lower management fees reflecting a decline in market levels, largely offset by net inflows, and
- lower brokerage fees on reduced volume.

Noninterest expense was $3.0 billion, up 10%, driven by higher structural expense and investments in the business, largely compensation.

The provision for credit losses was a net benefit of $102 million, predominantly driven by a net reduction in the allowance for credit losses.

Refer to Credit and Investment Risk Management on pages 57-76 and Allowance for Credit Losses on pages 73-75 for further discussions of the credit portfolios and the allowance for credit losses.

Year-to-date results

Net income was $3.2 billion, down 11%.

Net revenue was $13.2 billion, up 5%. Net interest income was $3.7 billion, up 30%. Noninterest revenue was $9.4 billion, down 2%.

Revenue from Asset Management was $6.7 billion, down 1%, predominantly driven by:

net investment valuation losses compared to net gains in the prior year, largely offset by higher performance fees.

Revenue from Global Private Bank was $6.5 billion, up 14%, driven by:

- growth in deposits and loans as well as improved margins

partially offset by

- lower brokerage fees on reduced volume.

Noninterest expense was $8.8 billion, up 11%, predominantly driven by higher structural expense and investments in the business, largely compensation.

The provision for credit losses was $96 million, driven by a net addition to the allowance for credit losses, compared with a net benefit of $191 million in the prior year.

Selected metrics

	As of or for the three months ended September 30,			As of or for the nine months ended September 30,		
(in millions, except ranking data, headcount and ratios)	**2022**	2021	Change	**2022**	2021	Change
% of JPM mutual fund assets rated as 4- or 5-star[(a)]	**75 %**	70 %		**75 %**	70 %	
% of JPM mutual fund assets ranked in 1st or 2nd quartile:[(b)]						
1 year	**70**	60		**70**	60	
3 years	**76**	78		**76**	78	
5 years	**84**	78		**84**	78	
Selected balance sheet data (period-end)[(c)]						
Total assets	**$ 232,303**	$ 221,702	5 %	**$ 232,303**	$ 221,702	5 %
Loans	**214,989**	202,871	6	**214,989**	202,871	6
Deposits	**242,315**	242,309	–	**242,315**	242,309	–
Equity	**17,000**	14,000	21	**17,000**	14,000	21
Selected balance sheet data (average)[(c)]						
Total assets	**$ 232,748**	$ 219,022	6	**$ 233,209**	$ 213,679	9
Loans	**216,714**	200,635	8	**216,065**	194,888	11
Deposits	**253,026**	229,710	10	**269,754**	218,742	23
Equity	**17,000**	14,000	21	**17,000**	14,000	21
Headcount	**25,769**	22,051	17	**25,769**	22,051	17
Number of Global Private Bank client advisors	**3,110**	2,646	18	**3,110**	2,646	18
Credit data and quality statistics[(c)]						
Net charge-offs/(recoveries)	**$ (13)**	$ (1)	NM	**$ (5)**	$ 22	NM
Nonaccrual loans	**467**	686	(32)	**467**	686	(32)
Allowance for credit losses:						
Allowance for loan losses	**$ 461**	$ 402	15	**$ 461**	$ 402	15
Allowance for lending-related commitments	**21**	20	5	**21**	20	5
Total allowance for credit losses	**$ 482**	$ 422	14%	**$ 482**	$ 422	14 %
Net charge-off/(recovery) rate	**(0.02)%**	– %		**– %**	0.02 %	
Allowance for loan losses to period-end loans	**0.21**	0.20		**0.21**	0.20	
Allowance for loan losses to nonaccrual loans	**99**	59		**99**	59	
Nonaccrual loans to period-end loans	**0.22**	0.34		**0.22**	0.34	

(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.

Client assets

Client assets of $3.8 trillion and assets under management of $2.6 trillion were down 7% and 13%, respectively, driven by lower market levels and net outflows from liquidity products, partially offset by net inflows to long term products.

Client assets

(in billions)	As of September 30, 2022	2021	Change
Assets by asset class			
Liquidity	**$ 615**	$ 685	(10)%
Fixed income	**612**	695	(12)
Equity	**609**	725	(16)
Multi-asset	**577**	702	(18)
Alternatives	**203**	189	7
Total assets under management	**2,616**	2,996	(13)
Custody/brokerage/administration/deposits	**1,207**	1,100	10
Total client assets[(a)]	**$ 3,823**	$ 4,096	(7)
Assets by client segment			
Private Banking	**$ 698**	$ 773	(10)
Global Institutional	**1,209**	1,375	(12)
Global Funds	**709**	848	(16)
Total assets under management	**$ 2,616**	$ 2,996	(13)
Private Banking	**$ 1,848**	$ 1,817	2
Global Institutional	**1,261**	1,425	(12)
Global Funds	**714**	854	(16)
Total client assets[(a)]	**$ 3,823**	$ 4,096	(7)%

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

Client assets (continued)

(in billions)	Three months ended September 30, 2022	2021	Nine months ended September 30, 2022	2021
Assets under management rollforward				
Beginning balance	**$ 2,743**	$ 2,987	**$ 3,113**	$ 2,716
Net asset flows:				
Liquidity	**(36)**	(11)	**(88)**	48
Fixed income	**9**	11	**5**	36
Equity	**6**	16	**26**	67
Multi-asset	**(5)**	3	**(2)**	11
Alternatives	**2**	3	**8**	16
Market/performance/other impacts	**(103)**	(13)	**(446)**	102
Ending balance, September 30	**$ 2,616**	$ 2,996	**$ 2,616**	$ 2,996
Client assets rollforward				
Beginning balance	**$ 3,798**	$ 4,044	**$ 4,295**	$ 3,652
Net asset flows	**(15)**	75	**(21)**	280
Market/performance/other impacts	**40**	(23)	**(451)**	164
Ending balance, September 30	**$ 3,823**	$ 4,096	**$ 3,823**	$ 4,096

International

(in millions)	Three months ended September 30, 2022	2021	Change	Nine months ended September 30, 2022	2021	Change
Total net revenue [(a)]						
Europe/Middle East/Africa	**$ 868**	$ 905	(4)%	**$ 2,357**	$ 2,627	(10)%
Asia-Pacific	**458**	503	(9)	**1,370**	1,513	(9)
Latin America/Caribbean	**237**	229	3	**736**	659	12
Total international net revenue	**1,563**	1,637	(5)	**4,463**	4,799	(7)
North America	**2,976**	2,663	12	**8,697**	7,685	13
Total net revenue[(a)]	**$ 4,539**	$ 4,300	6 %	**$ 13,160**	$ 12,484	5 %

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

(in billions)	As of September 30, 2022	2021	Change	As of September 30, 2022	2021	Change
Assets under management						
Europe/Middle East/Africa	**$ 455**	$ 548	(17)%	**$ 455**	$ 548	(17)%
Asia-Pacific	**205**	246	(17)	**205**	246	(17)
Latin America/Caribbean	**67**	76	(12)	**67**	76	(12)
Total international assets under management	**727**	870	(16)	**727**	870	(16)
North America	**1,889**	2,126	(11)	**1,889**	2,126	(11)
Total assets under management	**$ 2,616**	$ 2,996	(13)	**$ 2,616**	$ 2,996	(13)
Client assets						
Europe/Middle East/Africa	**$ 566**	$ 669	(15)	**$ 566**	$ 669	(15)
Asia-Pacific	**306**	371	(18)	**306**	371	(18)
Latin America/Caribbean	**181**	181	–	**181**	181	–
Total international client assets	**1,053**	1,221	(14)	**1,053**	1,221	(14)
North America	**2,770**	2,875	(4)	**2,770**	2,875	(4)
Total client assets	**$ 3,823**	$ 4,096	(7)%	**$ 3,823**	$ 4,096	(7)%

CORPORATE

Refer to pages 79-80 of JPMorgan Chase's 2021 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 September 30, 2022	2021	Change	As of or for the nine months ended September 30, 2022	2021	Change
Revenue						
Principal transactions	**$ (76)**	$ (103)	26 %	**$ (220)**	$ 161	NM
Investment securities losses	**(959)**	(256)	(275)%	**(1,506)**	(397)	(279)%
All other income	**(59)**	117	NM	**43**	168	(74)
Noninterest revenue	**(1,094)**	(242)	(352)	**(1,683)**	(68)	NM
Net interest income	**792**	(1,054)	NM	**580**	(2,870)	NM
Total net revenue[(a)]	**(302)**	(1,296)	77	**(1,103)**	(2,938)	62
Provision for credit losses	**(21)**	(7)	(200)	**36**	58	(38)
Noninterest expense	**305**	160	91	**695**	1,551	(55)
Income/(loss) before income tax expense/(benefit)	**(586)**	(1,449)	60	**(1,834)**	(4,547)	60
Income tax expense/(benefit)	**(292)**	(533) [(c)]	45	**(510)**	(1,484) [(c)]	66
Net income/(loss)	**$ (294)**	$ (916) [(c)]	68	**$ (1,324)**	$ (3,063) [(c)]	57
Total net revenue						
Treasury and CIO	**$ (180)**	$ (1,198)	85	**$ (1,042)**	$ (2,984)	65
Other Corporate	**(122)**	(98)	(24)	**(61)**	46	NM
Total net revenue	**$ (302)**	$ (1,296)	77	**$ (1,103)**	$ (2,938)	62
Net income/(loss)						
Treasury and CIO	**$ (68)**	$ (998)	93	**$ (728)**	$ (2,629)	72
Other Corporate	**(226)**	82 [(c)]	NM	**(596)**	(434) [(c)]	(37)
Total net income/(loss)	**$ (294)**	$ (916) [(c)]	68	**$ (1,324)**	$ (3,063) [(c)]	57
Total assets (period-end)	**$ 1,408,726**	$ 1,459,283	(3)	**$ 1,408,726**	$ 1,459,283	(3)
Loans (period-end)	**2,206**	1,697	30	**2,206**	1,697	30
Deposits (period-end)	**14,449** [(b)]	546	NM	**14,449** [(b)]	546	NM
Headcount	**42,806**	38,302	12 %	**42,806**	38,302	12 %

(a) Included tax-equivalent adjustments, driven by tax-exempt income from municipal bonds, of $59 million and $64 million for the three months ended September 30, 2022 and 2021, respectively, and $177 million and $197 million for the nine months ended September 30, 2022 and 2021, respectively.
(b) Predominantly relates to the Firm's international consumer growth initiatives.
(c) In the first quarter of 2022, the Firm changed its methodology for allocating income taxes to the LOBs, with no impact to Firmwide net income. Prior-period amounts have been revised to conform with the current presentation.

Quarterly results

Net loss was $294 million, compared with a net loss of $916 million in the prior year.

Net revenue was a loss of $302 million, compared with a loss of $1.3 billion in the prior year, driven by higher net interest income due to higher rates, partially offset by lower noninterest revenue.

Noninterest revenue was a loss of $1.1 billion, compared with a loss of $242 million in the prior year, predominantly driven by:

- higher net investment securities losses on sales of U.S. GSE and government agency MBS and U.S. Treasuries, associated with repositioning the investment securities portfolios, and
- the impact of movements in foreign exchange rates on certain revenues, primarily as a result of the U.S. dollar strengthening,

partially offset by

- the impact of movements in foreign exchange rates related to net investment hedges in Treasury and CIO, primarily as a result of the strengthening of the U.S. dollar, and
- lower net losses on certain legacy private equity investments.

Noninterest expense of $305 million was up $145 million, predominantly driven by:

- higher investments, including the costs associated with the Firm's international consumer growth initiatives, and
- higher structural expense, including higher compensation predominantly offset by the impact of movements in foreign exchange rates on certain expenses, primarily as a result of the U.S. dollar strengthening.

The net impact of movements in foreign exchange rates associated with the foreign exchange risk that is transferred to Treasury and CIO on certain revenues and expenses was not material to net income.

The current period income tax benefit was predominantly driven by benefits related to tax audit settlements and the change in the level and mix of income and expenses subject to U.S. federal, state and local taxes that also impacted the Firm's tax reserves.

Year-to-date results

Net loss was $1.3 billion, compared with a net loss of $3.1 billion in the prior year.

Net revenue was a loss of $1.1 billion, compared with a loss of $2.9 billion in the prior year, driven by higher net interest income due to higher rates, partially offset by lower noninterest revenue.

Noninterest revenue was a loss of $1.7 billion, compared with a loss of $68 million in the prior year, driven by:

- higher net investment securities losses on sales of U.S. GSE and government agency MBS and U.S. Treasuries, associated with repositioning the investment securities portfolios,
- the impact of movements in foreign exchange on certain revenues, primarily as result of the U.S. dollar strengthening,
- net losses on certain legacy private equity investments compared with net gains in prior year,
- net losses, including hedging costs on an equity method investment related to the Firm's international consumer growth initiatives, and
- net losses in Treasury and CIO related to cash deployment transactions, which were more than offset by the related net interest income earned on these transactions,

partially offset by

- proceeds from an insurance settlement in the first quarter of 2022, and
- higher net gains related to certain other Corporate investments.

Noninterest expense of $695 million was down $856 million, predominantly driven by:

- lower structural expense reflecting the impact of movements in foreign exchange on certain expenses primarily as a result of the U.S. dollar strengthening, and lower technology expense, partially offset by higher compensation related expense,

largely offset by

- higher investments, including the costs associated with the Firm's international consumer growth initiatives.

  The prior year included a contribution to the Firm's Foundation.

The net impact of movements in foreign exchange rates associated with the foreign exchange risk that is transferred to Treasury and CIO on certain revenues and expenses was not material to net income.

The current period income tax benefit was predominantly driven by benefits related to tax audit settlements and the change in the level and mix of income and expenses subject to U.S. federal, state and local taxes that also impacted the Firm's tax reserves.

Other Corporate also reflects the Firm's international consumer growth 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, which closed in the first quarter of 2022.

Treasury and CIO overview

At September 30, 2022, 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 9 for further information on the Firm’s investment securities portfolio and internal risk ratings.

Refer to Liquidity Risk Management on pages 51-56 for further information on liquidity and funding risk. Refer to Market Risk Management on pages 77-81 for information on interest rate and foreign exchange risks.

Selected income statement and balance sheet data

	As of or for the three months ended September 30,			As of or for the nine months ended September 30,		
(in millions)	**2022**	2021	Change	**2022**	2021	Change
Investment securities losses	**$ (959)**	$ (256)	(275)%	**$ (1,506)**	$ (397)	(279)%
Available-for-sale securities (average)	**$ 209,008**	$ 223,747	(7)	**$ 254,798**	$ 312,298	(18)
Held-to-maturity securities (average)[(a)]	**436,302**	339,544	28	**406,915**	263,214	55
Investment securities portfolio (average)	**$ 645,310**	$ 563,291	15	**$ 661,713**	$ 575,512	15
Available-for-sale securities (period-end)	**$ 186,441**	$ 249,484	(25)	**$ 186,441**	$ 249,484	(25)
Held-to-maturity securities, net of allowance for credit losses (period-end)[(a)]	**430,106**	343,542	25	**430,106**	343,542	25
Investment securities portfolio, net of allowance for credit losses (period-end)[(b)]	**$ 616,547**	$ 593,026	4 %	**$ 616,547**	$ 593,026	4 %

(a) During 2022 and 2021, the Firm transferred $73.2 billion and $104.5 billion of investment securities, respectively, from AFS to HTM for capital management purposes.

(b) At September 30, 2022 and 2021, the allowance for credit losses on investment securities was $52 million and $73 million, respectively.

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 businesses, and the associated risks, in a manner that balances serving the interests of its clients, customers and investors and protects 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
- Firmwide structures for risk governance.

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 and oversight framework

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

Refer to pages 81-84 of JPMorgan Chase's 2021 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 2021 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	45-50	86-96
Liquidity risk	51-56	97-104
Reputation risk		105
Consumer credit risk	59-63	110-116
Wholesale credit risk	64-72	117-128
Investment portfolio risk	76	132
Market risk	77-81	133-140
Country risk	82-83	141-142
Operational risk	84	143-149
Compliance risk		146
Conduct risk		147
Legal risk		148
Estimations and Model risk		149

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 2021 Form 10-K, Note 21 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 the SLR. While the Firm's SLR is currently more binding than the Basel III Standardized-risk-based ratios, the Firm expects that in the fourth quarter of 2022, the Basel III Standardized-risk-based ratios will become more binding due to increases in the Firm's risk-based regulatory capital requirements. As a result, the Firm announced the redemption of $5.43 billion of preferred stock and issued $3.5 billion of subordinated notes in the third quarter of 2022 to rebalance the Firm's capital components. Refer to SLR on page 48 and capital actions on pages 48-49 for additional information.

Key Regulatory Developments

CECL regulatory capital transition. On December 31, 2021, the CECL capital transition provisions, which delayed the effects of CECL on regulatory capital for two years, expired. Beginning January 1, 2022, the $2.9 billion CECL capital benefit recognized as of December 31, 2021, is being phased out at 25% per year over a three-year period. As of September 30, 2022, CET1 capital reflected the remaining $2.2 billion benefit associated with the CECL capital transition provisions.

Additionally, effective January 1, 2022, the Firm phased out 25% of the other relevant CECL capital transition provisions recognized as of December 31, 2021, from 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 2021 Form 10-K for further information on CECL capital transition provisions and the CECL accounting guidance.

Standardized Approach for Counterparty Credit Risk. On January 1, 2022, the Firm adopted "Standardized Approach for Counterparty Credit Risk" ("SA-CCR"), which replaced the Current Exposure Method used to measure derivatives counterparty exposure under the Standardized and Advanced approach RWA where internal models are not used, as well as leverage exposure used to calculate the SLR in the regulatory capital framework. The rule issued by the U.S. banking regulators in November 2019 applies to Basel III Advanced Approaches banking organizations, such as the Firm and JPMorgan Chase Bank, N.A.

The adoption of SA-CCR on January 1, 2022 increased the Firm's Standardized RWA by approximately $40 billion based on the Firm's derivatives exposure as of December 31, 2021, which resulted in a decrease of approximately 30 bps to the Firm's CET1 capital ratio and a modest decrease in its total leverage exposure. In addition, the adoption of SA-CCR increased the Firm's Advanced RWA, but to a lesser extent than Standardized.

Risk-based Capital Targets

The Firm's current target for its Basel III Standardized CET1 capital ratio is 12.5% for the fourth quarter of 2022 and 13.0% by the end of the first quarter of 2023. These targets are based on the Basel III capital rules currently in effect, taking into account the Firm's increasing risk-based regulatory capital requirements.

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 2021 Form 10-K for a further discussion of these capital metrics. Refer to Note 21 for JPMorgan Chase Bank, N.A.'s risk-based and leverage-based capital metrics.

	Standardized			Advanced		
(in millions, except ratios)	**September 30, 2022**	December 31, 2021	Capital ratio requirements[b]	**September 30, 2022**	December 31, 2021	Capital ratio requirements[b]
Risk-based capital metrics:[a]						
CET1 capital	**$ 209,661**	$ 213,942		**$ 209,661**	$ 213,942	
Tier 1 capital	**236,363**	246,162		**236,363**	246,162	
Total capital	**268,076**	274,900		**256,157**	265,796	
Risk-weighted assets	**1,678,498**	1,638,900		**1,609,968**	1,547,920	
CET1 capital ratio	**12.5 %**	13.1 %	**11.2 %**	**13.0 %**	13.8 %	**10.5 %**
Tier 1 capital ratio	**14.1**	15.0	**12.7**	**14.7**	15.9	**12.0**
Total capital ratio	**16.0**	16.8	**14.7**	**15.9**	17.2	**14.0**

(a) The capital metrics reflect the CECL capital transition provisions. Additionally, loans originated under the PPP receive a zero percent risk weight.
(b) Represents minimum requirements and regulatory buffers applicable to the Firm. Refer to Note 21 for additional information.

Three months ended (in millions, except ratios)	**September 30, 2022**	December 31, 2021	Capital ratio requirements[c]
Leverage-based capital metrics:[a]			
Adjusted average assets[b]	**$ 3,791,804**	$ 3,782,035	
Tier 1 leverage ratio	**6.2 %**	6.5 %	**4.0 %**
Total leverage exposure	**$ 4,460,636**	$ 4,571,789	
SLR	**5.3 %**	5.4 %	**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 21 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 September 30, 2022 and December 31, 2021.

(in millions)	September 30, 2022	December 31, 2021
Total stockholders' equity	**$ 288,018**	$ 294,127
Less: Preferred stock	32,838	34,838
Common stockholders' equity	**255,180**	259,289
Add:		
Certain deferred tax liabilities[(a)]	2,509	2,499
Other CET1 capital adjustments[(b)]	5,766	3,351
Less:		
Goodwill	52,589 [(f)]	50,315
Other intangible assets	1,205	882
Standardized/Advanced CET1 capital	**$ 209,661**	$ 213,942
Preferred stock	32,838	34,838
Less: Other Tier 1 adjustments[(c)]	6,136	2,618
Standardized/Advanced Tier 1 capital	**$ 236,363**	$ 246,162
Long-term debt and other instruments qualifying as Tier 2 capital	$ 14,553	$ 14,106
Qualifying allowance for credit losses[(d)]	17,981	15,012
Other	(821)	(380)
Standardized Tier 2 capital	**$ 31,713**	$ 28,738
Standardized Total capital	**$ 268,076**	$ 274,900
Adjustment in qualifying allowance for credit losses for Advanced Tier 2 capital[(e)]	(11,919)	(9,104)
Advanced Tier 2 capital	**$ 19,794**	$ 19,634
Advanced Total capital	**$ 256,157**	$ 265,796

(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) Includes a net benefit associated with cash flow hedges and debit valuation adjustments ("DVA") related to structured notes recorded in AOCI of $4.8 billion and $1.4 billion and the benefit from the CECL capital transition provisions of $2.2 billion and $2.9 billion at September 30, 2022 and December 31, 2021, respectively.

(c) As of September 30, 2022, Other Tier 1 adjustments included $2.5 billion of Series V and $2.93 billion of Series I preferred stock called for redemption in September 2022 and subsequently redeemed on October 3, 2022 and October 31, 2022, respectively. As of December 31, 2021, Other Tier 1 adjustments included $2.0 billion of Series Z preferred stock called for redemption on December 31, 2021 and subsequently redeemed on February 1, 2022.

(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) Includes estimated equity method goodwill related to the Firm's investment in C6 Bank.

Capital rollforward

The following table presents the changes in Basel III CET1 capital, Tier 1 capital and Tier 2 capital for the nine months ended September 30, 2022.

Nine months ended September 30, (in millions)	2022
Standardized/Advanced CET1 capital at December 31, 2021	$ 213,942
Net income applicable to common equity	25,429
Dividends declared on common stock	(8,921)
Net purchase of treasury stock	(2,017)
Changes in additional paid-in capital	450
Changes related to AOCI	(19,050)
Adjustment related to AOCI[(a)]	3,381
Changes related to other CET1 capital adjustments[(b)]	(3,553)
Change in Standardized/Advanced CET1 capital	(4,281)
Standardized/Advanced CET1 capital at September 30, 2022	**$ 209,661**
Standardized/Advanced Tier 1 capital at December 31, 2021	$ 246,162
Change in CET1 capital[(b)]	(4,281)
Redemptions of noncumulative perpetual preferred stock[(c)]	(5,434)
Other	(84)
Change in Standardized/Advanced Tier 1 capital	(9,799)
Standardized/Advanced Tier 1 capital at September 30, 2022	**$ 236,363**
Standardized Tier 2 capital at December 31, 2021	$ 28,738
Change in long-term debt and other instruments qualifying as Tier 2	447
Change in qualifying allowance for credit losses[(b)]	2,969
Other	(441)
Change in Standardized Tier 2 capital	2,975
Standardized Tier 2 capital at September 30, 2022	**$ 31,713**
Standardized Total capital at September 30, 2022	**$ 268,076**
Advanced Tier 2 capital at December 31, 2021	$ 19,634
Change in long-term debt and other instruments qualifying as Tier 2	447
Change in qualifying allowance for credit losses[(b)]	154
Other	(441)
Change in Advanced Tier 2 capital	160
Advanced Tier 2 capital at September 30, 2022	**$ 19,794**
Advanced Total capital at September 30, 2022	**$ 256,157**

(a) Includes cash flow hedges and DVA related to structured notes recorded in AOCI.

(b) Includes the impact of the CECL capital transition provisions.

(c) As of September 30, 2022, Redemptions of noncumulative perpetual preferred stock included $2.5 billion of Series V and $2.93 billion of Series I preferred stock called for redemption in September 2022 and subsequently redeemed on October 3, 2022 and October 31, 2022, respectively.

RWA rollforward

The following table presents changes in the components of RWA under Basel III Standardized and Advanced approaches for the nine months ended September 30, 2022. The amounts in the rollforward categories are estimates, based on the predominant driver of the change.

	Standardized			Advanced			
Nine months ended September 30, 2022 (in millions)	Credit risk RWA[(c)]	Market risk RWA	**Total RWA**	Credit risk RWA[(c)]	Market risk RWA	Operational risk RWA	**Total RWA**
December 31, 2021	$ 1,543,452	$ 95,448	**$ 1,638,900**	$ 1,047,042	$ 95,506	$ 405,372	**$ 1,547,920**
Model & data changes[(a)]	(10,714)	(2,572)	**(13,286)**	982	(2,572)	–	**(1,590)**
Movement in portfolio levels[(b)]	47,726	5,158	**52,884**	21,227	5,279	37,132	**63,638**
Changes in RWA	37,012	2,586	**39,598**	22,209	2,707	37,132	**62,048**
September 30, 2022	**$ 1,580,464**	**$ 98,034**	**$ 1,678,498**	**$ 1,069,251**	**$ 98,213**	**$ 442,504**	**$ 1,609,968**

(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, impact of SA-CCR adoption on January 1, 2022, changes in book size including position rolloffs 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 and market movements; and for Operational risk RWA, updates to cumulative losses and macroeconomic model inputs.

(c) As of September 30, 2022 and December 31, 2021, the Basel III Standardized Credit risk RWA included wholesale and retail off balance-sheet RWA of $210.5 billion and $218.5 billion, respectively; and the Basel III Advanced Credit risk RWA included wholesale and retail off balance-sheet RWA of $178.3 billion and $188.5 billion, respectively.

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 90 of JPMorgan Chase’s 2021 Form 10-K for additional information.

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

Three months ended (in millions, except ratio)	**September 30, 2022**	December 31, 2021
Tier 1 capital	**$ 236,363**	$ 246,162
Total average assets	3,842,247	3,831,655
Less: Regulatory capital adjustments[(a)]	50,443	49,620
Total adjusted average assets[(b)]	3,791,804	3,782,035
Add: Off-balance sheet exposures[(c)]	668,832	789,754
Total leverage exposure	**$ 4,460,636**	$ 4,571,789
SLR	**5.3 %**	5.4 %

(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. Effective January 1, 2022, includes the impact of the SA-CCR adoption. 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. Refer to line of business equity on page 93 of JPMorgan Chase’s 2021 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)	**September 30, 2022**	December 31, 2021
Consumer & Community Banking	**$ 50.0**	$ 50.0
Corporate & Investment Bank	**103.0**	83.0
Commercial Banking	**25.0**	24.0
Asset & Wealth Management	**17.0**	14.0
Corporate	**60.2**	88.3
Total common stockholders’ equity	**$ 255.2**	$ 259.3

Capital actions

Common stock dividends

The Firm’s quarterly common stock dividend is currently $1.00 per share. The Firm’s dividends are subject to approval by the Board of Directors on a quarterly basis.

Common stock

Through April 30, 2022, the Firm was authorized to repurchase up to $30 billion of common shares under its previously approved common share repurchase program, that was announced on December 18, 2020. Effective May 1, 2022, the Firm is authorized to purchase up to $30 billion of common shares under a new equity repurchase program.

On July 14, 2022, the Firm announced that it has temporarily suspended share repurchases in anticipation of the increase in the Firm's regulatory capital requirements.

The following table sets forth the Firm's repurchases of common stock for the three and nine months ended September 30, 2022 and 2021.

	Three months ended September 30,		Nine months ended September 30,	
(in millions)	**2022**	2021	**2022**	2021[(a)]
Total number of shares of common stock repurchased	–	33.4	**23.1**	107.6
Aggregate purchase price of common stock repurchases	$ –	$ 5,240	$ **3,122**	$16,440

(a) As directed by the Federal Reserve, total net repurchases and common stock dividends in the first and second quarter of 2021 were restricted and could not exceed the average of the Firm's net income for the four preceding calendar quarters.

Refer to Capital actions on page 94 of JPMorgan Chase's 2021 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 193-194 of this Form 10-Q and page 35 of JPMorgan Chase's 2021 Form 10-K, respectively, for additional information regarding repurchases of the Firm's equity securities.

Preferred stock

Preferred stock dividends declared were $432 million and $402 million for the three months ended September 30, 2022 and 2021, respectively, and $1.2 billion for both the nine months ended September 30, 2022 and 2021.

On September 1, 2022, the Firm announced the redemption of $2.5 billion of its fixed-to-floating rate non-cumulative preferred stock, Series V and subsequently redeemed those securities on October 3, 2022.

On September 30, 2022, the Firm announced the redemption of $2.93 billion of its fixed-to-floating rate non-cumulative perpetual preferred stock, Series I and subsequently redeemed those securities on October 31, 2022.

Subordinated Debt

On September 14, 2022, the Firm issued $3.5 billion of fixed-to-floating rate subordinated notes due 2033. Refer to Long-term funding and issuance on page 55 for additional information.

Refer to Note 17 of this Form 10-Q and Note 21 of JPMorgan Chase's 2021 Form 10-K for additional information on the Firm's preferred stock, including the issuance and redemption of preferred stock.

Capital planning and stress testing

Comprehensive Capital Analysis and Review

On June 27, 2022, the Firm announced that it had completed the Federal Reserve's 2022 Comprehensive Capital Analysis and Review ("CCAR") stress test process. On August 4, 2022, the Federal Reserve affirmed the Firm's 2022 SCB requirement of 4.0% (up from 3.2%), and the Firm's Standardized CET1 capital ratio requirement, including regulatory buffers, of 12.0% (up from 11.2%). The 2022 SCB requirement became effective on October 1, 2022, and will remain in effect until September 30, 2023.

Refer to Capital planning and stress testing on pages 86-87 of JPMorgan Chase's 2021 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. global systemically important bank ("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 the 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 September 30, 2022 and December 31, 2021.

	September 30, 2022		December 31, 2021	
(in billions, except ratio)	External TLAC	LTD	External TLAC	LTD
Total eligible amount	$ **473.2**	$ **225.1**	$ 464.6	$ 210.4
% of RWA	**28.2 %**	**13.4 %**	28.4 %	12.8 %
Regulatory requirements	**22.5**	**9.5**	22.5	9.5
Surplus/(shortfall)	$ **95.6**	$ **65.6**	$ 95.9	$ 54.7
% of total leverage exposure	**10.6 %**	**5.0 %**	10.2 %	4.6 %
Regulatory requirements	**9.5**	**4.5**	9.5	4.5
Surplus/(shortfall)	$ **49.5**	$ **24.4**	$ 30.3	$ 4.6

Refer to Liquidity Risk Management on pages 51-56 for further information on long-term debt issued by the Parent Company.

Refer to Part I, Item 1A: Risk Factors on pages 9-33 of JPMorgan Chase's 2021 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 2021 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 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, Commodity Futures Trading Commission ("CFTC"), Financial Industry Regulatory Authority ("FINRA") and the National Futures Association ("NFA").

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

September 30, 2022 (in millions)	Actual	Minimum
Net Capital	$ **22,913**	$ 5,649

Refer to Broker-dealer regulatory capital on page 96 of JPMorgan Chase's 2021 Form 10-K for a discussion on J.P. Morgan Securities' capital requirements.

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 by the U.K. 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 September 30, 2022, J.P. Morgan Securities plc was compliant with the MREL requirements, that became fully phased-in on January 1, 2022.

The following table presents J.P. Morgan Securities plc's capital metrics:

September 30, 2022 (in millions, except ratios)	Estimated	Regulatory Minimum ratios[(a)]
Total capital	$ **54,025**	
CET1 ratio	**23.2 %**	**4.5 %**
Total capital ratio	**29.8 %**	**8.0 %**

(a) Represents minimum Pillar 1 requirements specified by the PRA. J.P. Morgan Securities plc's capital ratios as of September 30, 2022 exceeded the minimum requirements, including the additional capital requirements specified by the PRA.

Refer to Broker-dealer regulatory capital on page 96 of JPMorgan Chase's 2021 Form 10-K for a further discussion on J.P. Morgan Securities plc.

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 September 30, 2022, JPMSE was compliant with the MREL requirements.

The following table presents JPMSE's capital metrics:

September 30, 2022 (in millions, except ratios)	Estimated	Regulatory Minimum ratios[(a)]
Total capital	$ **33,555**	
CET1 ratio	**17.3 %**	**4.5 %**
Total capital ratio	**27.8 %**	**8.0 %**

(a) Represents minimum Pillar 1 requirements specified by the EU CRR. J.P. Morgan SE's capital ratios as of September 30, 2022 exceeded the minimum requirements, including the additional capital requirements specified by the European Banking Authority.

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 2021 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 September 30, 2022, June 30, 2022 and September 30, 2021 based on the Firm's interpretation of the LCR framework.

	Three months ended		
Average amount (in millions)	**September 30, 2022**	June 30, 2022	September 30, 2021
JPMorgan Chase & Co.:			
HQLA			
Eligible cash[(a)]	**$ 589,158**	$ 634,480	$ 690,013
Eligible securities[(b)(c)]	**126,913**	107,473	34,049
Total HQLA[(d)]	**$ 716,071**	$ 741,953	$ 724,062
Net cash outflows	**$ 635,072**	$ 676,234	$ 645,557
LCR	**113 %**	110 %	112 %
Net excess eligible HQLA[(d)]	**$ 80,999**	$ 65,719	$ 78,505
JPMorgan Chase Bank N.A.:			
LCR	**165 %**	169 %	174 %
Net excess eligible HQLA	**$ 450,260**	$ 487,867	$ 516,374

(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.

The Firm's average LCR increased during the three months ended September 30, 2022, compared with the three months ended June 30, 2022, predominantly due to long-term debt issuances and CIB Markets activities.

JPMorgan Chase Bank, N.A.'s average LCR decreased during the three months ended September 30, 2022, compared with the three months ended June 30, 2022 due to a decrease in JPMorgan Chase Bank, N.A.'s HQLA, primarily from a reduction in cash from a decline in deposits and loan growth.

JPMorgan Chase Bank, N.A.'s average LCR for the three months ended September 30, 2022 was lower than the same period in the prior year due to a decrease in JPMorgan Chase Bank, N.A.'s HQLA as a result of a reduction in cash from loan growth, non-HQLA investment security purchases, and a decline in the market value of HQLA-eligible investment securities in Treasury and CIO, partially offset by an increase in deposits. Refer to Note 9 for additional information on the Firm's investment securities portfolio.

The Firm and JPMorgan Chase Bank, N.A.'s average LCR fluctuates from period to period, due to changes in its eligible HQLA and estimated net cash outflows as a result of ongoing business activity.

Refer to page 98 of JPMorgan Chase's 2021 Form 10-K and the Firm's U.S. LCR Disclosure reports for additional information on HQLA and net cash outflows.

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 $771 billion and $914 billion as of September 30, 2022 and December 31, 2021, respectively, although the amount of liquidity that could be raised at any particular time would be dependent on prevailing market conditions. The fair value decreased compared to December 31, 2021, primarily due to a decrease in excess eligible HQLA at JPMorgan Chase Bank, N.A., as noted above.

The Firm also had available borrowing capacity at the Federal Home Loan Banks ("FHLBs") and the discount window at the Federal Reserve Bank as a result of collateral pledged by the Firm to such banks of approximately $317 billion and $308 billion as of September 30, 2022 and December 31, 2021, 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 Bank discount window and other central banks. Although available, the Firm does not view this borrowing capacity at the Federal Reserve Bank discount window and the other central banks as a primary source of liquidity.

NSFR

The net stable funding ratio ("NSFR") rule requires that the Firm and JPMorgan Chase Bank, N.A. maintain an amount of "available" stable funding that is sufficient to meet their "required" amounts of stable funding over a one-year horizon.

As of September 30, 2022, the Firm and JPMorgan Chase Bank, N.A. were compliant with the 100% minimum NSFR requirement, based on the Firm's current understanding of the final rule. The Firm will be required to publicly disclose its quarterly average NSFR semi annually beginning in 2023.

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 Intermediate Holding Company ("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 22 for additional information on off-balance sheet obligations.

Deposits

The table below summarizes, by LOB and Corporate, the period-end deposit balances as of September 30, 2022, and December 31, 2021, and the average deposit balances for the three and nine months ended September 30, 2022 and 2021, respectively.

Deposits (in millions)	**September 30, 2022**	December 31, 2021	Three months ended September 30, Average **2022**	2021	Nine months ended September 30, Average **2022**	2021
Consumer & Community Banking	**$ 1,173,241**	$ 1,148,110	**$ 1,174,227**	$ 1,076,323	**$ 1,169,474**	$ 1,034,947
Corporate & Investment Bank	**706,753**	707,791	**721,690**	762,539	**750,538**	758,534
Commercial Banking	**271,857**	323,954	**281,276**	300,433	**299,337**	293,817
Asset & Wealth Management	**242,315**	282,052	**253,026**	229,710	**269,754**	218,742
Corporate	**14,449**	396	**15,151**	454	**8,385**	452
Total Firm	**$ 2,408,615**	$ 2,462,303	**$ 2,445,370**	$ 2,369,459	**$ 2,497,488**	$ 2,306,492

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 considered to be stable sources of liquidity because they are generated from customers that maintain operating service relationships with the Firm.

The table below shows the loan and deposit balances, the loans-to-deposits ratio, and deposits as a percentage of total liabilities, as of September 30, 2022 and December 31, 2021.

(in billions except ratios)	**September 30, 2022**	December 31, 2021
Deposits	**$ 2,408.6**	$ 2,462.3
Deposits as a % of total liabilities	**69 %**	71 %
Loans	**$ 1,112.6**	$ 1,077.7
Loans-to-deposits ratio	**46 %**	44 %

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 higher for the three months ended September 30, 2022 compared to the three months ended September 30, 2021, reflecting:

- an increase in CCB driven by growth from new and existing accounts across both consumer and small business customers, and growth in time deposits in AWM,

partially offset by

- declines in both Payments and Securities Services in CIB and in non-operating deposits in CB.

Average deposits were higher for the nine months ended September 30, 2022 compared to the nine months ended September 30, 2021, reflecting:

- increases in CCB driven by growth from existing and new accounts across both consumer and small business customers, and
- net inflows in AWM resulting from the residual effects of certain government actions,

partially offset by

- a decline in Securities Services in CIB.

Period-end deposits have declined as a result of the migration that began in the second quarter of 2022.

The decrease in period-end deposits reflects a reduction in non-operating deposits in CB, and in AWM net outflows into investments as a result of the rising interest rate environment, partially offset by growth from new consumer and small business accounts in CCB that more than offset the decline in deposits in existing accounts as spending continued to grow.

The increase in deposits in Corporate was driven by the Firm's international consumer growth initiatives.

Refer to the discussion of the Firm's Consolidated Balance Sheets Analysis and the Business Segment Results on pages 16-17 and pages 21-43, respectively, for further information on deposit and liability balance trends.

The following table summarizes short-term and long-term funding, excluding deposits, as of September 30, 2022, and December 31, 2021, and average balances for the three and nine months ended September 30, 2022 and 2021, respectively. Refer to the Consolidated Balance Sheets Analysis on pages 16-17 and Note 10 for additional information.

Sources of funds (excluding deposits) (in millions)	September 30, 2022	December 31, 2021	Three months ended September 30, Average 2022	Three months ended September 30, Average 2021	Nine months ended September 30, Average 2022	Nine months ended September 30, Average 2021
Commercial paper	$ 13,953	$ 15,108	$ 16,926	$ 10,304	$ 17,039	$ 12,275
Other borrowed funds	10,651	9,999	12,351	12,257	12,821	12,467
Federal Funds purchased	1,492	1,769	1,685	2,179	1,541	2,325
Total short-term unsecured funding	$ 26,096	$ 26,876	$ 30,962	$ 24,740	$ 31,401	$ 27,067
Securities sold under agreements to repurchase[a]	$ 232,844	$ 189,806	$ 232,581	$ 231,338	$ 234,383	$ 257,846
Securities loaned[a]	5,603	2,765	5,316	7,395	5,095	7,488
Other borrowed funds	23,262	28,487	23,994	29,571	26,088	27,953
Obligations of Firm-administered multi-seller conduits[b]	8,500	6,198	7,602	9,620	6,954	$ 9,896
Total short-term secured funding	$ 270,209	$ 227,256	$ 269,493	$ 277,924	$ 272,520	$ 303,183
Senior notes	$ 185,730	$ 191,488	$ 193,730	$ 188,568	$ 190,447	$ 178,697
Subordinated debt	21,797	20,531	19,510	20,956	19,628	20,954
Structured notes[c]	65,180	73,956	67,901	75,285	68,354	75,226
Total long-term unsecured funding	$ 272,707	$ 285,975	$ 281,141	$ 284,809	$ 278,429	$ 274,877
Credit card securitization[b]	$ 1,996	$ 2,397	$ 1,781	$ 2,396	$ 1,933	$ 3,412
FHLB advances	11,098	11,110	11,100	11,713	11,105	12,532
Other long-term secured funding[d]	3,668	3,920	3,729	4,379	3,814	4,487
Total long-term secured funding	$ 16,762	$ 17,427	$ 16,610	$ 18,488	$ 16,852	$ 20,431
Preferred stock[e]	$ 32,838	$ 34,838	$ 32,838	$ 34,229	$ 33,065	$ 32,417
Common stockholders' equity[e]	$ 255,180	$ 259,289	$ 252,944	$ 253,556	$ 251,147	$ 250,011

(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) Includes long-term structured notes which are secured.
(e) Refer to Capital Risk Management on pages 45-50 and Consolidated statements of changes in stockholders' equity on page 93 of this Form 10-Q, and Note 21 and Note 22 of JPMorgan Chase's 2021 Form 10-K for additional information on preferred stock and common stockholders' equity.

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 September 30, 2022, compared with December 31, 2021, due to higher secured financing of trading assets and the impact of netting on client-driven market-making activities in Markets, partially offset by lower secured financing of AFS investment securities in Treasury and CIO.

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 increase in commercial paper for the average three and nine months ended September 30, 2022 compared to the prior year period, and the decrease in commercial paper at September 30, 2022, from December 31, 2021, was due to changes in the net issuance levels primarily for short-term liquidity management.

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 both bank and non-bank subsidiary funding needs. 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 nine months ended September 30, 2022 and 2021. Refer to Liquidity Risk Management on pages 97-104 and Note 20 of JPMorgan Chase's 2021 Form 10-K for additional information on the IHC and long-term debt.

Long-term unsecured funding

	Three months ended September 30,		Nine months ended September 30,		Three months ended September 30,		Nine months ended September 30,	
	2022	2021	**2022**	2021	**2022**	2021	**2022**	2021
(Notional in millions)	Parent Company				Subsidiaries			
Issuance								
Senior notes issued in the U.S. market	**$ 8,500**	$ 4,500	**$ 29,600**	$ 33,750	**$ –**	$ –	**$ –**	$ –
Senior notes issued in non-U.S. markets	**–**	–	**2,752**	5,581	**–**	–	**–**	–
Total senior notes	**8,500**	4,500	**32,352**	39,331	**–**	–	**–**	–
Subordinated debt	**3,500**	–	**3,500**	–	**–**	–	**–**	–
Structured notes[(a)]	**416**	798	**2,341**	3,733	**9,733**	8,145	**29,395**	25,925
Total long-term unsecured funding – issuance	**$ 12,416**	$ 5,298	**$ 38,193**	$ 43,064	**$ 9,733**	$ 8,145	**$ 29,395**	$ 25,925
Maturities/redemptions								
Senior notes	**$ 4,495**	$ 3,523	**$ 13,188**	$ 10,840	**$ –**	$ –	**$ 64**	$ 66
Subordinated debt	**–**	4	**–**	4	**–**	–	**–**	–
Structured notes	**72**	530	**1,464**	3,691	**6,108**	7,280	**21,178**	25,453
Total long-term unsecured funding – maturities/redemptions	**$ 4,567**	$ 4,057	**$ 14,652**	$ 14,535	**$ 6,108**	$ 7,280	**$ 21,242**	$ 25,519

(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 and FHLB advances and their respective maturities or redemptions for the three and nine months ended September 30, 2022 and 2021, respectively.

Long-term secured funding

	Three months ended September 30,				Nine months ended September 30,			
	Issuance		Maturities/Redemptions		Issuance		Maturities/Redemptions	
(in millions)	**2022**	2021	**2022**	2021	**2022**	2021	**2022**	2021
Credit card securitization	**$ 997**	$ –	**$ 750**	$ –	**$ 997**	$ –	**$ 1,400**	$ 2,550
FHLB advances	**–**	–	**3**	1,002	**–**	–	**9**	3,008
Other long-term secured funding[(a)]	**73**	63	**49**	238	**357**	304	**141**	430
Total long-term secured funding	**$ 1,070**	$ 63	**$ 802**	$ 1,240	**$ 1,354**	$ 304	**$ 1,550**	$ 5,988

(a) 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 2021 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 liquidity risk and credit-related contingent features in Note 4 for additional information on the impact of a credit ratings downgrade on the funding requirements for VIEs, and on derivatives and collateral agreements.

The credit ratings of the Parent Company and the Firm's principal bank and non-bank subsidiaries as of September 30, 2022, were as follows:

	JPMorgan Chase & Co.			JPMorgan Chase Bank, N.A.			J.P. Morgan Securities LLC J.P. Morgan Securities plc J.P. Morgan SE (a)		
September 30, 2022	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-2	Positive	A+	A-1	Positive	A+	A-1	Positive
Fitch Ratings	AA-	F1+	Stable	AA	F1+	Stable	AA	F1+	Stable

(a) In January 2022, the three rating agencies affirmed the credit ratings of J.P. Morgan SE, which are equivalent to the ratings previously assigned to J.P. Morgan SE's predecessors, J.P. Morgan Bank Luxembourg S.A. and J.P. Morgan AG.

On September 29, 2022, Moody's upgraded the Parent Company's long-term issuer rating to A1 (previously A2) and changed the long-term outlook to stable (previously positive). All other ratings and outlooks of the Parent Company and those of the Firm's principal bank and non-bank subsidiaries were affirmed by Moody's.

Refer to page 104 of JPMorgan Chase's 2021 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 59-75 for a further discussion of Credit Risk.

Refer to page 76 for a further discussion of Investment Portfolio Risk. Refer to Credit and Investment Risk Management on pages 106-132 of JPMorgan Chase's 2021 Form 10-K for a further discussion of the Firm's Credit and Investment Risk Management framework.

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 11, 22 and 4 for additional information on the Firm's loans, lending-related commitments and derivative receivables.

Refer to Note 9 for information regarding the credit risk inherent in the Firm's investment securities portfolio; and refer to Note 10 for information regarding the credit risk inherent in the securities financing portfolio. Refer to Consumer Credit Portfolio on pages 59-63 and Note 11 for further discussions of the consumer credit environment and consumer loans. Refer to Wholesale Credit Portfolio on pages 64-72 and Note 11 for further discussions of the wholesale credit environment and wholesale loans.

Total credit portfolio

	Credit exposure		Nonperforming[c][d]	
(in millions)	**Sep 30, 2022**	Dec 31, 2021	**Sep 30, 2022**	Dec 31, 2021
Loans retained	**$1,068,073**	$1,010,206	**$ 5,799**	$ 6,932
Loans held-for-sale	**3,073**	8,688	**71**	48
Loans at fair value	**41,487**	58,820	**804**	815
Total loans	**1,112,633**	1,077,714	**6,674**	7,795
Derivative receivables	**92,534**	57,081	**339**	316
Receivables from customers[a]	**54,921**	59,645	**–**	–
Total credit-related assets	**1,260,088**	1,194,440	**7,013**	8,111
Assets acquired in loan satisfactions				
Real estate owned	**NA**	NA	**199**	213
Other	**NA**	NA	**31**	22
Total assets acquired in loan satisfactions	**NA**	NA	**230**	235
Lending-related commitments	**1,306,673**	1,262,313	**470**	764
Total credit portfolio	**$2,566,761**	$2,456,753	**$ 7,713**	$ 9,110
Credit derivatives and credit-related notes used in credit portfolio management activities[b]	**$ (25,646)**	$ (20,739) [e]	**$ –**	$ –
Liquid securities and other cash collateral held against derivatives	**(25,068)**	(10,102)	**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) At September 30, 2022, and December 31, 2021, nonperforming assets excluded mortgage loans 90 or more days past due and insured by U.S. government agencies of $362 million and $623 million, respectively, and real estate owned ("REO") insured by U.S. government agencies of $9 million and $5 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.
(d) At September 30, 2022 and December 31, 2021, nonaccrual loans excluded $85 million and $633 million, respectively, of PPP loans 90 or more days past due and guaranteed by the SBA.
(e) Prior-period amount has been revised to conform with the current presentation.

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

(in millions, except ratios)	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	**2022**	2021
Net charge-offs	**$ 727**	$ 524	**$ 1,966**	$ 2,315
Average retained loans	**1,059,962**	968,369	**1,033,586**	958,260
Net charge-off rates	**0.27 %**	0.21 %	**0.25 %**	0.32 %

CONSUMER CREDIT PORTFOLIO

The Firm's retained consumer portfolio consists primarily of residential real estate loans, credit card loans, scored auto and business banking loans, as well as associated lending-related commitments. The Firm's focus is on serving primarily the prime segment of the consumer credit market. Refer to Note 11 of this Form 10-Q; and Consumer Credit Portfolio on pages 110-116 and Note 12 of JPMorgan Chase's 2021 Form 10-K for further information on consumer loans, as well as the Firm's nonaccrual and charge-off accounting policies. Refer to Note 22 of this Form 10-Q and Note 28 of JPMorgan Chase's 2021 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

	Credit exposure		Nonaccrual loans[j][k][l]	
(in millions)	**Sep 30, 2022**	Dec 31, 2021	**Sep 30, 2022**	Dec 31, 2021
Consumer, excluding credit card				
Residential real estate[a]	**$ 237,771**	$ 224,795	**$ 3,797**	$ 4,759
Auto and other[b][c][d]	**63,632**	70,761	**120**	119
Total loans – retained	**301,403**	295,556	**3,917**	4,878
Loans held-for-sale	**682**	1,287	**42**	–
Loans at fair value[e]	**11,711**	26,463	**419**	472
Total consumer, excluding credit card loans	**313,796**	323,306	**4,378**	5,350
Lending-related commitments[f]	**34,868**	45,334		
Total consumer exposure, excluding credit card	**348,664**	368,640		
Credit card				
Loans retained[g]	**170,462**	154,296	**NA**	NA
Total credit card loans	**170,462**	154,296	**NA**	NA
Lending-related commitments[f][h]	**798,855**	730,534		
Total credit card exposure[h]	**969,317**	884,830		
Total consumer credit portfolio[h]	**$ 1,317,981**	$ 1,253,470	**$ 4,378**	$ 5,350
Credit-related notes used in credit portfolio management activities[i]	**$ (1,370)**	$ (2,028)		

	Three months ended September 30,					
	Net charge-offs/(recoveries)		Average loans - retained		Net charge-off/(recovery) rate[m]	
(in millions, except ratios)	**2022**	2021	**2022**	2021	**2022**	2021
Consumer, excluding credit card						
Residential real estate	**$ (59)**	$ (74)	**$ 237,261**	$ 219,928	**(0.10)%**	(0.13)%
Auto and other	**135**	66	**64,086**	78,091	**0.84**	0.34
Total consumer, excluding credit card - retained	**76**	(8)	**301,347**	298,019	**0.10**	(0.01)
Credit card - retained	**592**	495	**168,125**	141,371	**1.40**	1.39
Total consumer - retained	**$ 668**	$ 487	**$ 469,472**	$ 439,390	**0.56 %**	0.44 %

	Nine months ended September 30,					
	Net charge-offs/(recoveries)		Average loans - retained		Net charge-off/(recovery) rate[m]	
(in millions, except ratios)	**2022**	2021	**2022**	2021	**2022**	2021
Consumer, excluding credit card						
Residential real estate	**$ (193)**	$ (205)	**$ 232,028**	$ 220,142	**(0.11)%**	(0.12)%
Auto and other	**342**	187	**66,812**	79,478	**0.68**	0.31
Total consumer, excluding credit card - retained	**149**	(18)	**298,840**	299,620	**0.07**	(0.01)
Credit card - retained	**1,678**	2,233	**158,721**	137,012	**1.41**	2.18
Total consumer - retained	**$ 1,827**	$ 2,215	**$ 457,561**	$ 436,632	**0.53 %**	0.68 %

(a) Includes scored mortgage and home equity loans held in CCB and AWM, and scored mortgage loans held in Corporate.
(b) At September 30, 2022 and December 31, 2021, excluded operating lease assets of $12.9 billion and $17.1 billion, respectively. These operating lease assets are included in other assets on the Firm's Consolidated balance sheets. Refer to Note 16 for further information.
(c) Includes scored auto and business banking loans and overdrafts.
(d) At September 30, 2022 and December 31, 2021, included $791 million and $5.4 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 page 109 of JPMorgan Chase's 2021 Form 10-K for a further discussion of the PPP.
(e) Includes scored mortgage loans held in CCB and CIB.

(f) 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 22 for further information.
(g) Includes billed interest and fees.
(h) Also includes commercial card lending-related commitments primarily in CB and CIB.
(i) 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.
(j) At September 30, 2022 and December 31, 2021, nonaccrual loans excluded mortgage loans 90 or more days past due and insured by U.S. government agencies of $362 million and $623 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 September 30, 2022 and December 31, 2021, nonaccrual loans excluded $57 million and $506 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 $14.9 billion and $35.2 billion for the three months ended September 30, 2022 and 2021, respectively, and were $19.0 billion and $27.9 billion for the nine months ended September 30, 2022 and 2021, respectively. These amounts were excluded when calculating net charge-off/(recovery) rates.

Consumer, excluding credit card

Portfolio analysis

Loans decreased from December 31, 2021 driven by residential real estate loans at fair value and auto and other loans, largely offset by higher retained residential real estate 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, 2021, reflecting originations, net of paydowns. Retained nonaccrual loans decreased from December 31, 2021 reflecting improved credit performance and loan sales. Net recoveries were lower for the three and nine months ended September 30, 2022 when compared to the same periods in the prior year driven by lower prepayments in the current year due to higher interest rates.

Loans at fair value decreased from December 31, 2021, as warehouse loan sales in Home Lending outpaced originations due to higher interest rates and lower loan purchase activity in CIB. Nonaccrual loans at fair value decreased from December 31, 2021 driven by net portfolio activity in CIB.

The carrying value of home equity lines of credit outstanding was $16.3 billion at September 30, 2022. This amount included $5.3 billion of HELOCs that have recast from interest-only to fully amortizing payments or have been modified and $5.2 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.

At September 30, 2022 and December 31, 2021, the carrying value of interest-only residential mortgage loans were $35.7 billion and $30.0 billion, respectively. 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, predominantly in AWM. The interest-only residential mortgage loan portfolio reflected net recoveries for the three and nine months ended September 30, 2022. The credit performance of this portfolio is comparable with the performance of the broader prime mortgage portfolio.

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)	September 30, 2022	December 31, 2021
Current	**$ 670**	$ 689
30-89 days past due	**131**	135
90 or more days past due	**362**	623
Total government guaranteed loans	**$ 1,163**	$ 1,447

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

Refer to Note 11 for information on the geographic composition and current estimated LTVs of the Firm's residential real estate loans.

Modified residential real estate loans

The following table presents information relating to modified retained residential real estate loans for which concessions have been granted to borrowers experiencing financial difficulty, which include both TDRs and modified purchased credit deteriorated ("PCD") loans not accounted for as TDRs. The following table does not include loans with short-term or other insignificant modifications that are not considered concessions and, therefore, are not TDRs. Refer to Note 11 for further information on modifications for the three and nine months ended September 30, 2022 and 2021.

(in millions)	September 30, 2022	December 31, 2021
Retained loans	**$ 11,766**	$ 13,251
Nonaccrual retained loans[(a)]	**$ 3,317**	$ 3,938

(a) At both September 30, 2022 and December 31, 2021, nonaccrual loans included $2.7 billion of TDRs for which the borrowers were less than 90 days past due. Refer to Note 12 of JPMorgan Chase's 2021 Form 10-K for additional information about loans modified in a TDR that are on nonaccrual status.

Auto and other: The auto and other loan portfolio, including loans at fair value, predominantly consists of prime-quality scored auto and business banking loans, as well as overdrafts. The portfolio decreased when compared with December 31, 2021 predominantly due to PPP loan forgiveness in business banking and paydowns predominantly offset by loan originations in the scored auto portfolio. Net charge-offs increased for the three months ended September 30, 2022 when compared to the same period in the prior year due to higher overdraft and scored auto charge-offs. Net charge-offs for the nine months ended September 30, 2022 increased when compared to the same period in the prior year due to higher overdraft and scored auto charge-offs, partially offset by lower scored business banking charge-offs. The scored auto portfolio net charge-off rates were 0.27% and 0.03% for the three months ended September 30, 2022 and 2021, respectively, and 0.19% and 0.01% for the nine months ended September 30, 2022 and 2021, respectively, as net charge-offs benefited from government stimulus and payment assistance programs in the prior year.

Nonperforming assets

The following table presents information as of September 30, 2022 and December 31, 2021, about consumer, excluding credit card, nonperforming assets.

Nonperforming assets[a]

(in millions)	September 30, 2022	December 31, 2021
Nonaccrual loans		
Residential real estate[b]	**$ 4,258**	$ 5,231
Auto and other[c]	**120**	119
Total nonaccrual loans	**4,378**	5,350
Assets acquired in loan satisfactions		
Real estate owned	**118**	112
Other	**31**	22
Total assets acquired in loan satisfactions	**149**	134
Total nonperforming assets	**$ 4,527**	$ 5,484

(a) At September 30, 2022 and December 31, 2021, nonperforming assets excluded mortgage loans 90 or more days past due and insured by U.S. government agencies of $362 million and $623 million, respectively, and REO insured by U.S. government agencies of $9 million and $5 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 September 30, 2022 and December 31, 2021, nonaccrual loans excluded $57 million and $506 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 nine months ended September 30, 2022 and 2021.

Nonaccrual loan activity

Nine months ended September 30, (in millions)	2022	2021
Beginning balance	**$ 5,350**	$ 6,467
Additions	**1,648**	2,032
Reductions:		
Principal payments and other[a]	**1,209**	1,625
Charge-offs	**176**	167
Returned to performing status	**1,099**	1,295
Foreclosures and other liquidations	**136**	61
Total reductions	**2,620**	3,148
Net changes	**(972)**	(1,116)
Ending balance	**$ 4,378**	$ 5,351

(a) Other reductions include loan sales.

Refer to Note 11 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.

Purchased credit deteriorated ("PCD") loans

The following tables provide credit-related information for PCD loans which are reported in residential real estate.

(in millions, except ratios)	September 30, 2022	December 31, 2021
Loan delinquency[a]		
Current	**$ 11,252**	$ 12,746
30-149 days past due	**313**	331
150 or more days past due	**289**	664
Total PCD loans	**$ 11,854**	$ 13,741
% of 30+ days past due to total retained PCD loans	**5.08 %**	7.24 %
Nonaccrual loans	**$ 1,203**	$ 1,616

	Three months ended September 30,		Nine months ended September 30,	
(in millions, except ratios)	**2022**	2021	**2022**	2021
Net charge-offs/ (recoveries)	**$ (3)**	$ 1	**$ (9)**	$ 17
Net charge-off/ (recovery) rate	**(0.10)%**	0.03 %	**(0.09)%**	0.14 %

(a) At September 30, 2022 and December 31, 2021, 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.

Credit card

Total credit card loans increased from December 31, 2021 largely driven by growth in revolving balances on higher consumer spending and net new originations. The September 30, 2022 30+ and 90+ day delinquency rates of 1.23% and 0.57%, respectively, increased compared to the December 31, 2021 30+ and 90+ day delinquency rates of 1.04% and 0.50% but remain below pre-pandemic levels. Net charge-offs increased for the three months ended September 30, 2022 compared with the same period in the prior year driven by loan growth. Net charge-offs decreased for the nine months ended September 30, 2022 compared with the same period in the prior year. Delinquency and net charge-off rates continue to benefit from the ongoing financial strength of U.S. consumers. However, median deposit balances continue to decline, impacted by the growth in consumer spending.

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 11 for further information about this portfolio, including information about delinquencies.

Geographic and FICO composition of credit card loans

Refer to Note 11 for information on the geographic and FICO composition of the Firm's credit card loans.

Modifications of credit card loans

At September 30, 2022, the Firm had $794 million of credit card loans outstanding that have been modified in TDRs, which does not include loans with short-term or other insignificant modifications that are not considered TDRs, compared to $1.0 billion at December 31, 2021. Refer to Note 11 for additional information about loan modification programs to borrowers.

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 66-69 for further information.

The Firm's wholesale credit portfolio includes exposure held in CIB, CB, AWM and Corporate, as well as risk-rated exposures held in CCB, including business banking and auto dealer exposure for which the wholesale methodology is applied when determining the allowance for credit losses.

In the nine months ended September 30, 2022, credit continued to perform well with charge-offs remaining low. As of September 30, 2022, the decrease in nonperforming exposure was driven by a decline in lending related commitments and loans, predominantly in CIB and AWM, as a result of net portfolio activity and upgrades, largely offset by downgrades including downgrades to certain Russia and Russia-associated clients in the first quarter of 2022. Refer to Business Developments on page 9 and Country Risk on pages 82-83 for additional information.

As of September 30, 2022, retained loans increased $35.9 billion driven by CB and CIB, including increased revolver utilization, partially offset by a decline in AWM. Lending-related commitments decreased $13.5 billion driven by net portfolio activity in CIB, including a decrease in held-for-sale positions in the bridge financing portfolio, partially offset by net portfolio activity in AWM.

Wholesale credit portfolio

	Credit exposure		Nonperforming	
(in millions)	**Sep 30, 2022**	Dec 31, 2021	**Sep 30, 2022**	Dec 31, 2021
Loans retained	**$ 596,208**	$ 560,354	**$ 1,882**	$ 2,054
Loans held-for-sale	**2,391**	7,401	**29**	48
Loans at fair value	**29,776**	32,357	**385**	343
Loans	**628,375**	600,112	**2,296**	2,445
Derivative receivables	**92,534**	57,081	**339**	316
Receivables from customers[(a)]	**54,921**	59,645	**—**	—
Total wholesale credit-related assets	**775,830**	716,838	**2,635**	2,761
Assets acquired in loan satisfactions				
Real estate owned	**NA**	NA	**81**	101
Other	**NA**	NA	**—**	—
Total assets acquired in loan satisfactions	**NA**	NA	**81**	101
Lending-related commitments	**472,950**	486,445	**470**	764
Total wholesale credit portfolio	**$1,248,780**	$1,203,283	**$ 3,186**	$ 3,626
Credit derivatives and credit-related notes used in credit portfolio management activities[(b)]	**$ (24,276)**	$ (18,711) [(c)]	**$ —**	$ —
Liquid securities and other cash collateral held against derivatives	**(25,068)**	(10,102)	**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 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 72 and Note 4 for additional information.

(c) Prior-period amount has been revised to conform with the current presentation.

Wholesale credit exposure – maturity and ratings profile

The following tables present the maturity and internal risk ratings profiles of the wholesale credit portfolio as of September 30, 2022, and December 31, 2021. 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 2021 Form 10-K for further information on internal risk ratings.

September 30, 2022 (in millions, except ratios)	Maturity profile[e] 1 year or less	 1 year through 5 years	 After 5 years	 Total	Ratings profile Investment-grade	 Noninvestment-grade	 Total	 Total % of IG
Loans retained	$ 213,399	$ 242,119	$ 140,690	$ 596,208	$ 423,292	$ 172,916	$ 596,208	71 %
Derivative receivables				92,534			92,534	
Less: Liquid securities and other cash collateral held against derivatives				(25,068)			(25,068)	
Total derivative receivables, net of collateral	28,268	18,799	20,399	67,466	52,070	15,396	67,466	77
Lending-related commitments	110,035	339,705	23,210	472,950	329,043	143,907	472,950	70
Subtotal	351,702	600,623	184,299	1,136,624	804,405	332,219	1,136,624	71
Loans held-for-sale and loans at fair value[a]				32,167			32,167	
Receivables from customers				54,921			54,921	
Total exposure – net of liquid securities and other cash collateral held against derivatives				$1,223,712			$1,223,712	
Credit derivatives and credit-related notes used in credit portfolio management activities[b][c]	$ (8,713)	$ (10,866)	$ (4,697)	$ (24,276)	$ (19,787)	$ (4,489)	$ (24,276)	82 %

December 31, 2021 (in millions, except ratios)	Maturity profile[e] 1 year or less	 1 year through 5 years	 After 5 years	 Total	Ratings profile Investment-grade	 Noninvestment-grade	 Total	 Total % of IG
Loans retained	$214,064	$218,176	$128,114	$ 560,354	$ 410,011	$ 150,343	$ 560,354	73 %
Derivative receivables				57,081			57,081	
Less: Liquid securities and other cash collateral held against derivatives				(10,102)			(10,102)	
Total derivative receivables, net of collateral	13,648	12,814	20,517	46,979	31,934	15,045	46,979	68
Lending-related commitments	120,929	340,308	25,208	486,445	331,116	155,329	486,445	68
Subtotal	348,641	571,298	173,839	1,093,778	773,061	320,717	1,093,778	71
Loans held-for-sale and loans at fair value[a]				39,758			39,758	
Receivables from customers				59,645			59,645	
Total exposure – net of liquid securities and other cash collateral held against derivatives				$1,193,181			$1,193,181	
Credit derivatives and credit-related notes used in credit portfolio management activities[b][c][d]	$ (7,472)	$ (9,750)	$ (1,489)	$ (18,711)	$ (15,012)	$ (3,699)	$ (18,711)	80 %

(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) Prior-period amounts have been revised to conform with the current presentation.
(e) 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 at September 30, 2022, 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 $31.0 billion and $38.2 billion at September 30, 2022 and December 31, 2021, representing approximately 2.7% and 3.5% of total wholesale credit exposure, respectively. Criticized exposure decreased driven by net portfolio activity and client-specific upgrades, partially offset by client-specific downgrades, including declines in Consumer & Retail, Real Estate and Technology, Media & Telecommunications. Of the $31.0 billion of criticized exposure at September 30, 2022, approximately half was undrawn and $28.3 billion was performing.

The table below summarizes by industry the Firm's exposures as of September 30, 2022, and December 31, 2021. The industry of risk category is generally based on the client or counterparty's primary business activity. Refer to Note 4 of JPMorgan Chase's 2021 Form 10-K for additional information on industry concentrations.

Wholesale credit exposure – industries[(a)]

			Noninvestment-grade			Selected metrics			
As of or for the nine months ended **September 30, 2022** (in millions)	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	$ 168,202	$ 127,976	$ 36,833	$ 3,050	$ 343	$ 355	$ 5	$ (94)	$ –
Individuals and Individual Entities[(b)]	134,066	114,440	18,938	360	328	1,648	3	–	–
Consumer & Retail	118,893	61,434	50,208	6,720	531	447	20	(627)	–
Asset Managers	107,519	89,284	18,221	8	6	222	(1)	–	(12,253)
Technology, Media & Telecommunications	76,419	43,356	25,917	6,877	269	47	38	(1,402)	–
Industrials	70,480	38,533	29,156	2,635	156	263	32	(666)	(2)
Healthcare	58,215	41,088	15,430	1,602	95	59	24	(636)	(97)
Banks & Finance Cos	57,425	33,021	23,328	1,047	29	214	–	(406)	(612)
Oil & Gas	44,055	23,623	19,785	599	48	72	(1)	(513)	–
Utilities	35,226	25,699	8,374	1,002	151	11	21	(575)	–
Automotive	35,116	25,503	9,030	459	124	74	–	(480)	–
State & Municipal Govt[(c)]	34,804	33,987	687	123	7	7	–	(9)	(60)
Insurance	22,740	17,610	4,957	173	–	87	–	(198)	(7,871)
Chemicals & Plastics	19,504	12,022	6,822	569	91	13	3	(167)	–
Central Govt	16,493	16,206	287	–	–	–	10	(5,015)	(484)
Metals & Mining	16,432	9,172	6,883	327	50	5	(1)	(15)	(2)
Transportation	15,506	6,204	6,737	2,410	155	37	3	(302)	–
Financial Markets Infrastructure	7,122	7,001	121	–	–	–	–	–	–
Securities Firms	6,771	2,920	3,741	110	–	–	(13)	(24)	(898)
All other[(d)]	116,704	98,862	17,269	265	308	9	(4)	(13,147)	(2,789)
Subtotal	$1,161,692	$ 827,941	$ 302,724	$ 28,336	$ 2,691	$ 3,570	$ 139	$ (24,276)	$ (25,068)
Loans held-for-sale and loans at fair value	32,167								
Receivables from customers	54,921								
Total[(e)]	$1,248,780								

(continued from previous page)

As of or for the year ended December 31, 2021 (in millions)	Credit exposure[f][g]	Investment - grade	Noninvestment-grade			Selected metrics			
			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	$ 155,069	$ 120,174	$ 29,642	$ 4,636	$ 617	$ 394	$ 6	$ (185) [i]	$ –
Individuals and Individual Entities[b]	141,973	122,606	18,797	99	471	1,450	32	–	(1)
Consumer & Retail	122,789	59,622	53,317	9,445	405	288	2	(352) [i]	–
Asset Managers	81,228	68,593	12,630	–	5	8	–	–	(3,900)
Technology, Media & Telecommunications	84,070	49,610	25,540	8,595	325	58	(1)	(900) [i]	(12)
Industrials	66,974	36,953	26,957	2,895	169	428	13	(586) [i]	(1)
Healthcare	59,014	42,133	15,136	1,686	59	204	(4)	(490)	(174)
Banks & Finance Cos	54,684	29,732	23,809	1,138	5	9	9	(503) [i]	(810)
Oil & Gas	42,606	20,698	20,222	1,558	128	4	60	(564) [i]	–
Utilities	33,203	25,069	7,011	914	209	11	6	(367) [i]	(4)
Automotive	34,573	24,606	9,446	399	122	95	(3)	(463)	–
State & Municipal Govt[c]	33,216	32,522	586	101	7	74	–	–	(14)
Insurance	13,926	9,943	3,887	96	–	–	–	(25) [i]	(2,366)
Chemicals & Plastics	17,660	11,319	5,817	518	6	7	–	(89)	–
Central Govt	11,317	11,067	250	–	–	–	–	(6,961)	(72)
Metals & Mining	16,696	7,848	8,491	294	63	27	7	(15) [i]	(4)
Transportation	14,635	6,010	5,983	2,470	172	21	20	(100) [i]	(24)
Financial Markets Infrastructure	4,377	3,987	390	–	–	–	–	–	–
Securities Firms	4,180	2,599	1,578	–	3	–	–	(47)	(217)
All other[d]	111,690	97,537	13,580	205	368	242	(5)	(7,064) [i]	(2,503)
Subtotal	$1,103,880	$ 782,628	$ 283,069	$ 35,049	$ 3,134	$ 3,320	$ 142	$ (18,711)	$ (10,102)
Loans held-for-sale and loans at fair value	39,758								
Receivables from customers	59,645								
Total[e]	$1,203,283								

(a) The industry rankings presented in the table as of December 31, 2021, are based on the industry rankings of the corresponding exposures at September 30, 2022, not actual rankings of such exposures at December 31, 2021.

(b) Individuals and Individual Entities predominantly consists of Global Private Bank clients within AWM 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 $7.0 billion and $7.1 billion of trading assets at September 30, 2022, and December 31, 2021, respectively; $8.6 billion and $15.9 billion, respectively, of AFS securities; and $19.4 billion and $14.0 billion, respectively, of HTM securities, issued by U.S. state and municipal governments. Refer to Note 2 and Note 9 for further information.

(d) All other includes: SPEs, and Private education and civic organizations, representing approximately 95% and 5% at September 30, 2022 and 94% and 6% at December 31, 2021, respectively.

(e) Excludes cash placed with banks of $634.7 billion and $729.6 billion, at September 30, 2022, and December 31, 2021, 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) 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.

(i) Prior-period amounts have been revised to conform with the current presentation.

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

Real Estate

Real Estate exposure was $168.2 billion as of September 30, 2022, of which $98.3 billion was multifamily lending as shown in the table below. Criticized exposure decreased by $1.9 billion from $5.3 billion at December 31, 2021 to $3.4 billion at September 30, 2022, driven by client-specific upgrades and net portfolio activity partially offset by client-specific downgrades.

	September 30, 2022				
(in millions, except ratios)	Loans and Lending-related Commitments	Derivative Receivables	Credit exposure	% Investment-grade	% Drawn[d]
Multifamily[a]	$ 98,281	$ 10	$ 98,291	82 %	87 %
Office	15,035	26	15,061	74	74
Industrial	14,965	–	14,965	74	68
Services and Non Income Producing	13,679	4	13,683	68	48
Other Income Producing Properties[b]	12,285	150	12,435	69	61
Retail	10,136	10	10,146	69	66
Lodging	3,609	12	3,621	5	34
Total Real Estate Exposure[c]	$ 167,990	$ 212	$ 168,202	76 %	77 %

	December 31, 2021				
(in millions, except ratios)	Loans and Lending-related Commitments	Derivative Receivables	Credit exposure	% Investment-grade	% Drawn[d]
Multifamily[a]	$ 89,032	$ 122	$ 89,154	84 %	89 %
Office	16,409	234	16,643	75	71
Industrial	11,546	66	11,612	75	64
Services and Non Income Producing	11,512	24	11,536	63	50
Other Income Producing Properties[b]	13,018	498	13,516	77	55
Retail	9,580	106	9,686	61	69
Lodging	2,859	63	2,922	5	33
Total Real Estate Exposure	$ 153,956	$ 1,113	$ 155,069	77 %	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 79% secured; unsecured exposure is approximately 75% investment-grade.
(d) Represents drawn exposure as a percentage of credit exposure.

Consumer & Retail

Consumer & Retail exposure was $118.9 billion as of September 30, 2022, and predominantly included Retail, Food and Beverage, and Business and Consumer Services as shown in the table below. Criticized exposure decreased by $2.6 billion from $9.9 billion at December 31, 2021 to $7.3 billion at September 30, 2022, driven by net portfolio activity and client-specific upgrades partially offset by client-specific downgrades.

	September 30, 2022				
(in millions, except ratios)	**Loans and Lending-related Commitments**	**Derivative Receivables**	**Credit exposure**	**% Investment-grade**	**% Drawn[d]**
Retail[a]	**$ 34,299**	**$ 456**	**$ 34,755**	**52 %**	**34 %**
Food and Beverage	**31,239**	**900**	**32,139**	**61**	**41**
Business and Consumer Services	**30,939**	**472**	**31,411**	**48**	**39**
Consumer Hard Goods	**13,310**	**222**	**13,532**	**53**	**42**
Leisure[b]	**6,981**	**75**	**7,056**	**21**	**41**
Total Consumer & Retail[c]	**$ 116,768**	**$ 2,125**	**$ 118,893**	**52 %**	**39 %**

	December 31, 2021				
(in millions, except ratios)	Loans and Lending-related Commitments	Derivative Receivables	Credit exposure	% Investment-grade	% Drawn[d]
Retail[a]	$ 32,872	$ 1,152	$ 34,024	50 %	31 %
Food and Beverage	30,434	957	31,391	59	33
Business and Consumer Services	32,159	347	32,506	46	33
Consumer Hard Goods	17,035	111	17,146	46	30
Leisure[b]	7,620	102	7,722	17	34
Total Consumer & Retail	$ 120,120	$ 2,669	$ 122,789	49 %	32 %

(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 September 30, 2022 approximately 89% of the noninvestment-grade Leisure portfolio is secured.
(c) Consumer & Retail exposure is approximately 56% secured; unsecured exposure is approximately 79% investment-grade.
(d) Represents drawn exposure as a percent of credit exposure.

Oil & Gas

Oil & Gas exposure was $44.1 billion as of September 30, 2022, including $26.2 billion of Exploration & Production and Oil field Services as shown in the table below. Derivative receivables increased reflecting market movements related to Oil & Gas prices. Criticized exposure decreased by $1.0 billion from $1.7 billion at December 31, 2021 to $647 million at September 30, 2022, driven by net portfolio activity and client-specific upgrades partially offset by client-specific downgrades.

	September 30, 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	**$ 17,450**	**$ 8,756**	**$ 26,206**	**50 %**	**21 %**
Other Oil & Gas[a]	**16,345**	**1,504**	**17,849**	**59**	**25**
Total Oil & Gas[b]	**$ 33,795**	**$ 10,260**	**$ 44,055**	**54 %**	**22 %**

	December 31, 2021				
(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	$ 17,631	$ 5,452	$ 23,083	39 %	26 %
Other Oil & Gas[a]	18,941	582	19,523	60	26
Total Oil & Gas	$ 36,572	$ 6,034	$ 42,606	49 %	26 %

(a) Other Oil & Gas includes Integrated Oil & Gas companies, Midstream/Oil Pipeline companies and refineries.
(b) Oil & Gas exposure is approximately 44% secured, over half of which is reserve-based lending to the Exploration & Production sub-sector; unsecured exposure is approximately 61% 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 11 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 nine months ended September 30, 2022 and 2021. Since September 30, 2021, nonaccrual loan exposure decreased $596 million driven by paydowns and client-specific upgrades in Real Estate, Individuals and Oil & Gas, partially offset by client-specific downgrades, including downgrades to certain Russia and Russia-associated clients in the first quarter of 2022.

Wholesale nonaccrual loan activity

Nine month ended September 30, 2022, (in millions)	**2022**	2021
Beginning balance	**$ 2,445**	$ 4,106
Additions	**1,635**	2,021
Reductions:		
Paydowns and other	**1,108**	1,782
Gross charge-offs	**127**	180
Returned to performing status	**516**	893
Sales	**33**	380
Total reductions	**1,784**	3,235
Net changes	**(149)**	(1,214)
Ending balance	**$ 2,296**	$ 2,892

The following table presents net charge-offs/recoveries, which are defined as gross charge-offs less recoveries, for the three and nine months ended September 30, 2022 and 2021. 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 September 30,		Nine months ended September 30,	
	2022	2021	**2022**	2021
Loans				
Average loans retained	**$590,490**	$528,979	**$576,025**	$521,628
Gross charge-offs	**109**	52	**232**	187
Gross recoveries collected	**(50)**	(15)	**(93)**	(87)
Net charge-offs/(recoveries)	**59**	37	**139**	100
Net charge-off/(recovery) rate	**0.04 %**	0.03 %	**0.03 %**	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 22 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 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% at both September 30, 2022, and December 31, 2021. Refer to Note 4 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 were $92.5 billion and $57.1 billion at September 30, 2022, and December 31, 2021, respectively. The increase was primarily driven by higher foreign exchange and commodity derivative receivables as a result of market movements. 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 4 for additional information on the Firm's use of collateral agreements.

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

Derivative receivables

(in millions)	September 30, 2022	December 31, 2021
Total, net of cash collateral	**$ 92,534**	$ 57,081
Liquid securities and other cash collateral held against derivative receivables	**(25,068)**	(10,102)
Total, net of liquid securities and other cash collateral	**$ 67,466**	$ 46,979
Other collateral held against derivative receivables	**(2,299)**	(1,544)
Total, net of collateral	**$ 65,167**	$ 45,435

Ratings profile of derivative receivables

	September 30, 2022		December 31, 2021	
(in millions, except ratios)	Exposure net of collateral	% of exposure net of collateral	Exposure net of collateral	% of exposure net of collateral
Investment-grade	**$ 50,030**	**77 %**	$ 30,278	67 %
Noninvestment-grade	**15,137**	**23**	15,157	33
Total	**$ 65,167**	**100 %**	$ 45,435	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

	Notional amount of protection purchased and sold[(a)]	
(in millions)	**September 30, 2022**	December 31, 2021
Credit derivatives and credit-related notes used to manage:		
Loans and lending-related commitments	**$ 4,766**	$ 4,138
Derivative receivables	**19,510**	14,573 [(b)]
Credit derivatives and credit-related notes used in credit portfolio management activities	**$ 24,276**	$ 18,711

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

(b) Prior-period amount has been revised to conform with the current presentation.

Refer to Credit derivatives in Note 4 of this Form 10-Q and Note 5 of JPMorgan Chase's 2021 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 comprises:

- the allowance for loan losses, which covers the Firm's retained loan portfolios (scored and risk-rated) and is presented separately on the Consolidated balance sheets,
- the allowance for lending-related commitments, which is presented on the Consolidated balance sheets in accounts payable and other liabilities, 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 September 30, 2022 was $20.8 billion, reflecting a net addition of $2.1 billion from December 31, 2021, consisting of: $1.9 billion in wholesale and $168 million in consumer.

The net addition to the wholesale allowance resulted from:

- loan growth predominantly in CB and CIB, and
- changes to the Firm's macroeconomic forecast reflecting
  - updates to the Firm's macroeconomic scenarios including an increasing forecasted unemployment rate and deterioration in the equity market indices, and
  - the impact of the increased weight placed on the adverse scenarios beginning in the first quarter of 2022, due to the effects associated with higher inflation, changes in monetary policy, and geopolitical risks, including the war in Ukraine.

The increase in the consumer allowance was driven by Card, reflecting a net addition to the allowance for loan losses resulting from higher outstanding balances predominantly offset by a reduction related to a decrease in uncertainty associated with borrower behavior as the effects of the pandemic gradually recede.

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 5.0% in the third quarter of 2023, and a 1.6% lower U.S. real GDP exiting the fourth quarter of 2023.

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

	Assumptions at September 30, 2022		
	4Q22	2Q23	4Q23
U.S. unemployment rate[(a)]	3.8 %	3.9 %	3.9 %
YoY growth in U.S. real GDP[(b)]	– %	1.4 %	1.2 %

	Assumptions at December 31, 2021		
	2Q22	4Q22	2Q23
U.S. unemployment rate[(a)]	4.2 %	4.0 %	3.9 %
YoY growth in U.S. real GDP[(b)]	3.1 %	2.8 %	2.1 %

(a) Reflects quarterly average of forecasted U.S. unemployment rate.
(b) As of September 30, 2022, the year over year growth in U.S. real GDP in the forecast horizon of the central scenario is calculated as the percent 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 2021 Form 10-K for a description of the policies, methodologies and judgments used to determine the Firm's allowances for credit losses on loans, lending-related commitments, and investment securities.

Refer to Consumer Credit Portfolio on pages 59-63, Wholesale Credit Portfolio on pages 64-72 and Note 11 for additional information on the consumer and wholesale credit portfolios.

Refer to Critical Accounting Estimates Used by the Firm on pages 85-87 for further information on the allowance for credit losses and related management judgments.

Allowance for credit losses and related information

Nine months ended September 30, (in millions, except ratios)	2022				2021			
	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,	**$ 1,765**	**$ 10,250**	**$ 4,371**	**$ 16,386**	$ 3,636	$ 17,800	$ 6,892	$ 28,328
Gross charge-offs	**590**	**2,294**	**232**	**3,116**	452	2,957	187	3,596
Gross recoveries collected	**(441)**	**(616)**	**(93)**	**(1,150)**	(470)	(724)	(87)	(1,281)
Net charge-offs/(recoveries)	**149**	**1,678**	**139**	**1,966**	(18)	2,233	100	2,315
Provision for loan losses	**202**	**1,828**	**1,733**	**3,763**	(1,778)	(3,917)	(2,162)	(7,857)
Other	**1**	**—**	**1**	**2**	(2)	—	(4)	(6)
Ending balance at September 30,	**$ 1,819**	**$ 10,400**	**$ 5,966**	**$ 18,185**	$ 1,874	$ 11,650	$ 4,626	$ 18,150
Allowance for lending-related commitments								
Beginning balance at January 1,	**$ 113**	**$ —**	**$ 2,148**	**$ 2,261**	$ 187	$ —	$ 2,222	$ 2,409
Provision for lending-related commitments	**(36)**	**—**	**325**	**289**	(45)	—	(61)	(106)
Other	**—**	**—**	**1**	**1**	—	—	2	2
Ending balance at September 30,	**$ 77**	**$ —**	**$ 2,474**	**$ 2,551**	$ 142	$ —	$ 2,163	$ 2,305
Impairment methodology								
Asset-specific[(a)]	**$ (702)**	**$ 218**	**$ 450**	**$ (34)**	$ (571)	$ 383	$ 357	$ 169
Portfolio-based	**2,521**	**10,182**	**5,516**	**18,219**	2,445	11,267	4,269	17,981
Total allowance for loan losses	**$ 1,819**	**$ 10,400**	**$ 5,966**	**$ 18,185**	$ 1,874	$ 11,650	$ 4,626	$ 18,150
Impairment methodology								
Asset-specific	**$ —**	**$ —**	**$ 84**	**$ 84**	$ —	$ —	$ 129	$ 129
Portfolio-based	**77**	**—**	**2,390**	**2,467**	142	—	2,034	2,176
Total allowance for lending-related commitments	**$ 77**	**$ —**	**$ 2,474**	**$ 2,551**	$ 142	$ —	$ 2,163	$ 2,305
Total allowance for investment securities	**NA**	**NA**	**NA**	**$ 61**	NA	NA	NA	$ 73
Total allowance for credit losses[(b)]	**$ 1,896**	**$ 10,400**	**$ 8,440**	**$ 20,797**	$ 2,016	$ 11,650	$ 6,789	$ 20,528
Memo:								
Retained loans, end of period	**$ 301,403**	**$ 170,462**	**$ 596,208**	**$1,068,073**	$ 298,308	$ 143,166	$ 532,786	$ 974,260
Retained loans, average	**298,840**	**158,721**	**576,025**	**1,033,586**	299,620	137,012	521,628	958,260
Credit ratios								
Allowance for loan losses to retained loans	**0.60 %**	**6.10 %**	**1.00 %**	**1.70 %**	0.63 %	8.14 %	0.87 %	1.86 %
Allowance for loan losses to retained nonaccrual loans[(c)(d)]	**46**	**NM**	**317**	**314**	38	NM	222	259
Allowance for loan losses to retained nonaccrual loans excluding credit card	**46**	**NM**	**317**	**134**	38	NM	222	93
Net charge-off/(recovery) rates	**0.07**	**1.41**	**0.03**	**0.25**	(0.01)	2.18	0.03	0.32

(a) Includes collateral dependent loans, including those considered TDRs and those for which foreclosure is deemed probable, modified PCD loans, and non-collateral dependent loans that have been modified or are reasonably expected to be modified in a TDR. Also includes risk-rated loans that have been placed on nonaccrual status for the wholesale portfolio segment. The asset-specific allowance for credit card loans modified, or reasonably expected to be modified, in a TDR is calculated based on the loans' original contractual interest rates and does not consider any incremental penalty rates.

(b) At September 30, 2022, excludes an allowance for credit losses associated with certain accounts receivable in CIB of $30 million.

(c) The Firm's policy is generally to exempt credit card loans from being placed on nonaccrual status as permitted by regulatory guidance.

(d) Excludes the allowance for credit losses on investment securities of $61 million and $73 million as of September 30, 2022 and 2021, respectively.

Allocation of allowance for loan losses

The table below presents a breakdown of the allowance for loan losses by loan class. Refer to Note 11 for further information on loan classes.

	September 30, 2022		December 31, 2021	
(in millions, except ratios)	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	$ 849	22 %	$ 817	22 %
Auto and other	970	6	948	7
Consumer, excluding credit card	1,819	28	1,765	29
Credit card	10,400	16	10,250	15
Total consumer	12,219	44	12,015	45
Secured by real estate	1,559	12	1,495	12
Commercial and industrial	3,226	15	1,881	14
Other	1,181	29	995	29
Total wholesale	5,966	56	4,371	55
Total	$ 18,185	100 %	$ 16,386	100 %

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 September 30, 2022, the Treasury and CIO investment securities portfolio, net of allowance for credit losses, was $616.5 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 42-43 and Note 9 for further information on the investment securities portfolio and internal risk ratings. Refer to Liquidity Risk Management on pages 51-56 for further information on related liquidity risk. Refer to Market Risk Management on pages 77-81 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 September 30, 2022 and December 31, 2021.

(in billions)	**September 30, 2022**	December 31, 2021
Tax-oriented investments, primarily in alternative energy and affordable housing	**$ 23.8**	$ 23.2
Private equity, various debt and equity instruments, and real assets	**9.5** (a)	7.3
Total carrying value	**$ 33.3**	$ 30.5

(a) Includes the Firm's 40% ownership stake in C6 Bank.

Refer to page 132 of JPMorgan Chase's 2021 Form 10-K for a discussion of the Firm's Investment Portfolio Risk Management governance and oversight.

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 133-140 of JPMorgan Chase's 2021 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 149 of JPMorgan Chase's 2021 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 149 of JPMorgan Chase's 2021 Form 10-K for information regarding model reviews and approvals.

Refer to page 135 of JPMorgan Chase's 2021 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 138-140 of JPMorgan Chase's 2021 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

	Three months ended								
	September 30, 2022			June 30, 2022			September 30, 2021		
(in millions)	Avg.	Min	Max	Avg.	Min	Max	Avg.	Min	Max
CIB trading VaR by risk type									
Fixed income	**$ 64**	**$ 45**	**$ 82**	$ 60	$ 48	$ 79	$ 38	$ 30	$ 46
Foreign exchange	**9**	**6**	**15**	8	4	13	5	3	8
Equities	**11**	**8**	**14**	11	7	15	11	8	15
Commodities and other	**14**	**11**	**20**	14	12	17	11	9	13
Diversification benefit to CIB trading VaR	**(47)** [a]	**NM** [e]	**NM** [e]	(43) [a]	NM [e]	NM [e]	(33) [a]	NM [e]	NM [e]
CIB trading VaR	**51**	**36**	**69**	50	38	66	32	22	44
Credit Portfolio VaR	**10** [b][c]	**6** [b]	**17** [b][c]	17 [b][c]	6 [b]	31 [b][c]	5	4	7
Diversification benefit to CIB VaR	**(8)** [a]	**NM** [e]	**NM** [e]	(15) [a]	NM [e]	NM [e]	(4) [a]	NM [e]	NM [e]
CIB VaR	**53**	**38**	**71**	52	38	70	33	22	45
CCB VaR	**6**	**4**	**11**	5	4	6	6	4	10
Corporate and other LOB VaR	**12** [d]	**10**	**13**	10	9	11	17 [d]	15	19
Diversification benefit to other VaR	**(4)** [a]	**NM** [e]	**NM** [e]	(3) [a]	NM [e]	NM [e]	(4) [a]	NM [e]	NM [e]
Other VaR	**14**	**11**	**17**	12	10	14	19	16	23
Diversification benefit to CIB and other VaR	**(13)** [a]	**NM** [e]	**NM** [e]	(10) [a]	NM [e]	NM [e]	(16) [a]	NM [e]	NM [e]
Total VaR	**$ 54**	**$ 40**	**$ 71**	$ 54	$ 41	$ 71	$ 36	$ 24	$ 50

(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.
(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) For the three months ended March 31, 2022, the effects of nickel price increases and the associated volatility in the nickel market resulted in elevated average and maximum Credit Portfolio VaR which remained elevated for the period ended June 30, 2022. For the three months ended September 30, 2022, average and maximum Credit Portfolio VaR decreased driven by a reduction in nickel-related exposure when compared to the three months ended June 30, 2022.
(d) The decrease in Corporate and other LOB VaR was driven by lower market values for a legacy private equity position which is publicly traded.
(e) The maximum and minimum VaR for each portfolio may have occurred on different trading days than the components and consequently diversification benefit is not meaningful.

Quarter over quarter results

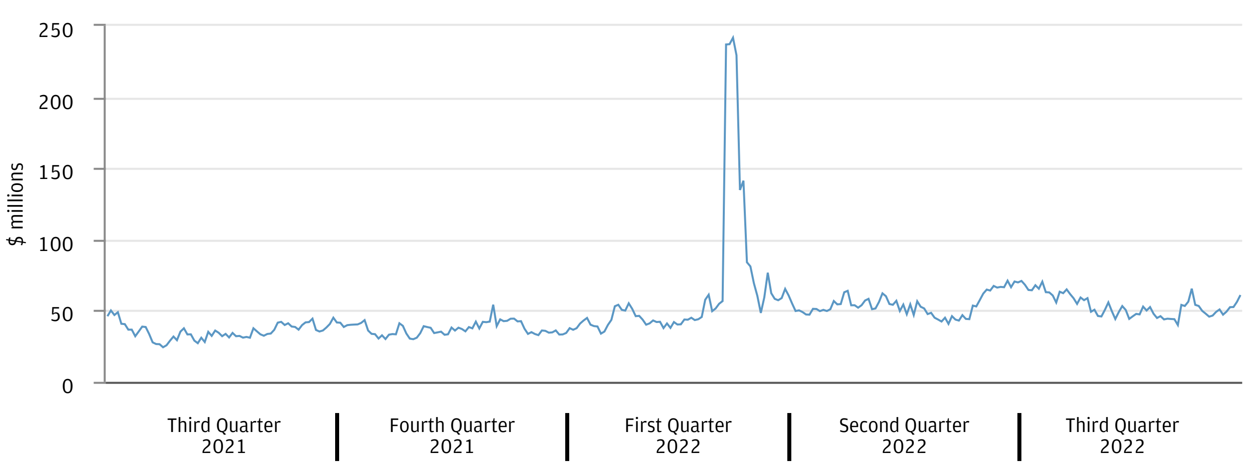
Average total VaR was flat for the three months ended September 30, 2022 when compared with June 30, 2022, reflecting increased market volatility impacting Fixed income, offset by risk reductions within CIB and Credit Portfolio VaR.

Year over year results

Average total VaR increased by $18 million for the three months ended September 30, 2022, compared with the same period in the prior year. This increase was predominantly driven by market volatility impacting Fixed income.

The following graph presents daily Risk Management VaR for the five trailing quarters. The movement in VaR in March 2022 was driven by changes in nickel-related counterparty exposure in the Firm's Credit portfolio.

Daily Risk Management VaR



VaR backtesting

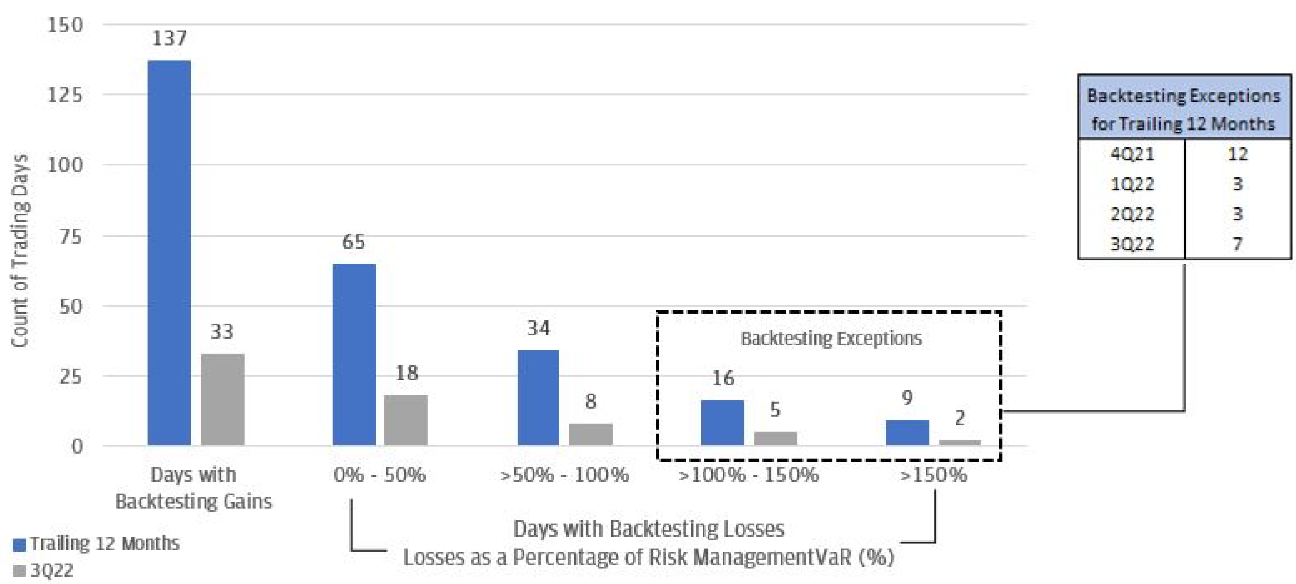
The Firm performs daily VaR model backtesting, which compares the daily Risk Management VaR results with the daily gains and losses that are utilized for VaR backtesting purposes. The gains and losses depicted in the chart below do not reflect the Firm's reported revenue as they exclude select components 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, certain 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 on average five times every 100 trading days. 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 September 30, 2022, the Firm posted backtesting gains on 137 of the 261 days, and observed 25 VaR backtesting exceptions due to market volatility that was materially higher than the levels realized in the historical data used for the VaR calculation. For the three months ended September 30, 2022, the Firm posted backtesting gains on 33 of the 66 days, and observed seven VaR backtesting exceptions predominantly driven by interest rate volatility.

The following chart presents the distribution of Firmwide daily backtesting gains and losses for the trailing 12 months and three months ended September 30, 2022. 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



Earnings-at-risk

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. Refer to the table on page 134 of JPMorgan Chase's 2021 Form 10-K for a summary by LOB and Corporate, identifying positions included in earnings-at-risk.

One way 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 134 of JPMorgan Chase's 2021 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 any such 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 used in the baseline and scenarios include certain assumptions relating to the reversal of Quantitative Easing.
- 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. The deposit rates paid in these scenarios differ from actual deposit rates paid, due to repricing lags and other factors.

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)	September 30, 2022	December 31, 2021
Parallel shift:		
+100 bps shift in rates	**$ (2.1)**	$ 5.0
-100 bps shift in rates	**1.3**	NM [(a)]
Steeper yield curve:		
+100 bps shift in long-term rates	**0.7**	1.8
-100 bps shift in short-term rates	**2.1**	NM [(a)]
Flatter yield curve:		
+100 bps shift in short-term rates	**(2.8)**	3.2
-100 bps shift in long-term rates	**(0.8)**	NM [(a)]

(a) Given the level of market interest rates, these scenarios were not considered to be meaningful as of December 31, 2021.

The change in the Firm's U.S. dollar sensitivities as of September 30, 2022 compared to December 31, 2021 reflected updates to the Firm's baseline for higher interest rates and higher corresponding modeled deposit betas, as well as the impact of changes in the Firm's balance sheet.

As of September 30, 2022, the Firm's sensitivity to the +/-100 basis points parallel and short-term shift in rates is primarily the result of a greater impact from liabilities repricing compared to the impact of assets repricing, while a +/-100 basis points shift in long-term rates is primarily the result of a greater impact from assets repricing compared to the impact of liabilities repricing.

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

(in billions)	September 30, 2022	December 31, 2021
Parallel shift:		
+100 bps shift in rates	**$ 0.7**	$ 0.8
-100 bps shift in rates	**(0.7)**	NM [(a)]
Steeper yield curve:		
-100 bps shift in short-term rates	**(0.6)**	NM [(a)]
Flatter yield curve:		
+100 bps shift in short-term rates	**0.6**	0.8

(a) Given the level of market interest rates, these scenarios were not considered to be meaningful as of December 31, 2021.

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 September 30, 2022 and December 31, 2021.

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 140 of JPMorgan Chase's 2021 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 September 30, 2022 and December 31, 2021, 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**	**September 30, 2022**	December 31, 2021
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	**$ (49)**	$ (69)
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	**(1,046)**	(971)
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	**(12)**	(16)
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	**(8)**	15
Derivatives – funding spread risk	Impact of changes in the spread related to derivatives FVA[c]	1 basis point parallel increase in spread	**(4)**	(7)
CVA - counterparty credit risk[b]	Credit risk component of CVA and associated hedges	10% credit spread widening	**(1)**	N/A
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	**40**	41
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	**(2)**	(3)
	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	**2**	3

(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.

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 141-142 of JPMorgan Chase's 2021 Form 10-K for a further discussion of the Firm's country risk management.

Sources and measurement

The Firm is exposed to country risk through its lending and deposits, investing, and market-making activities, whether cross-border or locally funded. Country exposure includes activity with both government and private-sector entities in a country.

Under the Firm's internal country risk management approach, attribution of exposure to an individual country is based on the country where the largest proportion of the assets of the counterparty, issuer, obligor or guarantor are located or where the largest proportion of its revenue is derived, which may be different than the domicile (i.e. legal residence) or country of incorporation.

Individual country exposures reflect an aggregation of the Firm's risk to an immediate default, with zero recovery, of the counterparties, issuers, obligors or guarantors attributed to that country. Activities which result in contingent or indirect exposure to a country are not included in the country exposure measure (for example, providing clearing services or secondary exposure to collateral on securities financing receivables).

Assumptions are sometimes required in determining the measurement and allocation of country exposure, particularly in the case of certain non-linear or index products, or where the nature of the counterparty, issuer, obligor or guarantor is not suitable for attribution to an individual country. The use of different measurement approaches or assumptions could affect the amount of reported country exposure.

Under the Firm's internal country risk measurement framework:

- Lending exposures are measured at the total committed amount (funded and unfunded), net of the allowance for credit losses and eligible cash and marketable securities collateral received
- Deposits are measured as the cash balances placed with central banks, commercial banks, and other financial institutions
- Securities financing exposures are measured at their receivable balance, net of eligible collateral received
- Debt and equity securities are measured at the fair value of all positions, including both long and short positions
- Counterparty exposure on derivative receivables is measured at the derivative's fair value, net of the fair value of the eligible collateral received
- Credit derivatives exposure is measured at the net notional amount of protection purchased or sold for the same underlying reference entity, inclusive of the fair value of the derivative receivable or payable; reflecting the manner in which the Firm manages these exposures

The Firm's internal country risk reporting differs from the reporting provided under the FFIEC bank regulatory requirements.

Risk Reporting

The following table presents the Firm's top 20 exposures by country (excluding the U.S.) as of September 30, 2022 and their comparative exposures as of December 31, 2021. 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 increase in exposure to Germany and the decrease in exposure to the U.K. were primarily due to changes in cash placements with the central banks of those countries driven by balance sheet and liquidity management activities.

The decrease in exposure to Australia was largely driven by a reduction in cash placed with the central bank of Australia, due to client-driven market-making activities and lower client cash deposits following recent interest rate increases.

As of September 30, 2022, exposure to Russia was approximately $600 million. This amount excludes certain client deposits placed at depository institutions.

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

(in billions)	September 30, 2022				December 31, 2021[e]
	Lending and deposits[b]	Trading and investing[c]	Other[d]	Total exposure	Total exposure
Germany	$ 98.6	$ 5.9	$ 0.3	$ 104.8	$ 61.7
United Kingdom	60.1	9.9	1.9	71.9	96.4
Japan	31.5	8.7	0.2	40.4	45.5
Australia	16.2	4.4	–	20.6	39.1
France	11.7	2.8	4.1	18.6	14.0
Switzerland	12.9	1.4	2.7	17.0	20.9
Brazil	7.7	8.3	–	16.0	12.0
Canada	13.0	2.6	0.2	15.8	16.9
China	9.6	5.1	0.1	14.8	18.6
Singapore	6.6	3.7	0.5	10.8	12.3
South Korea	4.7	4.5	0.1	9.3	8.7
Spain	8.4	0.8	–	9.2	10.1
India	5.3	2.9	0.7	8.9	14.7
Saudi Arabia	5.7	2.4	–	8.1	9.1
Belgium	6.3	1.3	–	7.6	6.8
Luxembourg	4.7	1.5	–	6.2	11.5
Netherlands	6.2	(0.4)	0.4	6.2	6.8
Malaysia	4.6	0.7	0.3	5.6	2.7
Mexico	4.6	0.3	–	4.9	4.9
Hong Kong SAR	2.6	1.2	–	3.8	5.9

(a) Country exposures presented in the table reflect 88% of total Firmwide non-U.S. exposure, where exposure is attributed to an individual country, at both September 30, 2022 and December 31, 2021, respectively.

(b) Lending and deposits includes loans and accrued interest receivable, lending-related commitments (net of eligible collateral and the allowance for credit losses), deposits with banks (including central banks), acceptances, other monetary assets, and issued letters of credit net of risk participations. Excludes intra-day and operating exposures, such as those from settlement and clearing activities.

(c) 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.

(d) Largely represents physical commodity inventory.

(e) The country rankings presented in the table as of December 31, 2021, are based on the country rankings of the corresponding exposures at September 30, 2022, not actual rankings of such exposures at December 31, 2021.

Operational risk is the risk of an adverse outcome resulting from inadequate or failed internal processes or systems, human factors, or external events impacting the Firm's processes or systems. Operational Risk includes compliance, conduct, legal, and estimations and model risk. Operational risk is inherent in the Firm's activities and can manifest itself in various ways, including fraudulent acts, business disruptions (including those caused by extraordinary events beyond the Firm's control), cyberattacks, inappropriate employee behavior, failure to comply with applicable laws, rules and regulations or failure of vendors or other third party providers to perform in accordance with their agreements. Operational Risk Management attempts to manage operational risk at appropriate levels in light of the Firm's financial position, the characteristics of its businesses, and the markets and regulatory environments in which it operates. Refer to Operational Risk Management on pages 143-149 of JPMorgan Chase's 2021 Form 10-K for a discussion of the Firm's Operational Risk Management. Details on other select examples of operational risks are provided below.

In response to the war in Ukraine, numerous sanctions have been imposed on Russia and Russia-associated entities and individuals by various governments around the world, including the authorities in the U.S., the U.K. and the EU. These sanctions are complex and continue to evolve. The Firm continues to face increased operational risk associated with interpreting and maintaining these complex compliance programs. To manage this increased risk, the Firm implemented additional controls reasonably designed to mitigate the risk of non-compliance and to prevent dealing with sanctioned persons or in property subject to sanctions, as well as to block or restrict payments as required by the applicable regulations.

Business and technology resiliency risk

Disruptions can occur due to forces beyond the Firm's control such as the spread of infectious diseases or pandemics, severe weather, power or telecommunications loss, failure of a third party to provide expected services, cyberattacks and terrorism. The Firmwide Business Resiliency Program is designed to enable the Firm to prepare for, adapt to, withstand and recover from business disruptions including occurrence of an extraordinary event beyond its control that may impact critical business functions and supporting assets (i.e., staff, technology, facilities and third parties). The program includes governance, awareness training, planning and testing of recovery strategies, as well as strategic and tactical initiatives to identify, assess, and manage business interruption and public safety risks.

Cybersecurity Risk

The Firm continues to face increased risk of cyber attacks due to potential retaliation for the sanctions imposed as a result of the war in Ukraine. The Firm implemented additional precautionary measures and controls reasonably designed to address this increased risk, such as enhanced threat monitoring. There can be no assurance that the measures taken by the Firm to protect against cybersecurity breaches will provide absolute security against cyber attacks.

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 comprises:

- The allowance for loan losses, which covers the Firm's retained loan portfolios (scored and risk-rated),
- The allowance for lending-related commitments, and
- The allowance for credit losses on investment securities.

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 2021 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 73-75 and Note 12 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 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 U.S. unemployment, HPI and U.S. real GDP.
- Key MEVs for the wholesale portfolio include U.S. real GDP, U.S. unemployment, U.S. equity prices, 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.

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 73 and in Note 12, the Firm's relative adverse scenario assumes an elevated U.S. unemployment rate, averaging approximately 2.2% higher over the eight-quarter forecast, with a peak difference of 3.0% in the third quarter of 2023; lower U.S. real GDP with a slower recovery, remaining approximately 4.2% lower at the end of the eight-quarter forecast, with a peak difference of approximately 4.9% in the third quarter of 2023; and lower national HPI with a peak difference of approximately 13.6% in the second quarter of 2024.

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 September 30, 2022, 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 September 30, 2022, 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 $500 million for residential real estate loans and lending-related commitments
- An increase of approximately $2.5 billion for credit card loans
- An increase of approximately $4.2 billion for wholesale loans and lending-related commitments

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 September 30, 2022.

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.

September 30, 2022 (in billions, except ratios)	Total assets at fair value	Total level 3 assets
Federal funds sold and securities purchased under resale agreements	$ 299.2	$ –
Securities borrowed	67.3	–
Trading assets:		
Trading–debt and equity instruments	413.9	2.9
Derivative receivables[(a)]	92.5	11.1
Total trading assets	506.4	14.0
AFS securities	188.1	0.2
Loans	41.6	1.6
MSRs	8.1	8.1
Other	14.0	0.4
Total assets measured at fair value on a recurring basis	1,124.7	24.3
Total assets measured at fair value on a nonrecurring basis	3.2	2.0
Total assets measured at fair value	$ 1,127.9	$ 26.3
Total Firm assets	$ 3,773.9	
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)]		2.3%

(a) For purposes of the table above, the derivative receivables total reflects the impact of netting adjustments; however, the $11.1 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 speed, 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 $11.1 billion and $9.8 billion at September 30, 2022 and December 31, 2021, respectively, and is recorded in accounts payable and other liabilities on the Consolidated balance sheets. The increase in the liability was driven by continued growth in rewards points earned on accelerated spend and promotional offers outpacing redemptions throughout 2022. Refer to page 152 of JPMorgan Chase's 2021 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 pages 152-153 of JPMorgan Chase's 2021 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 152 of JPMorgan Chase's 2021 Form 10-K for a description of the significant valuation judgments associated with goodwill impairment.

Refer to Note 14 for additional information on goodwill, including the goodwill impairment assessment as of September 30, 2022.

Litigation reserves
Refer to Note 24 of this Form 10-Q, and Note 30 of JPMorgan Chase's 2021 Form 10-K for a description of the significant estimates and judgments associated with establishing litigation reserves.

Financial Accounting Standards Board ("FASB") Standards Adopted since January 1, 2021

Standard	Summary of guidance	Effects on financial statements
Reference Rate Reform *Issued March 2020 and updated January 2021*	• 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. • Provides an election to account for certain contract amendments related to reference rate reform as modifications rather than extinguishments without the requirement to assess the significance of the amendments. • Allows for changes in critical terms of a hedge accounting relationship without automatic termination of that relationship. Provides various practical expedients and elections designed to allow hedge accounting to continue uninterrupted during the transition period. • Provides a one-time election to transfer securities out of the held-to-maturity classification if certain criteria are met. • The January 2021 update provides an election to account for derivatives modified to change the rate used for discounting, margining, or contract price alignment (collectively "discounting transition") as modifications.	• Issued and effective March 12, 2020. The January 7, 2021 update was effective when issued. • The Firm elected to apply certain of the practical expedients related to contract modifications and hedge accounting relationships, and discounting transition beginning in the third quarter of 2020. The discounting transition election was applied retrospectively. The main purpose of the practical expedients is to ease the administrative burden of accounting for contracts impacted by reference rate reform. These elections did not have a material impact on the Consolidated Financial Statements.

FASB Standards Issued but not yet Adopted

Standard	Summary of guidance	Effects on financial statements
Derivatives and Hedging: Fair Value Hedging - Portfolio Layer Method *Issued March 2022*	• 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 updates the disclosure guidance for the hedge accounting adjustments.	• Required effective date: January 1, 2023. (a) • The Firm is currently evaluating the potential impact on the Consolidated Financial Statements, as well as the Firm's planned date of adoption.
Financial Instruments - Credit Losses: Troubled Debt Restructurings and Vintage Disclosures *Issued March 2022*	• 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.	• Required effective date: January 1, 2023. (a) • The Firm is currently evaluating the potential impact on the Consolidated Financial Statements. • The Firm plans to adopt the new guidance on January 1, 2023.

(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;
- 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;
- Economic, financial, reputational and other impacts of the COVID-19 pandemic; and
- The other risks and uncertainties detailed in Part I, Item 1A: Risk Factors in JPMorgan Chase's 2021 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 September 30, 2022	Three months ended September 30, 2021	Nine months ended September 30, 2022	Nine months ended September 30, 2021
Revenue				
Investment banking fees	**$ 1,674**	$ 3,282	**$ 5,268**	$ 9,722
Principal transactions	**5,383**	3,546	**15,478**	14,122
Lending- and deposit-related fees	**1,731**	1,801	**5,443**	5,248
Asset management, administration and commissions	**5,069**	5,257	**15,671**	15,480
Investment securities losses	**(959)**	(256)	**(1,506)**	(397)
Mortgage fees and related income	**314**	600	**1,152**	1,855
Card income	**1,086**	1,005	**3,194**	4,002
Other income	**900**	1,332	**2,930**	3,650
Noninterest revenue	**15,198**	16,567	**47,630**	53,682
Interest income	**25,611**	14,480	**59,753**	42,845
Interest expense	**8,093**	1,400	**13,235**	4,135
Net interest income	**17,518**	13,080	**46,518**	38,710
Total net revenue	**32,716**	29,647	**94,148**	92,392
Provision for credit losses	**1,537**	(1,527)	**4,101**	(7,968)
Noninterest expense				
Compensation expense	**10,539**	9,087	**31,627**	29,502
Occupancy expense	**1,162**	1,109	**3,425**	3,314
Technology, communications and equipment expense	**2,366**	2,473	**7,102**	7,480
Professional and outside services	**2,481**	2,523	**7,522**	7,111
Marketing	**1,017**	712	**2,818**	2,089
Other expense	**1,613**	1,159	**4,624**	3,959
Total noninterest expense	**19,178**	17,063	**57,118**	53,455
Income before income tax expense	**12,001**	14,111	**32,929**	46,905
Income tax expense	**2,264**	2,424	**6,261**	8,970
Net income	**$ 9,737**	$ 11,687	**$ 26,668**	$ 37,935
Net income applicable to common stockholders	**$ 9,255**	$ 11,229	**$ 25,295**	$ 36,576
Net income per common share data				
Basic earnings per share	**$ 3.13**	$ 3.74	**$ 8.53**	$ 12.05
Diluted earnings per share	**3.12**	3.74	**8.51**	12.02
Weighted-average basic shares	**2,961.2**	2,999.9	**2,966.8**	3,036.4
Weighted-average diluted shares	**2,965.4**	3,005.1	**2,970.9**	3,041.7

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 September 30, 2022	Three months ended September 30, 2021	Nine months ended September 30, 2022	Nine months ended September 30, 2021
Net income	**$ 9,737**	$ 11,687	**$ 26,668**	$ 37,935
Other comprehensive income/(loss), after-tax				
Unrealized losses on investment securities	**(2,145)**	(434)	**(13,629)**	(4,099)
Translation adjustments, net of hedges	**(581)**	(187)	**(1,322)**	(373)
Fair value hedges	**38**	9	**199**	(42)
Cash flow hedges	**(1,698)**	(450)	**(5,837)**	(2,108)
Defined benefit pension and OPEB plans	**(1,004)**	6	**(917)**	83
DVA on fair value option elected liabilities	**625**	(551)	**2,456**	(484)
Total other comprehensive loss, after-tax	**(4,765)**	(1,607)	**(19,050)**	(7,023)
Comprehensive income	**$ 4,972**	$ 10,080	**$ 7,618**	$ 30,912

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)		September 30, 2022		December 31, 2021
Assets				
Cash and due from banks	**$**	**24,654**	$	26,438
Deposits with banks		**619,533**		714,396
Federal funds sold and securities purchased under resale agreements (included **$299,243** and $252,720 at fair value)		**301,878**		261,698
Securities borrowed (included **$67,281** and $81,463 at fair value)		**193,216**		206,071
Trading assets (included assets pledged of **$105,200** and $102,710)		**506,487**		433,575
Available-for-sale securities (amortized cost of **$200,919** and $308,254, net of allowance for credit losses; included assets pledged of **$11,114** and $18,268)		**188,140**		308,525
Held-to-maturity securities (net of allowance for credit losses)		**430,106**		363,707
Investment securities, net of allowance for credit losses		**618,246**		672,232
Loans (included **$41,487** and $58,820 at fair value)		**1,112,633**		1,077,714
Allowance for loan losses		**(18,185)**		(16,386)
Loans, net of allowance for loan losses		**1,094,448**		1,061,328
Accrued interest and accounts receivable		**143,905**		102,570
Premises and equipment		**27,199**		27,070
Goodwill, MSRs and other intangible assets		**60,806**		56,691
Other assets (included **$14,833** and $14,753 at fair value and assets pledged of **$5,361** and $5,298)		**183,512**		181,498
Total assets[(a)]	**$**	**3,773,884**	$	3,743,567
Liabilities				
Deposits (included **$20,935** and $11,333 at fair value)	**$**	**2,408,615**	$	2,462,303
Federal funds purchased and securities loaned or sold under repurchase agreements (included **$180,535** and $126,435 at fair value)		**239,939**		194,340
Short-term borrowings (included **$15,643** and $20,015 at fair value)		**47,866**		53,594
Trading liabilities		**189,878**		164,693
Accounts payable and other liabilities (included **$5,937** and $5,651 at fair value)		**300,016**		262,755
Beneficial interests issued by consolidated VIEs (included **$5** and $12 at fair value)		**12,079**		10,750
Long-term debt (included **$65,945** and $74,934 at fair value)		**287,473**		301,005
Total liabilities[(a)]		**3,485,866**		3,449,440
Commitments and contingencies (refer to Notes 22, 23 and 24)				
Stockholders' equity				
Preferred stock ($1 par value; authorized 200,000,000 shares; issued **3,283,750** and 3,483,750 shares)		**32,838**		34,838
Common stock ($1 par value; authorized 9,000,000,000 shares; issued **4,104,933,895** shares)		**4,105**		4,105
Additional paid-in capital		**88,865**		88,415
Retained earnings		**288,776**		272,268
Accumulated other comprehensive losses		**(19,134)**		(84)
Treasury stock, at cost (**1,171,729,007** and 1,160,784,750 shares)		**(107,432)**		(105,415)
Total stockholders' equity		**288,018**		294,127
Total liabilities and stockholders' equity	**$**	**3,773,884**	$	3,743,567

(a) The following table presents information on assets and liabilities related to VIEs that are consolidated by the Firm at September 30, 2022, and December 31, 2021. 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 13 for a further discussion.

(in millions)		September 30, 2022		December 31, 2021
Assets				
Trading assets	**$**	**1,991**	$	2,010
Loans		**31,597**		33,024
All other assets		**562**		490
Total assets	**$**	**34,150**	$	35,524
Liabilities				
Beneficial interests issued by consolidated VIEs	**$**	**12,079**	$	10,750
All other liabilities		**274**		245
Total liabilities	**$**	**12,353**	$	10,995

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 September 30, 2022	Three months ended September 30, 2021	Nine months ended September 30, 2022	Nine months ended September 30, 2021
Preferred stock				
Balance at the beginning of the period	**$ 32,838**	$ 32,838	**$ 34,838**	$ 30,063
Issuance	**–**	2,000	**–**	7,350
Redemption	**–**	–	**(2,000)**	(2,575)
Balance at September 30	**32,838**	34,838	**32,838**	34,838
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	**88,614**	88,194	**88,415**	88,394
Shares issued and commitments to issue common stock for employee share-based compensation awards, and related tax effects	**251**	227	**450**	93
Other	**–**	(64)	**–**	(130)
Balance at September 30	**88,865**	88,357	**88,865**	88,357
Retained earnings				
Balance at the beginning of the period	**282,445**	256,983	**272,268**	236,990
Net income	**9,737**	11,687	**26,668**	37,935
Dividends declared:				
Preferred stock	**(432)**	(402)	**(1,239)**	(1,174)
Common stock (**$1.00** and $1.00 per share and **$3.00** and $2.80 per share, respectively)	**(2,974)**	(2,992)	**(8,921)**	(8,475)
Balance at September 30	**288,776**	265,276	**288,776**	265,276
Accumulated other comprehensive income/(loss)				
Balance at the beginning of the period	**(14,369)**	2,570	**(84)**	7,986
Other comprehensive loss, after-tax	**(4,765)**	(1,607)	**(19,050)**	(7,023)
Balance at September 30	**(19,134)**	963	**(19,134)**	963
Treasury stock, at cost				
Balance at the beginning of the period	**(107,490)**	(98,304)	**(105,415)**	(88,184)
Repurchase	**–**	(5,240)	**(3,122)**	(16,440)
Reissuance	**58**	46	**1,105**	1,126
Balance at September 30	**(107,432)**	(103,498)	**(107,432)**	(103,498)
Total stockholders' equity	**$ 288,018**	$ 290,041	**$ 288,018**	$ 290,041

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)	Nine months ended September 30, 2022	2021
Operating activities		
Net income	**$ 26,668**	$ 37,935
Adjustments to reconcile net income to net cash used in operating activities:		
Provision for credit losses	**4,101**	(7,968)
Depreciation and amortization	**5,380**	6,001
Deferred tax (benefit)/expense	**(3,455)**	(1,063)
Other	**3,815**	2,662
Originations and purchases of loans held-for-sale	**(131,589)**	(259,159)
Proceeds from sales, securitizations and paydowns of loans held-for-sale	**149,420**	244,966
Net change in:		
Trading assets	**(114,006)**	2,700
Securities borrowed	**12,347**	(42,471)
Accrued interest and accounts receivable	**(41,621)**	(26,148)
Other assets	**(17,114)**	(358)
Trading liabilities	**34,950**	(10,668)
Accounts payable and other liabilities	**75,961**	47,547
Other operating adjustments	**1,040**	(987)
Net cash provided by/(used in) operating activities	**5,897**	(7,011)
Investing activities		
Net change in:		
Federal funds sold and securities purchased under resale agreements	**(40,741)**	14,089
Held-to-maturity securities:		
Proceeds from paydowns and maturities	**33,542**	39,106
Purchases	**(29,329)**	(78,976)
Available-for-sale securities:		
Proceeds from paydowns and maturities	**30,646**	39,346
Proceeds from sales	**62,252**	146,858
Purchases	**(75,204)**	(163,211)
Proceeds from sales and securitizations of loans held-for-investment	**36,199**	25,981
Other changes in loans, net	**(96,151)**	(45,028)
All other investing activities, net	**(7,503)**	(7,351)
Net cash (used in) investing activities	**(86,289)**	(29,186)
Financing activities		
Net change in:		
Deposits	**(44,336)**	234,716
Federal funds purchased and securities loaned or sold under repurchase agreements	**45,910**	39,753
Short-term borrowings	**(4,813)**	4,710
Beneficial interests issued by consolidated VIEs	**2,042**	(1,839)
Proceeds from long-term borrowings	**68,944**	69,272
Payments of long-term borrowings	**(37,470)**	(46,041)
Proceeds from issuance of preferred stock	**—**	7,350
Redemption of preferred stock	**(2,000)**	(2,575)
Treasury stock repurchased	**(3,162)**	(16,286)
Dividends paid	**(10,186)**	(9,472)
All other financing activities, net	**1,158**	(1,573)
Net cash provided by financing activities	**16,087**	278,015
Effect of exchange rate changes on cash and due from banks and deposits with banks	**(32,342)**	(9,558)
Net increase/(decrease) in cash and due from banks and deposits with banks	**(96,647)**	232,260
Cash and due from banks and deposits with banks at the beginning of the period	**740,834**	527,609
Cash and due from banks and deposits with banks at the end of the period	**$ 644,187**	$ 759,869
Cash interest paid	**$ 11,075**	$ 3,882
Cash income taxes paid, net	**226**	17,617

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. Refer to Note 25 for a further discussion of the Firm's business segments.

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 2021 Form 10-K.

Certain amounts reported in prior periods have been reclassified 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 2021 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 activities 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 2021 Form 10-K for further information on offsetting assets and liabilities.

Note 2 – Fair value measurement

Refer to Note 2 of JPMorgan Chase's 2021 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 September 30, 2022, and December 31, 2021, by major product category and fair value hierarchy.

Assets and liabilities measured at fair value on a recurring basis

	Fair value hierarchy				
September 30, 2022 (in millions)	Level 1	Level 2	Level 3	Derivative netting adjustments[f]	Total fair value
Federal funds sold and securities purchased under resale agreements	$ –	$ 299,242	$ 1	$ –	$ 299,243
Securities borrowed	–	67,281	–	–	67,281
Trading assets:					
Debt instruments:					
Mortgage-backed securities:					
U.S. GSEs and government agencies[a]	–	82,050	776	–	82,826
Residential – nonagency	–	2,188	9	–	2,197
Commercial – nonagency	–	1,432	11	–	1,443
Total mortgage-backed securities	–	85,670	796	–	86,466
U.S. Treasury, GSEs and government agencies[a]	76,042	7,557	–	–	83,599
Obligations of U.S. states and municipalities	–	6,960	7	–	6,967
Certificates of deposit, bankers' acceptances and commercial paper	–	1,216	–	–	1,216
Non-U.S. government debt securities	28,727	44,693	166	–	73,586
Corporate debt securities	–	26,427	348	–	26,775
Loans	–	5,210	865	–	6,075
Asset-backed securities	–	2,627	26	–	2,653
Total debt instruments	104,769	180,360	2,208	–	287,337
Equity securities	91,572	2,109	580	–	94,261
Physical commodities[b]	2,336	13,596	2	–	15,934
Other	–	16,296	84	–	16,380
Total debt and equity instruments[c]	198,677	212,361	2,874	–	413,912
Derivative receivables:					
Interest rate	12,023	263,527	3,582	(253,300)	25,832
Credit	–	13,215	719	(12,063)	1,871
Foreign exchange	886	353,603	1,344	(318,966)	36,867
Equity	–	80,920	4,881	(74,175)	11,626
Commodity	–	38,348	606	(22,616)	16,338
Total derivative receivables	12,909	749,613	11,132	(681,120)	92,534
Total trading assets[d]	211,586	961,974	14,006	(681,120)	506,446
Available-for-sale securities:					
Mortgage-backed securities:					
U.S. GSEs and government agencies[a]	–	53,331	–	–	53,331
Residential – nonagency	–	4,762	–	–	4,762
Commercial – nonagency	–	1,937	–	–	1,937
Total mortgage-backed securities	–	60,030	–	–	60,030
U.S. Treasury and government agencies	90,487	–	–	–	90,487
Obligations of U.S. states and municipalities	–	8,582	–	–	8,582
Non-U.S. government debt securities	6,547	8,054	–	–	14,601
Corporate debt securities	–	119	180	–	299
Asset-backed securities:					
Collateralized loan obligations	–	10,920	–	–	10,920
Other	–	3,221	–	–	3,221
Total available-for-sale securities	97,034	90,926	180	–	188,140
Loans[e]	–	39,913	1,574	–	41,487
Mortgage servicing rights	–	–	8,140	–	8,140
Other assets[d]	7,605	6,011	376	–	13,992
Total assets measured at fair value on a recurring basis	$ 316,225	$ 1,465,347	$ 24,277	$ (681,120)	$ 1,124,729
Deposits	$ –	$ 19,109	$ 1,826	$ –	$ 20,935
Federal funds purchased and securities loaned or sold under repurchase agreements	–	180,535	–	–	180,535
Short-term borrowings	–	14,059	1,584	–	15,643
Trading liabilities:					
Debt and equity instruments[c]	103,932	29,172	71	–	133,175
Derivative payables:					
Interest rate	7,373	255,680	3,027	(248,681)	17,399
Credit	–	10,814	376	(10,456)	734
Foreign exchange	727	351,568	837	(330,302)	22,830
Equity	–	74,707	5,207	(71,775)	8,139
Commodity	–	31,415	407	(24,221)	7,601
Total derivative payables	8,100	724,184	9,854	(685,435)	56,703
Total trading liabilities	112,032	753,356	9,925	(685,435)	189,878
Accounts payable and other liabilities	4,445	1,423	69	–	5,937
Beneficial interests issued by consolidated VIEs	–	5	–	–	5
Long-term debt	–	43,517	22,428	–	65,945
Total liabilities measured at fair value on a recurring basis	$ 116,477	$ 1,012,004	$ 35,832	$ (685,435)	$ 478,878

December 31, 2021 (in millions)	Fair value hierarchy Level 1	Level 2	Level 3	Derivative netting adjustments[f]	Total fair value
Federal funds sold and securities purchased under resale agreements	$ –	$ 252,720	$ –	$ –	$ 252,720
Securities borrowed	–	81,463	–	–	81,463
Trading assets:					
Debt instruments:					
Mortgage-backed securities:					
U.S. GSEs and government agencies[a]	–	38,944	265	–	39,209
Residential – nonagency	–	2,358	28	–	2,386
Commercial – nonagency	–	1,506	10	–	1,516
Total mortgage-backed securities	–	42,808	303	–	43,111
U.S. Treasury, GSEs and government agencies[a]	68,527	9,181	–	–	77,708
Obligations of U.S. states and municipalities	–	7,068	7	–	7,075
Certificates of deposit, bankers' acceptances and commercial paper	–	852	–	–	852
Non-U.S. government debt securities	26,982	44,581	81	–	71,644
Corporate debt securities	–	24,491	332	–	24,823
Loans	–	7,366	708	–	8,074
Asset-backed securities	–	2,668	26	–	2,694
Total debt instruments	95,509	139,015	1,457	–	235,981
Equity securities	86,904	1,741	662	–	89,307
Physical commodities[b]	5,357	20,788	–	–	26,145
Other	–	24,850	160	–	25,010
Total debt and equity instruments[c]	187,770	186,394	2,279	–	376,443
Derivative receivables:					
Interest rate	1,072	267,493	2,020	(248,611)	21,974
Credit	–	9,321	518	(8,808)	1,031
Foreign exchange	134	168,590	855	(156,954)	12,625
Equity	–	65,139	3,492	(58,650)	9,981
Commodity	–	26,232	421	(15,183)	11,470
Total derivative receivables	1,206	536,775	7,306	(488,206)	57,081
Total trading assets[d]	188,976	723,169	9,585	(488,206)	433,524
Available-for-sale securities:					
Mortgage-backed securities:					
U.S. GSEs and government agencies[a]	4	72,539	–	–	72,543
Residential – nonagency	–	6,070	–	–	6,070
Commercial – nonagency	–	4,949	–	–	4,949
Total mortgage-backed securities	4	83,558	–	–	83,562
U.S. Treasury and government agencies	177,463	–	–	–	177,463
Obligations of U.S. states and municipalities	–	15,860	–	–	15,860
Non-U.S. government debt securities	5,430	10,779	–	–	16,209
Corporate debt securities	–	160	161	–	321
Asset-backed securities:					
Collateralized loan obligations	–	9,662	–	–	9,662
Other	–	5,448	–	–	5,448
Total available-for-sale securities	182,897	125,467	161	–	308,525
Loans[e]	–	56,887	1,933	–	58,820
Mortgage servicing rights	–	–	5,494	–	5,494
Other assets[d]	9,558	4,139	306	–	14,003
Total assets measured at fair value on a recurring basis	$ 381,431	$ 1,243,845	$ 17,479	$ (488,206)	$ 1,154,549
Deposits	$ –	$ 9,016	$ 2,317	$ –	$ 11,333
Federal funds purchased and securities loaned or sold under repurchase agreements	–	126,435	–	–	126,435
Short-term borrowings	–	17,534	2,481	–	20,015
Trading liabilities:					
Debt and equity instruments[c]	87,831	26,716	30	–	114,577
Derivative payables:					
Interest rate	981	237,714	2,036	(232,537)	8,194
Credit	–	10,468	444	(10,032)	880
Foreign exchange	123	174,349	1,274	(161,649)	14,097
Equity	–	72,609	7,118	(62,494)	17,233
Commodity	–	26,600	1,328	(18,216)	9,712
Total derivative payables	1,104	521,740	12,200	(484,928)	50,116
Total trading liabilities	88,935	548,456	12,230	(484,928)	164,693
Accounts payable and other liabilities	5,115	467	69	–	5,651
Beneficial interests issued by consolidated VIEs	–	12	–	–	12
Long-term debt	–	50,560	24,374	–	74,934
Total liabilities measured at fair value on a recurring basis	$ 94,050	$ 752,480	$ 41,471	$ (484,928)	$ 403,073

(a) At September 30, 2022, and December 31, 2021, included total U.S. GSE obligations of $90.1 billion and $73.9 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 4 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 September 30, 2022, and December 31, 2021, the fair values of these investments, which include certain hedge funds, private equity funds, real estate and other funds, were $882 million and $801 million, respectively. Included in these balances at September 30, 2022, and December 31, 2021, were trading assets of $41 million and $51 million, respectively, and other assets of $841 million and $750 million, respectively.
(e) At September 30, 2022, and December 31, 2021, included $11.4 billion and $26.2 billion, respectively, of residential first-lien mortgages, and $7.5 billion and $8.2 billion, respectively, of commercial first-lien mortgages. Residential mortgage loans include conforming mortgage loans originated with the intent to sell to U.S. GSEs and government agencies of $3.4 billion and $13.6 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 2021 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)]

September 30, 2022						
Product/Instrument	**Fair value** (in millions)	**Principal valuation technique**	**Unobservable inputs[(g)]**	**Range of input values**		**Average[(i)]**
Residential mortgage-backed securities and loans[(b)]	$ 1,685	Discounted cash flows	Yield	3%	20%	7%
			Prepayment speed	3%	11%	8%
			Conditional default rate	0%	5%	0%
			Loss severity	0%	110%	4%
Commercial mortgage-backed securities and loans[(c)]	413	Market comparables	Price	$0	$100	$83
Corporate debt securities	528	Market comparables	Price	$0	$110	$95
Loans[(d)]	1,137	Market comparables	Price	$0	$356	$83
Non-U.S. government debt securities	166	Market comparables	Price	$6	$100	$90
Net interest rate derivatives	580	Option pricing	Interest rate volatility	28 bps	682 bps	131 bps
			Interest rate spread volatility	23 bps	35 bps	26 bps
			Bermudan switch value	8%	58%	18%
			Interest rate correlation	(85)%	89%	16%
			IR-FX correlation	(35)%	60%	7%
	(25)	Discounted cash flows	Prepayment speed	0%	21%	7%
Net credit derivatives	320	Discounted cash flows	Credit correlation	30%	60%	44%
			Credit spread	1 bps	6,152 bps	678 bps
			Recovery rate	15%	67%	46%
	23	Market comparables	Price	$15	$104	$82
Net foreign exchange derivatives	595	Option pricing	IR-FX correlation	(40)%	60%	20%
	(88)	Discounted cash flows	Prepayment speed	9%		9%
			Interest rate curve	2%	32%	8%
Net equity derivatives	(326)	Option pricing	Forward equity price[(h)]	84%	146%	101%
			Equity volatility	5%	146%	38%
			Equity correlation	17%	99%	55%
			Equity-FX correlation	(86)%	60%	(28)%
			Equity-IR correlation	15%	50%	27%
Net commodity derivatives	199	Option pricing	Oil commodity forward	$65 / BBL	$319 / BBL	$192 / BBL
			Natural gas commodity forward	$2 / MMBTU	$18 / MMBTU	$10 / MMBTU
			Commodity volatility	4%	144%	74%
			Commodity correlation	(30)%	77%	24%
MSRs	8,140	Discounted cash flows	Refer to Note 14			
Long-term debt, short-term borrowings, and deposits[(e)]	24,723	Option pricing	Interest rate volatility	28 bps	682 bps	131 bps
			Interest rate correlation	(85)%	89%	16%
			IR-FX correlation	(35)%	60%	7%
			Equity correlation	17%	99%	55%
			Equity-FX correlation	(86)%	60%	(28)%
			Equity-IR correlation	15%	50%	27%
	1,115	Discounted cash flows	Credit correlation	30%	60%	44%
Other level 3 assets and liabilities, net[(f)]	936					

(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 $776 million, nonagency securities of $9 million and non-trading loans of $900 million.
(c) Comprises nonagency securities of $11 million, trading loans of $40 million and non-trading loans of $362 million.
(d) Comprises trading loans of $825 million and non-trading loans of $312 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 $807 million including $227 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 2021 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 and nine months ended September 30, 2022 and 2021. 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 September 30, 2022 (in millions)	Fair value measurements using significant unobservable inputs								Change in unrealized gains/(losses) related to financial instruments held at September 30, 2022
	Fair value at July 1, 2022	Total realized/unrealized gains/(losses)	Purchases[g]	Sales	Settlements[h]	Transfers into level 3	Transfers (out of) level 3	Fair value at September 30, 2022	
Assets:[a]									
Federal funds sold and securities purchased under resale agreements	$ 1	$ —	$ 1	$ —	$ (1)	$ —	$ —	$ 1	$ —
Trading assets:									
Debt instruments:									
Mortgage-backed securities:									
U.S. GSEs and government agencies	803	5	5	—	(32)	—	(5)	776	5
Residential – nonagency	14	—	1	(5)	—	—	(1)	9	—
Commercial – nonagency	10	(1)	—	(1)	—	3	—	11	(1)
Total mortgage-backed securities	827	4	6	(6)	(32)	3	(6)	796	4
Obligations of U.S. states and municipalities	7	1	—	(1)	—	—	—	7	1
Non-U.S. government debt securities	205	(11)	21	(22)	(4)	8	(31)	166	(11)
Corporate debt securities	574	2	45	(75)	(28)	66	(236)	348	11
Loans	898	(15)	103	(144)	(43)	252	(186)	865	(16)
Asset-backed securities	20	5	15	(13)	—	—	(1)	26	1
Total debt instruments	2,531	(14)	190	(261)	(107)	329	(460)	2,208	(10)
Equity securities	661	(43)	16	(60)	(2)	18	(10)	580	(46)
Physical commodities	2	(1)	1	—	—	—	—	2	(1)
Other	87	19	10	—	(32)	1	(1)	84	15
Total trading assets – debt and equity instruments	3,281	(39) [c]	217	(321)	(141)	348	(471)	2,874	(42) [c]
Net derivative receivables:[b]									
Interest rate	420	(574)	60	(108)	(38)	848	(53)	555	(552)
Credit	249	56	6	(1)	41	2	(10)	343	69
Foreign exchange	245	217	31	(43)	43	(1)	15	507	166
Equity	(1,234)	904	272	(424)	385	(134)	(95)	(326)	902
Commodity	26	116	14	(51)	29	4	61	199	141
Total net derivative receivables	(294)	719 [c]	383	(627)	460	719	(82)	1,278	726 [c]
Available-for-sale securities:									
Mortgage-backed securities	—	—	—	—	—	—	—	—	—
Corporate debt securities	186	(6)	—	—	—	—	—	180	(6)
Total available-for-sale securities	186	(6) [d]	—	—	—	—	—	180	(6) [d]
Loans	2,020	(53) [c]	37	(85)	(102)	213	(456)	1,574	(52) [c]
Mortgage servicing rights	7,439	504 [e]	510	(79)	(234)	—	—	8,140	504 [e]
Other assets	408	11 [c]	2	(1)	(44)	—	—	376	11 [c]

Three months ended September 30, 2022 (in millions)	Fair value measurements using significant unobservable inputs									Change in unrealized (gains)/losses related to financial instruments held at September 30, 2022
	Fair value at July 1, 2022	Total realized/unrealized (gains)/losses	Purchases	Sales	Issuances	Settlements[h]	Transfers into level 3	Transfers (out of) level 3	Fair value at September 30, 2022	
Liabilities:[a]										
Deposits	$ 2,032	$ (152) [c][f]	$ —	$ —	$ 24	$ (18)	$ —	$ (60)	$ 1,826	$ (154) [c][f]
Short-term borrowings	2,101	(22) [c][f]	—	—	863	(1,354)	—	(4)	1,584	(51) [c][f]
Trading liabilities – debt and equity instruments	56	3 [c]	(5)	14	—	—	7	(4)	71	7 [c]
Accounts payable and other liabilities	73	(4) [c]	—	—	—	—	—	—	69	(4) [c]
Long-term debt	23,077	(1,037) [c][f]	—	—	2,943	(2,404)	297	(448)	22,428	(1,075) [c][f]

Three months ended September 30, 2021 (in millions)	Fair value measurements using significant unobservable inputs: Fair value at July 1, 2021	Total realized/ unrealized gains/ (losses)	Purchases[g]	Sales	Settlements[h]	Transfers into level 3	Transfers (out of) level 3	Fair value at September 30, 2021	Change in unrealized gains/ (losses) related to financial instruments held at September 30, 2021
Assets:[a]									
Federal funds sold and securities purchased under resale agreements	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –
Trading assets:									
Debt instruments:									
Mortgage-backed securities:									
U.S. GSEs and government agencies	329	(12)	13	(6)	(25)	–	–	299	(12)
Residential – nonagency	16	–	9	–	(1)	–	–	24	(1)
Commercial – nonagency	10	7	1	–	(13)	14	–	19	6
Total mortgage-backed securities	355	(5)	23	(6)	(39)	14	–	342	(7)
Obligations of U.S. states and municipalities	8	–	–	–	(1)	–	–	7	–
Non-U.S. government debt securities	183	(2)	128	(98)	–	–	(107)	104	(1)
Corporate debt securities	487	(33)	38	(115)	(3)	25	(29)	370	(25)
Loans	795	–	219	(197)	(130)	409	(114)	982	2
Asset-backed securities	35	1	3	(4)	–	–	(7)	28	–
Total debt instruments	1,863	(39)	411	(420)	(173)	448	(257)	1,833	(31)
Equity securities	690	(41)	5	(44)	–	62	(38)	634	(34)
Other	47	26	17	–	(31)	–	(1)	58	26
Total trading assets – debt and equity instruments	2,600	(54) (c)	433	(464)	(204)	510	(296)	2,525	(39) (c)
Net derivative receivables:[b]									
Interest rate	(22)	618	21	(44)	(683)	13	(16)	(113)	246
Credit	(17)	(9)	4	(7)	59	(4)	(32)	(6)	(1)
Foreign exchange	(583)	2	28	(44)	41	(5)	4	(557)	15
Equity	(4,936)	723	192	(1,001)	912	214	59	(3,837)	397
Commodity	(1,167)	88	130	(88)	156	(2)	11	(872)	178
Total net derivative receivables	(6,725)	1,422 (c)	375	(1,184)	485	216	26	(5,385)	835 (c)
Available-for-sale securities:									
Mortgage-backed securities	–	–	–	–	–	–	–	–	–
Corporate debt securities	–	–	95	–	–	–	–	95	–
Total available-for-sale securities	–	–	95	–	–	–	–	95	–
Loans	1,734	(13) (c)	209	(1)	(180)	427	(105)	2,071	(11) (c)
Mortgage servicing rights	4,549	(11) (e)	1,013	1	(201)	–	–	5,351	(11) (e)
Other assets	518	(35) (c)	3	–	(165)	–	–	321	(34) (c)

Three months ended September 30, 2021 (in millions)	Fair value measurements using significant unobservable inputs: Fair value at July 1, 2021	Total realized/ unrealized (gains)/ losses	Purchases	Sales	Issuances	Settlements[h]	Transfers into level 3	Transfers (out of) level 3	Fair value at September 30, 2021	Change in unrealized (gains)/losses related to financial instruments held at September 30, 2021
Liabilities:[a]										
Deposits	$ 2,684	$ (11) (c)(f)	$ –	$ –	$ 33	$ (172)	$ –	$ (157)	$ 2,377	$ (7) (c)(f)
Short-term borrowings	3,075	(699) (c)(f)	–	–	1,166	(1,121)	–	(10)	2,411	(124) (c)(f)
Trading liabilities – debt and equity instruments	36	(2) (c)	(8)	2	–	–	3	(1)	30	1 (c)
Accounts payable and other liabilities	51	–	–	–	–	–	–	–	51	1 (c)
Long-term debt	23,527	(216) (c)(f)	–	–	2,950	(2,512)	11	(246)	23,514	(242) (c)(f)

Nine months ended September 30, 2022 (in millions)	Fair value measurements using significant unobservable inputs								Change in unrealized gains/(losses) related to financial instruments held at September 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	Fair value at September 30, 2022	
Assets:[a]									
Federal funds sold and securities purchased under resale agreements	$ –	$ –	$ 1	$ –	$ (1)	$ 1	$ –	$ 1	$ –
Trading assets:									
Debt instruments:									
Mortgage-backed securities:									
U.S. GSEs and government agencies	265	31	670	(125)	(60)	–	(5)	776	29
Residential – nonagency	28	–	6	(5)	(12)	–	(8)	9	(1)
Commercial – nonagency	10	(1)	–	(1)	–	3	–	11	(1)
Total mortgage-backed securities	303	30	676	(131)	(72)	3	(13)	796	27
Obligations of U.S. states and municipalities	7	1	–	(1)	–	–	–	7	2
Non-U.S. government debt securities	81	(53)	426	(288)	(4)	51	(47)	166	(50)
Corporate debt securities	332	(33)	378	(146)	(65)	164	(282)	348	(27)
Loans	708	(52)	522	(406)	(202)	777	(482)	865	(25)
Asset-backed securities	26	5	17	(23)	–	5	(4)	26	1
Total debt instruments	1,457	(102)	2,019	(995)	(343)	1,000	(828)	2,208	(72)
Equity securities	662	(955)	337	(361)	(2)	977	(78)	580	(407)
Physical Commodities	–	(1)	3	–	–	–	–	2	(1)
Other	160	86	36	–	(195)	1	(4)	84	58
Total trading assets – debt and equity instruments	2,279	(972) [c]	2,395	(1,356)	(540)	1,978	(910)	2,874	(422) [c]
Net derivative receivables:[b]									
Interest rate	(16)	(181)	285	(337)	218	865	(279)	555	25
Credit	74	387	14	(8)	(120)	–	(4)	343	367
Foreign exchange	(419)	755	178	(86)	75	17	(13)	507	716
Equity	(3,626)	3,472	932	(1,449)	688	(692)	349	(326)	3,106
Commodity	(907)	920	82	(257)	297	3	61	199	878
Total net derivative receivables	(4,894)	5,353 [c]	1,491	(2,137)	1,158	193	114	1,278	5,092 [c]
Available-for-sale securities:									
Mortgage-backed securities	–	–	–	–	–	–	–	–	–
Corporate debt securities	161	2	17	–	–	–	–	180	2
Total available-for-sale securities	161	2 [d]	17	–	–	–	–	180	2 [d]
Loans	1,933	(37) [c]	431	(185)	(633)	829	(764)	1,574	79 [c]
Mortgage servicing rights	5,494	2,117 [e]	1,981	(750)	(702)	–	–	8,140	2,117 [e]
Other assets	306	136 [c]	48	(29)	(81)	2	(6)	376	131 [c]

Nine months ended September 30, 2022 (in millions)	Fair value measurements using significant unobservable inputs									Change in unrealized (gains)/losses related to financial instruments held at September 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	Fair value at September 30, 2022	
Liabilities:[a]										
Deposits	$ 2,317	$(454) [c][f]	$ –	$ –	$ 270	$ (87)	$ –	$ (220)	$1,826	$ (446) [c][f]
Short-term borrowings	2,481	(409) [c][f]	–	–	3,249	(3,737)	15	(15)	1,584	17 [c][f]
Trading liabilities – debt and equity instruments	30	(13) [c]	(39)	48	–	–	51	(6)	71	14 [c]
Accounts payable and other liabilities	69	(10) [c]	(28)	43	–	–	1	(6)	69	(9) [c]
Long-term debt	24,374	(5,345) [c][f]	–	–	10,463	(6,925)	739	(878)	22,428	(5,097) [c][f]

Nine months ended September 30, 2021 (in millions)	Fair value measurements using significant unobservable inputs								Change in unrealized gains/(losses) related to financial instruments held at September 30, 2021
	Fair value at Jan 1, 2021	Total realized/unrealized gains/(losses)	Purchases[g]	Sales	Settlements[h]	Transfers into level 3	Transfers (out of) level 3	Fair value at September 30, 2021	
Assets:[a]									
Federal funds sold and securities purchased under resale agreements	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –
Trading assets:									
Debt instruments:									
Mortgage-backed securities:									
U.S. GSEs and government agencies	449	(22)	20	(62)	(86)	1	(1)	299	(25)
Residential – nonagency	28	1	24	(24)	(4)	–	(1)	24	(2)
Commercial – nonagency	3	7	12	(1)	(16)	14	–	19	6
Total mortgage-backed securities	480	(14)	56	(87)	(106)	15	(2)	342	(21)
Obligations of U.S. states and municipalities	8	–	–	–	(1)	–	–	7	–
Non-U.S. government debt securities	182	(10)	330	(284)	(7)	–	(107)	104	(2)
Corporate debt securities	507	(18)	357	(415)	(3)	138	(196)	370	(3)
Loans	893	6	785	(434)	(256)	584	(596)	982	–
Asset-backed securities	28	8	41	(43)	(1)	2	(7)	28	–
Total debt instruments	2,098	(28)	1,569	(1,263)	(374)	739	(908)	1,833	(26)
Equity securities	476	(38)	258	(114)	–	140	(88)	634	(92)
Other	49	74	118	–	(86)	3	(100)	58	37
Total trading assets – debt and equity instruments	2,623	8 (c)	1,945	(1,377)	(460)	882	(1,096)	2,525	(81) (c)
Net derivative receivables:[b]									
Interest rate	258	1,587	92	(146)	(1,874)	68	(98)	(113)	212
Credit	(224)	140	6	(11)	103	(13)	(7)	(6)	143
Foreign exchange	(434)	(196)	67	(98)	140	6	(42)	(557)	(44)
Equity	(3,862)	(195)	667	(2,246)	1,638	233	(72)	(3,837)	(187)
Commodity	(731)	(505)	140	(382)	600	(3)	9	(872)	(223)
Total net derivative receivables	(4,993)	831 (c)	972	(2,883)	607	291	(210)	(5,385)	(99) (c)
Available-for-sale securities:									
Mortgage-backed securities	–	–	–	–	–	–	–	–	–
Corporate debt securities	–	–	95	–	–	–	–	95	–
Total available-for-sale securities	–	–	95	–	–	–	–	95	–
Loans	2,305	(79) (c)	516	(326)	(699)	1,027	(673)	2,071	(92) (c)
Mortgage servicing rights	3,276	258 (e)	2,410	(23)	(570)	–	–	5,351	258 (e)
Other assets	538	9 (c)	10	(18)	(217)	–	(1)	321	22 (c)

Nine months ended September 30, 2021 (in millions)	Fair value measurements using significant unobservable inputs									Change in unrealized (gains)/losses related to financial instruments held at September 30, 2021
	Fair value at Jan 1, 2021	Total realized/unrealized (gains)/losses	Purchases	Sales	Issuances	Settlements[h]	Transfers into level 3	Transfers (out of) level 3	Fair value at September 30, 2021	
Liabilities:[a]										
Deposits	$ 2,913	$ (67) (c)(f)	$ –	$ –	$ 252	$ (360)	$ 2	$ (363)	$ 2,377	$ (60) (c)(f)
Short-term borrowings	2,420	(1,095) (c)(f)	–	–	5,479	(4,333)	9	(69)	2,411	(117) (c)(f)
Trading liabilities – debt and equity instruments	51	(6) (c)	(100)	36	–	–	62	(13)	30	(2) (c)
Accounts payable and other liabilities	68	(10) (c)	–	1	–	–	–	(8)	51	(9) (c)
Long-term debt	23,397	190 (c)(f)	–	–	9,884	(9,250)	29	(736)	23,514	48 (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 September 30, 2022 and December 31, 2021. 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% and 10% at September 30, 2022 and December 31, 2021, 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. There were no realized gains/(losses) recorded in income on AFS securities for the three and nine months ended September 30, 2022 and 2021. Unrealized gains/(losses) recorded on AFS securities in OCI were $(6) million and zero for the three months ended September 30, 2022 and 2021, respectively and $2 million and zero for the nine months ended September 30, 2022 and 2021, respectively.
(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 nine months ended September 30, 2022 and 2021. Unrealized (gains)/losses are reported in OCI, and were $(256) million and $318 million for the three months ended September 30, 2022 and 2021, respectively and $(829) million and $300 million for the nine months ended September 30, 2022 and 2021, 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, 2021, 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 108 for further information on changes impacting items measured at fair value on a nonrecurring basis.

Three and nine months ended September 30, 2022

Level 3 assets were $24.3 billion at September 30, 2022, reflecting an increase of $2.0 billion from June 30, 2022, and an increase of $6.8 billion from December 31, 2021.

The increase for the three months ended September 30, 2022 was driven by a $2.2 billion increase in gross derivative receivables due to gains and net transfers partially offset by settlements.

The increase for the nine months ended September 30, 2022 was predominantly driven by:

- $3.8 billion increase in gross derivative receivables due to gains and purchases partially offset by settlements.
- $2.6 billion increase in MSRs.

Refer to Note 14 for information on MSRs.

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 September 30, 2022, significant transfers from level 2 into level 3 included the following:

- $1.1 billion of gross interest rate derivative receivables as a result of a decrease in observability and an increase in the significance of unobservable inputs.

For the three months ended September 30, 2022, significant transfers from level 3 into level 2 included the following:

- $524 million of gross equity derivative receivables as a result of an increase in observability and a decrease in the significance of unobservable inputs.

For the nine months ended September 30, 2022, significant transfers from level 2 into level 3 included the following:

- $2.0 billion of total debt and equity instruments, predominantly due to equity securities of $977 million driven by a decrease in observability as a result of restricted access to certain markets and trading loans of $777 million driven by a decrease in observability.
- $1.5 billion and $639 million of gross interest rate derivative receivables and gross interest rate derivative payables, respectively, as a result of a decrease in observability and an increase in the significance of unobservable inputs.
- $963 million and $1.8 billion of gross equity derivative receivables and gross equity derivative payables, respectively, as a result of a decrease in observability and an increase in the significance of unobservable inputs.
- $829 million of non-trading loans driven by a decrease in observability.
- $739 million of long-term debt driven by a decrease in observability and an increase in the significance of unobservable inputs for certain structured notes.

For the nine months ended September 30, 2022, significant transfers from level 3 into level 2 included the following:

- $1.0 billion and $758 million of gross interest rate derivative receivables and gross interest rate derivative payables, respectively, as a result of an increase in observability and a decrease in the significance of unobservable inputs.
- $1.4 billion and $1.8 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.
- $764 million of non-trading loans driven by an increase in observability.
- $878 million of long-term debt driven by an increase in observability and a decrease in the significance of unobservable inputs for certain structured notes.

For the three months ended September 30, 2021, there were no significant transfers from level 2 into level 3.

For the nine months ended September 30, 2021, significant transfers from level 2 into level 3 included the following:

- $882 million of total debt and equity instruments, largely trading loans, driven by a decrease in observability.

- $937 million of gross equity derivative receivables and $704 million of gross equity derivative payables as a result of a decrease in observability and an increase in the significance of unobservable inputs.
- $1.0 billion of non-trading loans driven by a decrease in observability.

For the three months ended September 30, 2021, there were no significant transfers from level 3 into level 2.

For the nine months ended September 30, 2021, significant transfers from level 3 into level 2 included the following:

- $1.1 billion of total debt and equity instruments, largely trading loans, driven by an increase in observability.
- $1.7 billion of gross equity derivative receivables and $1.6 billion of gross equity derivative payables as a result of an increase in observability and a decrease in the significance of unobservable inputs.
- $673 million of non-trading loans, driven by an increase in observability.
- $736 million of long-term debt driven, by an increase in observability and a decrease in the significance of unobservable inputs for certain structured notes.

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 101-106 for further information on these instruments.

Three months ended September 30, 2022

- $1.1 billion of net gains on assets, driven by gains in net equity derivative receivables due to market movements and gains in MSRs reflecting lower prepayment speeds on higher rates.
- $1.2 billion of net gains on liabilities, predominantly driven by gains in long-term debt due to market movements.

Three months ended September 30, 2021

- $1.3 billion of net gains on assets, driven by gains in net interest rate derivative receivables and net equity derivative receivables due to market movements.
- $928 million of net gains on liabilities, largely driven by gains in short-term borrowings due to market movements.

Nine months ended September 30, 2022

- $6.6 billion of net gains on assets, predominantly driven by gains in net equity derivative receivables due to market movements and gains in MSRs reflecting lower prepayment speeds on higher rates.
- $6.2 billion of net gains on liabilities, predominantly driven by gains in long-term debt due to market movements.

Nine months ended September 30, 2021

- $1.0 billion of net gains on assets, driven by gains in net interest rate derivative receivables due to market movements, partially offset by losses in net commodity derivative receivables due to market movements.
- $988 million of net gains on liabilities, driven by gains in short-term borrowings due to market movements.

Refer to Note 14 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.

	Three months ended September 30,		Nine months ended September 30,	
(in millions)	**2022**	2021	**2022**	2021
Credit and funding adjustments:				
Derivatives CVA	**$ (6)**	$ 60	**$ (171)**	$ 343
Derivatives FVA	**5**	38	**(46)**	99

Refer to Note 2 of JPMorgan Chase's 2021 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 September 30, 2022 and 2021, for which nonrecurring fair value adjustments were recorded during the nine months ended September 30, 2022 and 2021, by major product category and fair value hierarchy.

	Fair value hierarchy			
September 30, 2022 (in millions)	Level 1	Level 2	Level 3	Total fair value
Loans	**$ –**	**$ 1,142**	**$ 927** [b]	**$ 2,069**
Other assets[a]	**–**	**37**	**1,119**	**1,156**
Total assets measured at fair value on a nonrecurring basis	**$ –**	**$ 1,179**	**$ 2,046**	**$ 3,225**
Accounts payable and other liabilities	**–**	**–**	**112**	**112**
Total liabilities measured at fair value on a nonrecurring basis	**$ –**	**$ –**	**$ 112**	**$ 112**

	Fair value hierarchy			
September 30, 2021 (in millions)	Level 1	Level 2	Level 3	Total fair value
Loans	$ –	$ 1,175	$ 314	$ 1,489
Other assets	–	7	1,202	1,209
Total assets measured at fair value on a nonrecurring basis	$ –	$ 1,182	$ 1,516	$ 2,698
Accounts payable and other liabilities	–	–	2	2
Total liabilities measured at fair value on a nonrecurring basis	$ –	$ –	$ 2	$ 2

(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 $1.1 billion in level 3 assets measured at fair value on a nonrecurring basis as of September 30, 2022, $1.0 billion 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 $927 million in level 3 assets measured at fair value on a nonrecurring basis as of September 30, 2022, $65 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 9% to 56% with a weighted average of 23%.

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 nine months ended September 30, 2022 and 2021, related to assets and liabilities held at those dates.

	Three months ended September 30,		Nine months ended September 30,	
(in millions)	**2022**	2021	**2022**	2021
Loans	**$ (28)**	$ (10)	**$ (77)**	$ (40)
Other assets[a]	**(76)**	84	**(122)**	177
Accounts payable and other liabilities	**52**	–	**(108)**	6
Total nonrecurring fair value gains/(losses)	**$ (52)**	$ 74	**$ (307)**	$ 143

(a) Included $(76) million and $90 million for the three months ended September 30, 2022 and 2021, respectively, and $(105) million and $197 million for the nine months ended September 30, 2022 and 2021, respectively, of net gains/(losses) as a result of the measurement alternative.

Refer to Note 11 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 September 30, 2022 and 2021, 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.

	Three months ended September 30,		Nine months ended September 30,	
As of or for the period ended, (in millions)	**2022**	2021	**2022**	2021
Other assets				
Carrying value[(a)]	**$ 4,229**	$ 3,207	**$ 4,229**	$ 3,207
Upward carrying value changes[(b)]	**40**	100	**486**	216
Downward carrying value changes/impairment[(c)]	**(116)**	(10)	**(591)**	(18)

(a) The carrying value as of December 31, 2021 was $3.6 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 September 30, 2022 were $1.5 billion.

(c) The cumulative downward carrying value changes/impairment between January 1, 2018 and September 30, 2022 were $(781) million.

Included in other assets above is the Firm's interest in approximately 40 million Visa Class B common shares, recorded at a nominal carrying value. These shares are subject to certain transfer restrictions currently and will be convertible into Visa Class A common shares upon final resolution of certain litigation matters involving Visa. The conversion rate of Visa Class B common shares into Visa Class A common shares is 1.6059 at September 30, 2022, and may be adjusted by Visa depending on developments related to the litigation matters.

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 September 30, 2022, and December 31, 2021, 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.

	September 30, 2022					December 31, 2021				
		Estimated fair value hierarchy					Estimated fair value hierarchy			
(in billions)	Carrying value	Level 1	Level 2	Level 3	Total estimated fair value	Carrying value	Level 1	Level 2	Level 3	Total estimated fair value
Financial assets										
Cash and due from banks	**$ 24.7**	**$ 24.7**	**$ –**	**$ –**	**$ 24.7**	$ 26.4	$ 26.4	$ –	$ –	$ 26.4
Deposits with banks	**619.5**	**619.1**	**0.4**	**–**	**619.5**	714.4	714.4	–	–	714.4
Accrued interest and accounts receivable	**143.5**	**–**	**143.3**	**0.2**	**143.5**	102.1	–	102.0	0.1	102.1
Federal funds sold and securities purchased under resale agreements	**2.6**	**–**	**2.6**	**–**	**2.6**	9.0	–	9.0	–	9.0
Securities borrowed	**125.9**	**–**	**125.9**	**–**	**125.9**	124.6	–	124.6	–	124.6
Investment securities, held-to-maturity	**430.1**	**199.1**	**190.7**	**–**	**389.8**	363.7	183.3	179.3	–	362.6
Loans, net of allowance for loan losses[(a)]	**1,052.9**	**–**	**190.0**	**834.9**	**1,024.9**	1,002.5	–	202.1	821.1	1,023.2
Other	**106.4**	**–**	**104.7**	**1.8**	**106.5**	98.7	–	97.4	1.4	98.8
Financial liabilities										
Deposits	**$ 2,387.7**	**$ –**	**$ 2,387.9**	**$ –**	**$ 2,387.9**	$ 2,451.0	$ –	$ 2,451.0	$ –	$ 2,451.0
Federal funds purchased and securities loaned or sold under repurchase agreements	**59.4**	**–**	**59.4**	**–**	**59.4**	67.9	–	67.9	–	67.9
Short-term borrowings	**32.2**	**–**	**32.2**	**–**	**32.2**	33.6	–	33.6	–	33.6
Accounts payable and other liabilities	**260.3**	**–**	**254.4**	**5.4**	**259.8**	217.6	–	212.1	4.9	217.0
Beneficial interests issued by consolidated VIEs	**12.1**	**–**	**12.0**	**–**	**12.0**	10.7	–	10.8	–	10.8
Long-term debt	**221.5**	**–**	**210.1**	**3.0**	**213.1**	226.0	–	229.5	3.1	232.6

(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.

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.

	September 30, 2022					December 31, 2021				
		Estimated fair value hierarchy					Estimated fair value hierarchy			
(in billions)	Carrying value[(a)(b)]	Level 1	Level 2	Level 3	Total estimated fair value	Carrying value[(a)(b)]	Level 1	Level 2	Level 3	Total estimated fair value
Wholesale lending-related commitments	**$ 2.5**	**$ –**	**$ –**	**$ 3.4**	**$ 3.4**	$ 2.1	$ –	$ –	$ 2.9	$ 2.9

(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.

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 171 of JPMorgan Chase's 2021 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 nine months ended September 30, 2022 and 2021, 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.

	Three months ended September 30,					
	2022			2021		
(in millions)	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	**$ (185)**	**$ –**	**$ (185)**	$ (19)	$ –	$ (19)
Securities borrowed	**(209)**	**–**	**(209)**	(22)	–	(22)
Trading assets:						
Debt and equity instruments, excluding loans	**(1,782)**	**–**	**(1,782)**	(2,255)	–	(2,255)
Loans reported as trading assets:						
Changes in instrument-specific credit risk	**34**	**–**	**34**	66	–	66
Other changes in fair value	**(36)**	**–**	**(36)**	1	–	1
Loans:						
Changes in instrument-specific credit risk	**(133)**	**3** [c]	**(130)**	119	(7) [c]	112
Other changes in fair value	**(340)**	**(107)** [c]	**(447)**	25	609 [c]	634
Other assets	**12**	**(7)** [d]	**5**	(22)	–	(22)
Deposits[a]	**364**	**–**	**364**	38	–	38
Federal funds purchased and securities loaned or sold under repurchase agreements	**104**	**–**	**104**	11	–	11
Short-term borrowings[a]	**85**	**–**	**85**	388	–	388
Trading liabilities	**9**	**–**	**9**	(1)	–	(1)
Beneficial interests issued by consolidated VIEs	**–**	**–**	**–**	–	–	–
Other liabilities	**(2)**	**–**	**(2)**	(1)	–	(1)
Long-term debt[a][b]	**1,828**	**125** [c][d]	**1,953**	643	11 [c][d]	654

(in millions)	Nine months ended September 30, 2022 Principal transactions	2022 All other income	2022 Total changes in fair value recorded (e)	2021 Principal transactions	2021 All other income	2021 Total changes in fair value recorded (e)
Federal funds sold and securities purchased under resale agreements	**$ (560)**	**$ –**	**$ (560)**	$ (33)	$ –	$ (33)
Securities borrowed	**(508)**	**–**	**(508)**	(119)	–	(119)
Trading assets:						
Debt and equity instruments, excluding loans	**(2,693)**	**–**	**(2,693)**	(1,188)	(1) (c)	(1,189)
Loans reported as trading assets:			**–**			–
Changes in instrument-specific credit risk	**(109)**	**–**	**(109)**	342	–	342
Other changes in fair value	**(58)**	**–**	**(58)**	(7)	–	(7)
Loans:						
Changes in instrument-specific credit risk	**(210)**	**26** (c)	**(184)**	540	(9) (c)	531
Other changes in fair value	**(1,560)**	**(881)** (c)	**(2,441)**	(82)	1,733 (c)	1,651
Other assets	**21**	**(6)** (d)	**15**	6	(23) (d)	(17)
Deposits(a)	**1,148**	**–**	**1,148**	(53)	–	(53)
Federal funds purchased and securities loaned or sold under repurchase agreements	**310**	**–**	**310**	42	–	42
Short-term borrowings(a)	**858**	**–**	**858**	(223)	–	(223)
Trading liabilities	**(3)**	**–**	**(3)**	(2)	–	(2)
Beneficial interests issued by consolidated VIEs	**(1)**	**–**	**(1)**	–	–	–
Other liabilities	**(6)**	**–**	**(6)**	1	–	1
Long-term debt(a)(b)	**11,193**	**158** (c)(d)	**11,351**	(262)	6 (c)(d)	(256)

(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 zero and $(6) million for the three months ended September 30, 2022 and 2021, respectively, and $(9) million and $(8) million for the nine months ended September 30, 2022 and 2021, respectively.

(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 6 for further information regarding interest income and interest expense.

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 September 30, 2022, and December 31, 2021, for loans, long-term debt and long-term beneficial interests for which the fair value option has been elected.

	September 30, 2022			December 31, 2021		
(in millions)	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	**$ 2,704**	**$ 357**	**$ (2,347)**	$ 3,263	$ 546	$ (2,717)
Loans	**962**	**814**	**(148)**	918	797	(121)
Subtotal	**3,666**	**1,171**	**(2,495)**	4,181	1,343	(2,838)
90 or more days past due and government guaranteed						
Loans[(a)]	**152**	**144**	**(8)**	293	281	(12)
All other performing loans[(b)]						
Loans reported as trading assets	**7,093**	**5,718**	**(1,375)**	8,594	7,528	(1,066)
Loans	**42,236**	**40,529**	**(1,707)**	57,695	57,742	47
Subtotal	**49,329**	**46,247**	**(3,082)**	66,289	65,270	(1,019)
Total loans	**$ 53,147**	**$ 47,562**	**$ (5,585)**	$ 70,763	$ 66,894	$ (3,869)
Long-term debt						
Principal-protected debt	**$ 36,523** [(d)]	**$ 27,422**	**$ (9,101)**	$ 35,957 [(d)]	$ 33,799	$ (2,158)
Nonprincipal-protected debt[(c)]	**NA**	**38,523**	**NA**	NA	41,135	NA
Total long-term debt	**NA**	**$ 65,945**	**NA**	NA	$ 74,934	NA
Long-term beneficial interests						
Nonprincipal-protected debt[(c)]	**NA**	**$ 5**	**NA**	NA	$ 12	NA
Total long-term beneficial interests	**NA**	**$ 5**	**NA**	NA	$ 12	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 September 30, 2022, and December 31, 2021, respectively.

(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 September 30, 2022, and December 31, 2021, the contractual amount of lending-related commitments for which the fair value option was elected was $8.7 billion and $11.9 billion, respectively, with a corresponding fair value of $28 million and $10 million, respectively. Refer to Note 28 of JPMorgan Chase's 2021 Form 10-K, and Note 22 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.

	September 30, 2022				December 31, 2021			
(in millions)	Long-term debt	Short-term borrowings	Deposits	Total	Long-term debt	Short-term borrowings	Deposits	Total
Risk exposure								
Interest rate	**$ 29,043**	**$ 295**	**$16,563**	**$ 45,901**	$ 34,127	$ 1	$ 4,860	$ 38,988
Credit	**3,909**	**246**	**—**	**4,155**	6,352	858	—	7,210
Foreign exchange	**2,616**	**838**	**42**	**3,496**	3,386	315	1,066	4,767
Equity	**27,941**	**5,711**	**3,616**	**37,268**	29,317	6,827	5,125	41,269
Commodity	**1,257**	**12**	**2** (a)	**1,271**	405	—	3 (a)	408
Total structured notes	**$ 64,766**	**$ 7,102**	**$20,223**	**$ 92,091**	$ 73,587	$ 8,001	$ 11,054	$ 92,642

(a) Excludes deposits linked to precious metals for which the fair value option has not been elected of $600 million and $692 million for the periods ended September 30, 2022 and December 31, 2021, respectively.

Note 4 – 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 2021 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	121-122
• Interest rate	Hedge floating-rate assets and liabilities	Cash flow hedge	Corporate	123
• Foreign exchange	Hedge foreign currency-denominated assets and liabilities	Fair value hedge	Corporate	121-122
• Foreign exchange	Hedge foreign currency-denominated forecasted revenue and expense	Cash flow hedge	Corporate	123
• Foreign exchange	Hedge the value of the Firm's investments in non-U.S. dollar functional currency entities	Net investment hedge	Corporate	124
• Commodity	Hedge commodity inventory	Fair value hedge	CIB, AWM	121-122
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	125
• Credit	Manage the credit risk associated with wholesale lending exposures	Specified risk management	CIB	125
• Interest rate and foreign exchange	Manage the risk associated with certain other specified assets and liabilities	Specified risk management	Corporate	125
Market-making derivatives and other activities:				
• Various	Market-making and related risk management	Market-making and other	CIB	125
• Various	Other derivatives	Market-making and other	CIB, AWM, Corporate	125

Notional amount of derivative contracts

The following table summarizes the notional amount of free-standing derivative contracts outstanding as of September 30, 2022, and December 31, 2021.

	Notional amounts[b]	
(in billions)	**September 30, 2022**	December 31, 2021
Interest rate contracts		
Swaps	**$ 26,999**	$ 24,075
Futures and forwards	**3,692**	2,520
Written options	**2,905**	3,018
Purchased options	**2,879**	3,188
Total interest rate contracts	**36,475**	32,801
Credit derivatives[a]	**1,307**	1,053
Foreign exchange contracts		
Cross-currency swaps	**3,843**	4,112
Spot, futures and forwards	**8,829**	7,679
Written options	**873**	741
Purchased options	**856**	727
Total foreign exchange contracts	**14,401**	13,259
Equity contracts		
Swaps	**608**	612
Futures and forwards	**110**	139
Written options	**713**	654
Purchased options	**660**	598
Total equity contracts	**2,091**	2,003
Commodity contracts		
Swaps	**148**	185
Spot, futures and forwards	**149**	188
Written options	**133**	135
Purchased options	**100**	111
Total commodity contracts	**530**	619
Total derivative notional amounts	**$ 54,804**	$ 49,735

(a) Refer to the Credit derivatives discussion on page 126 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 September 30, 2022, and December 31, 2021, 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)]

	Gross derivative receivables				Gross derivative payables			
September 30, 2022 (in millions)	Not designated as hedges	Designated as hedges	Total derivative receivables	Net derivative receivables[(b)]	Not designated as hedges	Designated as hedges	Total derivative payables	Net derivative payables[(b)]
Trading assets and liabilities								
Interest rate	**$ 279,132**	**$ –**	**$ 279,132**	**$ 25,832**	**$ 266,080**	**$ –**	**$ 266,080**	**$ 17,399**
Credit	**13,934**	**–**	**13,934**	**1,871**	**11,190**	**–**	**11,190**	**734**
Foreign exchange	**353,791**	**2,042**	**355,833**	**36,867**	**351,385**	**1,747**	**353,132**	**22,830**
Equity	**85,801**	**–**	**85,801**	**11,626**	**79,914**	**–**	**79,914**	**8,139**
Commodity	**34,532**	**4,422**	**38,954**	**16,338**	**27,238**	**4,584**	**31,822**	**7,601**
Total fair value of trading assets and liabilities	**$ 767,190**	**$ 6,464**	**$ 773,654**	**$ 92,534**	**$ 735,807**	**$ 6,331**	**$ 742,138**	**$ 56,703**

	Gross derivative receivables				Gross derivative payables			
December 31, 2021 (in millions)	Not designated as hedges	Designated as hedges	Total derivative receivables	Net derivative receivables[(b)]	Not designated as hedges	Designated as hedges	Total derivative payables	Net derivative payables[(b)]
Trading assets and liabilities								
Interest rate	$ 270,562	$ 23	$ 270,585	$ 21,974	$ 240,731	$ –	$ 240,731	$ 8,194
Credit	9,839	–	9,839	1,031	10,912	–	10,912	880
Foreign exchange	169,186	393	169,579	12,625	174,622	1,124	175,746	14,097
Equity	68,631	–	68,631	9,981	79,727	–	79,727	17,233
Commodity	21,233	5,420	26,653	11,470	20,837	7,091	27,928	9,712
Total fair value of trading assets and liabilities	$ 539,451	$ 5,836	$ 545,287	$ 57,081	$ 526,829	$ 8,215	$ 535,044	$ 50,116

(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 September 30, 2022, and December 31, 2021, 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.

	September 30, 2022			December 31, 2021		
(in millions)	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")	**$ 207,083**	**$ (185,451)**	**$ 21,632**	$ 251,953	$ (234,283)	$ 17,670
OTC–cleared	**67,743**	**(67,282)**	**461**	14,144	(13,839)	305
Exchange-traded[(a)]	**1,061**	**(567)**	**494**	498	(489)	9
Total interest rate contracts	**275,887**	**(253,300)**	**22,587**	266,595	(248,611)	17,984
Credit contracts:						
OTC	**11,181**	**(9,685)**	**1,496**	8,035	(7,177)	858
OTC–cleared	**2,520**	**(2,378)**	**142**	1,671	(1,631)	40
Total credit contracts	**13,701**	**(12,063)**	**1,638**	9,706	(8,808)	898
Foreign exchange contracts:						
OTC	**348,675**	**(317,060)**	**31,615**	166,185	(156,251)	9,934
OTC–cleared	**1,968**	**(1,904)**	**64**	789	(703)	86
Exchange-traded[(a)]	**11**	**(2)**	**9**	6	–	6
Total foreign exchange contracts	**350,654**	**(318,966)**	**31,688**	166,980	(156,954)	10,026
Equity contracts:						
OTC	**44,162**	**(38,061)**	**6,101**	25,704	(23,977)	1,727
Exchange-traded[(a)]	**38,230**	**(36,114)**	**2,116**	36,095	(34,673)	1,422
Total equity contracts	**82,392**	**(74,175)**	**8,217**	61,799	(58,650)	3,149
Commodity contracts:						
OTC	**23,803**	**(9,815)**	**13,988**	15,063	(6,868)	8,195
OTC–cleared	**132**	**(127)**	**5**	49	(49)	–
Exchange-traded[(a)]	**12,743**	**(12,674)**	**69**	8,279	(8,266)	13
Total commodity contracts	**36,678**	**(22,616)**	**14,062**	23,391	(15,183)	8,208
Derivative receivables with appropriate legal opinion	**759,312**	**(681,120)**	**78,192** [(d)]	528,471	(488,206)	40,265 [(d)]
Derivative receivables where an appropriate legal opinion has not been either sought or obtained	**14,342**		**14,342**	16,816		16,816
Total derivative receivables recognized on the Consolidated balance sheets	**$ 773,654**		**$ 92,534**	$ 545,287		$ 57,081
Collateral not nettable on the Consolidated balance sheets[(b)(c)]			**(25,068)**			(10,102)
Net amounts			**$ 67,466**			$ 46,979

(in millions)	September 30, 2022 Gross derivative payables	September 30, 2022 Amounts netted on the Consolidated balance sheets	September 30, 2022 Net derivative payables	December 31, 2021 Gross derivative payables	December 31, 2021 Amounts netted on the Consolidated balance sheets	December 31, 2021 Net derivative payables
U.S. GAAP nettable derivative payables						
Interest rate contracts:						
OTC	**$ 193,084**	**$ (178,657)**	**$ 14,427**	$ 223,576	$ (216,757)	$ 6,819
OTC-cleared	**69,890**	**(69,517)**	**373**	15,695	(15,492)	203
Exchange-traded[(a)]	**507**	**(507)**	**–**	292	(288)	4
Total interest rate contracts	**263,481**	**(248,681)**	**14,800**	239,563	(232,537)	7,026
Credit contracts:						
OTC	**8,347**	**(7,965)**	**382**	9,021	(8,421)	600
OTC-cleared	**2,628**	**(2,491)**	**137**	1,679	(1,611)	68
Total credit contracts	**10,975**	**(10,456)**	**519**	10,700	(10,032)	668
Foreign exchange contracts:						
OTC	**346,765**	**(328,364)**	**18,401**	171,610	(160,946)	10,664
OTC-cleared	**1,985**	**(1,934)**	**51**	706	(703)	3
Exchange-traded[(a)]	**13**	**(4)**	**9**	7	–	7
Total foreign exchange contracts	**348,763**	**(330,302)**	**18,461**	172,323	(161,649)	10,674
Equity contracts:						
OTC	**39,131**	**(35,650)**	**3,481**	31,379	(27,830)	3,549
Exchange-traded[(a)]	**36,293**	**(36,125)**	**168**	40,621	(34,664)	5,957
Total equity contracts	**75,424**	**(71,775)**	**3,649**	72,000	(62,494)	9,506
Commodity contracts:						
OTC	**15,885**	**(11,378)**	**4,507**	14,874	(9,667)	5,207
OTC-cleared	**126**	**(126)**	**–**	73	(73)	–
Exchange-traded[(a)]	**13,484**	**(12,717)**	**767**	8,954	(8,476)	478
Total commodity contracts	**29,495**	**(24,221)**	**5,274**	23,901	(18,216)	5,685
Derivative payables with appropriate legal opinion	**728,138**	**(685,435)**	**42,703** [(d)]	518,487	(484,928)	33,559 [(d)]
Derivative payables where an appropriate legal opinion has not been either sought or obtained	**14,000**		**14,000**	16,557		16,557
Total derivative payables recognized on the Consolidated balance sheets	**$ 742,138**		**$ 56,703**	$ 535,044		$ 50,116
Collateral not nettable on the Consolidated balance sheets[(b)(c)]			**(4,259)**			(5,872)
Net amounts			**$ 52,444**			$ 44,244

(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 $77.4 billion and $67.6 billion at September 30, 2022, and December 31, 2021, respectively. Net derivatives payable included cash collateral netted of $81.7 billion and $64.3 billion at September 30, 2022, and December 31, 2021, 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 2021 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 September 30, 2022, and December 31, 2021.

OTC and OTC-cleared derivative payables containing downgrade triggers

(in millions)	**September 30, 2022**	December 31, 2021
Aggregate fair value of net derivative payables	**$ 20,153**	$ 20,114
Collateral posted	**20,090**	19,402

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 September 30, 2022, and December 31, 2021, 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 threshold rating 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 payments 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

	September 30, 2022		December 31, 2021	
(in millions)	Single-notch downgrade	Two-notch downgrade	Single-notch downgrade	Two-notch downgrade
Amount of additional collateral to be posted upon downgrade[(a)]	**$ 228**	**$ 1,531**	$ 219	$ 1,577
Amount required to settle contracts with termination triggers upon downgrade[(b)]	**83**	**1,070**	98	787

(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 10, 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 September 30, 2022 and December 31, 2021.

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 nine months ended September 30, 2022 and 2021, 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.

	Gains/(losses) recorded in income			Income statement impact of excluded components[e]		OCI impact
Three months ended September 30, 2022 (in millions)	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]	**$ (2,947)**	**$ 2,819**	**$ (128)**	**$ –**	**$ (93)**	**$ –**
Foreign exchange[c]	**(1,044)**	**1,082**	**38**	**(170)**	**39**	**50**
Commodity[d]	**5,000**	**(4,992)**	**8**	**–**	**26**	**–**
Total	**$ 1,009**	**$ (1,091)**	**$ (82)**	**$ (170)**	**$ (28)**	**$ 50**

	Gains/(losses) recorded in income			Income statement impact of excluded components[e]		OCI impact
Three months ended September 30, 2021 (in millions)	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]	$ (812)	$ 720	$ (92)	$ –	$ (89)	$ –
Foreign exchange[c]	(363)	367	4	(71)	3	12
Commodity[d]	(732)	754	22	–	14	–
Total	$ (1,907)	$ 1,841	$ (66)	$ (71)	$ (72)	$ 12

	Gains/(losses) recorded in income			Income statement impact of excluded components[e]		OCI impact
Nine months ended September 30, 2022 (in millions)	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]	**$ (14,484)**	**$ 14,167**	**$ (317)**	**$ –**	**$ (238)**	**$ –**
Foreign exchange[c]	**(2,552)**	**2,600**	**48**	**(350)**	**49**	**262**
Commodity[d]	**3,288**	**(3,381)**	**(93)**	**–**	**(84)**	**–**
Total	**$ (13,748)**	**$ 13,386**	**$ (362)**	**$ (350)**	**$ (273)**	**$ 262**

	Gains/(losses) recorded in income			Income statement impact of excluded components[e]		OCI impact
Nine months ended September 30, 2021 (in millions)	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]	$ (3,749)	$ 3,291	$ (458)	$ –	$ (353)	$ –
Foreign exchange[c]	(915) [g]	946 [g]	31	(221)	30	(56)
Commodity[d]	(5,119)	5,197	78	–	46	–
Total	$ (9,783)	$ 9,434	$ (349)	$ (221)	$ (277)	$ (56)

(a) Primarily consists of hedges of the benchmark (e.g., London Interbank Offered Rate ("LIBOR"), 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) Effective January 1, 2022, the Firm updated its presentation in the table above to include the amortization of income/expense associated with the inception hedge accounting adjustment applied to the hedged item; prior-period amounts have been revised to conform with the current presentation. 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.

(g) Prior-period amounts have been revised to conform with the current presentation.

As of September 30, 2022 and December 31, 2021, 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.

		Cumulative amount of fair value hedging adjustments included in the carrying amount of hedged items:		
September 30, 2022 (in millions)	Carrying amount of the hedged items[a][b]	Active hedging relationships[d]	Discontinued hedging relationships[d][e]	Total
Assets				
Investment securities - AFS	**$ 83,829** [c]	**$ (6,391)**	**$ 489**	**$ (5,902)**
Liabilities				
Long-term debt	**$ 168,982**	**$ (15,968)**	**$ 406**	**$ (15,562)**
Beneficial interests issued by consolidated VIEs	**—**	**—**	**—**	**—**

		Cumulative amount of fair value hedging adjustments included in the carrying amount of hedged items:		
December 31, 2021 (in millions)	Carrying amount of the hedged items[a][b]	Active hedging relationships[d]	Discontinued hedging relationships[d][e]	Total
Assets				
Investment securities - AFS	$ 65,746 [c]	$ 417	$ 661	$ 1,078
Liabilities				
Long-term debt	$ 195,642	$ (1,999)	$ 8,834	$ 6,835
Beneficial interests issued by consolidated VIEs	749	—	(1)	(1)

(a) Excludes physical commodities with a carrying value of $15.0 billion and $25.7 billion at September 30, 2022 and December 31, 2021, 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 September 30, 2022 and December 31, 2021, the carrying amount excluded for AFS securities is $15.2 billion and $14.0 billion, respectively, and for long-term debt is $208 million and $9.7 billion, respectively. Prior-period amount has been revised to conform with the current presentation.

(c) Carrying amount represents the amortized cost, net of allowance if applicable. Refer to Note 9 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 nine months ended September 30, 2022 and 2021, 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.

	Derivatives gains/(losses) recorded in income and other comprehensive income/(loss)		
Three months ended September 30, 2022 (in millions)	Amounts reclassified from AOCI to income	Amounts recorded in OCI	Total change in OCI for period
Contract type			
Interest rate[(a)]	**$ (160)**	**$ (2,279)**	**$ (2,119)**
Foreign exchange[(b)]	**(118)**	**(232)**	**(114)**
Total	**$ (278)**	**$ (2,511)**	**$ (2,233)**

	Derivatives gains/(losses) recorded in income and other comprehensive income/(loss)		
Three months ended September 30, 2021 (in millions)	Amounts reclassified from AOCI to income	Amounts recorded in OCI	Total change in OCI for period
Contract type			
Interest rate[(a)]	$ 272	$ (232)	$ (504)
Foreign exchange[(b)]	54	(35)	(89)
Total	$ 326	$ (267)	$ (593)

	Derivatives gains/(losses) recorded in income and other comprehensive income/(loss)		
Nine months ended September 30, 2022 (in millions)	Amounts reclassified from AOCI to income	Amounts recorded in OCI	Total change in OCI for period
Contract type			
Interest rate[(a)]	**$ 169**	**$ (7,149)**	**$ (7,318)**
Foreign exchange[(b)]	**(186)**	**(548)**	**(362)**
Total	**$ (17)**	**$ (7,697)**	**$ (7,680)**

	Derivatives gains/(losses) recorded in income and other comprehensive income/(loss)		
Nine months ended September 30, 2021 (in millions)	Amounts reclassified from AOCI to income	Amounts recorded in OCI	Total change in OCI for period
Contract type			
Interest rate[(a)]	$ 771	$ (1,871)	$ (2,642)
Foreign exchange[(b)]	159	27	(132)
Total	$ 930	$ (1,844)	$ (2,774)

(a) Primarily consists of hedges of LIBOR-indexed and 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 nine months ended September 30, 2022 and 2021.

Over the next 12 months, the Firm expects that approximately $(1.1) billion (after-tax) of net losses recorded in AOCI at September 30, 2022, 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 six 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 nine months ended September 30, 2022 and 2021.

	Gains/(losses) recorded in income and other comprehensive income/(loss)			
	2022		2021	
Three months ended September 30, (in millions)	Amounts recorded in income(a)(b)	Amounts recorded in OCI	Amounts recorded in income(a)(b)	Amounts recorded in OCI
Foreign exchange derivatives	**$ 26**	**$ 2,992**	$ (73)	$ 1,028

	Gains/(losses) recorded in income and other comprehensive income/(loss)			
	2022		2021	
Nine months ended September 30, (in millions)	Amounts recorded in income(a)(b)	Amounts recorded in OCI	Amounts recorded in income(a)(b)	Amounts recorded in OCI
Foreign exchange derivatives	**$ (221)**	**$ 6,850**	$ (180)	$ 1,958

(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. The amounts reclassified for the nine months ended September 30, 2022 and three and nine months ended September 30, 2021 were not material. Refer to Note 19 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 September 30,		Nine months ended September 30,	
(in millions)	**2022**	2021	**2022**	2021
Contract type				
Interest rate[(a)]	**$ (215)**	$ 320	**$ (753)**	$ 822
Credit[(b)]	**(17)**	(14)	**105**	(81)
Foreign exchange[(c)]	**(3)**	14	**(79)**	82
Total	**$ (235)**	$ 320	**$ (727)**	$ 823

(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 5 for information on principal transactions revenue.

Credit derivatives

Refer to Note 5 of JPMorgan Chase's 2021 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 September 30, 2022 and December 31, 2021. 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

	Maximum payout/Notional amount			
September 30, 2022 (in millions)	Protection sold	Protection purchased with identical underlyings[c]	Net protection (sold)/ purchased[d]	Other protection purchased[e]
Credit derivatives				
Credit default swaps	**$ (558,532)**	**$ 572,446**	**$ 13,914**	**$ 1,486**
Other credit derivatives[a]	**(69,476)**	**87,111**	**17,635**	**17,761**
Total credit derivatives	**(628,008)**	**659,557**	**31,549**	**19,247**
Credit-related notes[b]	**–**	**–**	**–**	**7,691**
Total	**$ (628,008)**	**$ 659,557**	**$ 31,549**	**$ 26,938**

	Maximum payout/Notional amount			
December 31, 2021 (in millions)	Protection sold	Protection purchased with identical underlyings[c]	Net protection (sold)/ purchased[d]	Other protection purchased[e]
Credit derivatives				
Credit default swaps	$ (443,481)	$ 458,180	$ 14,699	$ 2,269
Other credit derivatives[a]	(56,130)	79,586	23,456	13,435
Total credit derivatives	(499,611)	537,766	38,155	15,704
Credit-related notes[b]	–	–	–	9,437
Total	$ (499,611)	$ 537,766	$ 38,155	$ 25,141

(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 September 30, 2022, and December 31, 2021, 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

September 30, 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	**$ (101,892)**	**$ (303,752)**	**$ (77,175)**	**$ (482,819)**	**$ 1,598**	**$ (3,143)**	**$ (1,545)**
Noninvestment-grade	**(30,272)**	**(94,086)**	**(20,831)**	**(145,189)**	**815**	**(4,614)**	**(3,799)**
Total	**$ (132,164)**	**$ (397,838)**	**$ (98,006)**	**$ (628,008)**	**$ 2,413**	**$ (7,757)**	**$ (5,344)**

December 31, 2021 (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	$ (91,155)	$ (255,106)	$ (29,035)	$ (375,296)	$ 3,645	$ (623)	$ 3,022
Noninvestment-grade	(32,175)	(84,851)	(7,289)	(124,315)	2,630	(2,003)	627
Total	$ (123,330)	$ (339,957)	$ (36,324)	$ (499,611)	$ 6,275	$ (2,626)	$ 3,649

(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 5 – Noninterest revenue and noninterest expense

Noninterest revenue

Refer to Note 6 of JPMorgan Chase's 2021 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.

	Three months ended September 30,		Nine months ended September 30,	
(in millions)	**2022**	2021	**2022**	2021
Underwriting				
Equity	**$ 271**	$ 1,034	**$ 743**	$ 3,169
Debt	**578**	1,019	**2,263**	3,713
Total underwriting	**849**	2,053	**3,006**	6,882
Advisory	**825**	1,229	**2,262**	2,840
Total investment banking fees	**$ 1,674**	$ 3,282	**$ 5,268**	$ 9,722

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 6 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.

	Three months ended September 30,		Nine months ended September 30,	
(in millions)	**2022**	2021	**2022**	2021
Trading revenue by instrument type				
Interest rate[(a)]	**$ 1,092**	$ 339	**$ 1,937**	$ 1,726
Credit[(b)]	**488**	496	**1,224** (c)	2,525
Foreign exchange	**1,398**	648	**4,147**	2,287
Equity	**1,868**	1,863	**6,426**	6,449
Commodity	**562**	315	**1,808**	1,165
Total trading revenue	**5,408**	3,661	**15,542**	14,152
Private equity (losses)	**(25)**	(115)	**(64)**	(30)
Principal transactions	**$ 5,383**	$ 3,546	**$15,478**	$14,122

(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 net 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.

	Three months ended September 30,		Nine months ended September 30,	
(in millions)	**2022**	2021	**2022**	2021
Lending-related fees	**$ 379**	$ 374	**$ 1,103**	$ 1,102
Deposit-related fees	**1,352**	1,427	**4,340**	4,146
Total lending- and deposit-related fees	**$ 1,731**	$ 1,801	**$ 5,443**	$ 5,248

Asset management, administration and commissions

The following table presents the components of asset management, administration and commissions.

	Three months ended September 30,		Nine months ended September 30,	
(in millions)	**2022**	2021	**2022**	2021
Asset management fees				
Investment management fees[(a)]	**$ 3,420**	$ 3,554	**$10,407**	$10,232
All other asset management fees[(b)]	**75**	94	**257**	283
Total asset management fees	**3,495**	3,648	**10,664**	10,515
Total administration fees[(c)]	**558**	642	**1,781**	1,925
Commissions and other fees				
Brokerage commissions[(d)]	**648**	719	**2,196**	2,280
All other commissions and fees	**368**	248	**1,030**	760
Total commissions and fees	**1,016**	967	**3,226**	3,040
Total asset management, administration and commissions	**$ 5,069**	$ 5,257	**$15,671**	$15,480

(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) 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.
(c) Predominantly includes fees for custody, securities lending, funds services and securities clearance.
(d) Represents commissions earned when the Firm acts as a broker, by facilitating its clients' purchases and sales of securities and other financial instruments.

Card income

The following table presents the components of card income.

(in millions)	Three months ended September 30, 2022	2021	Nine months ended September 30, 2022	2021
Interchange and merchant processing income	**$ 7,166**	$ 6,117	**$ 20,615**	$ 16,959
Rewards costs and partner payments	**(5,747)**	(4,860)	**(16,258)**	(12,676)
Other card income[(a)]	**(333)**	(252)	**(1,163)**	(281)
Total card income	**$ 1,086**	$ 1,005	**$ 3,194**	$ 4,002

(a) Predominantly represents the amortization of account origination costs and annual fees.

Refer to Note 14 for further information on **mortgage fees and related income.**

Refer to Note 16 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 September 30, 2022	2021	Nine months ended September 30, 2022	2021
Legal expense	**$ 47**	$ 76	**$ 239**	$ 289

Note 6 – Interest income and Interest expense

Refer to Note 7 of JPMorgan Chase's 2021 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 September 30, 2022	2021	Nine months ended September 30, 2022	2021
Interest income				
Loans[(a)]	**$ 13,985**	$ 10,445	**$ 36,244**	$ 30,777
Taxable securities	**2,696**	1,553	**6,964**	4,735
Non-taxable securities[(b)]	**236**	262	**726**	809
Total investment securities[(a)]	**2,932**	1,815	**7,690**	5,544
Trading assets - debt instruments	**2,390**	1,682	**6,206**	5,175
Federal funds sold and securities purchased under resale agreements	**1,413**	231	**2,353**	639
Securities borrowed[(c)]	**772**	(73)	**858**	(240)
Deposits with banks	**3,015**	174	**4,332**	342
All other interest-earning assets[(d)]	**1,104**	206	**2,070**	608
Total interest income	**$ 25,611**	$ 14,480	**$ 59,753**	$ 42,845
Interest expense				
Interest-bearing deposits	**$ 3,159**	$ 126	**$ 4,239**	$ 404
Federal funds purchased and securities loaned or sold under repurchase agreements	**1,267**	119	**1,852**	194
Short-term borrowings[(e)]	**155**	31	**285**	97
Trading liabilities – debt and all other interest-bearing liabilities[(c)(f)]	**1,045**	52	**1,707**	130
Long-term debt	**2,405**	1,054	**5,042**	3,244
Beneficial interest issued by consolidated VIEs	**62**	18	**110**	66
Total interest expense	**$ 8,093**	$ 1,400	**$ 13,235**	$ 4,135
Net interest income	**$ 17,518**	$ 13,080	**$ 46,518**	$ 38,710
Provision for credit losses	**1,537**	(1,527)	**4,101**	(7,968)
Net interest income after provision for credit losses	**$ 15,981**	$ 14,607	**$ 42,417**	$ 46,678

(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) Negative interest income is related to the impact of interest rates combined with the fees paid on client-driven securities borrowed balances. The negative interest expense related to prime brokerage customer payables is recognized in interest expense and reported within trading liabilities - debt and all other interest-bearing liabilities.
(d) 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.
(e) Includes commercial paper.
(f) All other interest-bearing liabilities includes interest expense on brokerage-related customer payables.

Note 7 – Pension and other postretirement employee benefit plans

Refer to Note 8 of JPMorgan Chase's 2021 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.

	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	**2022**	2021
(in millions)	Pension and OPEB plans		Pension and OPEB plans	
Total net periodic defined benefit plan cost/(credit)	**$ (11)** [(a)]	$ (65)	**$ (150)** [(a)]	$ (184)
Total defined contribution plans	**353**	327	**1,054**	998
Total pension and OPEB cost included in noninterest expense	**$ 342**	$ 262	**$ 904**	$ 814

(a) Includes a $58 million pension settlement loss.

At September 30, 2022 and December 31, 2021, the fair values of plan assets for the Firm's defined benefit pension and OPEB plans were $19.4 billion and $25.7 billion, respectively.

During the period ended September 30, 2022, a remeasurement of the Firm's U.S. principal defined benefit plan was required as a result of a pension settlement. The remeasurement resulted in a reduction in the fair value of plan assets, reflecting market conditions at the time of remeasurement, and a reduction in the projected benefit obligation totaling $4.0 billion and $2.6 billion, respectively, resulting in a net decrease of $1.4 billion in accumulated other comprehensive income (pre-tax).

Note 8 – Employee share-based incentives

Refer to Note 9 of JPMorgan Chase's 2021 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.

	Three months ended September 30,		Nine months ended September 30,	
(in millions)	**2022**	2021	**2022**	2021
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	**$ 292**	$ 283	**$ 941**	$ 919
Accrual of estimated costs of share-based awards to be granted in future periods, predominantly those to full-career eligible employees	**392**	335	**1,368**	1,346
Total noncash compensation expense related to employee share-based incentive plans	**$ 684**	$ 618	**$ 2,309**	$ 2,265

In the first quarter of 2022, in connection with its annual incentive grant for the 2021 performance year, the Firm granted 19 million RSUs and 720 thousand PSUs with weighted-average grant date fair values of $151.06 per RSU and $149.99 per PSU.

Note 9 – 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 September 30, 2022, 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).

During the second quarter of 2022, the Firm transferred $73.2 billion of investment securities from AFS to HTM for capital management purposes. AOCI included pretax unrealized losses of $4.6 billion on the securities at the date of transfer.

Refer to Note 10 of JPMorgan Chase's 2021 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.

	September 30, 2022				December 31, 2021			
(in millions)	Amortized cost[b][c]	Gross unrealized gains	Gross unrealized losses	Fair value	Amortized cost[b][c]	Gross unrealized gains	Gross unrealized losses	Fair value
Available-for-sale securities								
Mortgage-backed securities:								
U.S. GSEs and government agencies	**$ 60,338**	**$ 204**	**$ 7,211**	**$ 53,331**	$ 72,800	$ 736	$ 993	$ 72,543
Residential:								
U.S.	**1,644**	**—**	**103**	**1,541**	2,128	38	2	2,164
Non-U.S.	**3,235**	**6**	**20**	**3,221**	3,882	25	1	3,906
Commercial	**2,073**	**—**	**136**	**1,937**	4,944	22	17	4,949
Total mortgage-backed securities	**67,290**	**210**	**7,470**	**60,030**	83,754	821	1,013	83,562
U.S. Treasury and government agencies	**94,558**	**204**	**4,275**	**90,487**	178,038	668	1,243	177,463
Obligations of U.S. states and municipalities	**9,038**	**70**	**526**	**8,582**	14,890	972	2	15,860
Non-U.S. government debt securities	**15,200**	**17**	**616**	**14,601**	16,163	92	46	16,209
Corporate debt securities	**333**	**—**	**34**	**299**	332	8	19	321
Asset-backed securities:								
Collateralized loan obligations	**11,244**	**—**	**324**	**10,920**	9,674	6	18	9,662
Other	**3,256**	**19**	**54**	**3,221**	5,403	47	2	5,448
Total available-for-sale securities	**200,919**	**520**	**13,299**	**188,140**	308,254	2,614	2,343	308,525
Held-to-maturity securities[a]								
Mortgage-backed securities:								
U.S. GSEs and government agencies	**114,012**	**—**	**15,112**	**98,900**	102,556	1,400	853	103,103
U.S. Residential	**10,750**	**1**	**1,251**	**9,500**	7,316	1	106	7,211
Commercial	**10,311**	**1**	**791**	**9,521**	3,730	11	54	3,687
Total mortgage-backed securities	**135,073**	**2**	**17,154**	**117,921**	113,602	1,412	1,013	114,001
U.S. Treasury and government agencies	**218,614**	**—**	**19,502**	**199,112**	185,204	169	2,103	183,270
Obligations of U.S. states and municipalities	**19,387**	**6**	**1,529**	**17,864**	13,985	453	44	14,394
Asset-backed securities:								
Collateralized loan obligations	**54,566**	**—**	**2,049**	**52,517**	48,869	75	22	48,922
Other	**2,466**	**—**	**102**	**2,364**	2,047	1	7	2,041
Total held-to-maturity securities	**430,106**	**8**	**40,336**	**389,778**	363,707	2,110	3,189	362,628
Total investment securities, net of allowance for credit losses	**$ 631,025**	**$ 528**	**$53,635**	**$ 577,918**	$ 671,961	$ 4,724	$ 5,532	$ 671,153

(a) The Firm purchased $1.8 billion and $29.3 billion of HTM securities for the three and nine months ended September 30, 2022, respectively, and $15.9 billion and $79.0 billion for the three and nine months ended September 30, 2021, respectively.

(b) The amortized cost of investment securities is reported net of allowance for credit losses of $61 million and $42 million at September 30, 2022 and December 31, 2021, respectively.

(c) Excludes $2.1 billion and $1.9 billion of accrued interest receivables at September 30, 2022 and December 31, 2021, respectively. The Firm did not reverse through interest income any accrued interest receivables for the three and nine months ended September 30, 2022 and 2021. Refer to Note 10 of JPMorgan Chase's 2021 Form 10-K for further discussion of accounting policies for accrued interest receivables on investment securities.

AFS securities impairment

The following tables present the fair value and gross unrealized losses by aging category for AFS securities at September 30, 2022 and December 31, 2021. The tables exclude U.S. Treasury and government agency securities and U.S. GSE and government agency MBS with unrealized losses of $11.5 billion and $2.2 billion, at September 30, 2022 and December 31, 2021, 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.

	Available-for-sale securities with gross unrealized losses					
	Less than 12 months		12 months or more			
September 30, 2022 (in millions)	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses	Total fair value	Total gross unrealized losses
Available-for-sale securities						
Mortgage-backed securities:						
Residential:						
U.S.	**$ 1,426**	**$ 88**	**$ 103**	**$ 15**	**$ 1,529**	**$ 103**
Non-U.S.	**2,953**	**19**	**68**	**1**	**3,021**	**20**
Commercial	**1,674**	**106**	**263**	**30**	**1,937**	**136**
Total mortgage-backed securities	**6,053**	**213**	**434**	**46**	**6,487**	**259**
Obligations of U.S. states and municipalities	**4,243**	**493**	**61**	**33**	**4,304**	**526**
Non-U.S. government debt securities	**9,847**	**475**	**1,474**	**141**	**11,321**	**616**
Corporate debt securities	**174**	**4**	**125**	**30**	**299**	**34**
Asset-backed securities:						
Collateralized loan obligations	**8,271**	**244**	**2,510**	**80**	**10,781**	**324**
Other	**2,468**	**49**	**148**	**5**	**2,616**	**54**
Total available-for-sale securities with gross unrealized losses	**$ 31,056**	**$ 1,478**	**$ 4,752**	**$ 335**	**$ 35,808**	**$ 1,813**

	Available-for-sale securities with gross unrealized losses					
	Less than 12 months		12 months or more			
December 31, 2021 (in millions)	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses	Total fair value	Total gross unrealized losses
Available-for-sale securities						
Mortgage-backed securities:						
Residential:						
U.S.	$ 303	$ 1	$ 45	$ 1	$ 348	$ 2
Non-U.S.	133	1	–	–	133	1
Commercial	2,557	5	349	12	2,906	17
Total mortgage-backed securities	2,993	7	394	13	3,387	20
Obligations of U.S. states and municipalities	120	2	–	–	120	2
Non-U.S. government debt securities	5,060	37	510	9	5,570	46
Corporate debt securities	166	1	46	18	212	19
Asset-backed securities:						
Collateralized loan obligations	8,110	18	208	–	8,318	18
Other	89	–	178	2	267	2
Total available-for-sale securities with gross unrealized losses	$ 16,538	$ 65	$ 1,336	$ 42	$ 17,874	$ 107

HTM securities – credit risk

Credit quality indicator

The primary credit quality indicator for HTM securities is the risk rating assigned to each security. At both September 30, 2022 and December 31, 2021, all HTM securities were rated investment grade and were current and accruing, with approximately 98% rated at least AA+.

Allowance for credit losses on investment securities

The allowance for credit losses on investment securities was $61 million and $73 million as of September 30, 2022 and 2021, respectively.

Refer to Note 10 of JPMorgan Chase's 2021 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

	Three months ended September 30,		Nine months ended September 30,	
(in millions)	**2022**	2021	**2022**	2021
Realized gains	**$ 88**	$ 60	**$ 170**	$ 481
Realized losses	**(1,047)**	(316)	**(1,676)**	(878)
Investment securities losses	**$ (959)**	$ (256)	**$ (1,506)**	$ (397)
Provision for credit losses	**$ 14**	$ (14)	**$ 19**	$ (5)

Contractual maturities and yields

The following table presents the amortized cost and estimated fair value at September 30, 2022, of JPMorgan Chase's investment securities portfolio by contractual maturity.

By remaining maturity September 30, 2022 (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[(b)]	Total
Available-for-sale securities					
Mortgage-backed securities					
Amortized cost	$ 1	$ 3,213	$ 4,107	$ 59,969	$ 67,290
Fair value	1	3,023	4,137	52,869	60,030
Average yield[(a)]	0.50 %	2.23 %	3.80 %	2.89 %	2.92 %
U.S. Treasury and government agencies					
Amortized cost	$ 20,409	$ 58,159	$ 9,753	$ 6,237	$ 94,558
Fair value	19,913	55,378	8,958	6,238	90,487
Average yield[(a)]	1.08 %	1.56 %	2.17 %	3.90 %	1.67 %
Obligations of U.S. states and municipalities					
Amortized cost	$ 18	$ 75	$ 622	$ 8,323	$ 9,038
Fair value	18	74	623	7,867	8,582
Average yield[(a)]	5.13 %	4.46 %	5.35 %	5.18 %	5.18 %
Non-U.S. government debt securities					
Amortized cost	$ 7,465	$ 3,475	$ 3,951	$ 309	$ 15,200
Fair value	7,456	3,340	3,492	313	14,601
Average yield[(a)]	2.83 %	2.76 %	1.24 %	2.10 %	2.39 %
Corporate debt securities					
Amortized cost	$ –	$ 329	$ 13	$ –	$ 342
Fair value	–	286	13	–	299
Average yield[(a)]	– %	12.88 %	4.09 %	– %	12.54 %
Asset-backed securities					
Amortized cost	$ 104	$ 1,618	$ 3,512	$ 9,266	$ 14,500
Fair value	101	1,587	3,437	9,016	14,141
Average yield[(a)]	3.51 %	3.06 %	3.35 %	3.84 %	3.63 %
Total available-for-sale securities					
Amortized cost	$ 27,997	$ 66,869	$ 21,958	$ 84,104	$ 200,928
Fair value	27,489	63,688	20,660	76,303	188,140
Average yield[(a)]	1.56 %	1.75 %	2.59 %	3.30 %	2.46 %
Held-to-maturity securities					
Mortgage-backed securities					
Amortized cost	$ –	$ 1,759	$ 11,828	$ 121,498	$ 135,085
Fair value	–	1,616	10,235	106,070	117,921
Average yield[(a)]	– %	2.19 %	2.43 %	2.84 %	2.80 %
U.S. Treasury and government agencies					
Amortized cost	$ 31,247	$ 120,211	$ 67,156	$ –	$ 218,614
Fair value	30,802	112,245	56,065	–	199,112
Average yield[(a)]	0.53 %	0.69 %	1.27 %	– %	0.84 %
Obligations of U.S. states and municipalities					
Amortized cost	$ –	$ 84	$ 2,523	$ 16,821	$ 19,428
Fair value	–	78	2,470	15,316	17,864
Average yield[(a)]	– %	3.06 %	4.01 %	4.18 %	4.16 %
Asset-backed securities					
Amortized cost	$ –	$ –	$ 17,229	$ 39,802	$ 57,031
Fair value	–	–	16,867	38,014	54,881
Average yield[(a)]	– %	– %	3.26 %	3.25 %	3.25 %
Total held-to-maturity securities					
Amortized cost	$ 31,247	$ 122,054	$ 98,736	$ 178,121	$ 430,158
Fair value	30,802	113,939	85,637	159,400	389,778
Average yield[(a)]	0.53 %	0.71 %	1.83 %	3.06 %	1.93 %

(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. 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) 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 nine years for agency residential MBS, and six years for both agency residential collateralized mortgage obligations and nonagency residential collateralized mortgage obligations.

Note 10 – Securities financing activities

Refer to Note 11 of JPMorgan Chase’s 2021 Form 10-K for a discussion of accounting policies relating to securities financing activities. Refer to Note 3 for further information regarding securities borrowed and securities lending agreements for which the fair value option has been elected. Refer to Note 23 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 September 30, 2022 and December 31, 2021. 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.

	September 30, 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	**$ 574,775**	**$ (272,911)**	**$ 301,864**	**$ (289,549)**	**$ 12,315**
Securities borrowed	**233,381**	**(40,165)**	**193,216**	**(139,178)**	**54,038**
Liabilities					
Securities sold under repurchase agreements	**$ 505,755**	**$ (272,911)**	**$ 232,844**	**$ (200,011)**	**$ 32,833**
Securities loaned and other[(a)]	**51,645**	**(40,165)**	**11,480**	**(11,383)**	**97**

	December 31, 2021				
(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	$ 604,724	$ (343,093)	$ 261,631	$ (245,588)	$ 16,043
Securities borrowed	250,333	(44,262)	206,071	(154,599)	51,472
Liabilities					
Securities sold under repurchase agreements	$ 532,899	$ (343,093)	$ 189,806	$ (166,456)	$ 23,350
Securities loaned and other[(a)]	52,610	(44,262)	8,348	(8,133)	215

(a) Includes securities-for-securities lending agreements of $5.9 billion and $5.6 billion at September 30, 2022 and December 31, 2021, 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 September 30, 2022 and December 31, 2021, included $7.4 billion and $13.9 billion, respectively, of securities purchased under resale agreements; $48.3 billion and $46.4 billion, respectively, of securities borrowed; $31.3 billion and $21.6 billion, respectively, of securities sold under repurchase agreements; and $21 million and $198 million, respectively, of securities loaned and other.

The tables below present as of September 30, 2022, and December 31, 2021 the types of financial assets pledged in securities financing agreements and the remaining contractual maturity of the securities financing agreements.

	Gross liability balance			
	September 30, 2022		December 31, 2021	
(in millions)	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	**$ 52,178**	**$ –**	$ 37,046	$ –
Residential - nonagency	**1,871**	**–**	1,508	–
Commercial - nonagency	**1,439**	**–**	1,463	–
U.S. Treasury, GSEs and government agencies	**216,942**	**1,096**	241,578	358
Obligations of U.S. states and municipalities	**2,213**	**24**	1,916	7
Non-U.S. government debt	**158,424**	**1,383**	174,971	1,572
Corporate debt securities	**37,938**	**1,766**	38,180	1,619
Asset-backed securities	**2,524**	**–**	1,211	–
Equity securities	**32,226**	**47,376**	35,026	49,054
Total	**$ 505,755**	**$ 51,645**	$ 532,899	$ 52,610

	Remaining contractual maturity of the agreements				
September 30, 2022 (in millions)	Overnight and continuous	Up to 30 days	30 – 90 days	Greater than 90 days	Total
Total securities sold under repurchase agreements	**$ 209,161**	**$ 172,220**	**$ 43,427**	**$ 80,947**	**$ 505,755**
Total securities loaned and other	**50,090**	**476**	**3**	**1,076**	**51,645**

	Remaining contractual maturity of the agreements				
December 31, 2021 (in millions)	Overnight and continuous	Up to 30 days	30 – 90 days	Greater than 90 days	Total
Total securities sold under repurchase agreements	$ 195,035	$ 231,171	$ 47,201	$ 59,492	$ 532,899
Total securities loaned and other	50,034	1,701	–	875	52,610

Transfers not qualifying for sale accounting

At September 30, 2022, and December 31, 2021, the Firm held $295 million and $440 million, respectively, 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 11 – 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 2021 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.

Loan portfolio

The Firm's loan portfolio is divided into three portfolio segments, which are the same segments used by the Firm to determine the allowance for loan losses: 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)]
• Residential real estate[(a)] • Auto and other[(b)]	• Credit card loans	• 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 and Corporate.
(b) Includes scored auto and business banking loans and overdrafts.
(c) Includes loans held in CIB, CB, AWM, Corporate as well as risk-rated loans held in CCB, including business banking and auto dealer loans 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). Refer to Note 14 of JPMorgan Chase's 2021 Form 10-K for more information on SPEs.

The following tables summarize the Firm's loan balances by portfolio segment.

September 30, 2022 (in millions)	Consumer, excluding credit card	Credit card	Wholesale	Total[(a)(b)]
Retained	**$ 301,403**	**$ 170,462**	**$ 596,208**	**$ 1,068,073**
Held-for-sale	**682**	**–**	**2,391**	**3,073**
At fair value	**11,711**	**–**	**29,776**	**41,487**
Total	**$ 313,796**	**$ 170,462**	**$ 628,375**	**$ 1,112,633**

December 31, 2021 (in millions)	Consumer, excluding credit card	Credit card	Wholesale	Total[(a)(b)]
Retained	$ 295,556	$ 154,296	$ 560,354	$ 1,010,206
Held-for-sale	1,287	–	7,401	8,688
At fair value	26,463	–	32,357	58,820
Total	$ 323,306	$ 154,296	$ 600,112	$ 1,077,714

(a) Excludes $4.0 billion and $2.7 billion of accrued interest receivables at September 30, 2022, and December 31, 2021, respectively. The Firm wrote off accrued interest receivables of $8 million and $10 million for the three months ended September 30, 2022 and 2021, respectively, and $27 million and $30 million for the nine months ended September 30, 2022 and 2021, respectively. Prior-period amounts have been revised to conform with the current presentation.
(b) 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 September 30, 2022, and December 31, 2021.

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 September 30, (in millions)	2022				2021			
	Consumer, excluding credit card	Credit card	Wholesale	Total	Consumer, excluding credit card	Credit card	Wholesale	Total
Purchases	**$ 447** [(b)(c)]	**$ –**	**$ 462**	**$ 909**	$ 101 [(b)(c)]	$ –	$ 245	$ 346
Sales	**2,755**	**–**	**11,226**	**13,981**	–	–	7,826	7,826
Retained loans reclassified to held-for-sale[(a)]	**47**	**–**	**343**	**390**	522	–	397	919

Nine months ended September 30, (in millions)	2022				2021			
	Consumer, excluding credit card	Credit card	Wholesale	Total	Consumer, excluding credit card	Credit card	Wholesale	Total
Purchases	**$ 1,539** [(b)(c)]	**$ –**	**$ 856**	**$ 2,395**	$ 403 [(b)(c)]	$ –	$ 772	$ 1,175
Sales	**2,884**	**–**	**32,938**	**35,822**	181	–	22,307	22,488
Retained loans reclassified to held-for-sale[(a)]	**189**	**–**	**1,031**	**1,220**	771	–	2,061	2,832

(a) Reclassifications of loans to held-for-sale are non-cash transactions.

(b) Predominantly 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 nine months ended September 30, 2022 and 2021. 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.

(c) Excludes purchases of retained loans of $2.4 billion and $7.3 billion for the three months ended September 30, 2022 and 2021, respectively, and $11.6 billion and $19.3 billion for the nine months ended September 30, 2022 and 2021, 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 nine months ended September 30, 2022 was $68 million and $(246) million, respectively, of which $(48) million and $(80) million, respectively, related to loans. Net gains/(losses) on sales of loans and lending-related commitments for the three and nine months ended September 30, 2021 was $31 million and $225 million, respectively, of which $30 million and $211 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)	September 30, 2022	December 31, 2021
Residential real estate	**$ 237,771**	$ 224,795
Auto and other[(a)]	**63,632**	70,761
Total retained loans	**$ 301,403**	$ 295,556

(a) At September 30, 2022 and December 31, 2021, included $791 million and $5.4 billion of loans, respectively, in Business Banking under the PPP.

Delinquency rates are the primary credit quality indicator for consumer loans. Refer to Note 12 of JPMorgan Chase's 2021 Form 10-K for further information on consumer credit quality indicators.

Residential real estate

The following tables provide information on delinquency, which is the primary credit quality indicator for retained residential real estate loans.

	September 30, 2022								
	Term loans by origination year[d]						Revolving loans		
(in millions, except ratios)	2022	2021	2020	2019	2018	Prior to 2018	Within the revolving period	Converted to term loans	Total
Loan delinquency[a][b]									
Current	**$ 36,439**	**$ 66,675**	**$ 43,962**	**$ 15,683**	**$ 6,486**	**$ 51,174**	**$ 5,747**	**$ 10,119**	**$ 236,285**
30–149 days past due	**8**	**12**	**13**	**18**	**15**	**517**	**12**	**185**	**780**
150 or more days past due	**—**	**—**	**4**	**11**	**7**	**494**	**4**	**186**	**706**
Total retained loans	**$ 36,447**	**$ 66,687**	**$ 43,979**	**$ 15,712**	**$ 6,508**	**$ 52,185**	**$ 5,763**	**$ 10,490**	**$ 237,771**
% of 30+ days past due to total retained loans[c]	**0.02 %**	**0.02 %**	**0.04 %**	**0.18 %**	**0.34 %**	**1.89 %**	**0.28 %**	**3.54 %**	**0.61 %**

	December 31, 2021								
	Term loans by origination year[d]						Revolving loans		
(in millions, except ratios)	2021	2020	2019	2018	2017	Prior to 2017	Within the revolving period	Converted to term loans	Total
Loan delinquency[a][b]									
Current	$ 68,742	$ 48,334	$ 18,428	$ 7,929	$ 11,684	$ 49,147	$ 6,392	$ 11,807	$ 222,463
30–149 days past due	13	23	27	27	22	578	11	182	883
150 or more days past due	—	11	21	25	33	1,069	6	284	1,449
Total retained loans	$ 68,755	$ 48,368	$ 18,476	$ 7,981	$ 11,739	$ 50,794	$ 6,409	$ 12,273	$ 224,795
% of 30+ days past due to total retained loans[c]	0.02 %	0.07 %	0.26 %	0.65 %	0.47 %	3.18 %	0.27 %	3.80 %	1.02 %

(a) At September 30, 2022 and December 31, 2021, individual delinquency classifications include mortgage loans insured by U.S. government agencies as follows: current included $27 million and $35 million; 30–149 days past due included $11 million for both periods; and 150 or more days past due included $15 million and $20 million, respectively.
(b) At September 30, 2022 and December 31, 2021, 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) At September 30, 2022 and December 31, 2021, residential real estate loans excluded mortgage loans insured by U.S. government agencies of $26 million and $31 million, respectively, that are 30 or more days past due. These amounts have been excluded based upon the government guarantee.
(d) 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)	September 30, 2022	December 31, 2021
Nonaccrual loans[(a)(b)(c)(d)]	**$ 3,797**	$ 4,759
90 or more days past due and government guaranteed[(e)]	**17**	24
Current estimated LTV ratios[(f)(g)(h)]		
Greater than 125% and refreshed FICO scores:		
Equal to or greater than 660	**$ 3**	$ 2
Less than 660	**1**	2
101% to 125% and refreshed FICO scores:		
Equal to or greater than 660	**40**	37
Less than 660	**4**	15
80% to 100% and refreshed FICO scores:		
Equal to or greater than 660	**4,047**	2,701
Less than 660	**63**	89
Less than 80% and refreshed FICO scores:		
Equal to or greater than 660	**222,577**	209,295
Less than 660	**8,736**	9,658
No FICO/LTV available	**2,247**	2,930
U.S. government-guaranteed	**53**	66
Total retained loans	**$ 237,771**	$ 224,795
Weighted average LTV ratio[(f)(i)]	**48 %**	50 %
Weighted average FICO[(g)(i)]	**768**	765
Geographic region[(j)]		
California	**$ 73,200**	$ 71,383
New York	**34,518**	32,545
Florida	**18,727**	16,182
Texas	**15,011**	13,865
Illinois	**11,411**	11,565
Colorado	**9,887**	8,885
Washington	**9,019**	8,292
New Jersey	**7,122**	6,832
Massachusetts	**6,370**	6,105
Connecticut	**5,465**	5,242
All other[(k)]	**47,041**	43,899
Total retained loans	**$ 237,771**	$ 224,795

(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 TDRs, regardless of their delinquency status. At September 30, 2022, approximately 5% of Chapter 7 residential real estate loans were 30 days or more past due.

(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 $42 million and $41 million and $132 million and $127 million for the three and nine months ended September 30, 2022 and 2021, respectively.

(d) Generally excludes loans under payment deferral programs offered in response to the COVID-19 pandemic.

(e) These balances are excluded from nonaccrual loans as the loans are guaranteed by U.S government agencies. Typically the principal balance of the loans is insured and interest is guaranteed at a specified reimbursement rate subject to meeting agreed-upon servicing guidelines. At September 30, 2022 and December 31, 2021, these balances were no longer accruing interest based on the agreed-upon servicing guidelines. There were no loans that were not guaranteed by U.S. government agencies that are 90 or more days past due and still accruing interest at September 30, 2022 and December 31, 2021.

(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 September 30, 2022.

(k) At September 30, 2022 and December 31, 2021, included mortgage loans insured by U.S. government agencies of $53 million and $66 million, respectively. These amounts have been excluded from the geographic regions presented based upon the government guarantee.

Loan modifications

Modifications of residential real estate loans where the Firm grants concessions to borrowers who are experiencing financial difficulty are generally accounted for and reported as TDRs. Loans with short-term or other insignificant modifications that are not considered concessions are not TDRs. The carrying value of new TDRs was $80 million and $116 million for the three months ended September 30, 2022 and 2021, respectively, and $313 million and $674 million for the nine months ended September 30, 2022 and 2021, respectively. There were no additional commitments to lend to borrowers whose residential real estate loans have been modified in TDRs.

Nature and extent of modifications

The Firm's proprietary modification programs as well as government programs, including U.S. GSE programs, generally provide various concessions to financially troubled borrowers including, but not limited to, interest rate reductions, term or payment extensions and delays of principal and/or interest payments that would otherwise have been required under the terms of the original agreement. The following table provides information about how residential real estate loans were modified in TDRs under the Firm's loss mitigation programs described above during the periods presented. This table excludes Chapter 7 loans where the sole concession granted is the discharge of debt and loans with short-term or other insignificant modifications that are not considered concessions.

	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	**2022**	2021
Number of loans approved for a trial modification	**820**	1,448	**3,258**	4,014
Number of loans permanently modified	**784**	917	**3,615**	3,817
Concession granted:(a)				
Interest rate reduction	**47 %**	75 %	**54 %**	74 %
Term or payment extension	**61**	64	**65**	49
Principal and/or interest deferred	**9**	19	**11**	24
Principal forgiveness	**–**	1	**1**	2
Other(b)	**46**	24	**38**	39

(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 under the loss mitigation programs described above and about redefaults of certain loans modified in TDRs for the periods presented. The following table presents only the financial effects of permanent modifications and do not include temporary concessions offered through trial modifications. This table also excludes Chapter 7 loans where the sole concession granted is the discharge of debt and loans with short-term or other insignificant modifications that are not considered concessions.

	Three months ended September 30,		Nine months ended September 30,	
(in millions, except weighted-average data)	**2022**	2021	**2022**	2021
Weighted-average interest rate of loans with interest rate reductions – before TDR	**5.39 %**	4.65 %	**4.65 %**	4.55 %
Weighted-average interest rate of loans with interest rate reductions – after TDR	**3.52**	2.89	**3.34**	2.91
Weighted-average remaining contractual term (in years) of loans with term or payment extensions – before TDR	**20**	23	**22**	23
Weighted-average remaining contractual term (in years) of loans with term or payment extensions – after TDR	**37**	37	**38**	37
Charge-offs recognized upon permanent modification	**$ —**	$ —	**$ 1**	$ —
Principal deferred	**4**	5	**15**	23
Principal forgiven	**—**	—	**1**	1
Balance of loans that redefaulted within one year of permanent modification[(a)]	**$ 33**	$ 52	**$ 103**	$ 97

(a) Represents loans permanently modified in TDRs that experienced a payment default in the periods presented, and for which the payment default occurred within one year of the modification. The dollar amounts presented represent the balance of such loans at the end of the reporting period in which such loans defaulted. For residential real estate loans modified in TDRs, payment default is deemed to occur when the loan becomes two contractual payments past due. In the event that a modified loan redefaults, it will generally be liquidated through foreclosure or another similar type of liquidation transaction. Redefaults of loans modified within the last twelve months may not be representative of ultimate redefault levels.

At September 30, 2022, the weighted-average estimated remaining lives of residential real estate loans permanently modified in TDRs were six years. The estimated remaining lives of these loans reflect estimated prepayments, both voluntary and involuntary (i.e., foreclosures and other forced liquidations).

Active and suspended foreclosure

At September 30, 2022 and December 31, 2021, the Firm had residential real estate loans, excluding those insured by U.S. government agencies, with a carrying value of $676 million and $619 million, respectively, that were not included in REO, but were in the process of active or suspended foreclosure.

Auto and other

The following tables provide information on delinquency, which is the primary credit quality indicator for retained auto and other consumer loans.

	September 30, 2022								
	Term loans by origination year						Revolving loans		
(in millions, except ratios)	2022	2021	2020	2019	2018	Prior to 2018	Within the revolving period	Converted to term loans	Total
Loan delinquency									
Current	**$ 17,530**	**$ 22,540** (b)	**$ 12,815** (b)	**$ 4,687**	**$ 1,892**	**$ 862**	**$ 2,291**	**$ 66**	**$ 62,683**
30–119 days past due	**164**	**502**	**86**	**63**	**34**	**21**	**15**	**3**	**888**
120 or more days past due	**–**	**–**	**53**	**–**	**–**	**1**	**5**	**2**	**61**
Total retained loans	**$ 17,694**	**$ 23,042**	**$ 12,954**	**$ 4,750**	**$ 1,926**	**$ 884**	**$ 2,311**	**$ 71**	**$ 63,632**
% of 30+ days past due to total retained loans[(a)]	**0.93 %**	**0.87 %**	**0.63 %**	**1.33 %**	**1.77 %**	**2.49 %**	**0.87 %**	**7.04 %**	**0.93 %**

	December 31, 2021								
	Term loans by origination year						Revolving loans		
(in millions, except ratios)	2021	2020	2019	2018	2017	Prior to 2017	Within the revolving period	Converted to term loans	Total
Loan delinquency									
Current	$ 35,323 (c)	$ 18,324 (c)	$ 7,443	$ 3,671	$ 1,800	$ 666	$ 2,242	$ 120	$ 69,589
30–119 days past due	192	720	88	53	31	21	12	6	1,123
120 or more days past due	–	35	–	–	1	1	5	7	49
Total retained loans	$ 35,515	$ 19,079	$ 7,531	$ 3,724	$ 1,832	$ 688	$ 2,259	$ 133	$ 70,761
% of 30+ days past due to total retained loans[(a)]	0.54 %	0.47 %	1.17 %	1.42 %	1.75 %	3.20 %	0.75 %	9.77 %	0.71 % (d)

(a) At September 30, 2022 and December 31, 2021, auto and other loans excluded $358 million and $667 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.

(b) Includes $653 million of loans originated in 2021 and $138 million of loans originated in 2020 in Business Banking under the PPP. PPP loans are guaranteed by the SBA. Other than in certain limited circumstances, the Firm typically does not recognize charge-offs, classify as nonaccrual nor record an allowance for loan losses on these loans.

(c) Includes $4.4 billion of loans originated in 2021 and $1.0 billion of loans originated in 2020 in Business Banking under the PPP.

(d) Prior-period amount has been revised to conform with the current presentation.

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.

	Total Auto and other	
(in millions)	**September 30, 2022**	December 31, 2021
Nonaccrual loans[(a)(b)(c)]	**$ 120**	$ 119
Geographic region[(d)]		
California	**$ 9,904**	$ 11,163
Texas	**7,233**	7,859
Florida	**4,792**	4,901
New York	**4,401**	5,848
Illinois	**2,762**	2,930
New Jersey	**2,219**	2,355
Pennsylvania	**1,843**	2,004
Georgia	**1,698**	1,748
Louisiana	**1,615**	1,801
Arizona	**1,590**	1,887
All other	**25,575**	28,265
Total retained loans	**$ 63,632**	$ 70,761

(a) At September 30, 2022 and December 31, 2021, nonaccrual loans excluded $57 million and $506 million, respectively, of PPP loans 90 or more days past due and guaranteed by the SBA, of which $53 million and $35 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 September 30, 2022 and December 31, 2021.

(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 the 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 nine months ended September 30, 2022 and 2021.

(d) The geographic regions presented in this table are ordered based on the magnitude of the corresponding loan balances at September 30, 2022.

Loan modifications

Certain auto and other loan modifications are considered to be TDRs as they provide various concessions to borrowers who are experiencing financial difficulty. Loans with short-term or other insignificant modifications that are not considered concessions are not TDRs.

The impact of these modifications, as well as new TDRs, were not material to the Firm for the three and nine months ended September 30, 2022 and 2021. Additional commitments to lend to borrowers whose loans have been modified in TDRs as of September 30, 2022 and December 31, 2021 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 2021 Form 10-K for further information on the credit card loan portfolio, including credit quality indicators.

The following tables provide information on delinquency, which is the primary credit quality indicator for retained credit card loans.

	September 30, 2022		
(in millions, except ratios)	Within the revolving period	Converted to term loans[a]	Total
Loan delinquency			
Current and less than 30 days past due and still accruing	**$ 167,654**	**$ 707**	**$ 168,361**
30–89 days past due and still accruing	**1,078**	**59**	**1,137**
90 or more days past due and still accruing	**936**	**28**	**964**
Total retained loans	**$ 169,668**	**$ 794**	**$ 170,462**
Loan delinquency ratios			
% of 30+ days past due to total retained loans	**1.19 %**	**10.96 %**	**1.23 %**
% of 90+ days past due to total retained loans	**0.55**	**3.53**	**0.57**

	December 31, 2021		
(in millions, except ratios)	Within the revolving period	Converted to term loans[a]	Total
Loan delinquency			
Current and less than 30 days past due and still accruing	$ 151,798	$ 901	$ 152,699
30–89 days past due and still accruing	770	59	829
90 or more days past due and still accruing	741	27	768
Total retained loans	$ 153,309	$ 987	$ 154,296
Loan delinquency ratios			
% of 30+ days past due to total retained loans	0.99 %	8.71 %	1.04 %
% of 90+ days past due to total retained loans	0.48	2.74	0.50

(a) Represents TDRs.

Other credit quality indicators

The following table provides information on other credit quality indicators for retained credit card loans.

(in millions, except ratios)	**September 30, 2022**	December 31, 2021
Geographic region[a]		
California	**$ 25,811**	$ 23,030
Texas	**17,672**	15,879
New York	**14,085**	12,652
Florida	**11,702**	10,412
Illinois	**9,402**	8,530
New Jersey	**7,078**	6,367
Ohio	**5,325**	4,923
Colorado	**5,124**	4,573
Pennsylvania	**5,033**	4,708
Michigan	**4,112**	3,773
All other	**65,118**	59,449
Total retained loans	**$ 170,462**	$ 154,296
Percentage of portfolio based on carrying value with estimated refreshed FICO scores		
Equal to or greater than 660	**87.2 %**	88.5 %
Less than 660	**12.6**	11.3
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 September 30, 2022.

Loan modifications

The Firm may offer loan modification programs granting concessions to credit card borrowers who are experiencing financial difficulty. The Firm grants concessions for most of the credit card loans under long-term programs. 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. Substantially all modifications under the Firm's long-term programs are considered to be TDRs. Loans with short-term or other insignificant modifications that are not considered concessions are not TDRs.

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.

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 for the periods presented. For all periods disclosed, new enrollments were less than 1% of total retained credit card loans.

(in millions, except weighted-average data)	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	**2022**	2021
Balance of new TDRs[(a)]	**$ 111**	$ 82	**$ 274**	$ 315
Weighted-average interest rate of loans – before TDR	**20.26 %**	17.75 %	**19.19 %**	17.79 %
Weighted-average interest rate of loans – after TDR	**3.81**	5.15	**4.37**	5.19
Balance of loans that redefaulted within one year of modification[(b)]	**$ 9**	$ 13	**$ 26**	$ 45

(a) Represents the outstanding balance prior to modification.

(b) Represents loans modified in TDRs that experienced a payment default in the periods presented, and for which the payment default occurred within one year of the modification. The amounts presented represent the balance of such loans as of the end of the quarter in which they defaulted.

For credit card loans modified in TDRs, 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.

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 2021 Form 10-K for further information on these risk ratings.

The following tables provide information on internal risk rating, which is the primary credit quality indicator for retained wholesale loans.

	Secured by real estate		Commercial and industrial		Other[b]		Total retained loans	
(in millions, except ratios)	**Sep 30, 2022**	Dec 31, 2021	**Sep 30, 2022**	Dec 31, 2021	**Sep 30, 2022**	Dec 31, 2021	**Sep 30, 2022**	Dec 31, 2021
Loans by risk ratings								
Investment-grade	**$ 98,149**	$ 92,369	**$ 78,303**	$ 75,783	**$ 246,840**	$ 241,859	**$ 423,292**	$ 410,011
Noninvestment-grade:								
Noncriticized	**23,599**	22,495	**77,270**	62,039	**56,962**	52,440	**157,831**	136,974
Criticized performing	**3,156**	3,645	**8,976**	6,900	**1,071**	770	**13,203**	11,315
Criticized nonaccrual[a]	**235**	326	**944**	969	**703**	759	**1,882**	2,054
Total noninvestment-grade	**26,990**	26,466	**87,190**	69,908	**58,736**	53,969	**172,916**	150,343
Total retained loans	**$ 125,139**	$ 118,835	**$ 165,493**	$ 145,691	**$ 305,576**	$ 295,828	**$ 596,208**	$ 560,354
% of investment-grade to total retained loans	**78.43 %**	77.73 %	**47.31 %**	52.02 %	**80.78 %**	81.76 %	**71.00 %**	73.17 %
% of total criticized to total retained loans	**2.71**	3.34	**5.99**	5.40	**0.58**	0.52	**2.53**	2.39
% of criticized nonaccrual to total retained loans	**0.19**	0.27	**0.57**	0.67	**0.23**	0.26	**0.32**	0.37

(a) At September 30, 2022 and December 31, 2021 nonaccrual loans excluded $28 million and $127 million, respectively, of PPP loans 90 or more days past due and guaranteed by the SBA, predominantly in commercial and industrial.
(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). Refer to Note 14 of JPMorgan Chase's 2021 Form 10-K for more information on SPEs.

	Secured by real estate **September 30, 2022**								
	Term loans by origination year						Revolving loans		
(in millions)	2022	2021	2020	2019	2018	Prior to 2018	Within the revolving period	Converted to term loans	Total
Loans by risk ratings									
Investment-grade	**$ 20,077**	**$ 22,610**	**$ 14,930**	**$ 14,995**	**$ 5,985**	**$ 18,503**	**$ 1,042**	**$ 7**	**$ 98,149**
Noninvestment-grade	**4,862**	**5,415**	**3,278**	**3,763**	**2,560**	**6,280**	**830**	**2**	**26,990**
Total retained loans	**$ 24,939**	**$ 28,025**	**$ 18,208**	**$ 18,758**	**$ 8,545**	**$ 24,783**	**$ 1,872**	**$ 9**	**$ 125,139**

	Secured by real estate December 31, 2021								
	Term loans by origination year						Revolving loans		
(in millions)	2021	2020	2019	2018	2017	Prior to 2017	Within the revolving period	Converted to term loans	Total
Loans by risk ratings									
Investment-grade	$ 23,346	$ 16,030	$ 17,265	$ 8,103	$ 7,325	$ 19,066	$ 1,226	$ 8	$ 92,369
Noninvestment-grade	5,364	3,826	4,564	3,806	2,834	5,613	458	1	26,466
Total retained loans	$ 28,710	$ 19,856	$ 21,829	$ 11,909	$ 10,159	$ 24,679	$ 1,684	$ 9	$ 118,835

(in millions)	Commercial and industrial September 30, 2022 Term loans by origination year 2022	2021	2020	2019	2018	Prior to 2018	Revolving loans Within the revolving period	Converted to term loans	Total
Loans by risk ratings									
Investment-grade	**$ 18,514**	**$ 9,621**	**$ 3,722**	**$ 2,186**	**$ 940**	**$ 1,233**	**$ 41,991**	**$ 96**	**$ 78,303** [(a)]
Noninvestment-grade	**19,371**	**13,289**	**3,820**	**3,097**	**803**	**975**	**45,755**	**80**	**87,190**
Total retained loans	**$ 37,885**	**$ 22,910**	**$ 7,542**	**$ 5,283**	**$ 1,743**	**$ 2,208**	**$ 87,746**	**$ 176**	**$ 165,493**

(in millions)	Commercial and industrial December 31, 2021 Term loans by origination year 2021	2020	2019	2018	2017	Prior to 2017	Revolving loans Within the revolving period	Converted to term loans	Total
Loans by risk ratings									
Investment-grade	$ 21,342	$ 6,268	$ 3,609	$ 1,269	$ 1,108	$ 819	$ 41,367	$ 1	$ 75,783 [(b)]
Noninvestment-grade	19,314	7,112	4,559	2,177	930	430	35,312	74	69,908
Total retained loans	$ 40,656	$ 13,380	$ 8,168	$ 3,446	$ 2,038	$ 1,249	$ 76,679	$ 75	$ 145,691

(a) At September 30, 2022, $188 million of the $215 million total PPP loans in the wholesale portfolio were commercial and industrial. Of the $188 million, $82 million were originated in 2021 and $106 million were originated in 2020. PPP loans are guaranteed by the SBA and considered investment-grade. Other than in certain limited circumstances, the Firm typically does not recognize charge-offs, classify as nonaccrual nor record an allowance for loan losses on these loans.

(b) At December 31, 2021, $1.1 billion of the $1.3 billion total PPP loans in the wholesale portfolio were commercial and industrial. Of the $1.1 billion, $698 million were originated in 2021 and $396 million were originated in 2020.

(in millions)	Other[(a)] September 30, 2022 Term loans by origination year 2022	2021	2020	2019	2018	Prior to 2018	Revolving loans Within the revolving period	Converted to term loans	Total
Loans by risk ratings									
Investment-grade	**$ 29,605**	**$ 16,432**	**$ 13,933**	**$ 4,935**	**$ 2,422**	**$ 8,097**	**$ 170,329**	**$ 1,087**	**$ 246,840**
Noninvestment-grade	**12,693**	**7,571**	**2,229**	**698**	**521**	**504**	**34,503**	**17**	**58,736**
Total retained loans	**$ 42,298**	**$ 24,003**	**$ 16,162**	**$ 5,633**	**$ 2,943**	**$ 8,601**	**$ 204,832**	**$ 1,104**	**$ 305,576**

(in millions)	Other[(a)] December 31, 2021 Term loans by origination year 2021	2020	2019	2018	2017	Prior to 2017	Revolving loans Within the revolving period	Converted to term loans	Total
Loans by risk ratings									
Investment-grade	$ 26,782	$ 17,829	$ 6,125	$ 2,885	$ 3,868	$ 7,651	$ 176,118	$ 601	$ 241,859
Noninvestment-grade	16,905	2,399	1,455	935	218	467	31,585	5	53,969
Total retained loans	$ 43,687	$ 20,228	$ 7,580	$ 3,820	$ 4,086	$ 8,118	$ 207,703	$ 606	$ 295,828

(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). Refer to Note 14 of JPMorgan Chase’s 2021 Form 10-K for more information on SPEs.

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.

	Multifamily		Other commercial		Total retained loans secured by real estate	
(in millions, except ratios)	**Sep 30, 2022**	Dec 31, 2021	**Sep 30, 2022**	Dec 31, 2021	**Sep 30, 2022**	Dec 31, 2021
Retained loans secured by real estate	**$ 78,566**	$ 73,801	**$ 46,573**	$ 45,034	**$ 125,139**	$ 118,835
Criticized	**1,560**	1,671	**1,831**	2,300	**3,391**	3,971
% of criticized to total retained loans secured by real estate	**1.99 %**	2.26 %	**3.93 %**	5.11 %	**2.71 %**	3.34 %
Criticized nonaccrual	**$ 53**	$ 91	**$ 182**	$ 235	**$ 235**	$ 326
% of criticized nonaccrual loans to total retained loans secured by real estate	**0.07 %**	0.12 %	**0.39 %**	0.52 %	**0.19 %**	0.27 %

Geographic distribution and delinquency

The following table provides information on the geographic distribution and delinquency for retained wholesale loans.

	Secured by real estate		Commercial and industrial		Other		Total retained loans	
(in millions)	**Sep 30, 2022**	Dec 31, 2021	**Sep 30, 2022**	Dec 31, 2021	**Sep 30, 2022**	Dec 31, 2021	**Sep 30, 2022**	Dec 31, 2021
Loans by geographic distribution[(a)]								
Total U.S.	**$ 122,226**	$ 115,732	**$ 125,010**	$ 106,449	**$ 225,444**	$ 215,750	**$ 472,680**	$ 437,931
Total non-U.S.	**2,913**	3,103	**40,483**	39,242	**80,132**	80,078	**123,528**	122,423
Total retained loans	**$ 125,139**	$ 118,835	**$ 165,493**	$ 145,691	**$ 305,576**	$ 295,828	**$ 596,208**	$ 560,354
Loan delinquency								
Current and less than 30 days past due and still accruing	**$ 124,744**	$ 118,163	**$ 162,738**	$ 143,459	**$ 303,274**	$ 293,358	**$ 590,756**	$ 554,980
30–89 days past due and still accruing	**144**	331	**1,529**	1,193	**1,395**	1,590	**3,068**	3,114
90 or more days past due and still accruing[(b)]	**16**	15	**282**	70	**204**	121	**502**	206
Criticized nonaccrual[(c)]	**235**	326	**944**	969	**703**	759	**1,882**	2,054
Total retained loans	**$ 125,139**	$ 118,835	**$ 165,493**	$ 145,691	**$ 305,576**	$ 295,828	**$ 596,208**	$ 560,354

(a) The U.S. and non-U.S. distribution is determined based predominantly on the domicile of the borrower.
(b) Represents loans that are considered well-collateralized and therefore still accruing interest.
(c) At September 30, 2022 and December 31, 2021 nonaccrual loans excluded $28 million and $127 million, respectively, of PPP loans 90 or more days past due and guaranteed by the SBA, predominantly in commercial and industrial.

Nonaccrual loans

The following table provides information on retained wholesale nonaccrual loans.

	Secured by real estate		Commercial and industrial		Other		Total retained loans	
(in millions)	**Sep 30, 2022**	Dec 31, 2021	**Sep 30, 2022**	Dec 31, 2021	**Sep 30, 2022**	Dec 31, 2021	**Sep 30, 2022**	Dec 31, 2021
Nonaccrual loans								
With an allowance	**$ 164**	$ 254	**$ 699**	$ 604	**$ 403**	$ 286	**$ 1,266**	$ 1,144
Without an allowance[(a)]	**71**	72	**245**	365	**300**	473	**616**	910
Total nonaccrual loans[(b)]	**$ 235**	$ 326	**$ 944**	$ 969	**$ 703**	$ 759	**$ 1,882**	$ 2,054

(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 nine months ended September 30, 2022 and 2021.

Loan modifications

Certain loan modifications are considered to be TDRs as they provide various concessions to borrowers who are experiencing financial difficulty. Loans with short-term or other insignificant modifications that are not considered concessions are not TDRs. New TDRs were $108 million and $180 million for the three months ended September 30, 2022, and 2021, respectively and $587 million and $832 million for the nine months ended September 30, 2022 and 2021, respectively. New TDRs for the three months ended September 30, 2022 and 2021 reflected extending maturity dates primarily in the Commercial and Industrial loan class in 2022 as well as principal deferrals largely in the Other loan class in 2021. New TDRs for the nine months ended September 30, 2022 and 2021 reflected modifications that included extending maturity dates and covenant waivers for both periods as well as the receipt of assets in partial satisfaction of the loan in 2021 predominantly in the Commercial and Industrial loan class. The impact of these modifications resulting in new TDRs was not material to the Firm for the three and nine months ended September 30, 2022 and 2021.

The carrying value of TDRs was $852 million and $607 million as of September 30, 2022, and December 31, 2021, respectively.

Note 12 – 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.

Refer to Note 13 of JPMorgan Chase's 2021 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 2021 Form 10-K and Note 9 of this Form 10-Q for further information on the allowance for credit losses on investment securities.

	2022				2021			
Nine months ended September 30, (in millions)	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,	**$ 1,765**	**$ 10,250**	**$ 4,371**	**$ 16,386**	$ 3,636	$ 17,800	$ 6,892	$ 28,328
Gross charge-offs	**590**	**2,294**	**232**	**3,116**	452	2,957	187	3,596
Gross recoveries collected	**(441)**	**(616)**	**(93)**	**(1,150)**	(470)	(724)	(87)	(1,281)
Net charge-offs/(recoveries)	**149**	**1,678**	**139**	**1,966**	(18)	2,233	100	2,315
Provision for loan losses	**202**	**1,828**	**1,733**	**3,763**	(1,778)	(3,917)	(2,162)	(7,857)
Other	**1**	**–**	**1**	**2**	(2)	–	(4)	(6)
Ending balance at September 30	**$ 1,819**	**$ 10,400**	**$ 5,966**	**$ 18,185**	$ 1,874	$ 11,650	$ 4,626	$ 18,150
Allowance for lending-related commitments								
Beginning balance at January 1,	**$ 113**	**$ –**	**$ 2,148**	**$ 2,261**	$ 187	$ –	$ 2,222	$ 2,409
Provision for lending-related commitments	**(36)**	**–**	**325**	**289**	(45)	–	(61)	(106)
Other	**–**	**–**	**1**	**1**	–	–	2	2
Ending balance at September 30	**$ 77**	**$ –**	**$ 2,474**	**$ 2,551**	$ 142	$ –	$ 2,163	$ 2,305
Total allowance for investment securities	**NA**	**NA**	**NA**	**61**	NA	NA	NA	73
Total allowance for credit losses[(a)]	**$ 1,896**	**$ 10,400**	**$ 8,440**	**$ 20,797**	$ 2,016	$ 11,650	$ 6,789	$ 20,528
Allowance for loan losses by impairment methodology								
Asset-specific[(b)]	**$ (702)**	**$ 218**	**$ 450**	**$ (34)**	$ (571)	$ 383	$ 357	$ 169
Portfolio-based	**2,521**	**10,182**	**5,516**	**18,219**	2,445	11,267	4,269	17,981
Total allowance for loan losses	**$ 1,819**	**$ 10,400**	**$ 5,966**	**$ 18,185**	$ 1,874	$ 11,650	$ 4,626	$ 18,150
Loans by impairment methodology								
Asset-specific[(b)]	**$ 12,218**	**$ 794**	**$ 2,282**	**$ 15,294**	$ 14,464	$ 1,083	$ 2,330	$ 17,877
Portfolio-based	**289,185**	**169,668**	**593,926**	**1,052,779**	283,844	142,083	530,456	956,383
Total retained loans	**$ 301,403**	**$ 170,462**	**$ 596,208**	**$ 1,068,073**	$ 298,308	$ 143,166	$ 532,786	$ 974,260
Collateral-dependent loans								
Net charge-offs	**$ (29)**	**$ –**	**$ 13**	**$ (16)**	$ 26	$ –	$ 9	$ 35
Loans measured at fair value of collateral less cost to sell	**3,718**	**–**	**537**	**4,255**	4,460	–	364	4,824
Allowance for lending-related commitments by impairment methodology								
Asset-specific	**$ –**	**$ –**	**$ 84**	**$ 84**	$ –	$ –	$ 129	$ 129
Portfolio-based	**77**	**–**	**2,390**	**2,467**	142	–	2,034	2,176
Total allowance for lending-related commitments[(c)]	**$ 77**	**$ –**	**$ 2,474**	**$ 2,551**	$ 142	$ –	$ 2,163	$ 2,305
Lending-related commitments by impairment methodology								
Asset-specific	**$ –**	**$ –**	**$ 470**	**$ 470**	$ –	$ –	$ 641	$ 641
Portfolio-based[(d)]	**22,259**	**–**	**452,530**	**474,789**	36,819	–	457,548	494,367
Total lending-related commitments	**$ 22,259**	**$ –**	**$ 453,000**	**$ 475,259**	$ 36,819	$ –	$ 458,189	$ 495,008

(a) At September 30, 2022 excludes an allowance for credit losses associated with certain accounts receivable in CIB of $30 million.

(b) Includes collateral dependent loans, including those considered TDRs and those for which foreclosure is deemed probable, modified PCD loans and non-collateral dependent loans that have been modified or are reasonably expected to be modified in a TDR. Also includes risk-rated loans that have been placed on nonaccrual status for the wholesale portfolio segment. The asset-specific allowance for credit card loans modified, or reasonably expected to be modified, in a TDR is calculated based on the loans' original contractual interest rates and does not consider any incremental penalty rates.

(c) The allowance for lending-related commitments is reported in accounts payable and other liabilities on the Consolidated balance sheets.

(d) At September 30, 2022 and 2021, lending-related commitments excluded $12.6 billion and $19.9 billion, respectively, for the consumer, excluding credit card portfolio segment; $798.9 billion and $710.6 billion, respectively, for the credit card portfolio segment; and $20.0 billion and $41.0 billion, respectively, for the wholesale portfolio segment, which were not subject to the allowance for lending-related commitments.

Discussion of changes in the allowance

The allowance for credit losses as of September 30, 2022 was $20.8 billion, reflecting a net addition of $2.1 billion from December 31, 2021, consisting of: $1.9 billion in wholesale and $168 million in consumer.

The net addition to the wholesale allowance resulted from:

- loan growth predominantly in CB and CIB, and
- changes to the Firm's macroeconomic forecast reflecting
  - updates to the Firm's macroeconomic scenarios including an increasing forecasted unemployment rate and deterioration in the equity market indices, and
  - the impact of the increased weight placed on the adverse scenarios beginning in the first quarter of 2022, due to the effects associated with higher inflation, changes in monetary policy, and geopolitical risks, including the war in Ukraine.

The increase in the consumer allowance was driven by Card, reflecting a net addition to the allowance for loan losses resulting from higher outstanding balances predominantly offset by a reduction related to a decrease in uncertainty associated with borrower behavior as the effects of the pandemic gradually recede.

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 5.0% in the third quarter of 2023, and a 1.6% lower U.S. real GDP exiting the fourth quarter of 2023.

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

	Assumptions at September 30, 2022		
	4Q22	2Q23	4Q23
U.S. unemployment rate[a]	3.8 %	3.9 %	3.9 %
YoY growth in U.S. real GDP[b]	– %	1.4 %	1.2 %

	Assumptions at December 31, 2021		
	2Q22	4Q22	2Q23
U.S. unemployment rate[a]	4.2 %	4.0 %	3.9 %
YoY growth in U.S. real GDP[b]	3.1 %	2.8 %	2.1 %

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

(b) As of September 30, 2022, the year over year growth in U.S. real GDP in the forecast horizon of the central scenario is calculated as the percent 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 2021 Form 10-K for a description of the policies, methodologies and judgments used to determine the Firm’s allowances for credit losses on loans, lending-related commitments, and investment securities.

Refer to Consumer Credit Portfolio on pages 59-63, Wholesale Credit Portfolio on pages 64-72 and Note 11 for additional information on the consumer and wholesale credit portfolios.

Refer to Critical Accounting Estimates Used by the Firm on pages 85-87 for further information on the allowance for credit losses and related management judgments.

Note 13 – Variable interest entities

Refer to Note 1 of JPMorgan Chase's 2021 Form 10-K for a further description of JPMorgan Chase's accounting policies regarding consolidation of VIEs. Refer to Note 14 of JPMorgan Chase's 2021 Form 10-K for a detailed discussion of VIEs, including the Firm's accounting policies regarding securitizations.

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	154
	Mortgage securitization trusts	Servicing and securitization of both originated and purchased residential mortgages	154-156
CIB	Mortgage and other securitization trusts	Securitization of both originated and purchased residential and commercial mortgages, and other consumer loans	154-156
	Multi-seller conduits	Assisting clients in accessing the financial markets in a cost-efficient manner and structuring transactions to meet investor needs	156
	Municipal bond vehicles	Financing of municipal bond investments	156

The Firm also invests in and provides financing and other services to VIEs sponsored by third parties. Refer to pages 157-159 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.

	Principal amount outstanding			JPMorgan Chase interest in securitized assets in nonconsolidated VIEs(c)(d)(e)			
September 30, 2022 (in millions)	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	**$ 56,227**	**$ 776**	**$ 47,632**	**$ 645**	**$ 1,881**	**$ –**	**$ 2,526**
Subprime	**10,063**	**–**	**4,589**	**6**	**–**	**–**	**6**
Commercial and other(b)	**164,009**	**–**	**119,387**	**587**	**5,282**	**643**	**6,512**
Total	**$ 230,299**	**$ 776**	**$ 171,608**	**$ 1,238**	**$ 7,163**	**$ 643**	**$ 9,044**

	Principal amount outstanding			JPMorgan Chase interest in securitized assets in nonconsolidated VIEs(c)(d)(e)			
December 31, 2021 (in millions)	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	$ 55,085	$ 942	$ 47,029	$ 974	$ 684	$ 95	$ 1,753
Subprime	10,966	27	10,115	2	–	–	2
Commercial and other(b)	150,694	–	93,698	671	3,274	506	4,451
Total	$ 216,745	$ 969	$ 150,842	$ 1,647	$ 3,958	$ 601	$ 6,206

(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 and subordinated securities of $252 million and $159 million, respectively, at September 30, 2022, and $145 million and $36 million, respectively, at December 31, 2021, which the Firm purchased in connection with CIB's secondary market-making activities.
(d) Includes interests held in re-securitization transactions.
(e) As of September 30, 2022 and December 31, 2021, 86% and 79%, respectively, 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 $2.5 billion and $1.6 billion of investment-grade retained interests, and $26 million and $131 million of noninvestment-grade retained interests at September 30, 2022, and December 31, 2021, respectively. The retained interests in commercial and other securitization trusts consisted of $5.4 billion and $3.5 billion of investment-grade retained interests, and $1.1 billion and $929 million of noninvestment-grade retained interests at September 30, 2022 and December 31, 2021, 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.

	Three months ended September 30,		Nine months ended September 30,	
(in millions)	**2022**	2021	**2022**	2021
Transfers of securities to VIEs				
U.S. GSEs and government agencies	**$ 1,417**	$11,258	**$14,866**	$43,157

The Firm did not transfer any private label securities to re-securitization VIEs during the three and nine months ended September 30, 2022 and 2021, respectively and retained interests in any such Firm-sponsored VIEs as of September 30, 2022 and December 31, 2021 were not material.

The following table presents information on the Firm's interests in nonconsolidated re-securitization VIEs.

	Nonconsolidated re-securitization VIEs	
(in millions)	**September 30, 2022**	December 31, 2021
U.S. GSEs and government agencies		
Interest in VIEs	**$ 2,138**	$ 1,947

As of September 30, 2022, and December 31, 2021, 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 $12.5 billion and $13.7 billion of the commercial paper issued by the Firm-administered multi-seller conduits at September 30, 2022, and December 31, 2021, 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 $11.5 billion and $13.4 billion at September 30, 2022, and December 31, 2021, respectively, and are reported as off-balance sheet lending-related commitments in other unfunded commitments to extend credit. Refer to Note 22 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 September 30, 2022, and December 31, 2021.

	Assets				Liabilities		
September 30, 2022 (in millions)	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	**$ –**	**$ 9,186**	**$ 93**	**$ 9,279**	**$ 1,996**	**$ 3**	**$ 1,999**
Firm-administered multi-seller conduits	**–**	**20,803**	**134**	**20,937**	**8,500**	**40**	**8,540**
Municipal bond vehicles	**1,991**	**–**	**7**	**1,998**	**1,436**	**5**	**1,441**
Mortgage securitization entities[a]	**–**	**798**	**12**	**810**	**147**	**69**	**216**
Other	**–**	**810** [b]	**316**	**1,126**	**–**	**157**	**157**
Total	**$ 1,991**	**$ 31,597**	**$ 562**	**$ 34,150**	**$ 12,079**	**$ 274**	**$ 12,353**

	Assets				Liabilities		
December 31, 2021 (in millions)	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	$ –	$ 11,108	$ 102	$ 11,210	$ 2,397	$ 1	$ 2,398
Firm-administered multi-seller conduits	1	19,883	71	19,955	6,198	41	6,239
Municipal bond vehicles	2,009	–	2	2,011	1,976	–	1,976
Mortgage securitization entities[a]	–	955	32	987	179	85	264
Other	–	1,078 [b]	283	1,361	–	118	118
Total	$ 2,010	$ 33,024	$ 490	$ 35,524	$ 10,750	$ 245	$ 10,995

(a) Includes residential and commercial 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 $2.1 billion and $2.6 billion at September 30, 2022, and December 31, 2021, 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 $27.6 billion and $26.8 billion, of which $10.0 billion and $9.4 billion was unfunded at September 30, 2022 and December 31, 2021, 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 2021 Form 10-K for further information on affordable housing tax credits and Note 22 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 September 30, 2022 and December 31, 2021 was $6.2 billion and $6.8 billion, respectively. The fair value of assets held by such VIEs at September 30, 2022 and December 31, 2021 was $8.2 billion and $10.5 billion, respectively.

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 nine months ended September 30, 2022 and 2021, 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.

	Three months ended September 30,				Nine months ended September 30,			
	2022		2021		**2022**		2021	
(in millions)	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	**$ 386**	**$ 1,297**	$ 8,245	$ 4,426	**$ 9,909**	**$ 8,355**	$ 16,437	$ 9,214
All cash flows during the period:[a]								
Proceeds received from loan sales as financial instruments[b][c]	**$ 375**	**$ 1,278**	$ 8,424	$ 4,456	**$ 9,504**	**$ 8,253**	$ 16,876	$ 9,335
Servicing fees collected	**12**	**—**	39	—	**56**	**—**	121	—
Cash flows received on interests	**131**	**71**	121	92	**413**	**196**	477	215

(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 MSRs 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 MSRs on a nonrecourse basis, predominantly to U.S. GSEs. These loans and excess MSRs 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 22 of this Form 10-Q for additional information about the Firm's loan sales- and securitization-related indemnifications and Note 14 for additional information about the impact of the Firm's sale of certain excess MSRs.

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.

	Three months ended September 30,				Nine months ended September 30,			
(in millions)		**2022**		2021		**2022**		2021
Carrying value of loans sold	**$**	**9,501**	$	29,033	**$**	**43,890**	$	76,639
Proceeds received from loan sales as cash		**2**		70		**15**		110
Proceeds from loan sales as securities[(a)(b)]		**9,352**		28,549		**43,161**		75,331
Total proceeds received from loan sales[(c)]	**$**	**9,354**	$	28,619	**$**	**43,176**	$	75,441
Gains/(losses) on loan sales[(d)(e)]	**$**	**(25)**	$	–	**$**	**(25)**	$	4

(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 22, 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 11 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 September 30, 2022 and December 31, 2021. Substantially all of these loans and real estate are insured or guaranteed by U.S. government agencies.

(in millions)		**September 30, 2022**		December 31, 2021
Loans repurchased or option to repurchase[(a)]	**$**	**877**	$	1,022
Real estate owned		**9**		5
Foreclosed government-guaranteed residential mortgage loans[(b)]		**26**		36

(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 September 30, 2022, and December 31, 2021.

	Securitized assets				90 days past due				Net liquidation losses/(recoveries) Three months ended September 30,				Net liquidation losses/(recoveries) Nine months ended September 30,			
(in millions)		**Sep 30, 2022**		Dec 31, 2021		**Sep 30, 2022**		Dec 31, 2021		**2022**		2021		**2022**		2021
Securitized loans																
Residential mortgage:																
Prime / Alt-A & option ARMs	**$**	**47,632**	$	47,029	**$**	**1,384**	$	2,466	**$**	**(5)**	$	–	**$**	**(32)**	$	14
Subprime		**4,589**		10,115		**613**		1,609		**(1)**		–		**(4)**		18
Commercial and other		**119,387**		93,698		**950**		1,456		**11**		244		**22**		265
Total loans securitized	**$**	**171,608**	$	150,842	**$**	**2,947**	$	5,531	**$**	**5**	$	244	**$**	**(14)**	$	297

Note 14 – Goodwill and Mortgage servicing rights

Refer to Note 15 of JPMorgan Chase's 2021 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)	September 30, 2022	December 31, 2021
Consumer & Community Banking	**$ 32,120**	$ 31,474
Corporate & Investment Bank	**7,909**	7,906
Commercial Banking	**2,985**	2,986
Asset & Wealth Management	**7,847**	7,222
Corporate	**600**	727
Total goodwill	**$ 51,461**	$ 50,315

The following table presents changes in the carrying amount of goodwill.

	Three months ended September 30,		Nine months ended September 30,	
(in millions)	**2022**	2021	**2022**	2021
Balance at beginning of period	**$ 50,697**	$ 49,256	**$ 50,315**	$ 49,248
Changes during the period from:				
Business combinations[(a)]	**882**	1,065	**1,352**	1,065
Other[(b)]	**(118)**	(8)	**(206)**	–
Balance at September 30,	**$ 51,461**	$ 50,313	**$ 51,461**	$ 50,313

(a) For the three and nine months ended September 30, 2022, represents estimated goodwill associated with the acquisitions of Global Shares PLC in AWM and Figg, Inc. in CCB in the third quarter, and Frosch Travel Group, LLC in CCB and Volkswagen Payments S.A. in CIB in the second quarter. For the three and nine months ended September 30, 2021, represents estimated goodwill associated with the acquisitions of Nutmeg in Corporate, OpenInvest and Campbell Global in AWM and Frank in CCB.

(b) Primarily foreign currency adjustments and, in 2021, adjustments to goodwill related to prior period acquisitions.

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 2021 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 September 30, 2022, 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 September 30, 2022, or December 31, 2021, nor was goodwill written off due to impairment during the nine months ended September 30, 2022 or 2021.

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 2021 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 nine months ended September 30, 2022 and 2021.

	As of or for the three months ended September 30,2022		As of or for the nine months ended September 30,	
(in millions, except where otherwise noted)	**2022**	2021	**2022**	2021
Fair value at beginning of period	**$ 7,439**	$ 4,549	**$ 5,494**	$ 3,276
MSR activity:				
Originations of MSRs	**140**	429	**736**	1,252
Purchase of MSRs	**370**	584	**1,245**	1,158
Disposition of MSRs [(a)]	**(79)**	1	**(750)**	(23)
Net additions/(dispositions)	**431**	1,014	**1,231**	2,387
Changes due to collection/realization of expected cash flows	**(234)**	(201)	**(702)**	(570)
Changes in valuation due to inputs and assumptions:				
Changes due to market interest rates and other[(b)]	**465**	133	**2,012**	469
Changes in valuation due to other inputs and assumptions:				
Projected cash flows (e.g., cost to service)	**36**	119	**36**	96
Discount rates	**—**	—	**—**	—
Prepayment model changes and other[(c)]	**3**	(263)	**69**	(307)
Total changes in valuation due to other inputs and assumptions	**39**	(144)	**105**	(211)
Total changes in valuation due to inputs and assumptions	**504**	(11)	**2,117**	258
Fair value at September 30	**$ 8,140**	$ 5,351	**$ 8,140**	$ 5,351
Changes in unrealized gains/(losses) included in income related to MSRs held at September 30	**$ 504**	$ (11)	**$ 2,117**	$ 258
Contractual service fees, late fees and other ancillary fees included in income	**391**	334	**1,156**	932
Third-party mortgage loans serviced at September 30, (in billions)	**587**	510	**587**	510
Servicer advances, net of an allowance for uncollectible amounts, at September 30, (in billions)[(d)]	**0.8**	1.7	**0.8**	1.7

(a) 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.

(b) 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.

(c) Represents changes in prepayments other than those attributable to changes in market interest rates.

(d) 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 nine months ended September 30, 2022 and 2021.

(in millions)	Three months ended September 30, 2022	Three months ended September 30, 2021	Nine months ended September 30, 2022	Nine months ended September 30, 2021
CCB mortgage fees and related income				
Production revenue	**$ 93**	$ 614	**$ 454**	$ 1,888
Net mortgage servicing revenue:				
Operating revenue:				
Loan servicing revenue	**400**	328	**1,203**	892
Changes in MSR asset fair value due to collection/realization of expected cash flows	**(234)**	(201)	**(702)**	(570)
Total operating revenue	**166**	127	**501**	322
Risk management:				
Changes in MSR asset fair value due to market interest rates and other[(a)]	**465**	133	**2,012**	469
Other changes in MSR asset fair value due to other inputs and assumptions in model[(b)]	**39**	(144)	**105**	(211)
Changes in derivative fair value and other	**(450)**	(134)	**(1,926)**	(621)
Total risk management	**54**	(145)	**191**	(363)
Total net mortgage servicing revenue	**220**	(18)	**692**	(41)
Total CCB mortgage fees and related income	**313**	596	**1,146**	1,847
All other	**1**	4	**6**	8
Mortgage fees and related income	**$ 314**	$ 600	**$ 1,152**	$ 1,855

(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 September 30, 2022, and December 31, 2021, and outlines hypothetical sensitivities of those fair values to immediate adverse changes in those assumptions, as defined below.

(in millions, except rates)	Sep 30, 2022	Dec 31, 2021
Weighted-average prepayment speed assumption (constant prepayment rate)	**6.27 %**	9.90 %
Impact on fair value of 10% adverse change	**$ (187)**	$ (210)
Impact on fair value of 20% adverse change	**(363)**	(404)
Weighted-average option adjusted spread[(a)]	**5.47 %**	6.44 %
Impact on fair value of a 100 basis point adverse change	**$ (344)**	$ (225)
Impact on fair value of a 200 basis point adverse change	**(660)**	(433)

(a) Includes the impact of operational risk and regulatory capital.

Note 15 – Deposits

Refer to Note 17 of JPMorgan Chase's 2021 Form 10-K for further information on deposits.

At September 30, 2022 and December 31, 2021, noninterest-bearing and interest-bearing deposits were as follows.

(in millions)	September 30, 2022	December 31, 2021
U.S. offices		
Noninterest-bearing (included **$18,476** and $8,115 at fair value)[a]	$ **688,292**	$ 711,525 [b]
Interest-bearing (included **$565** and $629 at fair value)[a]	**1,304,012**	1,359,932 [b]
Total deposits in U.S. offices	**1,992,304**	2,071,457
Non-U.S. offices		
Noninterest-bearing (included **$1,296** and $2,420 at fair value)[a]	**26,629**	26,229
Interest-bearing (included **$598** and $169 at fair value)[a]	**389,682**	364,617
Total deposits in non-U.S. offices	**416,311**	390,846
Total deposits	$ **2,408,615**	$ 2,462,303

(a) Includes structured notes classified as deposits for which the fair value option has been elected. Refer to Note 3 for further information.
(b) Prior-period amount has been revised to conform with the current presentation.

Note 16 – Leases

Refer to Note 18 of JPMorgan Chase's 2021 Form 10-K for a further discussion on leases.

Firm as lessee

At September 30, 2022, 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 following table provides information related to the Firm's operating leases:

(in millions)	September 30, 2022	December 31, 2021
Right-of-use assets	$ **7,905**	$ 7,888
Lease liabilities	**8,234**	8,328

The Firm's net rental expense was $496 million and $490 million for the three months ended September 30, 2022 and 2021 and $1.5 billion for both the nine months ended September 30, 2022 and 2021, 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:

	Three months ended September 30,		Nine months ended September 30,	
(in millions)	**2022**	2021	**2022**	2021
Operating lease income	$ **870**	$ 1,190	$ **2,863**	$ 3,792
Depreciation expense	**620**	785	**1,998**	2,595

Note 17 - Preferred stock

Refer to Note 21 of JPMorgan Chase's 2021 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 September 30, 2022 and December 31, 2021, and the quarterly dividend declarations for the three and nine months ended September 30, 2022 and 2021.

	Shares		Carrying value (in millions)						Dividend declared per share			
									Three months ended September 30,		Nine months ended September 30,	
	September 30, 2022	December 31, 2021	**September 30, 2022**	December 31, 2021	Issue date	Contractual rate in effect at September 30, 2022	Earliest redemption date	Floating annualized rate[a]	**2022**	2021	**2022**	2021
Fixed-rate:												
Series AA	**–**	–	**$ –**	$ –	6/4/2015	**– %**	9/1/2020	NA	**$–**	$–	**$–**	$305.00
Series BB	**–**	–	**–**	–	7/29/2015	**–**	9/1/2020	NA	**–**	–	**–**	307.50
Series DD	**169,625**	169,625	**1,696**	1,696	9/21/2018	**5.750**	12/1/2023	NA	**143.75**	143.75	**431.25**	431.25
Series EE	**185,000**	185,000	**1,850**	1,850	1/24/2019	**6.000**	3/1/2024	NA	**150.00**	150.00	**450.00**	450.00
Series GG	**90,000**	90,000	**900**	900	11/7/2019	**4.750**	12/1/2024	NA	**118.75**	118.75	**356.25**	356.25
Series JJ	**150,000**	150,000	**1,500**	1,500	3/17/2021	**4.550**	6/1/2026	NA	**113.75**	113.75	**341.25**	207.28 (b)
Series LL	**185,000**	185,000	**1,850**	1,850	5/20/2021	**4.625**	6/1/2026	NA	**115.63**	129.76	**346.89**	129.76 (b)
Series MM	**200,000**	200,000	**2,000**	2,000	7/29/2021	**4.200**	9/1/2026	NA	**105.00**	–	**315.00**	– (c)
Fixed-to-floating-rate:												
Series I	**293,375**	293,375	**$ 2,934**	$ 2,934	4/23/2008	**LIBOR + 3.47%**	4/30/2018	LIBOR + 3.47%	**$163.87**	$90.96	**$375.03**	$276.42
Series Q	**150,000**	150,000	**1,500**	1,500	4/23/2013	**5.150**	5/1/2023	LIBOR + 3.25	**128.75**	128.75	**386.25**	386.25
Series R	**150,000**	150,000	**1,500**	1,500	7/29/2013	**6.000**	8/1/2023	LIBOR + 3.30	**150.00**	150.00	**450.00**	450.00
Series S	**200,000**	200,000	**2,000**	2,000	1/22/2014	**6.750**	2/1/2024	LIBOR + 3.78	**168.75**	168.75	**506.25**	506.25
Series U	**100,000**	100,000	**1,000**	1,000	3/10/2014	**6.125**	4/30/2024	LIBOR + 3.33	**153.13**	153.13	**459.38**	459.38
Series V	**250,000**	250,000	**2,500**	2,500	6/9/2014	**LIBOR + 3.32%**	7/1/2019	LIBOR + 3.32	**146.15**	88.55	**340.91**	263.54
Series X	**160,000**	160,000	**1,600**	1,600	9/23/2014	**6.100**	10/1/2024	LIBOR + 3.33	**152.50**	152.50	**457.50**	457.50
Series Z	**–**	200,000	**–**	2,000	4/21/2015	**–**	5/1/2020	LIBOR + 3.80	**–**	99.23	**–**	300.97
Series CC	**125,750**	125,750	**1,258**	1,258	10/20/2017	**4.625**	11/1/2022	LIBOR + 2.58	**115.63**	115.63	**346.88**	346.88
Series FF	**225,000**	225,000	**2,250**	2,250	7/31/2019	**5.000**	8/1/2024	SOFR + 3.38	**125.00**	125.00	**375.00**	375.00
Series HH	**300,000**	300,000	**3,000**	3,000	1/23/2020	**4.600**	2/1/2025	SOFR + 3.125	**115.00**	115.00	**345.00**	345.00
Series II	**150,000**	150,000	**1,500**	1,500	2/24/2020	**4.000**	4/1/2025	SOFR + 2.745	**100.00**	100.00	**300.00**	300.00
Series KK	**200,000**	200,000	**2,000**	2,000	5/12/2021	**3.650**	6/1/2026	CMT + 2.85	**91.25**	110.51	**273.75**	110.51 (b)
Total preferred stock	**3,283,750**	3,483,750	**$ 32,838**	$ 34,838								

(a) Floating annualized rate includes three-month LIBOR, three-month term SOFR or five-year Constant Maturity Treasury ("CMT") rate, as applicable, plus the spreads noted above.
(b) The initial dividend declared is prorated based on the number of days outstanding for the period. Dividends were declared quarterly thereafter at the contractual rate.
(c) No dividends were declared from the original issue date through September 30, 2021.

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 $33.2 billion at September 30, 2022.

Redemptions

On October 31, 2022, the Firm redeemed all $2.93 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.

On June 1, 2021, the Firm redeemed all $1.43 billion of its 6.10% non-cumulative preferred stock, Series AA and all $1.15 billion of its 6.15% non-cumulative preferred stock, Series BB.

Note 18 – Earnings per share

Refer to Note 23 of JPMorgan Chase's 2021 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 nine months ended September 30, 2022 and 2021.

(in millions, except per share amounts)	Three months ended September 30,		Nine months ended September 30,	
	2022	2021	**2022**	2021
Basic earnings per share				
Net income	**$ 9,737**	$ 11,687	**$ 26,668**	$ 37,935
Less: Preferred stock dividends	**432**	402	**1,239**	1,174
Net income applicable to common equity	**9,305**	11,285	**25,429**	36,761
Less: Dividends and undistributed earnings allocated to participating securities	**50**	56	**134**	185
Net income applicable to common stockholders	**$ 9,255**	$ 11,229	**$ 25,295**	$ 36,576
Total weighted-average basic shares outstanding	**2,961.2**	2,999.9	**2,966.8**	3,036.4
Net income per share	**$ 3.13**	$ 3.74	**$ 8.53**	$ 12.05
Diluted earnings per share				
Net income applicable to common stockholders	**$ 9,255**	$ 11,229	**$ 25,295**	$ 36,576
Total weighted-average basic shares outstanding	**2,961.2**	2,999.9	**2,966.8**	3,036.4
Add: Dilutive impact of SARs and employee stock options, unvested PSUs and nondividend-earning RSUs	**4.2**	5.2	**4.1**	5.3
Total weighted-average diluted shares outstanding	**2,965.4**	3,005.1	**2,970.9**	3,041.7
Net income per share	**$ 3.12**	$ 3.74	**$ 8.51**	$ 12.02

Note 19 – 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 loss and prior service costs/(credit) 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 September 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 July 1, 2022	**$ (8,844)**	**$ (1,675)**	**$ 30**	**$(4,435)**	**$ (123)**	**$ 678**	**$ (14,369)**
Net change	**(2,145)**	**(581)**	**38**	**(1,698)**	**(1,004)**	**625**	**(4,765)**
Balance at September 30, 2022	**$ (10,989)** (a)	**$ (2,256)**	**$ 68**	**$(6,133)**	**$ (1,127)**	**$ 1,303**	**$ (19,134)**

As of or for the three months ended September 30, 2021 (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 July 1, 2021	$ 4,515	$ (659)	$ (163)	$ 725	$ (1,055)	$ (793)	$ 2,570
Net change	(434)	(187)	9	(450)	6	(551)	(1,607)
Balance at September 30, 2021	$ 4,081 (a)	$ (846)	$ (154)	$ 275	$ (1,049)	$ (1,344)	$ 963

As of or for the nine months ended September 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	**(13,629)**	**(1,322)**	**199**	**(5,837)**	**(917)**	**2,456**	**(19,050)**
Balance at September 30, 2022	**$ (10,989)** (a)	**$ (2,256)**	**$ 68**	**$(6,133)**	**$ (1,127)**	**$ 1,303**	**$ (19,134)**

As of or for the nine months ended September 30, 2021 (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, 2021	$ 8,180	$ (473)	$ (112)	$ 2,383	$ (1,132)	$ (860)	$ 7,986
Net change	(4,099)	(373)	(42)	(2,108)	83	(484)	(7,023)
Balance at September 30, 2021	$ 4,081 (a)	$ (846)	$ (154)	$ 275	$ (1,049)	$ (1,344)	$ 963

(a) As of September 30, 2022 and 2021 includes after-tax net unamortized unrealized gains/(losses) of $(1.3) billion and $2.7 billion, related to AFS securities that have been transferred to HTM, respectively. Refer to Note 10 of JPMorgan Chase's 2021 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 September 30, (in millions)	2022 Pre-tax	2022 Tax effect	2022 After-tax	2021 Pre-tax	2021 Tax effect	2021 After-tax
Unrealized gains/(losses) on investment securities:						
Net unrealized gains/(losses) arising during the period	**$ (3,785)**	**$ 912**	**$ (2,873)**	$ (826)	$ 197	$ (629)
Reclassification adjustment for realized (gains)/losses included in net income[(a)]	**959**	**(231)**	**728**	256	(61)	195
Net change	**(2,826)**	**681**	**(2,145)**	(570)	136	(434)
Translation adjustments[(b)]:						
Translation	**(3,017)**	**164**	**(2,853)**	(1,030)	63	(967)
Hedges	**2,992**	**(720)**	**2,272**	1,028	(248)	780
Net change	**(25)**	**(556)**	**(581)**	(2)	(185)	(187)
Fair value hedges, net change[(c)]:	**50**	**(12)**	**38**	12	(3)	9
Cash flow hedges:						
Net unrealized gains/(losses) arising during the period	**(2,511)**	**602**	**(1,909)**	(267)	65	(202)
Reclassification adjustment for realized (gains)/losses included in net income[(d)]	**278**	**(67)**	**211**	(326)	78	(248)
Net change	**(2,233)**	**535**	**(1,698)**	(593)	143	(450)
Defined benefit pension and OPEB plans, net change[(e)]:	**(1,320)**	**316**	**(1,004)**	8	(2)	6
DVA on fair value option elected liabilities, net change:	**823**	**(198)**	**625**	(729)	178	(551)
Total other comprehensive loss	**$ (5,531)**	**$ 766**	**$ (4,765)**	$ (1,874)	$ 267	$ (1,607)

Nine month ended September 30, (in millions)	2022 Pre-tax	2022 Tax effect	2022 After-tax	2021 Pre-tax	2021 Tax effect	2021 After-tax
Unrealized gains/(losses) on investment securities:						
Net unrealized gains/(losses) arising during the period	**$ (19,443)**	**$ 4,670**	**$ (14,773)**	$ (5,792)	$ 1,391	$ (4,401)
Reclassification adjustment for realized (gains)/losses included in net income[(a)]	**1,506**	**(362)**	**1,144**	397	(95)	302
Net change	**(17,937)**	**4,308**	**(13,629)**	(5,395)	1,296	(4,099)
Translation adjustments[(b)]:						
Translation	**(6,908)**	**381**	**(6,527)**	(1,950)	92	(1,858)
Hedges	**6,854**	**(1,649)**	**5,205**	1,958	(473)	1,485
Net change	**(54)**	**(1,268)**	**(1,322)**	8	(381)	(373)
Fair value hedges, net change[(c)]:	**262**	**(63)**	**199**	(56)	14	(42)
Cash flow hedges:						
Net unrealized gains/(losses) arising during the period	**(7,697)**	**1,847**	**(5,850)**	(1,844)	443	(1,401)
Reclassification adjustment for realized (gains)/losses included in net income[(d)]	**17**	**(4)**	**13**	(930)	223	(707)
Net change	**(7,680)**	**1,843**	**(5,837)**	(2,774)	666	(2,108)
Defined benefit pension and OPEB plans, net change[(e)]:	**(1,197)**	**280**	**(917)**	101	(18)	83
DVA on fair value option elected liabilities, net change:	**3,240**	**(784)**	**2,456**	(642)	158	(484)
Total other comprehensive loss	**$ (23,366)**	**$ 4,316**	**$ (19,050)**	$ (8,758)	$ 1,735	$ (7,023)

(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.The amounts reclassified for the nine months ended September 30, 2022 and three and nine months ended September 30, 2021 were not material.
(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.
(e) During the period ended September 30, 2022, a remeasurement of the Firm's U.S. principal defined benefit plan was required as a result of a pension settlement. The remeasurement resulted in a decrease of $1.4 billion in accumulated other comprehensive income (pre-tax). Refer to Note 7 for further information.

Note 20 – Restricted cash and other restricted assets

Refer to Note 26 of JPMorgan Chase’s 2021 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)	**September 30, 2022**	December 31, 2021
Segregated for the benefit of securities and cleared derivative customers	**$ 19.8**	$ 14.6
Cash reserves at non-U.S. central banks and held for other general purposes	**7.3**	5.1
Total restricted cash[(a)]	**$ 27.1**	$ 19.7

(a) Comprises $25.8 billion and $18.4 billion in deposits with banks, and $1.3 billion and $1.3 billion in cash and due from banks on the Consolidated balance sheet as of September 30, 2022 and December 31, 2021, respectively.

Also, as of September 30, 2022 and December 31, 2021, the Firm had the following other restricted assets:

- Cash and securities pledged with clearing organizations for the benefit of customers of $39.1 billion and $47.5 billion, respectively.
- Securities with a fair value of $33.8 billion and $30.0 billion, respectively, were also restricted in relation to customer activity.

Note 21 – Regulatory capital

Refer to Note 27 of JPMorgan Chase's 2021 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 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 September 30, 2022 and December 31, 2021.

	Standardized capital ratio requirements		Advanced capital ratio requirements		Well-capitalized ratios	
	BHC[(a)]	IDI[(b)]	BHC[(a)]	IDI[(b)]	BHC[(c)]	IDI[(d)]
Risk-based capital ratios						
CET1 capital	11.2 %	7.0 %	10.5 %	7.0 %	NA	6.5 %
Tier 1 capital	12.7	8.5	12.0	8.5	6.0 %	8.0
Total capital	14.7	10.5	14.0	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 3.5% as calculated under Method 2; plus a 3.2% 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) 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.

(c) Represents requirements for bank holding companies pursuant to regulations issued by the Federal Reserve.

(d) 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 September 30, 2022 and December 31, 2021.

	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

On December 31, 2021, the CECL capital transition provisions, which delayed the effects of CECL on regulatory capital for two years, expired. Beginning January 1, 2022, the $2.9 billion CECL capital benefit recognized as of December 31, 2021, is being phased out at 25% per year over a three-year period. As of September 30, 2022, CET1 capital reflected the remaining $2.2 billion benefit associated with the CECL capital transition provisions.

Additionally, effective January 1, 2022, the Firm phased out 25% of the other relevant CECL capital transition provisions recognized as of December 31, 2021, from Tier 2 capital, adjusted average assets, total leverage exposure and RWA, as applicable.

Refer to Note 27 of JPMorgan Chase's 2021 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 September 30, 2022 and December 31, 2021, JPMorgan Chase and JPMorgan Chase Bank, N.A. were well-capitalized and met all capital requirements to which each was subject.

	Basel III Standardized		Basel III Advanced	
September 30, 2022 (in millions, except ratios)	JPMorgan Chase & Co.	JPMorgan Chase Bank, N.A.	JPMorgan Chase & Co.	JPMorgan Chase Bank, N.A.
Risk-based capital metrics:[(a)]				
CET1 capital	**$ 209,661**	**$ 264,466**	**$ 209,661**	**$ 264,466**
Tier 1 capital	**236,363**	**264,470**	**236,363**	**264,470**
Total capital	**268,076**	**282,192**	**256,157**	**269,897**
Risk-weighted assets	**1,678,498**	**1,614,628**	**1,609,968**	**1,471,019**
CET1 capital ratio	**12.5 %**	**16.4 %**	**13.0 %**	**18.0 %**
Tier 1 capital ratio	**14.1**	**16.4**	**14.7**	**18.0**
Total capital ratio	**16.0**	**17.5**	**15.9**	**18.3**

	Basel III Standardized		Basel III Advanced	
December 31, 2021 (in millions, except ratios)	JPMorgan Chase & Co.	JPMorgan Chase Bank, N.A.	JPMorgan Chase & Co.	JPMorgan Chase Bank, N.A.
Risk-based capital metrics:[(a)]				
CET1 capital	$ 213,942	$ 266,907	$ 213,942	$ 266,907
Tier 1 capital	246,162	266,910	246,162	266,910
Total capital	274,900	281,826	265,796	272,299
Risk-weighted assets	1,638,900	1,582,280	1,547,920	1,392,847
CET1 capital ratio	13.1 %	16.9 %	13.8 %	19.2 %
Tier 1 capital ratio	15.0	16.9	15.9	19.2
Total capital ratio	16.8	17.8	17.2	19.5

(a) The capital metrics reflect the CECL capital transition provisions. Additionally, loans originated under the PPP receive a zero percent risk weight.

	September 30, 2022		December 31, 2021	
Three months ended (in millions, except ratios)	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)]	**$ 3,791,804**	**$ 3,327,201**	$ 3,782,035	$ 3,334,925
Tier 1 leverage ratio	**6.2 %**	**7.9 %**	6.5 %	8.0 %
Total leverage exposure	**$ 4,460,636**	**$ 4,002,580**	$ 4,571,789	$ 4,119,286
SLR	**5.3 %**	**6.6 %**	5.4 %	6.5 %

(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 22 – 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 2021 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 12 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 September 30, 2022, and December 31, 2021. 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[(h)]	
	September 30, 2022					Dec 31, 2021	Sep 30, 2022	Dec 31, 2021
	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)]	**$ 6,546**	**$ 3,133**	**$ 6,447**	**$ 6,735**	**$ 22,861**	$ 32,996	**$ 91**	$ 100
Auto and other	**10,687**	**—**	**—**	**1,320**	**12,007**	12,338	**—**	2
Total consumer, excluding credit card	**17,233**	**3,133**	**6,447**	**8,055**	**34,868**	45,334	**91**	102
Credit card[(b)]	**798,855**	**—**	**—**	**—**	**798,855**	730,534	**—**	—
Total consumer[(c)]	**816,088**	**3,133**	**6,447**	**8,055**	**833,723**	775,868	**91**	102
Wholesale:								
Other unfunded commitments to extend credit[(d)]	**92,849**	**135,571**	**190,735**	**22,144**	**441,299**	453,467	**2,498**	2,037
Standby letters of credit and other financial guarantees[(d)]	**13,829**	**8,328**	**4,590**	**1,066**	**27,813**	28,530	**456**	476
Other letters of credit[(d)]	**3,357**	**385**	**96**	**—**	**3,838**	4,448	**13**	9
Total wholesale[(c)]	**110,035**	**144,284**	**195,421**	**23,210**	**472,950**	486,445	**2,967**	2,522
Total lending-related	**$ 926,123**	**$147,417**	**$ 201,868**	**$ 31,265**	**$ 1,306,673**	$ 1,262,313	**$ 3,058**	$ 2,624
Other guarantees and commitments								
Securities lending indemnification agreements and guarantees[(e)]	**$ 309,553**	**$ —**	**$ —**	**$ —**	**$ 309,553**	$ 337,770	**$ —**	$ —
Derivatives qualifying as guarantees	**4,244**	**310**	**12,737**	**41,074**	**58,365**	55,730	**1,006**	475
Unsettled resale and securities borrowed agreements	**137,055**	**445**	**—**	**—**	**137,500**	103,681	**(9)**	1
Unsettled repurchase and securities loaned agreements	**88,455**	**490**	**—**	**—**	**88,945**	74,263	**(10)**	—
Loan sale and securitization-related indemnifications:								
Mortgage repurchase liability	**NA**	**NA**	**NA**	**NA**	**NA**	NA	**54**	61
Loans sold with recourse	**NA**	**NA**	**NA**	**NA**	**826**	827	**28**	19
Exchange & clearing house guarantees and commitments[(f)]	**105,501**	**—**	**—**	**—**	**105,501**	182,701	**—**	—
Other guarantees and commitments[(g)]	**7,343**	**602**	**298**	**2,204**	**10,447**	10,490	**60**	69

(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) At September 30, 2022, and December 31, 2021, reflected the contractual amount net of risk participations totaling $29 million and $44 million, respectively, for other unfunded commitments to extend credit; $8.5 billion and $7.9 billion, respectively, for standby letters of credit and other financial guarantees; and $502 million and $451 million, respectively, for other letters of credit. In regulatory filings with the Federal Reserve these commitments are shown gross of risk participations.
(e) At September 30, 2022, and December 31, 2021, collateral held by the Firm in support of securities lending indemnification agreements was $326.0 billion and $357.4 billion, respectively. Securities lending collateral primarily consists of cash, G7 government securities, and securities issued by U.S. GSEs and government agencies.
(f) At September 30, 2022, and December 31, 2021, 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) At September 30, 2022, and December 31, 2021, primarily includes unfunded commitments related to certain tax-oriented equity investments, unfunded commitments to purchase secondary market loans, and other equity investment commitments.
(h) For lending-related products, the carrying value represents 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. At September 30, 2022, includes net markdowns on held-for-sale positions related to unfunded commitments in the bridge financing portfolio.

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.

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.

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 September 30, 2022, and December 31, 2021.

Standby letters of credit, other financial guarantees and other letters of credit

	September 30, 2022		December 31, 2021	
(in millions)	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)]	**$ 19,632**	**$ 2,846**	$ 19,998	$ 3,087
Noninvestment-grade[(a)]	**8,181**	**992**	8,532	1,361
Total contractual amount	**$ 27,813**	**$ 3,838**	$ 28,530	$ 4,448
Allowance for lending-related commitments	**$ 89**	**$ 13**	$ 123	$ 9
Guarantee liability	**367**	**–**	353	–
Total carrying value	**$ 456**	**$ 13**	$ 476	$ 9
Commitments with collateral	**$ 15,137**	**$ 660**	$ 14,511	$ 999

(a) The ratings scale is based on the Firm's internal risk ratings. Refer to Note 11 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 2021 Form 10-K for further information on these derivatives.

The following table summarizes the derivatives qualifying as guarantees as of September 30, 2022, and December 31, 2021.

(in millions)	**September 30, 2022**	December 31, 2021
Notional amounts		
Derivative guarantees	**$ 58,365**	$ 55,730
Stable value contracts with contractually limited exposure	**31,567**	29,778
Maximum exposure of stable value contracts with contractually limited exposure	**2,943**	2,882
Fair value		
Derivative payables	**1,006**	475

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 4 for a further discussion of credit derivatives.

Merchant charge-backs

Under the rules of payment networks, the Firm, in its role as a merchant acquirer, 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, Merchant Services 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 Merchant Services is unable to collect the amount from the merchant, Merchant Services will bear the loss for the amount credited or refunded to the cardholder. Merchant Services mitigates this risk by withholding future settlements, retaining cash reserve accounts or obtaining other collateral. In addition, Merchant Services recognizes a valuation allowance that covers the payment or performance risk to the Firm 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 24 of this Form 10-Q and Note 30 of JPMorgan Chase's 2021 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 172. Refer to Note 11 of JPMorgan Chase's 2021 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 on a parity with the Firm's unsecured and unsubordinated indebtedness, are not included in the table on page 172 of this Note. Refer to Note 20 of JPMorgan Chase's 2021 Form 10-K for additional information.

Note 23 – Pledged assets and collateral

Refer to Note 29 of JPMorgan Chase's 2021 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)	**September 30, 2022**	December 31, 2021
Assets that may be sold or repledged or otherwise used by secured parties	**$ 121.7**	$ 126.3
Assets that may not be sold or repledged or otherwise used by secured parties	**105.8**	112.0
Assets pledged at Federal Reserve banks and FHLBs	**539.7**	476.4
Total pledged assets	**$ 767.2**	$ 714.7

Total pledged assets do not include assets of consolidated VIEs; these assets are used to settle the liabilities of those entities. Refer to Note 13 for additional information on assets and liabilities of consolidated VIEs. Refer to Note 10 for additional information on the Firm's securities financing activities. Refer to Note 20 of JPMorgan Chase's 2021 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)	**September 30, 2022**	December 31, 2021
Collateral permitted to be sold or repledged, delivered, or otherwise used	**$ 1,340.7**	$ 1,471.3
Collateral sold, repledged, delivered or otherwise used	**1,040.1**	1,111.0

Note 24 – Litigation

Contingencies

As of September 30, 2022, 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 $1.2 billion at September 30, 2022. 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 attendant 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.

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.

Federal Republic of Nigeria Litigation. JPMorgan Chase Bank, N.A. operated an escrow and depository account for the Federal Government of Nigeria ("FGN") and two major international oil companies. The account held approximately $1.1 billion in connection with a dispute among the clients over rights to an oil field. Following the settlement of the dispute, JPMorgan Chase Bank, N.A. paid out the monies in the account in 2011 and 2013 in accordance with directions received from its clients. In November 2017, the Federal Republic of Nigeria ("FRN") commenced a claim in the English High Court for approximately $875 million in payments made out of the accounts. The FRN alleged that the payments were instructed as part of a complex fraud not involving JPMorgan Chase Bank, N.A., but that JPMorgan Chase Bank, N.A. was or should have been on notice that the payments may be fraudulent. A trial was held between February and April 2022. In June 2022, the Court decided the case in favor of JPMorgan Chase Bank, N.A. and dismissed it in full. The FRN has requested permission to appeal the decision relating solely to the 2013 payment of approximately $75 million.

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 a five-year exemption of disqualification that allows the Firm and its affiliates to continue to rely on the Qualified Professional Asset Manager exemption under the Employee Retirement Income Security Act ("ERISA") until January 2023. The Firm will need the DOL to approve a further exemption to cover the remainder of the ten-year disqualification period following the antitrust plea. In October 2022, the DOL published a proposed exemption for the remainder of the disqualification period. This proposal will be open for public comment until December 2022. 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. Certain members of the settlement class filed requests to the Court to be excluded from the class, and certain of them filed a complaint against the Firm and other foreign exchange dealers in November 2018. A number of these actions remain pending. Further, a putative class action has been filed against the Firm and other foreign exchange dealers on behalf of certain consumers who purchased foreign currencies at allegedly inflated rates. Another putative class action was brought against the Firm and other foreign exchange dealers on behalf of purported indirect purchasers of FX instruments. In 2020, the Court approved a settlement by the Firm and 11 other defendants of that class action for a total of $10 million. 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. In a putative class action pending before the U.K. Competition Appeal Tribunal, proposed class representatives have appealed the tribunal's 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.

Inquiries Concerning Preservation Requirements. In December 2021 certain of the Firm's subsidiaries entered into resolutions with the U.S. Securities and Exchange Commission ("SEC") and the U.S. Commodity Futures Trading Commission ("CFTC") to resolve their respective civil investigations of compliance with records preservation requirements applicable to broker-dealer firms, swap dealers and futures commission merchants. The SEC and CFTC found that J.P. Morgan Securities LLC did not maintain copies of certain communications required to be maintained under their respective record keeping rules, where such communications were sent or received by employees over electronic messaging channels that had not been approved for employee use by the Firm. The CFTC resolution also included JPMorgan Chase Bank, N.A. and J.P. Morgan Securities plc as swap dealers. The SEC and CFTC also found related supervision failures. Under these resolutions, J.P. Morgan Securities LLC paid a $125 million civil monetary penalty to the SEC, and J.P. Morgan Securities LLC, JPMorgan Chase Bank, N.A. and J.P. Morgan Securities plc paid a total $75 million civil monetary penalty to the CFTC. The Firm continues to respond to requests for information and other material from certain authorities concerning its compliance with records preservation requirements in connection with business communications sent over electronic messaging channels that have not been approved by the Firm. The Firm is cooperating with these inquiries.

In March 2022, a shareholder derivative action was filed in the United States District Court for the Eastern District of New York against the Firm's Board of Directors asserting breaches of fiduciary duty and violation of federal securities laws based on the Board's alleged failure to exercise adequate oversight over compliance with records preservation requirements. The complaint seeks damages, restitution, disgorgement and corporate governance reforms. The plaintiff filed an amended complaint in August 2022, which defendants have moved to dismiss.

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, a temporary reduction of credit card interchange, and modifications to certain credit card network rules. In 2017, after the approval of that settlement was reversed on appeal, the case was remanded to the United States District Court for the Eastern District of New York for further proceedings consistent with the appellate decision.

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. Certain merchants appealed the District Court's approval order, and those appeals are pending. 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.

In addition, certain merchants have filed individual actions raising similar allegations against Visa and Mastercard, as well as against the Firm and other banks, and some of those actions remain pending.

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. Defendants moved to dismiss plaintiffs' complaint. In December 2021, the court denied plaintiffs' motions for a preliminary injunction seeking to enjoin defendants from setting U.S. dollar LIBOR and enforcing any financial instruments that rely on U.S. dollar LIBOR. In September 2022, the Court dismissed plaintiffs' complaint in its entirety, and plaintiffs filed an amended complaint asserting similar antitrust claims in October 2022. The Firm's settlements of putative class actions related to Swiss franc LIBOR, the Singapore Interbank Offered Rate and the Singapore Swap Offer Rate, and the Australian Bank Bill Swap Reference Rate remain subject to court approval.

Metals and U.S. Treasuries Investigations and Litigation and Related Inquiries. The Firm previously reported that it and/or certain of its subsidiaries had entered into resolutions with the U.S. Department of Justice ("DOJ"), the U.S. Commodity Futures Trading Commission ("CFTC") and the U.S. Securities and Exchange Commission ("SEC"), which, collectively, resolved those agencies' respective investigations relating to historical trading practices by former employees in the precious metals and U.S. treasuries markets and related conduct from 2008 to 2016.

The Firm entered into a Deferred Prosecution Agreement ("DPA") with the DOJ in which it agreed to the filing of a criminal information charging JPMorgan Chase & Co. with two counts of wire fraud and agreed, along with JPMorgan Chase Bank, N.A. and J.P. Morgan Securities LLC, to certain terms and obligations as set forth therein. Under the terms of the DPA, the criminal information will be dismissed after three years, provided that JPMorgan Chase & Co., JPMorgan Chase Bank, N.A. and J.P. Morgan Securities LLC fully comply with all of their obligations.

Across the three resolutions with the DOJ, CFTC and SEC, JPMorgan Chase & Co., JPMorgan Chase Bank, N.A. and J.P. Morgan Securities LLC agreed to pay a total monetary amount of approximately $920 million. A portion of the total monetary amount includes victim compensation payments.

Several putative class action complaints have been filed in the United States District Court for the Southern District of New York against the Firm and certain former employees, alleging a precious metals futures and options price manipulation scheme in violation of the Commodity Exchange Act. Some of the complaints also allege unjust enrichment and deceptive acts or practices under the General Business Law of the State of New York. The Court consolidated these putative class actions, and, in July 2022, the Court granted final approval of a settlement among the parties. In addition, several putative class actions were filed in the United States District Courts for the Northern District of Illinois and Southern District of New York against the Firm, alleging manipulation of U.S. Treasury futures and options, and bringing claims under the Commodity Exchange Act. The actions in the Northern District of Illinois were transferred to the Southern District of New York. The Court consolidated these putative class actions, and, in June 2022, the Court granted final approval of a settlement among the parties. In Canada, plaintiffs have commenced putative class action proceedings based on similar alleged underlying conduct related to precious metals.

In October 2020, two putative class action complaints were filed under the Securities Exchange Act of 1934 in the United States District Court for the Eastern District of New York against the Firm and certain individual defendants on behalf of shareholders who acquired shares during the putative class period alleging that certain SEC filings of the Firm were materially false or misleading in that they did not disclose certain information relating to the above-referenced investigations. The Court consolidated these putative class actions in January 2021. Plaintiffs filed their second amended complaint in May 2021, which additionally alleged that certain orders in precious metals futures contracts placed by precious metals futures traders during the putative class period were materially false and misleading. Defendants have moved to dismiss.

In May 2022, a shareholder derivative suit purporting to act on behalf of the Firm, was filed in the Supreme Court of the State of New York asserting breach of fiduciary duty and unjust enrichment claims against certain current and former officers and directors of the Firm. The complaint claims the Firm's Board of Directors wrongfully rejected the shareholder's demand to commence litigation and seeks damages, disgorgement and corporate governance reforms on the basis of alleged supervisory failures with regard to certain historical spoofing-related conduct that was the subject of the Firm's resolutions with the DOJ, CFTC and SEC in September 2020, as well as certain fiduciary activities that were separately the subject of a resolution between JPMorgan Chase Bank, N.A. and the OCC in November 2020. Defendants have moved to dismiss.

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 are opposing.

* * *

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 $47 million and $76 million for the three months ended September 30, 2022 and 2021, respectively, and $239 million and $289 million for the nine months ended September 30, 2022 and 2021, 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 25 – 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 2021 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 nine months ended September 30, 2022 and 2021, 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 2021 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. Periodically, the assumptions and methodologies used to allocate capital are reassessed and as a result, the capital allocated to the LOBs may change. Refer to Line of business equity on page 93 of JPMorgan Chase's 2021 Form 10-K for additional information on capital allocation.

Segment results and reconciliation[(a)]

As of or for the three months ended September 30, (in millions, except ratios)	Consumer & Community Banking		Corporate & Investment Bank		Commercial Banking		Asset & Wealth Management	
	2022	2021	**2022**	2021	**2022**	2021	**2022**	2021
Noninterest revenue	**$ 3,762**	$ 4,138	**$ 9,231**	$ 9,061	**$ 836**	$ 988	**$ 3,126**	$ 3,312
Net interest income	**10,569**	8,383	**2,644**	3,335	**2,212**	1,532	**1,413**	988
Total net revenue	**14,331**	12,521	**11,875**	12,396	**3,048**	2,520	**4,539**	4,300
Provision for credit losses	**529**	(459)	**513**	(638)	**618**	(363)	**(102)**	(60)
Noninterest expense	**8,047**	7,238	**6,618**	5,871	**1,180**	1,032	**3,028**	2,762
Income/(loss) before income tax expense/ (benefit)	**5,755**	5,742	**4,744**	7,163	**1,250**	1,851	**1,613**	1,598
Income tax expense/(benefit)	**1,421**	1,391 (b)	**1,212**	1,516 (b)	**304**	442 (b)	**394**	402 (b)
Net income/(loss)	**$ 4,334**	$ 4,351 (b)	**$ 3,532**	$ 5,647 (b)	**$ 946**	$ 1,409 (b)	**$ 1,219**	$ 1,196 (b)
Average equity	**$ 50,000**	$ 50,000	**$ 103,000**	$ 83,000	**$ 25,000**	$ 24,000	**$ 17,000**	$ 14,000
Total assets	**500,752**	493,169	**1,384,618**	1,355,752	**247,485**	227,670	**232,303**	221,702
ROE	**33 %**	34 %	**13 %**	26 %	**14 %**	22 %	**28 %**	33 %
Overhead ratio	**56**	58	**56**	47	**39**	41	**67**	64

As of or for the three months ended September 30, (in millions, except ratios)	Corporate		Reconciling Items[(a)]		Total	
	2022	2021	**2022**	2021	**2022**	2021
Noninterest revenue	**$ (1,094)**	$ (242)	**$ (663)**	$ (690)	**$ 15,198**	$ 16,567
Net interest income	**792**	(1,054)	**(112)**	(104)	**17,518**	13,080
Total net revenue	**(302)**	(1,296)	**(775)**	(794)	**32,716**	29,647
Provision for credit losses	**(21)**	(7)	**–**	–	**1,537**	(1,527)
Noninterest expense	**305**	160	**–**	–	**19,178**	17,063
Income/(loss) before income tax expense/ (benefit)	**(586)**	(1,449)	**(775)**	(794)	**12,001**	14,111
Income tax expense/(benefit)	**(292)**	(533) (b)	**(775)**	(794)	**2,264**	2,424
Net income/(loss)	**$ (294)**	$ (916) (b)	**$ –**	$ –	**$ 9,737**	$ 11,687
Average equity	**$ 57,944**	$ 82,556	**$ –**	$ –	**$ 252,944**	$ 253,556
Total assets	**1,408,726**	1,459,283	**NA**	NA	**3,773,884**	3,757,576
ROE	**NM**	NM	**NM**	NM	**15 %**	18 %
Overhead ratio	**NM**	NM	**NM**	NM	**59**	58

(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 2022, the Firm changed its methodology for allocating income taxes to the LOBs, with no impact to Firmwide net income. Prior-period amounts have been revised to conform with the current presentation.

Segment results and reconciliation[a]

As of or for the nine months ended September 30, (in millions, except ratios)	Consumer & Community Banking		Corporate & Investment Bank		Commercial Banking		Asset & Wealth Management	
	2022	2021	**2022**	2021	**2022**	2021	**2022**	2021
Noninterest revenue	**$ 11,570**	$ 13,452	**$ 27,937**	$ 30,061	**$ 2,607**	$ 2,855	**$ 9,449**	$ 9,623
Net interest income	**27,604**	24,346	**9,414**	10,154	**5,522**	4,541	**3,711**	2,861
Total net revenue	**39,174**	37,798	**37,351**	40,215	**8,129**	7,396	**13,160**	12,484
Provision for credit losses	**1,968**	(5,929)	**1,017**	(1,048)	**984**	(858)	**96**	(191)
Noninterest expense	**23,490**	21,502	**20,661**	19,498	**3,465**	2,982	**8,807**	7,922
Income/(loss) before income tax expense/(benefit)	**13,716**	22,225	**15,673**	21,765	**3,680**	5,272	**4,257**	4,753
Income tax expense/(benefit)	**3,387**	5,442 (b)	**4,031**	5,174 (b)	**890**	1,260 (b)	**1,026**	1,141 (b)
Net income/(loss)	**$ 10,329**	$ 16,783 (b)	**$ 11,642**	$ 16,591 (b)	**$ 2,790**	$ 4,012 (b)	**$ 3,231**	$ 3,612 (b)
Average equity	**$ 50,000**	$ 50,000	**$ 103,000**	$ 83,000	**$ 25,000**	$ 24,000	**$ 17,000**	$ 14,000
Total assets	**500,752**	493,169	**1,384,618**	1,355,752	**247,485**	227,670	**232,303**	221,702
ROE	**27 %**	44 %	**14 %**	26 % (b)	**14 %**	21 %	**25 %**	34 %
Overhead ratio	**60**	57	**55**	48	**43**	40	**67**	63

As of or for the nine months ended September 30, (in millions, except ratios)	Corporate		Reconciling Items[a]		Total	
	2022	2021	**2022**	2021	**2022**	2021
Noninterest revenue	**$ (1,683)**	$ (68)	**$ (2,250)**	$ (2,241)	**$ 47,630**	$ 53,682
Net interest income	**580**	(2,870)	**(313)**	(322)	**46,518**	38,710
Total net revenue	**(1,103)**	(2,938)	**(2,563)**	(2,563)	**94,148**	92,392
Provision for credit losses	**36**	58	**—**	—	**4,101**	(7,968)
Noninterest expense	**695**	1,551	**—**	—	**57,118**	53,455
Income/(loss) before income tax expense/(benefit)	**(1,834)**	(4,547)	**(2,563)**	(2,563)	**32,929**	46,905
Income tax expense/(benefit)	**(510)**	(1,484) (b)	**(2,563)**	(2,563)	**6,261**	8,970
Net income/(loss)	**$ (1,324)**	$ (3,063) (b)	**$ —**	$ —	**$ 26,668**	$ 37,935
Average equity	**$ 56,147**	$ 79,011	**$ —**	$ —	**$ 251,147**	$ 250,011
Total assets	**1,408,726**	1,459,283	**NA**	NA	**3,773,884**	3,757,576
ROE	**NM**	NM	**NM**	NM	**14 %**	20 %
Overhead ratio	**NM**	NM	**NM**	NM	**61**	58

(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 2022, the Firm changed its methodology for allocating income taxes to the LOBs, with no impact to Firmwide net income. Prior-period amounts have been revised to conform with the current presentation.

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 September 30, 2022, and the related consolidated statements of income, comprehensive income and changes in stockholders' equity for the three-month and nine-month periods ended September 30, 2022 and 2021 and the consolidated statements of cash flows for the nine-month periods ended September 30, 2022 and 2021, 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, 2021, 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 22, 2022, 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, 2021, 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.

PricewaterhouseCoopers LLP

November 3, 2022

PricewaterhouseCoopers LLP, 300 Madison Avenue, New York, NY 10017

JPMorgan Chase & Co.
Consolidated average balance sheets, interest and rates (unaudited)
(Taxable-equivalent interest and rates; in millions, except rates)

	Three months ended September 30, 2022			Three months ended September 30, 2021		
	Average balance	Interest[f]	Rate (annualized)	Average balance	Interest[f]	Rate (annualized)
Assets						
Deposits with banks	$ 652,321	$ 3,015	1.83 %	$ 756,653	$ 174	0.09 %
Federal funds sold and securities purchased under resale agreements	322,053	1,413	1.74	262,679	231	0.35
Securities borrowed	204,479	772	1.50	189,418	(73)	(0.15) [h]
Trading assets – debt instruments	283,414	2,401	3.36	275,860	1,689	2.43
Taxable securities	619,517	2,696	1.73	534,771	1,553	1.15
Nontaxable securities[a]	27,648	300	4.30	30,573	331	4.30
Total investment securities	647,165	2,996	1.84 [g]	565,344	1,884	1.32 [g]
Loans	1,112,761	14,022	5.00	1,042,591	10,473	3.99
All other interest-earning assets[b]	122,756	1,104	3.57	127,241	206	0.64
Total interest-earning assets	3,344,949	25,723	3.05	3,219,786	14,584	1.80
Allowance for loan losses	(17,757)			(19,500)		
Cash and due from banks	26,805			27,065		
Trading assets – equity and other instruments	129,221			177,315		
Trading assets – derivative receivables	83,950			65,574		
Goodwill, MSRs and other intangible Assets	60,085			54,947		
All other noninterest-earning assets	214,994			200,032		
Total assets	$ 3,842,247			$ 3,725,219		
Liabilities						
Interest-bearing deposits	$ 1,728,852	$ 3,159	0.73 %	$ 1,677,837	$ 126	0.03 %
Federal funds purchased and securities loaned or sold under repurchase agreements	239,582	1,267	2.10	240,912	119	0.20
Short-term borrowings[c]	45,797	155	1.35	43,759	31	0.26
Trading liabilities – debt and all other interest-bearing liabilities[d][e]	278,049	1,045	1.49	241,297	52	0.09 [h]
Beneficial interests issued by consolidated VIEs	11,039	62	2.24	14,232	18	0.50
Long-term debt	253,012	2,405	3.77	257,593	1,054	1.62
Total interest-bearing liabilities	2,556,331	8,093	1.26	2,475,630	1,400	0.22
Noninterest-bearing deposits	716,518			691,622		
Trading liabilities – equity and other instruments[e]	36,985			35,505		
Trading liabilities – derivative payables	56,994			55,907		
All other liabilities, including the allowance for lending-related commitments	189,637			178,770		
Total liabilities	3,556,465			3,437,434		
Stockholders' equity						
Preferred stock	32,838			34,229		
Common stockholders' equity	252,944			253,556		
Total stockholders' equity	285,782			287,785		
Total liabilities and stockholders' equity	$ 3,842,247			$ 3,725,219		
Interest rate spread			1.79 %			1.58 %
Net interest income and net yield on interest-earning assets		$ 17,630	2.09		$ 13,184	1.62

(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 $143.1 billion and $122.5 billion for the three months ended September 30, 2022 and 2021, 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 1.80% and 1.34% for the three months ended September 30, 2022 and 2021, respectively, and does not give effect to changes in fair value that are reflected in AOCI.
(h) Negative interest income and yield are related to the impact of interest rates combined with the fees paid on client-driven securities borrowed balances. The negative interest expense related to prime brokerage customer payables is recognized in interest expense and reported within trading liabilities - debt and all other interest-bearing liabilities.

JPMorgan Chase & Co.
Consolidated average balance sheets, interest and rates (unaudited)
(Taxable-equivalent interest and rates; in millions, except rates)

	Nine months ended September 30, 2022			Nine months ended September 30, 2021		
	Average balance	Interest[f]	Rate (annualized)	Average balance	Interest[f]	Rate (annualized)
Assets						
Deposits with banks	**$ 696,096**	**$ 4,332**	**0.83 %**	$ 703,616	$ 342	0.06 %
Federal funds sold and securities purchased under resale agreements	**307,478**	**2,353**	**1.02**	269,324	639	0.32
Securities borrowed	**209,932**	**858**	**0.55**	185,127	(240)	(0.17) [h]
Trading assets – debt instruments	**276,464**	**6,234**	**3.01**	291,673	5,198	2.38
Taxable securities	**635,312**	**6,964**	**1.47**	546,258	4,735	1.16
Nontaxable securities[a]	**28,310**	**916**	**4.33**	31,308	1,018	4.35
Total investment securities	**663,622**	**7,880**	**1.59** [g]	577,566	5,753	1.33 [g]
Loans	**1,091,663**	**36,339**	**4.45**	1,027,023	30,867	4.02
All other interest-earning assets[b]	**132,135**	**2,070**	**2.09**	120,529	608	0.67
Total interest-earning assets	**3,377,390**	**60,066**	**2.38**	3,174,858	43,167	1.82
Allowance for loan losses	**(17,127)**			(23,546)		
Cash and due from banks	**27,823**			26,338		
Trading assets – equity and other instruments	**145,712**			180,253		
Trading assets – derivative receivables	**78,650**			70,139		
Goodwill, MSRs and other intangible Assets	**59,005**			54,467		
All other noninterest-earning assets	**215,203**			206,818		
Total assets	**$ 3,886,656**			$ 3,689,327		
Liabilities						
Interest-bearing deposits	**$ 1,766,672**	**$ 4,239**	**0.32 %**	$ 1,652,807	$ 404	0.03 %
Federal funds purchased and securities loaned or sold under repurchase agreements	**241,019**	**1,852**	**1.03**	267,659	194	0.10
Short-term borrowings[c]	**48,159**	**285**	**0.79**	43,998	97	0.29
Trading liabilities – debt and all other interest-bearing liabilities[d][e]	**271,891**	**1,707**	**0.84**	239,666	130	0.07 [h]
Beneficial interests issued by consolidated VIEs	**10,836**	**110**	**1.36**	15,501	66	0.57
Long-term debt	**251,125**	**5,042**	**2.68**	248,581	3,244	1.74
Total interest-bearing liabilities	**2,589,702**	**13,235**	**0.68**	2,468,212	4,135	0.22
Noninterest-bearing deposits	**730,816**			653,685		
Trading liabilities – equity and other instruments[e]	**40,415**			35,312		
Trading liabilities – derivative payables	**57,523**			62,089		
All other liabilities, including the allowance for lending-related commitments	**183,988**			187,601		
Total liabilities	**3,602,444**			3,406,899		
Stockholders' equity						
Preferred stock	**33,065**			32,417		
Common stockholders' equity	**251,147**			250,011		
Total stockholders' equity	**284,212**			282,428		
Total liabilities and stockholders' equity	**$ 3,886,656**			$ 3,689,327		
Interest rate spread			**1.70 %**			1.60 %
Net interest income and net yield on interest-earning assets		**$ 46,831**	**1.85**		$ 39,032	1.64

(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 $141.2 billion and $128.1 billion for the nine months ended September 30, 2022 and 2021, 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 1.57% and 1.35% for the nine months ended September 30, 2022 and 2021, respectively, and does not give effect to changes in fair value that are reflected in AOCI.
(h) Negative interest income and yield are related to the impact of interest rates combined with the fees paid on client-driven securities borrowed balances. The negative interest expense related to prime brokerage customer payables is recognized in interest expense and reported within trading liabilities - debt and all other interest-bearing liabilities.

2021 Form 10-K: Annual report on Form 10-K for year ended December 31, 2021, 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

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

CBB: Consumer & Business 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.

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

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

FASB: Financial Accounting Standards Board

FCA: Financial Conduct Authority

FDIC: Federal Deposit Insurance Corporation

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

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" 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.

CONSUMER & COMMUNITY BANKING (“CCB”)

Debit and credit card sales volume: Dollar amount of card member purchases, net of returns.

Deposit margin/deposit spread: 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 MSRs; the impact of risk management activities associated with MSRs; 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 Credit Card 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 133-140 of JPMorgan Chase's 2021 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 156 of JPMorgan Chase's 2021 Form 10-K for further information. 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 September 30, 2022, 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 24 of this Form 10-Q for information that updates the disclosures set forth under Part I, Item 3: Legal Proceedings, in JPMorgan Chase's 2021 Form 10-K.

Item 1A. Risk Factors.

Refer to Part I, Item 1A: Risk Factors on pages 9-33 of JPMorgan Chase's 2021 Form 10-K and Forward-Looking Statements on page 89 of this Form 10-Q for a discussion of certain risk factors affecting the Firm.

Supervision and regulation

Refer to the Supervision and regulation section on pages 4–8 of JPMorgan Chase's 2021 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 September 30, 2022.

Repurchases under the common share repurchase program

Refer to Capital Risk Management on pages 45-50 of this Form 10-Q and pages 86-96 of JPMorgan Chase's 2021 Form 10-K for information regarding repurchases under the Firm's common share repurchase program.

Through April 30, 2022, the Firm was authorized to repurchase up to $30 billion of common shares under its previously approved common share repurchase program, that was announced on December 18, 2020. Effective May 1, 2022, the Firm is authorized to purchase up to $30 billion of common shares under a new equity repurchase program.

On July 14, 2022, the Firm announced that it has temporarily suspended share repurchases in anticipation of the increase in the Firm's regulatory capital requirements.

Shares repurchased pursuant to the common share repurchase program during the nine months ended September 30, 2022 were as follows.

Nine months ended September 30, 2022	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)]
First quarter	18,106,991	$ 138.04	$ 2,500	$ 9,052
Second quarter	4,981,047	$ 124.88	$ 622	$ 29,633 [(b)(c)]
July	—	—	—	—
August	—	—	—	—
September	—	—	—	—
Third quarter	—	—	—	—
Year-to-date	23,088,038	$ 135.20	$ 3,122	$ 29,633 [(c)]

(a) Excludes commissions cost.
(b) The remaining amount of $8.8 billion under the prior Board authorization was canceled when the $30 billion repurchase program was authorized by the Board of Directors effective May 1, 2022.
(c) 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.

None.

Item 6. Exhibits.

Exhibit No.	Description of Exhibit
15	Letter re: Unaudited Interim Financial Information.[(a)]
22	Subsidiary Guarantors and Issuers of Guaranteed Securities (incorporated by reference to Exhibit 22.2 to the Annual Report on Form 10-K of JPMorgan Chase & Co. (File No. 1-5805) for the year ended December 31, 2021.)
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 September 30, 2022, formatted in XBRL (eXtensible Business Reporting Language) interactive data files: (i) the Consolidated statements of income (unaudited) for the three and nine months ended September 30, 2022 and 2021, (ii) the Consolidated statements of comprehensive income (unaudited) for the three and nine months ended September 30, 2022 and 2021, (iii) the Consolidated balance sheets (unaudited) as of September 30, 2022, and December 31, 2021, (iv) the Consolidated statements of changes in stockholders' equity (unaudited) for the three and nine months ended September 30, 2022 and 2021, (v) the Consolidated statements of cash flows (unaudited) for the nine months ended September 30, 2022 and 2021, 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: November 3, 2022

Exhibit 15

pwc

November 3, 2022

Securities and Exchange Commission
100 F Street, N.E.
Washington, DC 20549

Re: JPMorgan Chase & Co.

Registration Statements on Form S-3
(No. 333-236659)
(No. 333-236659-01)
(No. 333-263304)

Registration Statements on Form S-8
(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 November 3, 2022 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

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: November 3, 2022

/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: November 3, 2022

/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 September 30, 2022 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: November 3, 2022 By: /s/ James Dimon

James Dimon
Chairman and Chief Executive Officer

Date: November 3, 2022 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.