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

FORM 10-Q

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

For the quarterly period ended June 30, 2023

Commission file number 1-5805

JPMorgan Chase & Co. (Exact name of registrant as specified in its charter)

(State or other jurisdiction of incorporation or organization)

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

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

10179 (Zip Code)

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

<u>Title of each class</u> Common stock	little 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 shar Cumulative Preferred Stock, Series DD	e of 5.75% Non-	JPM PR D	The New York Stock Exchange	
	Depositary Shares, each representing a one-four hundredth interest in a shar Cumulative Preferred Stock, Series EE	e of 6.00% Non-	JPM PR C	The New York Stock Exchange	
	Depositary Shares, each representing a one-four hundredth interest in a shar Cumulative Preferred Stock, Series GG	e of 4.75% Non-	JPM PR J	The New York Stock Exchange	
	Depositary Shares, each representing a one-four hundredth interest in a shar Cumulative Preferred Stock, Series JJ		JPM PR K	The New York Stock Exchange	
	Depositary Shares, each representing a one-four hundredth interest in a shar Cumulative Preferred Stock, Series LL	e of 4.625% Non-	JPM PR L	The New York Stock Exchange	
	Depositary Shares, each representing a one-four hundredth interest in a shar Cumulative Preferred Stock, Series MM	e of 4.20% Non-	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 Compa	ny LLC JPM/32	The New York Stock Exchange	
	eceding 12 months (or for such shorter period that the registrant was required	to submit such file	s). 🗵 Yes 🗆 No	Rule 405 of Regulation S-T (§232.405 of this chapter) dur	,
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JPMorgan Chase & Co. Consolidated financial highlights (unaudited)

As of or for the period ended, (in millions, except per share,												Six months e	nded	,
ratio, headcount data and where otherwise noted)		2Q23		1Q23		4Q22		3Q22		2Q22		2023		2022
Selected income statement data	_		•	00.040	•	04.545	•	00 740	•	00 745			•	04.400
Total net revenue	\$	41,307	\$	38,349	\$	34,547	\$	32,716	\$	30,715	\$	79,656	\$. , .
Total noninterest expense		20,822		20,107		19,022		19,178		18,749		40,929		37,940
Pre-provision profit®		20,485		18,242		15,525		13,538		11,966		38,727		23,492
Provision for credit losses		2,899		2,275		2,288		1,537		1,101		5,174		2,564
Income before income tax expense		17,586		15,967		13,237		12,001		10,865		33,553		20,928
Income tax expense	_	3,114	Φ.	3,345	Φ.	2,229	•	2,264	•	2,216		6,459	Φ.	3,997
Net income	\$	14,472	\$	12,622	\$	11,008	\$	9,737	\$	8,649	\$	27,094	\$	16,931
Earnings per share data			_		_		_		_				_	
Net income: Basic	\$	4.76	\$	4.11	\$	3.58	\$	3.13	\$	2.77	\$	8.86	\$	
Diluted		4.75		4.10		3.57		3.12		2.76		8.85		5.39
Average shares: Basic		2,943.8		2,968.5		2,962.9		2,961.2		2,962.2		2,956.1		2,969.6
Diluted		2,948.3		2,972.7		2,967.1		2,965.4		2,966.3		2,960.5		2,973.7
Market and per common share data														
Market capitalization		422,661		380,803		393,484		306,520		330,237		422,661		330,237
Common shares at period-end		2,906.1		2,922.3		2,934.3		2,933.2		2,932.6		2,906.1		2,932.6
Book value per share		98.11		94.34		90.29		87.00		86.38		98.11		86.38
Tangible book value per share ("TBVPS")(s)		79.90		76.69		73.12		69.90		69.53		79.90		69.53
Cash dividends declared per share		1.00		1.00		1.00		1.00		1.00		2.00		2.00
Selected ratios and metrics														
Return on common equity ("ROE")(b)		20 %		18 '	%	16 °	%	15 9	%	13 %)	19 %		13 %
Return on tangible common equity ("ROTCE")(a)(b)		25		23		20		18		17		24		16
Return on assets ^{b)}		1.51		1.38		1.16		1.01		0.89		1.45		0.87
Overhead ratio		50		52		55		59		61		51		62
Loans-to-deposits ratio		54		47		49		46		45		54		45
Firm Liquidity coverage ratio ("LCR") (average)()		112		114		112		113		110		112		110
JPMorgan Chase Bank, N.A. LCR (average) ^(c)		129		140		151		165		169		129		169
Common equity Tier 1 ("CET1") capital ratio(d)		13.8		13.8		13.2		12.5		12.2		13.8		12.2
Tier 1 capital ratio		15.4		15.4		14.9		14.1		14.1		15.4		14.1
Total capital ratio ^(d)		17.3		17.4		16.8		16.0		15.7		17.3		15.7
Tier 1 leverage ratio(c)(d)		6.9		6.9		6.6		6.2		6.2		6.9		6.2
Supplementary leverage ratio ("SLR")(c)(d)		5.8		5.9		5.6		5.3		5.3		5.8		5.3
Selected balance sheet data (period-end)														
Trading assets	\$	636,996	\$	578.892	\$	453,799	\$	506,487	\$	465.577	\$	636,996	\$	465.577
Investment securities, net of allowance for credit losses	Ψ	612,203	Ψ	610,075	Ψ	631,162	Ψ	618,246	Ψ	663,718	Ψ	612,203	Ψ	663,718
Loans		1,300,069		1,128,896		1,135,647		1,112,633		1,104,155		1,300,069		1,104,155
Total assets		3,868,240		3,744,305		3,665,743		3,773,884		3,841,314		3,868,240		3,841,314
Deposits		2,398,962		2,377,253		2,340,179		2,408,615		2,471,544		2,398,962		2,471,544
Long-term debt		364.078		295.489		295.865		287.473		288.212		364,078		288,212
Common stockholders' equity		285,112		275,678		264,928		255,180		253,305		285,112		253.305
Total stockholders' equity		312,516		303.082		292,332		288,018		286,143		312,516		286.143
Headcount		300,066 (e)		296,877		293,723		288,474		278,494		300,066 (e)	278,494
Credit quality metrics		,		,		,		,		-,		,		-,
Allowances for credit losses	\$	24,288	\$	22,774	\$	22,204	\$	20,797	\$	20,019	\$	24,288	\$	20,019
Allowance for loan losses to total retained loans	Ψ	1.75 %	Ψ	1.85		1.81		1.70		1.69 %		1.75 %	ψ	1.69 %
Nonperforming assets	\$	7.838	\$	7,418	/º \$	7,247	/º \$	7,243		7,845	, \$	7,838	\$	
Net charge-offs	Ψ	1,411	Ψ	1,137	Ψ	887	Ψ	727	Ψ	657	Ψ	2,548	Ψ	1,239
Net charge-off rate		0.47 %		0.43	0/	0.33	0/	0.27	0/	0.25 %		0.45 %		0.24 %

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

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

(b) Quarterly ratios are based upon annualized amounts.

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

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

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

INTRODUCTION

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

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

This Form 10-Q contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on the current beliefs and expectations of JPMorgan Chase's management, speak only as of the date of this Form 10-Q and are subject to significant risks and uncertainties. Refer to Forward-looking Statements on page 95 of this Form 10-Q; Part I, Item 1A, Risk Factors on page 99.32 of the 2022 Form 10-K; and Part II, Item 1A, Risk Factors on page 209 of this Form 10-Q for a discussion of certain of those risks and uncertainties and the factors that could cause JPMorgan Chase's actual results to differ materially because of those risks and uncertainties. There is no assurance that actual results will be in line with any outlook information set forth herein, and the Firm does not undertake to update any forward-looking statements.

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

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

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

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

EXECUTIVE OVERVIEW

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

Financial performance of JPMorgan Chase

(unaudited)	Thre	ee mor	nths ended June 30,			Si	x months	s ended June 30,	
As of or for the period ended,									
(in millions, except per share data and ratios)	2023		2022	Chan	ge	2023		2022	Change
Selected income statement data									
Noninterest revenue	\$ 19,528	\$	15,587	25%	\$	37,166	\$	32,432	15%
Net interest income	21,779		15,128	44		42,490		29,000	47
Total net revenue	41,307		30,715	34		79,656		61,432	30
Total noninterest expense	20,822		18,749	11		40,929		37,940	8
Pre-provision profit	20,485		11,966	71		38,727		23,492	65
Provision for credit losses	2,899		1,101	163		5,174		2,564	102
Net income	14,472		8,649	67		27,094		16,931	60
Diluted earnings per share	4.75		2.76	72		8.85		5.39	64
Selected ratios and metrics									
Return on common equity	20 %	•	13 %			19 %	, D	13 %	
Return on tangible common equity	25		17			24		16	
Book value per share	\$ 98.11	\$	86.38	14	\$	98.11	\$	86.38	14
Tangible book value per share	79.90		69.53	15		79.90		69.53	15
Capital ratios(a)									
ŒT1 capital	13.8 %	•	12.2 %			13.8 %	, D	12.2 %	
Tier 1 capital	15.4		14.1			15.4		14.1	
Total capital	17.3		15.7			17.3		15.7	
Memo:									
NII excluding Markets(b)	\$ 22,370	\$	13,682	63	\$	43,306	\$	25,434	70
NIR excluding Markets ^(b)	13,013		10,158	28		23,031		21,243	8
Markets(b)	7,018		7,790	(10)		15,400		16,543	(7)
Total net revenue - managed basis	\$ 42,401	\$	31,630	34	\$	81,737	\$	63,220	29

- (a) The ratios reflect the CECL capital transition provisions. Refer to Capital Risk Management on pages 48-53 of this Form 10-Q and pages 86-96 of JPMorgan Chase's 2022 Form 10-K for additional information.
- (b) NII and NIR refer to net interest income and noninterest revenue, respectively. Markets consists of CIB's Fixed Income Markets and Equity Markets businesses.

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

Firmwide overview

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

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

- balances. Net interest income excluding Markets was \$22.4 billion, up 63%
- Noninterest revenue was \$19.5 billion, up 25%, driven by the impact of the First Republic acquisition, higher Markets noninterest revenue and the absence of losses on equity investments in Payments in the prior year, partially offset by higher net investment securities losses in Treasury and ClO. The impact of the First Republic acquisition included a \$2.7 billion estimated bargain purchase gain in Corporate.
- Total Markets revenue declined reflecting lower Markets NII, largely offset by higher NIR.
- Noninterest expense was \$20.8 billion, up 11%, driven by higher compensation expense due to additional headcount and the impact of wage inflation, \$599 million expense associated with the First Republic acquisition, higher technology and marketing investments and higher legal expense.

- The provision for credit losses was \$2.9 billion, reflecting a \$1.5 billion net addition to the allowance for credit losses and \$1.4 billion of net charge-offs. The net addition to the allowance for credit losses included \$1.2 billion to establish the allowance for the First Republic loans and lending-related commitments. The net addition also reflected:
 - \$233 million in **consumer** predominantly in Card Services, and
 - \$79 million in wholesale reflecting \$389 million in CB, largely offset by a \$243 million reduction in Corporate.

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

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

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

partially offset by

 the impact of the First Republic acquisition in CCB, and an increase in Corporate related to the Firm's international consumer initiatives.

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

Selected capital and other metrics

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

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

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

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

' '	•
CCB ROE 38%	 Average deposits down 2%; client investment assets up 42% Average loans up 19% year-over-year ("YoY") and 15% quarter-over-quarter ("QoQ"); Card Services net charge-off rate of 2.41% Debit and credit card sales volume^(a) up 7% Active mobile customers^(b) up 10%
CIB ROE 15%	 #1 ranking for Global Investment Banking fees with 8.4% wallet share year-to-date Total Markets revenue of \$7.0 billion, down 10%, with Fixed Income Markets down 3% and Equity Markets down 20%
CB ROE 16%	 Gross Investment Banking and Markets revenue of \$767 million, down 3% Average loans up 23% YoY and 14% QoQ; average deposits down 8%
AWM ROE 29%	 Assets under management ("AUM") of \$3.2 trillion, up 16% Average loans up 1% YoY and 4% QoQ; average deposits down 21%

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

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

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

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

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

Recent events

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

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

Outlook

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

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

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

Full-year 2023

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

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

Business Developments

First Republic acquisition

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

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

Current market and economic conditions

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

Interbank Offered Rate ("IBOR") transition

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

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

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

CONSOLIDATED RESULTS OF OPERATIONS

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

	Three months ended June 30,						Six months ended June 30,				
(in millions)		2023		2022	Change		2023		2022	Change	
Investment banking fees	\$	1,513	\$	1,586	(5)%	\$	3,162	\$	3,594	(12)%	
Principal transactions		6,910		4,990	38	1	4,525		10,095	44	
Lending- and deposit-related fees		1,828		1,873	(2)		3,448		3,712	(7)	
Asset management fees		3,774		3,517	7		7,239		7,169	1	
Commissions and other fees		1,739		1,723	1		3,434		3,433	_	
Investment securities losses		(900)		(153)	(488)	(1,768)		(547)	(223)	
Mortgage fees and related income		278		378	(26)		499		838	(40)	
Card income		1,094		1,133	(3)		2,328		2,108	10	
Other income(a)(b)		3,292		540	NM		4,299		2,030	112	
Noninterest revenue		19,528		15,587	25	3	7,166		32,432	15	
Net interest income		21,779		15,128	44	4	2,490		29,000	47	
Total net revenue	\$	41,307	\$	30,715	34 %	\$ 7	9,656	\$	61,432	30 %	

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

Quarterly results

Investment banking fees decreased in CIB, reflecting:

· lower advisory fees due to a lower level of announced deals in prior periods amid a challenging environment,

largely offset by

· higher equity underwriting fees primarily due to higher convertible securities offerings and, in the second half of the quarter, follow-on offerings that benefited from the lower equity market volatility

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

Principal transactions revenue increased, reflecting:

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

· higher revenue related to cash deployment transactions in Treasury and CIO.

partially offset by

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

Principal transactions revenue in CIB generally has offsets across other revenue lines, including net interest income. The Firm assesses the performance of its Markets business on a total net revenue basis. Refer to CIB, CB and Corporate segment results on pages 30-36, pages 37-40 and pages 45-46, respectively, and Note 6 for additional information. Lending- and deposit-related fees decreased due to:

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

largely offset by

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

Refer to CIB, CB and AWM segment results on pages 30-36, pages 37-40 and pages 41-44, respectively, and Note 6 for additional information. Asset management fees increased driven by:

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

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

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

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

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

Card income decreased driven by:

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

largely offset by

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

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

Other income increased, reflecting:

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

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

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

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

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

nformation on the First Republic acquisition.

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

Year-to-date results

Investment banking fees decreased in CIB, reflecting:

- lower debt underwriting fees as challenging market conditions resulted in lower issuance activity in acquisition financing, and
- lower advisory fees due to a lower level of announced deals in prior periods amid a challenging environment,

partially offset by

 higher equity underwriting fees primarily due to higher convertible securities offerings and, in the second half of the second quarter, followon offerings that benefited from the lower equity market volatility.

Principal transactions revenue increased, reflecting:

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

Lending- and deposit-related fees decreased due to:

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

partially offset by

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

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

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

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

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

Mortgage fees and related income decreased driven by

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

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

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

Other income increased, reflecting:

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

partially offset by

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

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

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

Provision for credit losses

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

Quarterly results

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

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

The net addition also reflected:

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

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

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

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

Year-to-date results

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

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

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

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

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

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

Noninterest expense

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

- (a) Includes depreciation expense associated with auto operating lease assets.
- (b) Included Firmwide legal expense of \$420 million and \$73 million for the three months ended June 30, 2023 and 2022, respectively, and \$596 million and \$192 million for the six months ended June 30, 2023 and 2022, respectively; as well as FDIC-related expense of \$338 million and \$216 million for the three months ended June 30, 2023 and 2022, respectively, and \$655 million and \$414 million for the six months ended June 30, 2023 and 2022, respectively. Refer to Note 6 for additional information.
- (c) Included expense associated with the First Republic acquisition of \$599 million for the three and six months ended June 30, 2023. Refer to Business Segment Results on page 24 for additional information.

Quarterly results

Compensation expense increased driven by:

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

Noncompensation expense increased as a result of:

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

partially offset by

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

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

Year-to-date results

Compensation expense increased driven by:

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

Noncompensation expense increased as a result of:

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

partially offset by

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

Income tax expense

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

Quarterly results
The effective tax rate decreased, reflecting:

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

partially offset by

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

Year-to-date results

The effective tax rate was relatively flat, reflecting:

- the higher level of pre-tax income and changes in the mix of income and expenses subject to U.S. federal and state and local taxes, as well as the lower benefits related to vesting of employee stock based awards, predominantly offset by
- the impact of the income tax expense associated with the First Republic acquisition that was reflected in the estimated bargain purchase gain, which resulted in a reduction in the Firm's effective tax rate.

CONSOLIDATED BALANCE SHEETS AND CASH FLOWS ANALYSIS

Consolidated balance sheets analysis

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

Selected Consolidated balance sheets data

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

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

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

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

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

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

Investment securities decreased due to:

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

Refer to Corporate segment results on pages 45-46,

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

Loans increased, reflecting:

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

The increase also included:

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

The allowance for loan losses increased, reflecting:

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

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

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

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

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

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

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

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

Selected Consolidated balance sheets data (continued)

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

Deposits increased, reflecting:

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

partially offset by

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

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

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

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

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

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

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

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

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

Consolidated cash flows analysis

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

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

Operating activities

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

Investing activities

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

Financing activities

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

* * *

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

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

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

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

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

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

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

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

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

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

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

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

		Thr	ee mon	ths ended June 30,			Six	month	s ended June 30,	
(in millions, except rates)		20	23	2022	Change)	202	23	2022	Change
Net interest income – reported	\$	21,779	\$	15,128	44 %	\$	42,490	\$	29,000	47 %
Fully taxable-equivalent adjustments		104	ļ	103	1		224		201	11
Net interest income – managed basis(a)	\$	21,883	3 \$	15,231	44	\$	42,714	\$	29,201	46
Less: Markets net interest income ^(b)		(487)	1,549	NM		(592)		3,767	NM
Net interest income excluding Markets(a)	\$	22,370) \$	13,682	63	\$	43,306	\$	25,434	70
Average interest-earning assets	\$	3,343,780	\$	3,385,894	(1)	\$	3,280,619	\$	3,393,879	(3)
Less: Average Markets interest-earning assets(b)		1,003,877	,	957,304	` 5		993,283		960,556	`3
Average interest-earning assets excluding Markets	\$	2,339,903	\$	2,428,590	(4) %	\$	2,287,336	\$	2,433,323	(6) %
Net yield on average interest-earning assets - manage	ed basis	2.62	2 %	1.80 %	, ,		2.63	%	1.74 %	
Net yield on average Markets interest-earning assets(b)		(0.19)	0.65			(0.12)		0.79	
Net yield on average interest-earning assets excluding Markets	9	3.83	%	2.26 %			3.82	%	2.11 %	
Noninterest revenue – reported	\$	19,528	\$	15,587	25 %	\$	37,166	\$	32,432	15 %
Fully taxable-equivalent adjustments		990		812	22		1,857		1,587	17
Noninterest revenue – managed basis	\$	20,518	\$	16,399	25	\$	39,023	\$	34,019	
Less: Markets noninterest revenue(b)		7,505		6,241	20		15,992		12,776	25
Noninterest revenue excluding Markets	\$	13,013	\$	10,158	28	\$	23,031	\$	21,243	8
Memo: Total Markets net revenue(b)	\$	7,018	\$	7,790	(10)	\$	15,400	\$	16,543	(7)

⁽a) Interest includes the effect of related hedges. Taxable-equivalent amounts are used where applicable.(b) Refer to page 35 for further information on Markets.

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

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

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

BUSINESS SEGMENT RESULTS

The Firm is managed on an LOB basis. There are four major reportable business segments – Consumer & Community Banking, Corporate & Investment Bank, Commercial Banking and Asset & Wealth Management. In addition, there is a Corporate segment.

The business segments are determined based on the products and services provided, or the type of customer served, and they reflect the manner in which financial information is currently evaluated by the Firm's Operating Committee. Segment results are presented on a managed basis. Refer to Explanation and Reconciliation of the Firm's use of Non-GAAP Financial Measures on pages 20-21 for a definition of managed basis.

Description of business segment reporting methodology

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

Revenue sharing

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

Funds transfer pricing

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

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

Foreign exchange risk

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

Capital allocation

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

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

Segment results – managed basis
The following tables summarize the Firm's results by segment for the periods indicated.

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

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

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

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

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

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

Selected Firmwide Metrics

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

Selected metrics - Wealth Management

	J	une 30, 2023	ne 30, 022
Client assets (in billions)(a)	\$	2,862 (b)	\$ 2,177
Number of client advisors		8,367	7,756

- Consists of Global Private Bank in AWM and client investment assets in J.P. Morgan
- Wealth Management in CCB.
 (b) As of June 30, 2023, included \$150.9 billion of client investment assets associated with the First Republic acquisition.

Selected metrics - J.P. Morgan Payments

(in millions, except where otherwise	1	Three moi Jun		S	ix months 3	nded June
noted)		2023	2022		2023	2022
Total net revenue(a)	\$	4,729	\$ 3,130	\$	9,187	\$ 5,725
Merchant processing volume (in billions)		600.1	539.6		1,158.9	1,029.8
Average deposits (in billions)		720	816		714	819

(a) Excludes the net impact of equity investments.

Segment information related to the First Republic acquisition

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

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

- (a) Reflects the estimated bargain purchase gain of \$2.7 billion recorded in other income. Refer to Note 28 for additional information.
- (b) Excluded \$1.9 billion of loans transferred to the CIB.

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

CONSUMER & COMMUNITY BANKING

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

		Three	mont	ths ended	June :	30,		Six	month	ns ended Ju	ine 30,	
(in millions, except ratios)	2023			2022		Change	202	3		202	2	Change
Revenue												
Lending- and deposit-related fees	\$ 841		\$	855		(2) %	\$ 1,664		\$	1,660		— %
Asset management fees	816	(d)		684		19	1,492	(d)		1,410		6
Mortgage fees and related income	274			377		(27)	497			833		(40)
Card income	483			621	(f)	(22)	1,222			1,162	(f)	5
All other income ^(a)	1,129	(d)		1,313	(f)	(14)	 2,291	(d)		2,640	(f)	(13)
Noninterest revenue	3,543			3,850		(8)	7,166			7,705		(7)
Net interest income	13,690	(d)		8,708	_	57	 26,523	(d)		17,035	_	56
Total net revenue	17,233			12,558		37	33,689	_		24,740		36
Provision for credit losses	1,862	(d)		761		145	3,264	(d)		1,439		127
Noninterest expense												
Compensation expense	3,628			3,237		12	7,173			6,408		12
Noncompensation expense(b)	4,685	(d)		4,421	(f)	6	 9,205	(d)		8,905	(f)	3
Total noninterest expense	8,313			7,658	_	9	 16,378			15,313	_	7
Income before income tax expense	7,058			4,139		71	14,047			7,988		76
Income tax expense	1,752			1,031	(f)	70	 3,498			1,972	(f)	77
Net income	\$ 5,306		\$	3,108	_	71	\$ 10,549		\$	6,016	_	75
Revenue by line of business												
Banking & Wealth Management	\$ 10,936	(e)	\$	6,502	(f)	68	\$ 20,977	(e)	\$	12,517	(f)	68
Home Lending	1,007	(e)		1,001		1	1,727	(e)		2,170		(20)
Card Services & Auto	5,290			5,055		5	10,985			10,053		9
Mortgage fees and related income details:												
Production revenue	102			150		(32)	177			361		(51)
Net mortgage servicing revenue(c)	172			227	_	(24)	 320			472	_	(32)
Mortgage fees and related income	\$ 274		\$	377	_	(27) %	\$ 497		\$	833	_	(40) %
Financial ratios												
Return on equity	38 9	%		24	%		39 (%		23 9	%	
Overhead ratio	48			61			49			62		

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

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

 (c) Included MSR risk management results of \$25 million and \$28 million for the three months ended June 30, 2023 and 2022, respectively, and \$13 million and \$137 million for the six months
- ended June 30, 2023 and 2022, respectively.
- (d) Includes the impact of the First Republic acquisition. Refer to page 24 for additional information.

 (e) For the three and six months ended June 30, 2023, included \$596 million and \$235 million for Banking & Wealth Management and Home Lending, respectively, associated with the First Republic acquisition.
- In the first quarter of 2023, the allocations of revenue and expense to CCB associated with a Merchant Services revenue sharing agreement were discontinued and are now retained in Payments in CIB. Prior-period amounts have been revised to conform with the current presentation.

Quarterly results

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

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

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

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

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

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

partially offset by

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

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

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

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

- higher compensation expense, including wage inflation and headcount growth, as well as higher marketing and technology, partially offset by
- · lower auto lease depreciation on lower auto lease assets.

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

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

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

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

Year-to-date results

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

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

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

- deposit margin expansion on higher rates, partially offset by lower average deposits in BWM, and
- higher NII in Card Services driven by increased revolving balances, partially offset by
- · the impact of lower PPP loan forgiveness in BWM.

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

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

partially offset by

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

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

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

- higher compensation expense, including wage inflation and headcount growth, as well as higher marketing and technology,
- partially offset by
- · lower auto lease depreciation on lower auto lease assets.

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

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

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

Selected metrics

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

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

⁽a) At June 30, 2023 and 2022, included \$163 million and \$1.5 billion of loans, respectively, in Business Banking under the PPP. Refer to Credit Portfolio on pages 108-109 of JPMorgan Chase's 2022 Form 10-K for a further discussion of the PPP.
(b) At June 30, 2023 and 2022, Home Lending loans held-for-sale and loans at fair value were \$3.9 billion and \$5.2 billion, respectively.
(c) Average Home Lending loans held-for sale and loans at fair value were \$5.3 billion and \$8.1 billion for the three months ended June 30, 2023 and 2022, respectively, and \$4.4 billion and \$9.5 billion for the six months ended June 30, 2023 and 2022, respectively.
(d) As of June 30, 2023, included \$3.4 billion and \$91.3 billion for Banking & Wealth Management and Home Lending, respectively, associated with the First Republic acquisition.
(e) Includes the impact of the First Republic acquisition. Refer to page 24 for additional information.
(f) For the three months ended June 30, 2023, included \$2.7 billion and \$57.2 billion for Banking & Wealth Management and Home Lending, respectively, and for the six months ended June 30, 2023, included \$1.4 billion and \$28.7 billion for Banking & Wealth Management and Home Lending, respectively, associated with the First Republic acquisition.
(g) For the three and six months ended June 30, 2023, included \$47.2 billion and \$23.7 billion, respectively, associated with the First Republic acquisition.

Selected metrics

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

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

Salacted metrics

	A	As of	r the three months ed June 30,	3		As	or the six months ed June 30,	
(in billions, except ratios and where otherwise noted)	2023		2022	Change		2023	2022	Change
Business Metrics								
Number of branches	4,874		4,822	1 %)	4,874	4,822	1 %
Active digital customers (in thousands)(a)	65,559	(f)	60,735	8		65,559 ^(f)	60,735	8
Active mobile customers (in thousands)(1)	51,963	(f)	47,436	10		51,963 (f)	47,436	10
Debit and credit card sales volume	\$ 424.0		\$ 397.0	7	\$	811.3	\$ 748.5	8
Total payments transaction volume (in trillions)(c)	1.5	(f)	1.5	_		2.9 (f)	2.8	4
Banking & Wealth Management								
Average deposits	\$ 1,142.8	(g)	\$ 1,163.4	(2)	\$	1,120.7 (g)	\$ 1,149.8	(3)
Deposit margin	2.83 %	6	1.31 %	, ,		2.81 %	1.27 %	
Business Banking average loans	\$ 19.6		\$ 22.8	(14)	\$	19.8	\$ 23.8	(17)
Business banking origination volume	1.3		1.2	7		2.3	2.2	4
Client investment assets(d)	892.9		628.5	42		892.9	628.5	42
Number of client advisors	5,153		4,890	5		5,153	4,890	5
Home Lending								
Mortgage origination volume by channel								
Retail	\$ 7.3	(h)	\$ 11.0	(34)	\$	10.9 (h)	\$ 26.1	(58)
Correspondent	3.9		10.9	(64)		6.0	20.5	(71)
Total mortgage origination volume(e)	\$ 11.2		\$ 21.9	(49)	\$	16.9	\$ 46.6	(64)
Third-party mortgage loans serviced (period-end)	\$ 604.5		\$ 575.6	5		604.5	\$ 575.6	5
MSR carrying value (period-end)	8.2		7.4	11		8.2	7.4	11
Card Services								
Sales volume, excluding commercial card	\$ 294.0		\$ 271.2	8	\$	560.2	\$ 507.6	10
Net revenue rate	9.11 %	6	9.59 %			9.73 %	9.72 %	
Net yield on average loans	9.31		9.50			9.60	9.73	
Auto								
Loan and lease origination volume	\$ 12.0		\$ 7.0	71	\$	21.2	\$ 15.4	38
Average auto operating lease assets	11.0		14.9	(26) %	,	11.3	15.6	(28) %

(a) Users of all web and/or mobile platforms who have logged in within the past 90 days.
(b) Users of all mobile platforms who have logged in within the past 90 days.
(c) Total payments transaction volume includes debit and credit card sales volume and gross outflows of ACH, ATM, teller, wires, BillPay, PayChase, Zelle, person-to-person and checks.
(d) Includes assets invested in managed accounts and J.P. Morgan mutual funds where AWMis the investment manager. Refer to AWM segment results on pages 41-44 for additional information. As of June 30, 2023, included \$150.9 billion of client investment assets associated with the First Republic acquisition.
(e) Firmwide mortgage origination volume was \$13.0 billion and \$27.9 billion for the three months ended June 30, 2023, and 2022, respectively.
(f) Excludes the impact of the First Republic acquisition.
(g) For the three and six months ended June 30, 2023, included \$47.2 billion and \$23.7 billion, respectively, associated with the First Republic acquisition.
(h) For the three and six months ended June 30, 2023, included \$1.1 billion associated with the First Republic acquisition.

CORPORATE & INVESTMENT BANK

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

Selected income statement data												
		Thr	ree moi	nths ended J	une 30	,		Si	x mont	hs ended Ju	ne 30,	
(in millions, except ratios)	' <u></u>	2023		2022		Change	202	3		2022		Change
Revenue												
Investment banking fees (a)	\$	1,557	\$	1,650		(6) % \$;	3,211	\$	3,700		(13) %
Principal transactions		6,697		5,048		33	•	14,105		10,271		37
Lending- and deposit-related fees		533		641		(17)		1,072		1,282		(16)
Commissions and other fees		1,219		1,328		(8)		2,453		2,660		(8)
Card income		400		337	(c)	19		715		603	(c)	19
All other income		396		(199)	(c)	NM		769		293	(c)	162
Noninterest revenue		10,802		8,805		23	- 2	22,325		18,809		19
Net interest income		1,717		3,198		(46)		3,794		6,770		(44)
Total net revenue(b)		12,519		12,003		4	- 2	26,119		25,579		2
Provision for credit losses		38		59		(36)		96		504		(81)
Noninterest expense												
Compensation expense		3,461		3,510		(1)		7,546		7,516		_
Noncompensation expense		3,433		3,300	(c)	4		6,831		6,657	(c)	3
Total noninterest expense		6,894		6,810		1	•	14,377		14,173		1
Income before income tax expense		5,587		5,134		9	•	11,646		10,902		7
Income tax expense		1,495		1,417	(c)	6		3,133		2,813	(c)	11
Net income	\$	4,092	\$	3,717		10 % \$	i	8,513	\$	8,089		5 %
Financial ratios												
Return on equity		15 %	6	14 9	6			15 %	0	15 9	%	
Overhead ratio		55		57	(c)			55		55		
Compensation expense as percentage of total net revenue		28		29				29		29	(c)	

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

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

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

Selected income statement data

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

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

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

Quarterly results

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

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

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

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

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

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

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

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

The prior year provision was \$59 million.

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

Year-to-date results

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

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

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

- Investment Banking revenue was \$3.1 billion, down 10%. Excluding \$257 million of markdowns on held-for-sale positions, primarily unfunded commitments, in the bridge financing portfolio recorded in the second quarter of 2022, Investment Banking revenue was down 17%. Investment Banking fees were down 13%, driven by lower debt underwriting and advisory fees. The Firm ranked #1 for Global Investment Banking fees, according to Dealogic.
- Debt underwriting fees were \$1.4 billion, down 22%, as challenging market conditions resulted in lower issuance activity in acquisition financing.
- Advisory fees were \$1.3 billion, down 12%, due to a lower level of announced deals in prior periods amid a challenging environment.
- Equity underwriting fees were \$553 million, up 12%, primarily due to higher convertible securities offerings and, in the second half of the second quarter, follow-on offerings that benefited from the lower equity market volatility.
- Payments revenue was \$4.8 billion, up 42%, driven by deposit margin expansion on higher rates, partially offset by lower average deposits.
- Lending revenue was \$566 million, down 23%, driven by \$183 million of fair value losses on hedges of retained loans, compared to \$112 million of gains in the prior year, partially offset by higher net interest income.

Markets & Securities Services revenue was \$17.7 billion, down 2%. Markets revenue was \$15.4 billion, down 7%.

- Fixed Income Markets revenue was \$10.3 billion, down 1%, reflecting lower revenue in Currencies & Emerging Markets and Commodities, largely offset by higher revenue in Rates, the Securitized Products Group and Credit Trading.
- Equity Markets revenue was \$5.1 billion, down 16%, predominantly driven by lower revenue in Equity Derivatives.
- Securities Services revenue was \$2.4 billion, up 7%, driven by deposit margin expansion on higher rates, largely offset by lower fees and lower average deposits.
- Credit Adjustments & Other was a loss of \$117 million, driven by losses on certain components of fair value option elected liabilities, compared with a loss of \$742 million in the prior year, which was predominantly driven

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

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

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

The prior year provision was \$504 million.

Selected metrics

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

⁽a) Loans retained includes credit portfolio loans, loans held by consolidated Firm-administered multi-seller conduits, trade finance loans, other held-for-investment loans and overdrafts. (b) Loans held-for-sale and loans at fair value primarily reflect lending-related positions originated and purchased in Markets, including loans held for securitization.

Selected metrics

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

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

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

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

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

Investment banking fees

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

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

League table results - wallet share

Ecagae table results Wallet Share											
		T	hree months en	ded June 30),		Six months end	ed June 30,			
		20	23	20	22	20	23	20)22	Full-ye	ar 2022
	F	ank	Share	Rank	Share	Rank	Share	Rank	Share	Rank	Share
Based on fees(a)											
M&A ^(b)											
Global	#	2	8.7 % #	2	7.5 %	# 2	9.3 % #	2	7.4 %	# 2	8.0 %
U.S.		2	11.5	2	8.3	2	11.8	2	8.4	2	9.0
Equity and equity-related(c)											
Global		1	7.6	1	6.0	1	7.1	1	5.6	2	5.7
U.S.		1	14.7	1	15.1	1	13.3	1	13.2	1	13.8
Long-term debt(d)											
Global		2	6.8	1	7.2	1	6.7	1	7.6	1	6.9
U.S.		2	10.4	1	12.5	2	10.0	1	12.3	1	12.2
Loan syndications											
Global		1	12.4	1	12.2	1	12.6	1	11.3	1	11.0
U.S.		1	15.7	1	13.9	1	16.1	1	11.9	1	12.7
Global investment banking fees(e)	#	1	8.3 % #	. 2	8.1 %	# 1	8.4 % #	! 1	7.9 %	# 1	7.8 %

(a) Source: Dealogic as of July 3, 2023. Reflects the ranking of revenue wallet and market share.
(b) Global MBA excludes any withdrawn transactions. U.S. MBA revenue wallet represents wallet from client parents based in the U.S.
(c) Global equity and equity-related ranking includes rights offerings and Chinese A-Shares.
(d) Long-term debt rankings include investment-grade, high-yield, supranationals, sovereigns, agencies, covered bonds, asset-backed securities ("ABS") and mortgage-backed securities ("MBS"); and exclude money market, short-term debt and U.S. municipal securities.
(e) Global investment banking fees exclude money market, short-term debt and shelf securities.

Markets revenue

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

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

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

		Three m	onths ended June 30	0,	Three months ended June 30,						
			2023				2022				
(in millions)	F	ixed Income Markets	Equity Markets	Total Markets	F	ixed Income Markets	Equity Markets	Total Markets			
Principal transactions	\$	3,120 \$	3,350 \$	6,470	\$	2,934 \$	2,448 \$	5,382			
Lending- and deposit-related fees		76	7	83		76	4	80			
Commissions and other fees		151	472 623			128	516	644			
All other income		369	(40)	329		166	(31)	135			
Noninterest revenue		3,716	3,789	7,505		3,304	2,937	6,241			
Net interest income(a)		851	(1,338)	(487)		1,407	142	1,549			
Total net revenue	\$	4,567 \$	2,451 \$	7,018	\$	4,711 \$	3,079 \$	7,790			

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

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

Selected metrics

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

⁽a) Consists of mutual funds, unit investment trusts, currencies, annuities, insurance contracts, options and other contracts.(b) Represents Firmwide merchant processing volume.(c) Client deposits and other third-party liabilities pertain to the Payments and Securities Services businesses.

International metrics

memational metrics	As of or for the three months ended June 30,						As of or for the six months ended June 30,					
(in millions, except where otherwise noted)		2023		2022	Change		2023		2022	Change		
Total net revenue(a)												
Europe/Middle East/Africa	\$	3,813	\$	4,280	(11) %	\$	8,081	\$	8,972	(10) %		
Asia-Pacific		1,889		2,023	(7)		4,022		4,008	_		
Latin America/Caribbean		543		464	17		1,105		1,141	(3)		
Total international net revenue		6,245		6,767	(8)		13,208		14,121	(6)		
North America		6,274		5,236 ^(c)	20		12,911		11,458 ^(c)	13		
Total net revenue	\$	12,519	\$	12,003	4	\$	26,119	\$	25,579	2		
Loans retained (period-end)(a)												
Europe/Middle East/Africa	\$	39,752	\$	35,524	12	\$	39,752	\$	35,524	12		
Asia-Pacific		14,789		16,427	(10)		14,789		16,427	(10)		
Latin America/Caribbean		8,704		7,961	9		8,704		7,961	9		
Total international loans		63,245		59,912	6		63,245		59,912	6		
North America		131,205		111,307	18		131,205		111,307	18		
Total loans retained	\$	194,450	\$	171,219	14	\$	194,450	\$	171,219	14		
Client deposits and other third-party liabilities (average)(b)												
Europe/Mddle East/Africa	\$	228,490	\$	272,919	(16)	\$	229,655	\$	259.781	(12)		
Asia-Pacific	•	128,253	•	129,514	(1)	•	127,146	•	132,126	(4)		
Latin America/Caribbean		38,911		41,785	(7)		38,825		42,720	(9)		
Total international	\$	395,654	\$	444,218	(11)	\$	395,626	\$	434,627	(9)		
North America		251,825		278,170	`(9)		245,016		281,164	(13)		
Total client deposits and other third-party liabilities	\$	647,479	\$	722,388	(10)	\$	640,642	\$	715,791	(10)		
AUC (period-end) ^(c) (in billions)										, ,		
North America	\$	20,512	\$	18,816	9	\$	20,512	\$	18,816	9		
All other regions		9,912		9,763	2		9,912		9,763	2		
Total AUC	\$	30,424	\$	28,579	6 %	\$	30,424	\$	28,579	6 %		

⁽a) Total net revenue and loans retained (excluding loans held-for-sale and loans at fair value) are based on the location of the trading desk, booking location, or domicile of the client, as applicable.
(b) Client deposits and other third-party liabilities pertaining to the Payments and Securities Services businesses, and AUC, are based on the domicile of the client.
(c) In the first quarter of 2023, the allocations of revenue and expense to CCB associated with a Merchant Services revenue sharing agreement were discontinued and are now retained in Payments in CIB. Prior-period amounts have been revised to conform with the current presentation.

COMMERCIAL BANKING

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

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

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

Selected income statement data (continued)

		П	hree r	month	s ended June 3	0,		Six n	nonths	ended June 30,	
(in millions, except ratios)	2	023		2	2022	Change	2023			2022	Change
Revenue by product											_
Lending	\$	1,480	(c)	\$	1,058	40 %	\$ 2,702	(c)	\$	2,163	25 %
Payments		2,248			1,253	79	4,276			2,275	88
Investment banking(a)		213			234	(9)	463			453	2
Other		47			138	(66)	58			190	(69)
Total net revenue	\$	3,988		\$	2,683	49	\$ 7,499		\$	5,081	48
Investment Banking and Markets revenue, gross(b)	\$	767		\$	788	(3)	\$ 1,648		\$	1,517	9
Revenue by client segments											
Mddle Warket Banking	\$	1,916	(d)	\$	1,169	64	\$ 3,597	(d)	\$	2,149	67
Corporate Client Banking		1,229			927	33	2,405			1,757	37
Commercial Real Estate Banking		806	(d)		590	37	1,448	(d)		1,171	24
Other		37			(3)	NM	49			4	NM
Total net revenue	\$	3,988		\$	2,683	49 %	\$ 7,499		\$	5,081	48 %
Financial ratios											
Return on equity		16 9	%		15 %		17 '	%		14 %	
Overhead ratio		33			43		35			45	

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

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

⁽b) Includes gross revenues earned by the Firm that are subject to a revenue sharing arrangement between CB and the CIB for Investment Banking and Markets' products sold to CB clients. This includes revenues related to fixed income and equity markets products. Refer to Business Segment Results on page 22 for discussion of revenue sharing.

⁽c) Includes the impact of the First Republic acquisition. Refer to page 24 for additional information.
(d) For the three and six months ended June 30, 2023, included \$48 million and \$130 million for Mddle Market Banking and Commercial Real Estate Banking, respectively, associated with the First Republic acquisition.

Quarterly results

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

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

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

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

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

The prior year provision was \$209 million.

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

Year-to-date results

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

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

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

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

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

The prior year provision was \$366 million.

Selected metrics

		ne three months June 30,	3			the six months I June 30,	
(in millions, except headcount)	 2023	2022	Change	_	2023	2022	Change
Selected balance sheet data (period-end)							
Total assets	\$ 305,280	\$ 242,456	26 %	\$	305,280	\$ 242,456	26 %
Loans:							
Loans retained	282,124 (b)	223,541	26		282,124 (b)	223,541	26
Loans held-for-sale and loans at fair value	1,540	566	172		1,540	566	172
Total loans	\$ 283,664	\$ 224,107	27	\$	283,664	\$ 224,107	27
Equity	30,000	25,000	20		30,000	25,000	20
Period-end loans by client segment							
Mddle Market Banking ^(a)	\$ 79,885 (c)	\$ 68,535	17	\$	79,885 (c)	\$ 68,535	17
Corporate Client Banking	60,511	49,503	22		60,511	49,503	22
Commercial Real Estate Banking	142,897 (c)	105,982	35		142,897 (c)	105,982	35
Other	371	87	326		371	87	326
Total loans(a)	\$ 283,664	\$ 224,107	27	\$	283,664	\$ 224,107	27
Selected balance sheet data (average)							
Total assets	\$ 290,875	\$ 239,381	22	\$	273,269	\$ 236,444	16
Loans:							
Loans retained	270,091 (d)	218,478	24		253,542 (d)	213,536	19
Loans held-for-sale and loans at fair value	726	1,004	(28)		939	1,572	(40)
Total loans	\$ 270,817	\$ 219,482	23	\$	254,481	\$ 215,108	18
Average loans by client segment							
Middle Market Banking	\$ 78,037 (e)	\$ 66,640	17	\$	75,547 (e)	\$ 64,550	17
Corporate Client Banking	59,159	47,832	24		57,877	46,720	24
Commercial Real Estate Banking	133,394 (e)	104,890	27		120,838 (e)	103,701	17
Other	227	120	89		219	137	60
Total loans	\$ 270,817	\$ 219,482	23	\$	254,481	\$ 215,108	18
Deposits	275,196	300,339	(8)		270,595	308,518	(12)
Equity	29,505	25,000	18		29,005	25,000	16
Headcount	15,991	13,811	16 %		15,991	13,811	16 %

⁽a) At June 30, 2023 and 2022, total loans included \$65 million and \$335 million of loans, respectively, under the PPP, of which \$60 million and \$306 million were in Mddle Market Banking, respectively. Refer to Credit Portfolio on pages 108-109 of JPWorgan Chase's 2022 Form 10-K for a further discussion of the PPP.
(b) Includes the impact of the First Republic acquisition. Refer to page 24 for additional information.
(c) As of June 30, 2023, included \$6.2 billion and \$33.3 billion for Mddle Market Banking and Commercial Real Estate Banking, respectively, associated with the First Republic acquisition.
(d) For the three and six months ended June 30, 2023, included \$2.6 billion and \$14.4 billion, respectively, associated with the First Republic acquisition.
(e) For the three months ended June 30, 2023, included \$4.4 billion and \$24.2 billion for Mddle Market Banking and Commercial Real Estate Banking, respectively, associated with the First Republic acquisition.

Selected metrics (continued)

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

⁽a) Allowance for loan losses of \$205 million and \$74 million was held against nonaccrual loans retained at June 30, 2023 and 2022, respectively.
(b) Loans held-for-sale and loans at fair value were excluded when calculating the net charge-off/(recovery) rate.
(c) As of June 30, 2023, included a \$608 million allowance established as part of the First Republic acquisition.

ASSET & WEALTH MANAGEMENT

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

	 Th	hree mo	onths en	ided June 30,			Six mon	ths ended June 30,	
(in millions, except ratios)	2023		202	2	Change	2023		2022	Change
Revenue									
Asset management fees	\$ 2,930	9	\$	2,797	5 %	\$ 5,691	\$	5,696	— %
Commissions and other fees	196			240	(18)	377		456	(17)
All other income	232	(a)		47	394	623	(a)	171	264
Noninterest revenue	3,358			3,084	9	6,691		6,323	6
Net interest income	1,585	(a)		1,222	30	3,036	(a)	2,298	32
Total net revenue	4,943			4,306	15	9,727		8,621	13
Provision for credit losses	145	(a)		44	230	173	(a)	198	(13)
Noninterest expense									
Compensation expense	1,746			1,508	16	3,481		3,038	15
Noncompensation expense	1,417			1,411	_	 2,773		2,741	1
Total noninterest expense	3,163			2,919	8	 6,254		5,779	8
Income before income tax expense	1,635			1,343	22	3,300		2,644	25
Income tax expense	409			339	21	 707		632	12
Net income	\$ 1,226	Ç	\$	1,004	22	\$ 2,593	\$	2,012	29
Revenue by line of business									
Asset Management	\$ 2,128	9	\$	2,137	_	\$ 4,562	\$	4,451	2
Global Private Bank	2,815	(a)		2,169	30	 5,165	(a)	4,170	24
Total net revenue	\$ 4,943	Ç	\$	4,306	15 %	\$ 9,727	\$	8,621	13 %
Financial ratios									
Return on equity	29 9	%		23 %		31 %	•	23 %	
Overhead ratio	64			68		64		67	
Pre-tax margin ratio:									
Asset Management	27			29		32		31	
Global Private Bank	37			33		35		30	
Asset & Wealth Management	33			31		34		31	

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

Quarterly results

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

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

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

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

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

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

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

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

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

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

Year-to-date results

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

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

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

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

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

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

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

partially offset by

an investment valuation loss in the first quarter of 2023.

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

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

The prior year provision was \$198 million.

Selected metrics

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

⁽a) Represents the Morningstar Rating for all domiciled funds except for Japan domiciled funds which use Nomura. Includes only Asset Management retail open-ended mutual funds that

have a rating. Excludes money market funds, Undiscovered Managers Fund, and Brazil domiciled funds.

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

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

⁽d) Includes the impact of the First Republic acquisition. Refer to page 24 for additional information.
(e) For the three and six months ended June 30, 2023, included \$9.7 billion and \$4.9 billion, respectively, associated with the First Republic acquisition.
(f) As of June 30, 2023, included a \$146 million allowance established as part of the First Republic acquisition.

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

Client assets

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

(a) Includes COB client investment assets invested in managed accounts and J.P. Morgan mutual funds where AVM is the investment manager. (b) Includes the impact of the acquisition of Global Shares.

Client assets (continued)

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

International

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

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

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

CORPORATE

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

Selected income statement and balance sheet data

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

- (a) Included tax-equivalent adjustments, driven by tax-exempt income from municipal bonds, of \$45 million and \$60 million for the three months ended June 30, 2023 and 2022, respectively, and \$101 million and \$118 million for the six months ended June 30, 2023 and 2022, respectively.
- (b) Predominantly relates to the Firm's international consumer initiatives.
- (c) Includes the impacts of the First Republic acquisition. Refer to Note 28 for additional information.
- (d) Income taxes associated with the First Republic acquisition are reflected in the estimated bargain purchase gain.

Quarterly results

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

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

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

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

partially offset by

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

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

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

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

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

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

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

Year-to-date results

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

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

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

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

partially offset by

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

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

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

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

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

Treasury and CIO overview

At June 30, 2023, the average credit rating of the Treasury and CIO investment securities comprising the portfolio in the table below was AA+ (based upon external ratings where available and, where not available, based primarily upon internal risk ratings). Refer to Note 10 for further information on the Firm's investment securities portfolio and internal risk ratings.

Refer to Liquidity Risk Management on pages 54-61 for further information on liquidity and funding risk. Refer to Market Risk Management on pages 84-89 for information on interest rate and foreign exchange risks.

Selected income statement and balance sheet data

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

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

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

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

FIRMWIDE RISK MANAGEMENT

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

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

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

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

Risk governance framework

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



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

Risk governance and oversight functions

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

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

CAPITAL RISK MANAGEMENT

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

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

Basel III Overview

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

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

Key Regulatory Developments

CECL regulatory capital transition

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

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

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

Risk-based Capital Targets

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

Basel III Finalization

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

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

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

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

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

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

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

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

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

(a) The capital interest the cap capital and a since provisions.
 (b) Adjusted average assets, for purposes of calculating the leverage ratios, includes quarterly average assets adjusted for on-balance sheet assets that are subject to deduction from Tier 1 capital, predominantly goodwill, inclusive of estimated equity method goodwill, and other intangible assets.
 (c) Represents minimum requirements and regulatory buffers applicable to the Firm Refer to Note 23 for additional information.

Capital components

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

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

- (a) Represents deferred tax liabilities related to tax-deductible goodwill and to identifiable intangibles created in nontaxable transactions, which are netted against goodwill and other intangibles when calculating OET1 capital.
- (b) As of June 30, 2023 and December 31, 2022, included a net benefit associated with cash flow hedges and debit valuation adjustments ("DVA") related to structured notes recorded in AOQI of \$5.3 billion and \$5.2 billion and the benefit from the CECL capital transition provisions of \$1.4 billion and \$2.2 billion, respectively.
- (c) Goodwill deducted from capital includes goodwill associated with equity method investments in nonconsolidated financial institutions based on regulatory requirements. Refer to Principal investment risk on page 83 for additional information.
- requirements. Refer to Principal investment risk on page 83 for additional information.

 (d) Represents the allowance for credit losses eligible for inclusion in Tier 2 capital up to 1.25% of credit risk RWA, including the impact of the CECL capital transition provision with any excess deducted from RWA.
- (e) Represents an adjustment to qualifying allowance for credit losses for the excess of eligible credit reserves over expected credit losses up to 0.6% of credit risk RWA, including the impact of the OEOL capital transition provision with any excess deducted from RWA.
- (f) Included an incremental \$714 million allowance for credit losses on certain assets associated with the First Republic acquisition to which the Standardized approach has been applied, as permitted by the transition provisions in the U.S. capital rules.

Capital rollforward

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

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

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

RWA rollforward

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

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

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

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

Supplementary leverage ratio

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

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

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

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

Line of business equity

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

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

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

Line of business equity (Allocated capital)

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

Capital actions

Common stock dividends

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

Common stock

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

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

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

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

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

Preferred stock

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

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

Subordinated Debt

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

Capital planning and stress testing

Comprehensive Capital Analysis and Review

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

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

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

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

Other capital requirements

Total Loss-Absorbing Capacity

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

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

		June 30, 20	023	December 31,	2022
(in billions, except ratio)	Е	xternal TLAC	LTD	External TLAC	LTD
Total eligible amount	\$	493\$	218	2 486.\$	228.5
% of RWA		28.9%	12.	8 ⁄ ₀ 29.4%	13.8%
Regulatory requirements		23.0	10.0	0 22.5	9.5
Surplus/(shortfall)	\$	101₽	47\$	6 114.\$)	71.4
% of total leverage expos	ure	11.0%	4.9	9 ⁄ ₀ 11.1%	5.2%
Regulatory requirements		9.5	4.:	5 9.5	4.5
Surplus/(shortfall)	\$	66.\$9	166	1 71.\$	32.0

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

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

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

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

U.S. broker-dealer regulatory capital

J.P. Morgan Securities

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

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

ıne 30, 2023		
n millions)	Actual	Minimum
et Capital	\$ 24,5\$8	5,593

Non-U.S. subsidiary regulatory capital

J.P. Morgan Securities plc

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

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

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

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

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

- (a) Represents minimum Pillar 1 requirements specified by the PRA. J.P. Morgan Securities plc's capital ratios as of June 30, 2023 exceeded the minimum requirements, including the additional capital requirements specified by the PRA.
- (b) At least 75% of the Tier 1 leverage ratio minimum must be met with CET1 capital.

J.P. Morgan SE

JPMSE is a wholly-owned subsidiary of JPMorgan Chase Bank, N.A. and has authority to engage in banking, investment banking and markets activities. JPMSE is regulated by the European Central Bank as well as the local regulators in each of the countries in which it operates, and it is subject to EU capital requirements under Basel III.

JPMSE is required by the EU Single Resolution Board to maintain MREL. As of June 30, 2023, JPMSE was compliant with its MREL requirements.

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

June 30, 2023			
(in millions, except ratios)	Estimat@egulatory	V i nimum ratios	(a)
Total capital	\$ 43,524		
CET1 capital ratio	19. 9 %	4.5	%
Tier 1 capital ratio	19.9	6.0	
Total capital ratio	35.4	8.0	
Tier 1 leverage ratio	5.5	3.0	

(a) Represents minimum Pllar 1 requirements specified by the EJ CRR J.P. Morgan SEs capital and leverage ratios as of June 30, 2023 exceeded the minimum requirements, including the additional capital requirements specified by EJ regulators.

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

LIQUIDITY RISK MANAGEMENT

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

LCR and HQLA

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

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

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

		Three months ended										
Average amount (in millions)		June 30, 2023	N	/arch 31, 2023		June 30, 2022						
JPMorgan Chase & Co.:												
HQLA												
Eligible cash(a)	\$	440,294	\$	453,287	\$	634,480						
Bigible securities(b)(c)		327,837		278,223		107,473						
Total HQLA(d)(e)	\$	768,131	\$	731,510	\$	741,953						
Net cash outflows	\$	683,446	\$	642,650	\$	676,234						
LCR		112 9	%	114 %		110 %						
Net excess eligible HQLA(d)	\$	84,685	\$	88,860	\$	65,719						
JPMorgan Chase Bank N.A.:	:											
LCR		129 9	%	140 %		169 %						
Net excess eligible HQLA	\$	211,233	\$	278,651	\$	487,867						

- (a) Represents cash on deposit at central banks, primarily the Federal Reserve Banks.(b) Predominantly U.S. Treasuries, U.S. GSE and government agency MBS, and sovereign bonds net of applicable haircuts under the LOR 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 JPVbrgan Chase Bank, N.A. that are not transferable to non-bank affiliates.
- (e) End-of-period HQLA balances were \$791.5 billion, \$758.9 billion, and \$721.1 billion for June 30, 2023, March 31, 2023 and June 30, 2022, respectively.

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

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

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

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

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

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

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

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

Internal stress testing

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

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

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

Other liquidity sources

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

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

NSFR

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

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

Funding

Sources of funds

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

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

Firm's non-bank subsidiaries are primarily funded from long-term unsecured borrowings and short-term secured borrowings which are primarily securities loaned or sold under repurchase agreements. Excess funding is invested by Treasury and CIO in the Firm's investment securities portfolio or deployed in cash or other short-term liquid investments based on their interest rate and liquidity risk characteristics. Refer to Note 24 for additional information on off-balance sheet obligations.

Deposits

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

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

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

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

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

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

partially offset by

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

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

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

partially offset by

 an increase in Corporate related to the Firm's international consumer initiatives. Period-end deposits increased, reflecting:

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

partially offset by

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

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

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

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

	June : 2023		Decemb 202	31,			
(in millions)	U.S.	Non-U.S.	U.S.		Non-U.S.		
Three months or less	\$ 33,242 \$	74,455	\$ 25,910 (a)	\$	68,765		
Over three months but within 6 months	15,044	5,452	8,670		3,658		
Over six months but within 12 months	8,014	3,524	7,035		2,850		
Over 12 months	770	2,506	787		2,634		
Total	\$ 57,070 \$	85,937	\$ 42,402	\$	77,907		

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

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

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

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

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

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

		Average interest	rates				
	Three months e	nded	Six months ended				
(Unaudited)	June 30, 2023	June 30, 2022	June 30, 2023	June 30, 2022			
U.S. offices							
Noninterest-bearing	NA	NA	NA	NA			
Interest-bearing							
Demand ^(a)	3.41 %	0.32 %	3.09 %	0.18 %			
Savings ^(b)	1.04	0.12	0.97	0.10			
Time	4.53	0.92	4.52	0.60			
Total interest-bearing deposits	1.93	0.20	1.75	0.14			
Total deposits in U.S. offices	1.28	0.12	1.19	0.08			
Non-U.S. offices							
Noninterest-bearing	NA.	NA	NA	NA			
Interest-bearing							
Demand	2.53	80.0	2.38	0.02			
Time	5.66	0.72	5.32	0.38			
Total interest-bearing deposits	3.21	0.20	2.98	0.08			
Total deposits in non-U.S. offices	3.01	0.16	2.80	0.06			
Total deposits	1.60 %	0.16 %	1.47 %	0.08 %			

⁽a) Includes Negotiable Order of Withdrawal ("NOW") accounts, and certain trust accounts. (b) Includes Money Market Deposit Accounts ("MNDAs").

Refer to Note 16 for additional information on deposits.

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

Sources of funds (excluding deposits)

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

- (a) Primarily consists of short-term securities loaned or sold under agreements to repurchase.
- (b) Included in beneficial interests issued by consolidated variable interest entities on the Firms Consolidated balance sheets.
- (c) Includes certain TLAC-eligible long-term unsecured debt issued by the Parent Company.
 (d) As of June 30, 2023, included \$25.0 billion FHLB advances and the Purchase Money Note associated with the First Republic acquisition. Refer to Note 28 for additional information.
- (e) Includes long-term structured notes which are secured.
- (f) Refer to Capital Risk Management on pages 48-53, Consolidated statements of changes in stockholders' equity on page 99 of this Form 10-Q, and Note 21 and Note 22 of JPMorgan Chase's 2022 Form 10-K for additional information on preferred stock and common stockholders' equity.

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

Short-term funding

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

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

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

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

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

Long-term funding and issuance

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

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

Long-term unsecured funding

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

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

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

Long-term secured funding

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

- (a) As of June 30, 2023, included FHLB advances and the Purchase Money Note associated with the First Republic acquisition. Refer to Note 28 for additional information.
- (b) Includes long-term structured notes that are secured.

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

Credit ratings

The cost and availability of financing are influenced by credit ratings. Reductions in these ratings could have an adverse effect on the Firm's access to liquidity sources, increase the cost of funds, trigger additional collateral or funding requirements and decrease the number of investors and counterparties willing to lend to the Firm. The nature and magnitude of the impact of ratings downgrades depends on numerous contractual and behavioral factors, which the Firm believes are incorporated in its liquidity risk

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

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

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

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

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

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

CREDIT AND INVESTMENT RISK MANAGEMENT

Credit and investment risk is the risk associated with the default or change in credit profile of a client, counterparty or customer; or loss of principal or a reduction in expected returns on investments, including consumer credit risk

wholesale credit risk, and investment portfolio risk. Refer to Consumer Credit Portfolio, Wholesale Credit Portfolio and Allowance for Credit Losses on pages 65-82 for a further discussion of Credit Risk.

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

CREDIT PORTFOLIO

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

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

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

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

Total credit portfolio

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

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

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

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

The following table provides information about the Firm's net charge-offs and recoveries. $\begin{tabular}{ll} \hline \end{tabular}$

(in millions,	Three mon	thse	enc	ded June 30,	Six months ended June 30,					
except ratios)	:	2023	;	2022			2023		2022	
Net charge- offs	\$ 1,4	11	\$	65	57 \$	5 2,	548 \$	5 1	,239	
Average retained loans	1,194,044			1,035,933		1,138,550		1,020,180		
Net charge- off rates	0.47	%	,	0.25	%	0.45	%	0.24	%	

CONSUMER CREDIT PORTFOLIO

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

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

Consumer credit portfolio

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

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

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

- (a) Includes scored mortgage and home equity loans held in CCB and AVM.(b) At June 30, 2023 and December 31, 2022, excluded operating lease assets of \$10.9 billion and \$12.0 billion, respectively. These operating lease assets are included in other assets on the Firm's Consolidated balance sheets. Refer to Note 17 for further information.
- (c) Includes scored auto and business banking loans, and overdrafts.
- (d) Includes scored mortgage loans held in COB and CIB, and other consumer unsecured loans in CIB.
- (e) Credit card, home equity and certain business banking lending-related commitments represent the total available lines of credit for these products. The Firmhas 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 net, home equity commitments and certain business banking commitments, the Firm can reduce or cancel these lines of credit by providing the borrower notice or, in some cases as permitted by law, without notice. Refer to Note 24 for further information.
- (f) Includes billed interest and fees.
- (g) Also includes commercial card lending-related commitments primarily in CB and CIB.

(h) Represents the notional amount of protection obtained through the issuance of credit-related notes that reference certain pools of residential real estate and auto loans in the retained consumer portfolio

Included credit exposure of \$104.6 billion associated with the First Republic acquisition consisting of \$101.5 billion in residential real estate and \$3.1 billion in auto and other.

(j) At June 30, 2023 and December 31, 2022, nonaccrual loans excluded mortgage loans 90 or more days past due and insured by U.S. government agencies of \$215 million and \$302 million, respectively. These amounts have been excluded from nonaccrual loans based upon the government guarantee. In addition, the Firm's policy is generally to exempt credit card loans from being placed on nonaccrual status, as permitted by regulatory guidance.

- (k) Generally excludes loans under payment deferral programs offered in response to the COVID-19 pandemic.
 (I) At June 30, 2023 and December 31, 2022, nonaccrual loans excluded \$39 million and \$101 million, respectively, of PPP loans 90 or more days past due and guaranteed by the SBA.
- (m) Average consumer loans held-for-sale and loans at fair value were \$13.3 billion and \$18.2 billion for the three months ended June 30, 2023 and 2022, respectively, and \$12.4 billion and \$21.0 billion for the six months ended June 30, 2023 and 2022, respectively. These amounts were excluded when calculating net charge-off/(recovery) rates.

Maturities and sensitivity to changes in interest rates

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

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

- (a) Included \$3.6 billion, \$4.7 billion, \$27.3 billion, and \$58.3 billion of loans within 1 year, 1-5 years, 5-15 years, and after 15 years, respectively, associated with the First Republic

acquisition.

(b) Included \$3.0 billion, \$8.8 billion, and \$15.6 billion in 1-5 years, 5-15 years, and after 15 years, respectively, associated with the First Republic acquisition.

(c) Included \$1.7 billion, \$18.6 billion, and \$42.7 billion in 1-5 years, 5-15 years, and after 15 years, respectively, associated with the First Republic acquisition.

(d) Includes loans held-for-sale and loans at fair value.

(e) Includes overdrafts.

Consumer, excluding credit card

Portfolio analysis

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

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

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

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

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

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

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

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

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

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

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

Modified residential real estate loans

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

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

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

Nonperforming assets

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

Nonperforming assets(a)

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

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

Nonaccrual loans

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

Nonaccrual loan activity

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

(a) Other reductions include loan sales.

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

Credit card

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

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

Geographic and FICO composition of credit card loans

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

Modifications of credit card loans

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

For the three and six months ended June 30, 2022, credit card TDRs were \$81 million and \$163 million, respectively.

Refer to Note 1 and Note 12 for further information.

WHOLESALE CREDIT PORTFOLIO

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

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

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

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

Wholesale credit portfolio

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

- (a) Receivables from customers reflect held-for-investment margin loans to brokerage clients in CIB, COB and AVMt these are reported within accrued interest and accounts receivable on the Consolidated balance sheets.
- (b) Represents the net notional amount of protection purchased and sold through credit derivatives and credit-related notes used to manage both performing and nonperforming wholesale credit exposures; these derivatives do not qualify for hedge accounting under U.S. GAAP. Refer to Credit derivatives on page 79 and Note 5 for additional information.
- (c) Included credit exposure of \$98.2 billion associated with the First Republic acquisition.

Wholesale credit exposure - maturity and ratings profile

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

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

		Maturity	profile ^(d)		Ratings profile						
December 31, 2022 (in millions, except ratios)	1 year or less	1 year through 5 years	After 5 years	Total	Investment-grad		loninvestment- grade	Total	Total % of IG		
Loans retained	\$ 204,761 \$	253,896	\$ 145,013 \$	603,670	\$ 425,412	2 \$	178,258 \$	603,670	70 %		
Derivative receivables				70,880				70,880			
Less: Liquid securities and other cash collateral held against derivatives				(23,014)				(23,014)			
Total derivative receivables, net of collateral	13,508	14,880	19,478	47,866	36,23	1	11,635	47,866	76		
Lending-related commitments	101,083	347,456	23,441	471,980	327,16	3	144,812	471,980	69		
Subtotal	319,352	616,232	187,932	1,123,516	788,81	1	334,705	1,123,516	70		
Loans held-for-sale and loans at fair value(a)				35,427				35,427			
Receivables from customers				49,257				49,257			
Total exposure – net of liquid securities and other cash collateral held against derivatives			\$	1,208,200			\$	1,208,200			
Credit derivatives and credit-related notes used in credit portfolio management activities ^{b)(c)}	\$ (2,817)\$	(13,530)	\$ (1,796)\$	(18,143)	\$ (15,11)	5) \$	(3,028) \$	(18,143)	83 %		

⁽a) Loans held-for-sale are primarily related to syndicated loans and loans transferred from the retained portfolio.
(b) These derivatives do not qualify for hedge accounting under U.S. GAAP.
(c) The notional amounts are presented on a net basis by underlying reference entity and the ratings profile shown is based on the ratings of the reference entity on which protection has been purchased. Predominantly all of the credit derivatives entered into by the Firmwhere it has purchased protection used in credit portfolio management activities are executed with investment-grade counterparties. In addition, the Firmobtains credit protection against certain loans in the retained loan portfolio through the issuance of credit-related notes.
(d) The maturity profile of retained loans, lending-related commitments and derivative receivables is generally based on remaining contractual maturity. Derivative contracts that are in a receivable position as of June 30, 2023, may become payable prior to maturity based on their cash flow profile or changes in market conditions.

Wholesale credit exposure – industry exposures

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

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

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

Wholesale credit exposure - industries(a)

wholesale credit exposure – in	uusuic	·3()								
	Noninvestment-grade						Selected metrics			
						ade	<u>-</u> .			
As of or for the six months ended							30 days or more		Credit derivative	Liquid securities and other cash
June 30, 2023					0.00	0.30.3	past due and	Net	hedges and	collateral held
(in millions)	Cred	t exposure(f)(g)	Investment- grade	Noncriticized	Criticized performing	Criticized nonperforming	accruing loans	charge-offs/ (recoveries)	credit-related notes(1)	against derivative receivables
Real Estate	\$	206,912 \$	151,293	\$ 50,328	\$ 4,715	\$ 576	\$ 286 \$	102	\$ (671)	-
Individuals and Individual Entities(b)		141,178	115,505	24,954	210	509	1,158	_	_	_
Asset Managers		138,143	87,284	50,713	138	8	72	_	_	(8,906)
Consumer & Retail		125,935	62,890	54,980	7,511	554	416	59	(3,618)	_
Industrials		77,206	43,489	30,310	3,242	165	362	16	(2,072)	(3)
Technology, Media & Telecommunications		76,444	41,401	27,127	7,708	208	125	78	(3,396)	_
Healthcare		65,547	43,569	19,435	2,140	403	292	13	(2,829)	(13)
Banks & Finance Cos		61,659	31,037	29,540	1,061	21	71	4	(470)	(1,123)
State & Municipal Govt(c)		37,157	33,372	3,560	222	3	7	_	(4)	_
Utilities		35,757	25,124	9,746	768	119	60	(2)	(1,989)	_
Oil & Gas		33,233	18,969	13,768	446	50	42	4	(1,384)	_
Automotive		32,947	23,385	9,174	235	153	56	_	(623)	_
Chemicals & Plastics		22,195	12,020	9,243	811	121	26	_	(835)	_
Insurance		21,874	15,513	6,062	299	_	14	_	(531)	(7,529)
Central Govt		16,845	16,396	318	127	4	_	_	(3,724)	(229)
Metals & Mining		15,631	8,528	6,623	450	30	_	(6)	(209)	_
Transportation		15,447	6,879	7,002	1,516	50	64	(18)	(598)	_
Securities Firms		9,077	6,116	2,961	_	_	4	_	(14)	(2,693)
Financial Markets Infrastructure		4,993	4,599	394	_	_	_	_	(1)	_
All other ^(d)		135,271	114,197	20,621	216	237	40	(2)	(8,137)	(2,786)
Subtotal	\$	1,273,451 \$	861,566	\$ 376,859	\$ 31,815	\$ 3,211	\$ 3,095 \$	248	\$ (31,105)	\$ (23,282)
Loans held-for-sale and loans at fair value		32,372								
Receivables from customers		42,741								
Total ^(e)	\$	1,348,564								

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

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

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

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

				June :	30, 2023		
(in millions, except ratios)	Lend	oans and ding-related nmitments	erivative ceivables	e	Credit exposure	%Investment-grade	%Drawn ^(e)
Multifamily ^(a)	\$	119,840	\$ 11	\$	119,851	83 %	89 %
Other Income Producing Properties(b)		18,664	178		18,842	56	68
Industrial		17,997	_		17,997	66	74
Office		17,623	24		17,647	62	76
Services and Non Income Producing		15,656	63		15,719	64	53
Retail		12,899	35		12,934	61	71
Lodging		3,902	20		3,922	16	47
Total Real Estate Exposure(c)	\$	206.581	\$ 331	\$	206.912 (d)	73 %	80 %

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

- (a) Multifamily exposure is largely in California.
 (b) Other Income Producing Properties consists of clients with diversified property types or other property types outside of categories listed in the table above.
 (c) Real Estate exposure is approximately 82% secured; unsecured exposure is approximately 76% investment-grade.
 (d) Included \$33.2 billion of credit exposure associated with the First Republic acquisition.
 (e) Represents drawn exposure as a percentage of credit exposure.

Consumer & Retail

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

					June 3	30, 2023		
(in millions, except ratios)	Lend	Loans and Lending-related Derivative Credit Commitments Receivables exposure %Investment-grade						
Retail ^(a)	\$	35,745	\$	329	\$	36,074	53 %	32 %
Business and Consumer Services		33,127		348		33,475	49	41
Food and Beverage		31,747		1,195		32,942	56	40
Consumer Hard Goods		13,927		285		14,212	47	36
Leisure ^(b)		9,111		121		9,232	25	44
Total Consumer & Retail(c)	\$	123,657	\$	2,278	\$	125,935	50 %	38 %

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

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

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

 (c) Consumer & Retail exposure is approximately 57% secured; unsecured exposure is approximately 79% investment-grade.
- (d) Represents drawn exposure as a percent of credit exposure.

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

					June 3	0, 2023			
(in millions, except ratios)	Lend	oans and ding-related nmitments		erivative ceivables	e	Credit xposure	%Investment-grade	% Drawn(c)	
Exploration & Production ("E&P") and Oil field Services	\$	\$ 16,592		1,186	\$	17,778	56 %	29 %	
Other Oil & Gas(a)		15,289		166		15,455	58	28	
Total Oil & Gas(b)	\$	31,881	\$	1,352	\$	33,233	57 %	29 %	

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

- (a) Other Oil & Gas includes Integrated Oil & Gas companies, Mdstream/Oil Ppeline companies and refineries.
 (b) Oil & Gas exposure is approximately 40% secured, approximately half of which is reserve-based lending to the Exploration & Production sub-sector; unsecured exposure is approximately 68% investment-grade.
 (c) Represents drawn exposure as a percent of credit exposure.

Loans

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

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

Wholesale nonaccrual loan activity

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

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

Wholesale net charge-offs/(recoveries)

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

Modified wholesale loans

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

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

Maturities and sensitivity to changes in interest rates

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

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

- (a) Included \$6.5 billion, \$17.0 billion, and \$9.9 billion of loans in 1 year or less, after 1 year through 5 years, and after 5 years though 15, respectively, associated with the First Republic (a) Included \$12.0 billion, and \$3.8 billion of loans in 1 year or less, and after 1 year through 5 years, respectively, associated with the First Republic acquisition.

 (b) Included \$12.0 billion, and \$3.8 billion in after 1 year through 5 years, and after 5 years though 15, respectively, associated with the First Republic acquisition.

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

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

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

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

	Three months ended June 30,												
	Secured by rea	al estate	Commer and indu		Oth	ner	Total						
(in millions, except ratios)	2023	2022	2023	2022	2023	2022	2023	2022					
Net charge-offs/(recoveries)	\$ 85 \$	2	\$ 81 \$	47	\$ (1)	1	\$ 165 \$	50					
Average retained loans	153,590	120,441	171,684	162,702	322,200	294,707	647,474	577,850					
Net charge-off/(recovery) rate	0.22 %	0.01 %	0.19 %	0.12 %	-%	-%	0.10 %	0.03 %					

	Six months ended June 30,												
	Commercial Secured by real estate and industrial Other									_	Total		
(in millions, except ratios)	2023	2022		2023		2022		2023	2022		2023	2022	
Net charge-offs/(recoveries)	\$ 90 \$	8	\$	151	\$	54	\$	7 \$	18	\$	248 \$	80	
Average retained loans	139,822	119,139		171,136		158,222		313,608	291,312		624,566	568,673	
Net charge-off/(recovery) rate	0.13 %	0.01 %		0.18 %	6	0.07 %		—%	0.01 %	,	0.08 %	0.03 %	

Lending-related commitments

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

Receivables from customers

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

Derivative contracts

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

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

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

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

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

The Firm also holds additional collateral (primarily cash, G7 government securities, other liquid government agency and guaranteed securities, and corporate debt and equity securities) delivered by clients at the initiation of transactions, as well as collateral related to contracts that have a non-daily call frequency and collateral that the Firm has agreed to return but has not yet settled as of the reporting date. Although this collateral does not reduce the balances and is not included in the tables below, it is available as security against potential exposure that could arise should the fair value of the client's derivative contracts move in the Firm's favor. Refer to Note 5 for additional information on the Firm's use of collateral agreements for derivatives transactions.

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

Derivative receivables

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

Ratings profile of derivative receivables

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

Credit portfolio management activities

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

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

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

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

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

ALLOWANCE FOR CREDIT LOSSES

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

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

Discussion of changes in the allowance

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

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

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

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

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

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

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

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

G. 14 G. G. 104 G. G. 101 G. 1			
	Assumption	, 2023	
	4Q23	2Q24	4Q24
U.S. unemployment rate(a)	4.2 %	4.9 %	5.0 %
YoY growth in U.S. real GDPb)	0.5 %	-%	1.0 %

	Assumptions at December 31, 2022										
	2Q23	4Q23	2Q24								
U.S. unemployment rate(a)	3.8 %	4.3 %	5.0 %								
YoY growth in U.S. real GDPb)	1.5 %	0.4 %	—%								

- (a) Reflects quarterly average of forecasted U.S. unemployment rate.
- (b) The year over year growth in U.S. real GDP in the forecast horizon of the central scenario is calculated as the percentage change in U.S. real GDP levels from the prior year.

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

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

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

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

Allowance for credit losses and related information

Allowanios for Great respectation related					2023				2022						
Six months ended June 30,		Consumer,								Consumer,					
(in millions, except ratios)		excluding credit card		Credit card		Wholesale		Total		excluding credit card	Credit card		Wholesale		Total
Allowance for loan losses															
Beginning balance at January 1,	\$	2,040	\$	11,200	\$	6,486	\$	19,726	\$	1,765	10,250) \$	4,371	\$	16,386
Cumulative effect of a change in accounting principle(a)		(489)		(100)		2		(587)		NA		NA	N	4	NA
Gross charge-offs		501		2,432		294		3,227		384	1,505	5	123		2,012
Gross recoveries collected		(247)		(386)		(46)		(679)		(311)	(419	9)	(43)		(773)
Net charge-offs/(recoveries)		254		2,046		248		2,548		73	1,086	3	80		1,239
Provision for loan losses		751		2,546		2,067		5,364		237	1,236	3	1,125		2,598
Other		_		_		25		25			_	-	5		5
Ending balance at June 30,	\$	2,048	\$	11,600	\$	8,332	\$	21,980	\$	1,929	10,400) \$	5,421	\$	17,750
Allowance for lending-related commitments															
Beginning balance at January 1,	\$	76	\$	_	\$	2,306	\$	2,382	\$	113	- 5	- \$	2,148	\$	2,261
Provision for lending-related commitments		52		_		(253)		(201)		(2)	_	_	(37)		(39)
Other		1		_		4		5		(1)	_	_	` 1 [′]		`
Ending balance at June 30,	\$	129	\$	_	\$	2,057	\$	2,186	\$	110 \$	-	- \$	2,112	\$	2,222
Impairment methodology															
Asset-specific ^(b)	\$	(971)	\$	_	\$	478	\$	(493)	\$	(676)	\$ 227	7 \$	332	\$	(117)
Portf olio-based	٠	3,019	۳	11,600	۳	7,854	۳	22,473	Ψ	2,605	10,173		5,089	Ψ	17,867
Total allowance for loan losses	\$	2,048	\$	11,600	\$	8,332	\$	21,980	\$	1,929				\$	17,750
Impairment methodology															
Asset-specific	\$	_	\$	_	\$	65	\$	65	\$	_ \$		- \$	78	\$	78
Portf olio-based	•	129	•	_	•	1,992	•	2,121	•	110	_	- `	2,034	*	2,144
Total allowance for lending-related commitments	\$	129	\$	_	\$	2,057	\$	2,186	\$	110	-	- \$	2,112	\$	2,222
Total allowance for investment securities		N	Α	N	Α	N.	A\$	104		NA		NA	N	۹\$	47
Total allowance for credit losses(c)(d)	\$	2,177	\$	11,600	\$	10,389	\$	24,270	\$	2,039	10,400) \$	7,533	\$	20,019
Memo:															
Retained loans, end-of-period	\$	396,195	\$	191,348	\$	668,145	\$	1,255,688	\$	302,631	165,494	1 \$	584,265	\$	1,052,390
Retained loans, average		330,227		183,757		624,566		1,138,550		297,566	153,94	1	568,673		1,020,180
Credit ratios															
Allowance for loan losses to retained loans		0.52 9	%	6.06	%	1.25 9	%	1.75 %		0.64 %	6.28	3 %	0.93 %	6	1.69 %
Allowance for loan losses to retained nonaccrual loans(e)		54		N	М	321		345		46		NM	260		283
Allowance for loan losses to retained nonaccrual loans excluding credit card		54		N	М	321		163		46		NM	260		117
Net charge-off/(recovery) rates		0.16		2.25		0.08		0.45		0.05	1.42	2	0.03		0.24

⁽a) Represents the impact to the allowance for loan losses upon the Firm's adoption of changes to the TDR accounting guidance on January 1, 2023. The adoption of this guidance eliminated the existing accounting and disclosure requirements for TDRs, including the requirement to measure the allowance using a discounted cash flow ("DCF") methodology. The Firmelected to change from an asset-specific allowance approach to its non-DCF, portfolio-based allowance approach for modified loans to troubled borrowers for all portfolios except collateral-dependent loans and nonaccrual risk-rated loans, for which the asset-specific allowance approach will continue to apply. Refer to Note 1 for further information.

(b) Includes collateral-dependent loans, including those for which foreclosure is deemed probable, and nonaccrual risk-rated loans for all periods presented. Prior periods also include non collateral-dependent TDRs or reasonably expected TDRs and modified purchased credit deteriorated ("PCD") loans.

(c) At June 30, 2023, in addition to the allowance for credit losses in the table above, the Firmalso had an allowance for credit losses of \$18 million associated with certain accounts receivable in OTB.

(d) As of June 30, 2023 included\$1.2 billion allowance for credit losses associated with the First Republic acquisition.

receivable in CIB.

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

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

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

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

INVESTMENT PORTFOLIO RISK MANAGEMENT

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

Investment securities risk

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

Principal investment risk

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

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

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

- (a) As of June 30, 2023, included approximately \$1.2 billion in tax-oriented investments in QB associated with the First Republic acquisition.
- (b) Includes the Firms 40% ownership in C6 Bank and 49% ownership in Viva Wallet.

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

MARKET RISK MANAGEMENT

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

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

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

Value-at-risk

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

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

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

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

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

Total VaR

Total Val							Thre	e m	nths er	nded						
	_		June	e 30, 20	23		11111		h 31, 2				June 3	30, 2022	,	
(in millions)	_	Avg.		Mn		Max	 Avg.	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Min	.0_0	Max	 Avg.		Min		Max
CIB trading VaR by risk type																
Fixed income	\$	57	\$	50	\$	66	\$ 56	\$	45	\$	71	\$ 60	\$	48	\$	79
Foreign exchange		12		7		24	10		6		17	8		4		13
Equities		8		5		11	7		5		10	11		7		15
Commodities and other		12		8		17	15		11		19	14		12		17
Diversification benefit to CIB trading VaRa)		(48)		NM		NM	(44)		NM		NM	(43)		NM		NM
CIB trading VaR		41		31		50	44		34		55	50		38		66
Oredit Portfolio VaR ^(b)		14		11		18	11		8		17	17		6		31 (e)
Diversification benefit to CIB VaRa)		(11)		NM		NM	(10)		NM		NM	(15)		NM		NM
CIB VaR		44		34		55	45		35		58	52		38		70
COB VaR		9 (d)		6		14	11		6		15	5 ^(d)		4		6
Corporate and other LOB VaRc)		13		11		15	15		13		17	10		9		11
Diversification benefit to other VaRa)		(7)		NM		NM	(8)		NM		NM	(3)		NM		NM
Other VaR		15		13		19	18		14		22	12		10		14
Diversification benefit to CIB and other VaR _a)		(12)		NM		NM	(16)		NM		NM	(10)		NM		NM
Total VaR	\$	47	\$	36	\$	56	\$ 47	\$	37	\$	57	\$ 54	\$	41	\$	71

- (a) Diversification benefit represents the difference between the portfolio VaR and the sum of its individual components. This reflects the non-additive nature of VaR due to imperfect correlation across LOBs. Corporate, and risk types. For maximum and minimum VaR, diversification benefit is not meaningful as the maximum and minimum VaR for each portfolio may have occurred on different trading days than the components.
- (b) Credit portfolio VaR includes the derivative CVA, hedges of the CVA and hedges of the retained loan portfolio, which are reported in principal transactions revenue. This VaR does not include the retained loan portfolio, which is not reported at fair value. In the first quarter of 2022, in line with the Firmts internal model governance, the credit risk component of CVA related to certain counterparties was removed from Credit Portfolio VaR due to the widening of the credit spreads for those counterparties to elevated levels. The related hedges were also removed to maintain consistency. This exposure is now reflected in other sensitivity-based measures.

 (c) Corporate and other LOB VaR includes a legacy private equity position in Corporate which is publicly traded.

 (d) The increase in COB VaR is driven by interest rate volatility impacting Home Lending warehouse loans, MSR, and related hedges.

 (e) For the period ended June 30, 2022, maximum Credit Portfolio VaR remained elevated due to the effects of nickel price increases and the associated volatility in the nickel market which

- occurred during the first quarter of 2022.

Quarter over quarter results

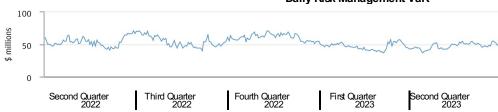
Average total VaR was flat for the three months ended June 30, 2023, when compared with March 31, 2023, reflecting increases in fixed income offset by market volatility relating to commodities rolling out of the oneyear historical look-back period.

Year over year results

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

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

Daily Risk Management VaR



VaR backtesting

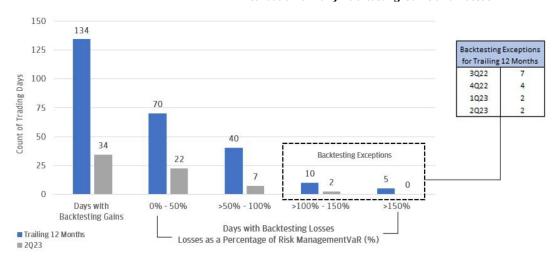
The Firm performs daily VaR model backtesting, which compares the daily Risk Management VaR results with the daily gains and losses that are utilized for VaR backtesting purposes. The gains and losses depicted in the chart below do not reflect the Firm's reported revenue as they exclude certain components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

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

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

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

Distribution of Daily Backtesting Gains and Losses



Structural interest rate risk management

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

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

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

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

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

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

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

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

(in billions)	J	une 30, 2023 (a)	December	31, 2022
Parallel shift:				
+100 bps shift in rates	\$	2.5	\$	(2.0)
-100 bps shift in rates		(2.2)		2.4
Steeper yield curve:				
+100 bps shift in long-term rates		0.6		8.0
-100 bps shift in short-term rates		(1.6)		3.2
Flatter yield curve:				
+100 bps shift in short-term rates		1.8		(2.8)
-100 bps shift in long-term rates		(0.6)		(0.9)

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

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

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

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

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

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

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

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

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

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

Other sensitivity-based measures

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

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

•	, ,			
Gain/(loss) (in millions)				December 31,
Activity	Description	Sensitivity measure	June 30, 2023	2022
Debt and equity(a)				
Asset Management activities	Consists of seed capital and related hedges; fund co- investments(c); and certain deferred compensation and related hedges(d)	10% decline in market value	\$ (58)	\$ (56)
Other debt and equity	Consists of certain real estate-related fair value option elected loans, privately held equity and other investments held at fair value ^(c)	10% decline in market value	(1,016)	(1,046)
Credit- and funding-related exposures				
Non-USD LTD cross-currency basis	Represents the basis risk on derivatives used to hedge the foreign exchange risk on the non-USD LTD $^{\rm e)}$	1 basis point parallel tightening of cross currency basis	(11)	(12)
Non-USD LTD hedges foreign currency ("FX") exposure	Primarily represents the foreign exchange revaluation on the fair value of the derivative hedges ^(a)	10% depreciation of currency	4	3
Derivatives – funding spread risk	Impact of changes in the spread related to derivatives $FVA^{\scriptscriptstyle{(c)}}$	1 basis point parallel increase in spread	(4)	(4)
CVA - counterparty credit risk(b)	Oredit risk component of CVA and associated hedges	10% credit spread widening	_	(1)
Fair value option elected liabilities – funding spread risk	Impact of changes in the spread related to fair value option elected liabilities $\text{DVA}^{\scriptscriptstyle(e)}$	1 basis point parallel increase in spread	45	43
Fair value option elected liabilities – interest rate sensitivity	Interest rate sensitivity on fair value option elected liabilities resulting from a change in the Firm's own credit spread(0)	1 basis point parallel increase in spread	_	_
	Interest rate sensitivity related to risk management of changes in the Firm's own credit spread on the fair value option elected liabilities noted above ⁽²⁾	1 basis point parallel increase in spread	_	_

⁽a) Excludes equity securities without readily determinable fair values that are measured under the measurement alternative. Refer to Note 2 for additional information.
(b) In the first quarter of 2022, in line with the Firmts internal model governance, the credit risk component of CVA related to certain counterparties was removed from Credit Portfolio VaR due to the widening of the credit spreads for those counterparties to elevated levels. The related hedges were also removed to maintain consistency. This exposure is now reflected in other sensitivity-based measures.

(c) Impact recognized through net revenue.

⁽d) Impact recognized through noninterest expense.

(e) Impact recognized through OCI.

COUNTRY RISK MANAGEMENT

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

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

Risk Reporting

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

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

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

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

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

(in billions)		J	une 30, 2023	3		December 31, 2022(1)
	Deposits with banks ^(b)	Lending(c)	Trading and investing(d)	Other(e)	Total exposure	Total exposure
Germany	\$ 94.0	\$ 12.5	\$ 5.5	\$ 0.3	\$ 112.3	\$ 93.2
United Kingdom	44.1	25.6	17.4	1.9	89.0	70.1
Japan	32.7	2.7	7.7	0.3	43.4	55.8
Brazil	1.9	4.6	11.2	_	17.7	17.8
Canada	2.4	10.7	3.0	0.2	16.3	14.4
Australia	5.0	6.3	3.0	_	14.3	25.7
Switzerland	7.6	3.3	1.4	1.7	14.0	15.3
France	0.4	10.7	0.1	1.4	12.6	18.1
China	3.3	5.0	4.1	_	12.4	13.7
Belgium	6.7	1.7	1.4	_	9.8	9.2
Singapore	1.8	3.9	3.6	0.2	9.5	9.9
India	1.2	3.6	3.9	0.6	9.3	9.0
South Korea	1.0	3.8	3.5	0.2	8.5	10.0
Netherlands	0.1	6.4	0.6	0.2	7.3	7.1
Mexico	1.0	4.3	2.0	_	7.3	5.4
Saudi Arabia	0.8	4.0	1.8	_	6.6	7.9
Spain	0.4	5.1	0.9	_	6.4	5.8
Hong Kong SAR	2.3	1.4	0.8	0.4	4.9	4.5
Luxembourg	0.8	2.6	1.3	_	4.7	5.3
Sweden	1.2	3.4	(0.1)	_	4.5	4.4

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

CRITICAL ACCOUNTING ESTIMATES USED BY THE FIRM

JPMorgan Chase's accounting policies and use of estimates are integral to understanding its reported results. The Firm's most complex accounting estimates require management's judgment to ascertain the appropriate carrying value of assets and liabilities. The Firm has established policies and control procedures intended to ensure that estimation methods, including any judgments made as part of such methods, are wellcontrolled, independently reviewed and applied consistently from period to period. The methods used and judgments made reflect, among other factors, the nature of the assets or liabilities and the related business and risk management strategies, which may vary across the Firm's businesses and portfolios. In addition, the policies and procedures are intended to ensure that the process for changing methodologies occurs in an appropriate manner. The Firm believes its estimates for determining the carrying value of its assets and liabilities are appropriate. The following is a brief description of the Firm's critical accounting estimates involving significant judgments.

Allowance for credit losses

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

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

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

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

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

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

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

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

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

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

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

ario assumes an elevated U.S. unemployment rate, averaging approximately 1.6% higher over the eight-quarter forecast, with a peak difference of

2.2% in the first quarter of 2024; lower

U.S. real GDP with a slower recovery, remaining approximately 3.1% lower at the end of the eight-quarter forecast, with a peak difference of approximately 3.4% in the third quarter of 2024; and lower national HPI with a peak difference of approximately 10.5% in the first quarter of 2025. This analysis is not intended to estimate expected future changes in the allowance for credit losses, for a number of reasons, including:

- The allowance as of June 30, 2023, reflects credit losses beyond those estimated under the central scenario due to the weight placed on the adverse scenarios.
- The impacts of changes in many MEVs are both interrelated and nonlinear, so the results of this analysis cannot be simply extrapolated for more severe changes in macroeconomic variables.
- Expectations of future changes in portfolio composition and borrower behavior can significantly affect the allowance for credit losses.

To demonstrate the sensitivity of credit loss estimates to macroeconomic forecasts as of June 30, 2023, the Firm compared the modeled estimates under its relative adverse scenario to its central scenario. Without considering offsetting or correlated effects in other qualitative components of the Firm's allowance for credit losses, the comparison between these two scenarios for the exposures below reflect the following differences:

- An increase of approximately \$750 million for residential real estate loans and lending-related commitments, including the First Republic portfolios
- An increase of approximately \$2.4 billion for credit card loans
- An increase of approximately \$3.8 billion for wholesale loans and lending-related commitments, excluding the First Republic portfolios.

This analysis relates only to the modeled credit loss estimates and is not intended to estimate changes in the overall allowance for credit losses as it does not reflect any potential changes in other adjustments to the quantitative calculation, which would also be influenced by the judgment management applies to the modeled lifetime loss estimates to reflect the uncertainty and imprecision of these modeled lifetime loss estimates based on then-current circumstances and conditions.

Recognizing that forecasts of macroeconomic conditions are inherently uncertain, particularly in light of the recent economic conditions, the Firm believes that its process to consider the available information and associated risks and uncertainties is appropriately governed and that its estimates of expected credit losses were reasonable and appropriate for the period ended June 30, 2023.

Fair value

JPMorgan Chase carries a portion of its assets and liabilities at fair value. The majority of such assets and liabilities are measured at fair value on a recurring basis, including derivatives, structured note products and certain securities financing agreements. Certain assets and liabilities are measured at fair value on a nonrecurring basis, including certain mortgage, home equity and other loans, where the carrying value is based on the fair value of the underlying collateral.

Assets measured at fair value

The following table includes the Firm's assets measured at fair value and the portion of such assets that are classified within level 3 of the fair value hierarchy. Refer to Note 2 for further information.

June 30, 2023 (in millions, except ratios)	Total assets at fair 7 value			Total level 3 assets
Federal funds sold and securities purchased under resale agreements	\$	322,579	\$	_
Securities borrowed		55,905		_
Trading assets:				
Trading-debt and equity instruments		572,739		3,313
Derivative receivables(a)		64,217		10,749
Total trading assets		636,956		14,062
AFS securities		203,262		267
Loans		38,789		3,808
MSRs		8,229		8,229
Other		13,250		417
Total assets measured at fair value on a recurring basis		1,278,970		26,783
Total assets measured at fair value on a nonrecurring basis		1,936		1,126
Total assets measured at fair value	\$	1,280,906	\$	27,909
Total Firm assets	\$	3,868,240		_
Level 3 assets at fair value as a percentage of total Firmassets ^(a)				0.7 %
Level 3 assets at fair value as a percentage of total Firmassets at fair value(a)				2.2 %

(a) For purposes of the table above, the derivative receivables total reflects the impact of netting adjustments; however, the \$10.7 billion of derivative receivables classified as level 3 does not reflect the netting adjustment as such netting is not relevant to a presentation based on the transparency of inputs to the valuation of an asset. The level 3 balances would be reduced if netting were applied, including the netting benefit associated with cash collateral.

Valuation

Estimating fair value requires the application of judgment. The type and level of judgment required is largely dependent on the amount of observable market information available to the Firm. For instruments valued using internally developed valuation models and other valuation techniques that use significant unobservable inputs and are therefore classified within level 3 of the fair value hierarchy, judgments used to estimate fair value are more significant than those required when estimating the fair value of instruments classified within levels 1 and 2.

In arriving at an estimate of fair value for an instrument within level 3, management must first determine the appropriate valuation model or other valuation technique to use. Second, the lack of observability of certain significant inputs requires management to assess relevant empirical data in deriving valuation inputs including, for example, transaction details, yield curves, interest rates, prepayment speeds, default rates, volatilities, correlations, prices (such as commodity, equity or debt prices), valuations of comparable instruments, foreign exchange rates and credit curves. Refer to Note 2 for a further discussion of the valuation of level 3 instruments, including unobservable inputs used.

For instruments classified in levels 2 and 3, management judgment must be applied to assess the appropriate level of valuation adjustments to reflect counterparty credit quality, the Firm's creditworthiness, market funding rates, liquidity considerations, unobservable parameters, and for portfolios that meet specified criteria, the size of the net open risk position. The judgments made are typically affected by the type of product and its specific contractual terms, and the level of liquidity for the product or within the market as a whole. In periods of heightened market valuality and uncertainty judgments are further affected by the wider variation of reasonable valuation estimates, particularly for positions that are less liquid. Refer to Note 2 for a further discussion of valuation adjustments applied by the Firm.

Imprecision in estimating unobservable market inputs or other factors can affect the amount of gain or loss recorded for a particular position. Furthermore, while the Firm believes its valuation methods are appropriate and consistent with those of other market participants, the methods and assumptions used reflect management judgment and may vary across the Firm's businesses and portfolios.

The Firm uses various methodologies and assumptions in the determination of fair value. The use of methodologies or assumptions different than those used by the Firm could result in a different estimate of fair value at the reporting date. Refer to Note 2 for a detailed discussion of the Firm's valuation process and hierarchy, and its determination of fair value for individual financial instruments.

Credit card rewards liability

The credit card rewards liability was \$12.2 billion and \$11.3 billion at June 30, 2023 and December 31, 2022, respectively, and is recorded in accounts payable and other liabilities on the Consolidated balance sheets. The increase in the liability was predominantly driven by continued growth in rewards points earned on higher spend and promotional offers outpacing redemptions throughout 2023, and, to a lesser extent, adjustments to certain reward program terms in the second quarter. Refer to pages 151-152 of JPMorgan Chase's 2022 Form 10-K for a description of the significant assumptions and sensitivities, associated with the Firm's credit card rewards liability.

Income taxes

Refer to Income taxes on page 152 of JPMorgan Chase's 2022 Form 10-K for a description of the significant assumptions, judgments and interpretations associated with the accounting for income taxes.

Goodwill impairment

Management applies significant judgment when testing goodwill for impairment. Refer to Goodwill impairment on page 151 of JPMorgan Chase's 2022 Form 10-K for a description of the significant valuation judgments associated with goodwill impairment.

Refer to Note 15 for additional information on goodwill, including the goodwill impairment assessment as of June 30, 2023.

Litigation reserves

Refer to Note 26 of this Form 10-Q, and Note 30 of JPMorgan Chase's 2022 Form 10-K for a description of the significant estimates and judgments associated with establishing litigation reserves.

ACCOUNTING AND REPORTING DEVELOPMENTS

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

Standard	Summary of guidance	Effects on financial statements
Reference Rate Reform Issued March 2020 and updated January 2021 and December 2022	 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. 	 Issued and effective March 12, 2020. The January 7, 2021 and December 21, 2022 updates were effective when issued. Refer to Accounting and Reporting Developments on page 153 of JPMorgan Chase's 2022 Form 10-K for further information.

FASB Standards Adopted since January 1, 2023

Standard	Summary of guidance	Effects on financial statements
Derivatives and Hedging: Fair Value Hedging – Portfolio Layer Method 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. 	 Adopted prospectively on January 1, 2023. Refer to Note 1 for further information.
	 Clarifies the types of derivatives that can be used as hedges, and the balance sheet presentation and disclosure requirements for the hedge accounting adjustments. 	
	 Allows a one-time reclassification from HTM to AFS upon adoption. 	
Financial Instruments – Credit Losses: Troubled Debt Restructurings and Vintage Disclosures	 Eliminates existing accounting and disclosure requirements for Troubled Debt Restructurings, including the requirement to measure the allowance using a discounted cash flow methodology. 	 Adopted under the modified retrospective method on January 1, 2023. Refer to Note 1 for further information.
Issued March 2022	 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. 	

FASB Standards Issued but not yet Adopted

Standard	Summary of guidance	Effects on financial statements
Investments - Equity Method and Joint Ventures: Accounting for Investments in Tax Credit Structures Using the Proportional	more types of tax-oriented investments (beyond low income housing tax credit investments) on a program-by-program	Required effective date: January 1, 2024. (a) The Firm is currently evaluating the potential impact on the Consolidated Financial Statements.
Amortization Method Issued March 2023	 May be adopted using a full retrospective method, or a modified retrospective method wherein the effect of adoption is reflected as an adjustment to retained earnings at the effective date. 	
(a) Early adoption is permitted.		

FORWARD-LOOKING STATEMENTS

From time to time, the Firm has made and will make forward-looking statements. These statements can be identified by the fact that they do not relate strictly to historical or current facts. Forward-looking statements often use words such as "anticipate," "target," "expect," "estimate," "intend," "plan," "goal," "believe," or other words of similar meaning. Forward-looking statements provide JPMorgan Chase's current expectations or forecasts of future events, circumstances, results or aspirations. JPMorgan Chase's disclosures in this Form 10-Q contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. The Firm also may make forward-looking statements in its other documents filed or furnished with the SEC. In addition, the Firm's senior management may make forward-looking statements orally to investors, analysts, representatives of the media and others.

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

- Local, regional and global business, economic and political conditions and geopolitical events, including the war in Ukraine;
- Changes in laws, rules and regulatory requirements, including capital and liquidity requirements affecting the Firm's businesses, and the ability of the Firm to address those requirements;
- Heightened regulatory and governmental oversight and scrutiny of JPMorgan Chase's business practices, including dealings with retail customers;
- · Changes in trade, monetary and fiscal policies and laws;
- · Changes in the level of inflation;
- Changes in income tax laws, rules and regulations;
- Changes in FDIC assessments;
- Securities and capital markets behavior, including changes in market liquidity and volatility;
- Changes in investor sentiment or consumer spending or savings behavior:
- · Ability of the Firm to manage effectively its capital and liquidity;
- · Changes in credit ratings assigned to the Firm or its subsidiaries;
- · Damage to the Firm's reputation;
- Ability of the Firm to appropriately address social, environmental and sustainability concerns that may arise, including from its business activities;
- Ability of the Firm to deal effectively with an economic slowdown or other economic or market disruption, including, but not limited to, in the interest rate environment;

- Technology changes instituted by the Firm, its counterparties or competitors;
- · The effectiveness of the Firm's control agenda;
- Ability of the Firm to develop or discontinue products and services, and the extent to which products or services previously sold by the Firm require the Firm to incur liabilities or absorb losses not contemplated at their initiation or origination;
- Acceptance of the Firm's new and existing products and services by the marketplace and the ability of the Firm to innovate and to increase market share;
- · Ability of the Firm to attract and retain qualified and diverse employees;
- Ability of the Firm to control expenses;
- · Competitive pressures;
- Changes in the credit quality of the Firm's clients, customers and counterparties;
- Adequacy of the Firm's risk management framework, disclosure controls and procedures and internal control over financial reporting;
- Adverse judicial or regulatory proceedings;
- Ability of the Firm to determine accurate values of certain assets and liabilities;
- Occurrence of natural or man-made disasters or calamities, including health emergencies, the spread of infectious diseases, epidemics or pandemics, an outbreak or escalation of hostilities or other geopolitical instabilities, the effects of climate change or extraordinary events beyond the Firm's control, and the Firm's ability to deal effectively with disruptions caused by the foregoing;
- Ability of the Firm to maintain the security of its financial, accounting, technology, data processing and other operational systems and facilities:
- Ability of the Firm to withstand disruptions that may be caused by any failure of its operational systems or those of third parties;
- Ability of the Firm to effectively defend itself against cyberattacks and other attempts by unauthorized parties to access information of the Firm or its customers or to disrupt the Firm's systems; and
- The other risks and uncertainties detailed in Part I, Item 1A: Risk Factors in JPMorgan Chase's 2022 Form 10-K.

Any forward-looking statements made by or on behalf of the Firm speak only as of the date they are made, and JPMorgan Chase does not undertake to update any forward-looking statements. The reader should, however, consult any further disclosures of a forward-looking nature the Firm may make in any subsequent Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q or Current Reports on Form 8-K.

JPMorgan Chase & Co.
Consolidated statements of income (unaudited)

oonsondated statements	Three months			Six months e	nded .	June 30,
(in millions, except per share data)	2023	3	2022	 2023		2022
Revenue						
Investment banking fees \$	1,513	\$	1,586	\$ 3,162	\$	3,594
Principal transactions	6,910		4,990	14,525		10,095
Lending- and deposit-related fees	1,828		1,873	3,448		3,712
Asset management fees	3,774		3,517	7,239		7,169
Commissions and other fees	1,739		1,723	3,434		3,433
Investment securities losses	(900))	(153)	(1,768)		(547)
Mortgage fees and related income	278		378	499		838
Card income	1,094		1,133	2,328		2,108
Other income	3,292		540	4,299		2,030
Noninterest revenue	19,528		15,587	37,166		32,432
Interest income	41,644		18,646	78,648		34,142
Interest expense	19,865		3,518	36,158		5,142
Net interest income	21,779		15,128	42,490		29,000
Total net revenue	41,307		30,715	79,656		61,432
Provision for credit losses	2,899		1,101	5,174		2,564
Noninterest expense						
Compensation expense	11,216		10,301	22,892		21,088
Occupancy expense	1,070		1,129	2,185		2,263
Technology, communications and equipment expense	2,267		2,376	4,451		4,736
Professional and outside services	2,561		2,469	5,009		5,041
Marketing	1,122		881	2,167		1,801
Other expense	2,586		1,593	4,225		3,011
Total noninterest expense	20,822		18,749	40,929		37,940
Income before income tax expense	17,586		10,865	33,553		20,928
Income tax expense	3,114		2,216	6,459		3,997
Net income \$	14,472	\$	8,649	\$ 27,094	\$	16,931
Net income applicable to common stockholders \$	14,011	\$	8,195	\$ 26,204	\$	16,039
Net income per common share data						
Basic earnings per share \$	4.76	\$	2.77	\$ 8.86	\$	5.40
Diluted earnings per share	4.75		2.76	8.85		5.39
Weighted-average basic shares	2,943.8		2,962.2	2,956.1		2,969.6
Weighted-average diluted shares	2,948.3		2,966.3	2,960.5		2,973.7

JPMorgan Chase & Co.
Consolidated statements of comprehensive income (unaudited)

	Thr	Six months ended June 30,				
(in millions)		2023	2022	2023	2022	
Net income	\$	14,472 \$	8,649 \$	27,094 \$	16,931	
Other comprehensive income/(loss), after-tax						
Unrealized gains/(losses) on investment securities		757	(4,031)	2,969	(11,484)	
Translation adjustments, net of hedges		70	(679)	267	(741)	
Fair value hedges		11	51	(10)	161	
Cash flow hedges		(497)	(1,348)	301	(4,139)	
Defined benefit pension and OPEB plans		(6)	20	(61)	87	
DVA on fair value option elected liabilities		(207)	1,185	(415)	1,831	
Total other comprehensive income/(loss), after-tax		128	(4,802)	3,051	(14,285)	
Comprehensive income	\$	14,600 \$	3,847 \$	30,145 \$	2,646	

JPMorgan Chase & Co. Consolidated balance sheets (unaudited)

constituted buttined sheets (unaddred)			
(in millions, except share data)	June 30, 2023	De	ecember 31, 2022
Assets			
Cash and due from banks	\$ 26,064	\$	27,697
Deposits with banks	469,059		539,537
Federal funds sold and securities purchased under resale agreements (included \$322,579 and \$311,883 at fair value)	325,628		315,592
Securities borrowed (included \$55,905 and \$70,041 at fair value)	163,563		185,369
Trading assets (included assets pledged of \$142,625 and \$93,687)	636,996		453,799
Available-for-sale securities (amortized cost of \$209,876 and \$216,188; included assets pledged of \$12,864 and \$9,158)	203,262		205,857
Held-to-maturity securities	408,941		425,305
Investment securities, net of allowance for credit losses	612,203		631,162
Loans (included \$38,789 and \$42,079 at fair value)	1,300,069		1,135,647
Allow ance for loan losses	(21,980)		(19,726)
Loans, net of allowance for loan losses	1,278,089		1,115,921
Accrued interest and accounts receivable	111,561		125,189
Premises and equipment	29,493		27,734
Goodwill, MSRs and other intangible assets	64,238		60,859
Other assets (included \$14,166 and \$14,921 at fair value and assets pledged of \$5,844 and \$7,998)	151,346		182,884
Total assets ^(a)	\$ 3,868,240	\$	3,665,743
Liabilities			
Deposits (included \$51,568 and \$28,620 at fair value)	\$ 2,398,962	\$	2,340,179
Federal funds purchased and securities loaned or sold under repurchase agreements (included \$216,604 and \$151,999 at fair value)	266,272		202,613
Short-term borrowings (included \$17,942 and \$15,792 at fair value)	41,022		44,027
Trading liabilities	178,809		177,976
Accounts payable and other liabilities (included \$5,101 and \$7,038 at fair value)	286,934		300,141
Beneficial interests issued by consolidated VIEs (included \$1 and \$5 at fair value)	19,647		12,610
Long-termdebt (included \$78,609 and \$72,281 at fair value)	364,078		295,865
Total liabilities ^(a)	3,555,724		3,373,411
Commitments and contingencies (refer to Notes 22, 23 and 24)			
Stockholders' equity			
Preferred stock (\$1 par value; authorized 200,000,000 shares; issued 2,740,375 shares)	27,404		27,404
Common stock (\$1 par value; authorized 9,000,000,000 shares; issued 4,104,933,895 shares)	4,105		4,105
Additional paid-in capital	89,578		89,044
Retained earnings	317,359		296,456
Accumulated other comprehensive losses	(14,290)		(17,341)
Treasury stock, at cost (1,198,848,622 and 1,170,676,094 shares)	(111,640)		(107,336)
Total stockholders' equity	312,516		292,332
Total liabilities and stockholders' equity	\$ 3,868,240	\$	3,665,743

(a) The following table presents information on assets and liabilities related to VIEs that are consolidated by the Firmat June 30, 2023, and December 31, 2022. The assets of the consolidated VIEs are used to settle the liabilities of those entities. The holders of the beneficial interests generally do not have recourse to the general credit of JPVorgan Chase. The assets and liabilities in the table below include third-party assets and liabilities of consolidated VIEs and exclude intercompany balances that eliminate in consolidation. Refer to Note 14 for a further discussion.

(in millions)	June 30, 2023	December 31, 2022
Assets		
Trading assets	\$ 2,368	\$ 2,151
Loans	39,125	34,411
All other assets	532	550
Total assets	\$ 42,025	\$ 37,112
Liabilities		
Beneficial interests issued by consolidated VIEs	\$ 19,647	\$ 12,610
All other liabilities	247	279
Total liabilities	\$ 19,894	\$ 12,889

JPMorgan Chase & Co. Consolidated statements of changes in stockholders' equity (unaudited)

	Three months	ended Ju	ine 30.	Six month	s ende	d June 30.
(in millions, except per share data)	 2023		2022	2023	2	2022
Preferred stock						
Balance at the beginning of the period	\$ 27,404	\$	32,838	\$ 27,40	4 \$	34,838
Issuance	_		_	-	_	_
Redemption	_		_	-	_	(2,000)
Balance at June 30	27,404		32,838	27,40	4	32,838
Common stock						
Balance at the beginning and end of the period	4,105		4,105	4,10	5	4,105
Additional paid-in capital						
Balance at the beginning of the period	89,155		88,260	89,04	4	88,415
Shares issued and commitments to issue common stock for employee share-based					_	
compensation awards, and related tax effects	423		354	53	-	199
Balance at June 30	89,578		88,614	89,57	8	88,614
Retained earnings						
Balance at the beginning of the period	306,208		277,177	296,45		272,268
Cumulative effect of change in accounting principles	_		_	44	9	_
Net income	14,472		8,649	27,09	4	16,931
Dividends declared:						
Preferred stock	(373)		(410)	(72	,	(807)
Common stock (\$1.00 and \$1.00 per share and \$2.00 and \$2.00 per share, respectively)	(2,948)		(2,971)	(5,91	1)	(5,947)
Balance at June 30	317,359		282,445	317,35	9	282,445
Accumulated other comprehensive income/(loss)						
Balance at the beginning of the period	(14,418)		(9,567)	(17,34	1)	(84)
Other comprehensive income/(loss), after-tax	128		(4,802)	3,05	1	(14,285)
Balance at June 30	(14,290)		(14,369)	(14,29	0)	(14,369)
Treasury stock, at cost						
Balance at the beginning of the period	(109,372)		(106,914)	(107,33	6)	(105,415)
Repurchase	(2,316)		(622)	(5,27	1)	(3,122)
Reissuance	48		` 46	96	7	1,047
Balance at June 30	(111,640)		(107,490)	(111,64	0)	(107,490)
Total stockholders' equity	\$ 312,516	\$	286,143	\$ 312,51	6 \$	286,143

Effective January 1, 2023, the Firm adopted the Financial Instruments – Credit Losses: Troubled Debt Restructurings and Derivatives and Hedging: Fair Value Hedging – Portfolio Layer Method accounting guidance. Refer to Note 1 for further information.

JPMorgan Chase & Co. Consolidated statements of cash flows (unaudited)

		Six months e	nded	
(in millions)		2023		2022
Operating activities	•	07.004	•	40.004
Net income	\$	27,094	\$	16,931
Adjustments to reconcile net income to net cash used in operating activities:		- 4-4		0.504
Provision for credit losses		5,174		2,564
Depreciation and amortization		2,156		3,609
Deferred tax (benefit)/expense		(2,238)		(2,086
Bargain purchase gain associated with the First Republic acquisition		(2,712)		
Other		3,008		2,172
Originations and purchases of loans held-for-sale		(48,270)		(102,857
Proceeds from sales, securitizations and paydowns of loans held-for-sale		47,746		116,764
Net change in:				
Trading assets		(178,766)		(53,816
Securities borrowed		21,835		3,379
Accrued interest and accounts receivable		16,107		(43,051
Other assets		44,599		(14,930)
Trading liabilities		(4,846)		23,646
Accounts payable and other liabilities		(24,563)		70,976
Other operating adjustments		1,300		800
Net cash provided by/(used in) operating activities		(92,376)		24,101
Investing activities				,
Net change in:				
Federal funds sold and securities purchased under resale agreements		(9,816)		(60,833
Held-to-maturity securities:		(0,010)		(00,000
Proceeds from paydowns and maturities		13,762		20.952
Purchases		(4,141)		(27,490)
Available-for-sale securities:		(4,141)		(21,400)
Proceeds from paydowns and maturities		23,470		21,913
Proceeds fromsales		69,875		36,217
Richases		(52,433)		(66,200)
Proceeds from sales and securitizations of loans held-for-investment		19,526		22,185
Other changes in loans, net		(33,353)		(67,802)
Net cash used in the First Republic acquisition		(9,920)		(07,002
		(11,419)		(4.752)
All other investing activities, net		5,551		(4,753)
Net cash provided by/(used in) investing activities		5,551		(125,811)
Financing activities Net change in:				
<u>v</u>		(27,782)		5.841
Deposits Endowed funds by websered and accumition learned or cold under you websere as weaponets		63.590		28.586
Federal funds purchased and securities loaned or sold under repurchase agreements		,		20,500 5.622
Short-termborrowings		(3,135)		5,622 552
Beneficial interests issued by consolidated VIEs		7,708		
Proceeds fromlong-termborrowings		19,357		45,873
Payments of long-termborrowings		(32,003)		(25,991)
Redemption of preferred stock		-		(2,000)
Treasury stock repurchased		(5,167)		(3,162)
Dividends paid		(6,651)		(6,774
All other financing activities, net		(1,275)		423
Net cash provided by financing activities		14,642		48,970
Effect of exchange rate changes on cash and due from banks and deposits with banks		72		(18,834
Net decrease in cash and due from banks and deposits with banks		(72,111)		(71,574
Cash and due from banks and deposits with banks at the beginning of the period		567,234		740,834
Cash and due from banks and deposits with banks at the end of the period	\$	495,123	\$	669,260
Cash interest paid	\$	35,250	\$	4,457
Cash income taxes paid, net	•	5,466		3,100

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (unaudited)

Note 1 - Basis of presentation

JPMorgan Chase & Co. ("JPMorgan Chase" or the "Firm"), a financial holding company incorporated under Delaware law in 1968, is a leading financial services firm based in the U.S., with operations worldwide. The Firm is a leader in investment banking, financial services for consumers and small businesses, commercial banking, financial transaction processing and asset management. On May 1, 2023, JPMorgan Chase acquired certain assets and assumed certain liabilities of First Republic Bank (the "First Republic acquisition") from the Federal Deposit Insurance Corporation ("FDIC"). The Firm continues to convert certain operations, and to integrate clients, products and services, associated with the First Republic acquisition, to align with the Firm's businesses and operations. The Firm also continues to evaluate to which segments certain clients, products and services associated with the First Republic acquisition, including deposits, should be allocated. Accordingly, reporting classifications and allocations may change in future periods including across the Firm's segments. Refer to Note 27 for a further discussion of the Firm's business segments and Note 28 for additional information on the First Republic acquisition.

The accounting and financial reporting policies of JPMorgan Chase and its subsidiaries conform to U.S. GAAP. Additionally, where applicable, the policies conform to the accounting and reporting guidelines prescribed by regulatory authorities.

The unaudited Consolidated Financial Statements prepared in conformity with U.S. GAAP require management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expense, and the disclosures of contingent assets and liabilities. Actual results could be different from these estimates. In the opinion of management, all normal, recurring adjustments have been included such that this interim financial information is fairly stated.

These unaudited Consolidated Financial Statements should be read in conjunction with the audited Consolidated Financial Statements, and related notes thereto, included in JPMorgan Chase's 2022 Form 10-K.

Certain amounts reported in prior periods have been revised to conform with the current presentation.

Consolidation

The Consolidated Financial Statements include the accounts of JPMorgan Chase and other entities in which the Firm has a controlling financial interest. All material intercompany balances and transactions have been eliminated.

Assets held for clients in an agency or fiduciary capacity by the Firm are not assets of JPMorgan Chase and are not included on the Consolidated balance sheets.

The Firm determines whether it has a controlling financial interest in an entity by first evaluating whether the entity is a voting interest entity or a variable interest entity.

Refer to Notes 1 and 14 of JPMorgan Chase's 2022 Form 10-K for a further description of JPMorgan Chase's accounting policies regarding consolidation.

Offsetting assets and liabilities

U.S. GAAP permits entities to present derivative receivables and derivative payables with the same counterparty and the related cash collateral receivables and payables on a net basis on the Consolidated balance sheets when a legally enforceable master netting agreement exists. U.S. GAAP also permits securities financing balances to be presented on a net basis when specified conditions are met, including the existence of a legally enforceable master netting agreement. The Firm has elected to net such balances where it has determined that the specified conditions are met. Refer to Note 1 of JPMorgan Chase's 2022 Form 10-K for further information on offsetting assets and liabilities.

Accounting standards adopted January 1, 2023 Derivatives and Hedging: Fair Value Hedging – Portfolio Layer Method

The adoption of this guidance expanded the ability to hedge a portfolio of prepayable assets to allow more of the portfolio to be hedged. Non-prepayable assets can also be included in the same portfolio, thus increasing the size of the portfolio and the amount available to be hedged. This guidance also clarified the types of derivatives that can be used as hedges, and the balance sheet presentation and disclosure requirements for the hedge accounting adjustments. As permitted by the guidance, the Firm elected to transfer HTM securities to AFS and designate those securities in a portfolio layer method hedge upon adoption. The adoption impact of the transfer on retained earnings was not material.

Refer to Note 5 and Note 10 for additional information.

Financial Instruments – Credit Losses: Troubled Debt Restructurings and Vintage Disclosures

The adoption of this guidance eliminated the accounting and disclosure requirements for TDRs, including the requirement to measure the allowance using a discounted cash flow ("DCF") methodology, and allowed the option of a non-DCF portfolio-based approach for modified loans to troubled borrowers. If a DCF methodology is still applied for these modified loans, the discount rate must be the post-

modification effective interest rate, instead of the pre-modification effective interest rate.

The Firm elected to apply its non-DCF, portfolio-based allowance approach for modified loans to troubled borrowers for all portfolios except modified nonaccrual risk-rated loans which the Firm elected to continue applying a DCF methodology. Refer to Note 13 of JPMorgan Chase's 2022 Form 10-K for a description of the portfolio-based allowance approach and the asset-specific allowance approach.

This guidance was adopted under the modified retrospective method which resulted in a net decrease to the allowance for credit losses of \$587 million and an increase to retained earnings of \$446 million, after-tax, predominantly driven by residential real estate and credit card.

The adoption of this guidance eliminated the disclosure requirements for TDRs including the requirement to assess whether a modification is reasonably expected or involves a concession. The new guidance requires disclosure for loan modifications to borrowers experiencing financial difficulty consisting of principal forgiveness, interest rate reduction, other-than-insignificant payment delay, term extension or a combination of these modifications. The Firm has defined these types of modifications as financial difficulty modifications ("FDMs"). As a result of the elimination of the requirement to assess whether a modification is reasonably expected or involves a concession, the population of loans considered FDMs will differ from those previously considered TDRs. This guidance also requires disclosure of current period gross charge-offs by vintage origination year. Refer to Note 12 for further information.

Note 2 – Fair value measurement

Refer to Note 2 of JPMorgan Chase's 2022 Form 10-K for a discussion of the Firm's valuation methodologies for assets, liabilities and lending-related commitments measured at fair value and the fair value hierarchy.

The following table presents the assets and liabilities reported at fair value as of June 30, 2023, and December 31, 2022, by major product category and fair value hierarchy.

Assets and liabilities measured at fair value on a recurring basis

			Fair value hierarchy		Derivative	
June 30, 2023 (in millions)		Level 1	Level 2	Level 3	netting adjustments(1)	Total fair valu
Federal funds sold and securities purchased under resale agreements	S	— \$	322,579	\$ —	\$ - \$	322,57
Securities borrowed		_ `	55,905	· <u> </u>	<u> </u>	55,90
Trading assets:						
Debt instruments:						
Mortgage-backed securities:						
U.S. GSEs and government agencies(a)		_	88,769	706	_	89,47
Residential – nonagency		_	2,684	5	_	2,68
Commercial – nonagency		_	1,517	6	_	1,52
Total mortgage-backed securities		_	92,970	717	_	93,68
U.S. Treasury, GSEs and government agencies(a)		129,042	9,204	_	_	138,24
Obligations of U.S. states and municipalities		· -	6,782	6	_	6,78
Certificates of deposit, bankers' acceptances and commercial paper		_	2,834	_	_	2,83
Non-U.S. government debt securities		41,423	63,986	199	_	105,60
Corporate debt securities		_	33,106	522	_	33,62
Loans		_	6,984	1,105	_	8,08
Asset-backed securities		_	2,497	14	_	2,51
Total debt instruments		170,465	218,363	2,563	_	391,39
Equity securities		148,222	1,337	631	_	150,19
Physical commodities(b)		2,442	11,265	6	_	13,71
Other		· —	17,332	113	_	17,44
Total debt and equityinstruments(c)		321,129	248,297	3,313	_	572,73
Derivative receivables:		,	,	-,		
Interest rate		1,988	282,125	4,199	(260,603)	27,709
Credit		_	12.535	1.150	(12,440)	1.24
Foreign exchange		204	226,130	1,345	(205,485)	22,194
Equity			57,619	3,773	(54,068)	7,324
Commodity		_	17,358	282	(11,895)	5,74
Total derivative receivables		2,192	595,767	10,749	(544,491)	64,217
Total trading assets ⁽⁴⁾		323,321	844,064	14,062	(544,491)	636,956
Available-for-sale securities:		JEJ,JE1	044,004	14,002	(34,401)	000,300
Mortgage-backed securities:						
U.S. GSEs and government agencies ^(a)		1	79,767			79,760
Residential – nonagency			3,544	_	_	3,54
Commercial – nonagency			2,056			2,056
Total mortgage-backed securities		1	85,367	<u>_</u>		85,36
		62,688	65,367 49	_	_	62,737
U.S. Treasury and government agencies Obligations of U.S. states and municipalities		02,000	24,023	_	_	24,023
Non-U.S. government debt securities		13,397	8,643	_	_	22,040
Corporate debt securities		13,397	0,043 121	267	_	388
Asset-backed securities:		_	121	201	_	300
Collateralized loan obligations			5,437			5.437
Other(a)			3,269			3,269
		76,086	126,909	267	<u>_</u> _	203,262
Total available-for-sale securities		70,000				
Loans(e)		_	34,981	3,808		38,789
Mortgage servicing rights		-		8,229	_	8,229 13,250
Other assets(d)		6,146	6,687	417		
Total assets measured at fair value on a recurring basis	\$	405,553 \$	1,391,125	\$ 26,783	\$ (544,491) \$	1,278,970
Deposits	\$	— \$	49,515	\$ 2,053	\$	51,568
Federal funds purchased and securities loaned or sold under repurchase agreements		_	216,604		_	216,60
Short-termborrowings		_	16,238	1,704	_	17,94
Trading liabilities:						
Debt and equity instruments(c)		101,437	30,764	63	_	132,26
Derivative payables:						
Interest rate		1,610	270,411	5,321	(262,185)	15,15
Credit		_	13,306	461	(13,201)	560
Foreign exchange		185	222,444	956	(209,408)	14,17
Equity		_	62,016	5,654	(57,865)	9,80
Commodity		_	18,650	635	(12,445)	6,84
Total derivative payables		1,795	586,827	13,027	(555,104)	46,54
		103.232	617,591	13,090	(555,104)	178,809
Total trading liabilities						
Total trading liabilities Accounts payable and other liabilities		3,486	1,547	68	_	5,101
· ·		3,486		68 —		
Accounts payable and other liabilities		3,486 — —	1,547	68 — 25,425	_ _ _	5,10° 1 78,609

	Fair value hierarchy					Derivative			
December 31, 2022 (in millions)		Level 1 Level 2 Level 3				netting			Total fair val
Federal funds sold and securities purchased under resale agreements	\$	— \$	311,883	\$	_	\$	_	\$	311,88
Securities borrowed		_	70,041		_		_		70,04
Trading assets:									
Debt instruments:									
Mortgage-backed securities: U.S. GSEs and government agencies(a)		_	68,162		759		_		68,92
Residential – nonagency		_	2,498		5		_		2,50
Commercial – nonagency		_	1,448		7		_		1,45
Total mortgage-backed securities		_	72,108		771		_		72,87
U.S. Treasury, GSEs and government agencies(a)		61,191	8,546		_		_		69,73
Obligations of U.S. states and municipalities		_	6,608		7		_		6,61
Certificates of deposit, bankers' acceptances and commercial paper Non-U.S. government debt securities		— 18,213	2,009 48,429		— 155		_		2,00 66,79
Corporate debt securities		10,213	25,626		463		_		26,08
Loans		_	5,744		759		_		6,50
Asset-backed securities		_	2,536		23		_		2,55
Total debt instruments		79,404	171,606		2,178		_		253,18
Equitysecurities		82,483	2,060		665		_		85,20
Physical commodities ^(b)		9,595	16,673		2		_		26,27
Other			18,146		64		_		18,21
Total debt and equityinstruments ^(c) Derivative receivables:		171,482	208,485		2,909		_		382,87
De i value i ece values.									
Interest rate		3,390	292,956		4,069		(271,996)		28,41
Credit		_	9,722		607		(9,239)		1,090
Foreign exchange		169	240,207		1,203		(218,214)		23,36
Equity		_	57,485		4,428		(52,774)		9,13
Commodity		_	24,982		375		(16,490)		8,86
Total derivative receivables		3,559	625,352		10,682		(568,713)		70,88
			-				· · · · · · · · · · · · · · · · · · ·		
Total trading assets ^(a) Available-for-sale securities:		175,041	833,837		13,591		(568,713)		453,75
Mortgage-backed securities:									
U.S. GSEs and government agencies(a)		3	71,500		_		_		71,50
Residential – nonagency		_	4,620		_		_		4,62
Commercial – nonagency		_	1,958		_		_		1,95
Total mortgage-backed securities		3	78,078		_		_		78,08
U.S. Treasury and government agencies Obligations of U.S. states and municipalities		92,060	6,786		_		_		92,06 6,78
Non-U.S. government debt securities		10,591	9,105		_		_		19,69
Corporate debt securities			118		239		_		35
Asset-backed securities:									
Collateralized loan obligations		_	5,792		_		_		5,79
Other		_	3,085		_		_		3,08
Total available-for-sale securities		102,654	102,964		239		_		205,85
Loans(e)		_	40,661		1,418		_		42,07
Mortgage servicing rights Other assets(4)		— 7,544	6,065		7,973 405		_		7,97 14,01
			-	•		_	(500.740)	•	
Total assets measured at fair value on a recurring basis Deposits	\$ \$	285,239 \$ — \$	1,365,451 26,458	\$ \$	23,626 2,162	\$	(568,713)	\$ \$	1,105,60 28,62
Federal funds purchased and securities loaned or sold under repurchase agreements	Ψ	— ¥	151,999	Ψ	2,102	Ψ	_	Ψ	151,99
Short-termborrowings		_	14,391		1,401		_		15,79
Trading liabilities:									
Debt and equity instruments(c)		98,719	28,032		84		_		126,83
Derivative payables:									
Interest rate		2,643	284,280		3,368		(274,321)		15,97
Credit		_	9,377		594		(9,217)		75
Foreign exchange		160	250,647		714		(232,665)		18,85
Equity			57,649		4,812		(53,657)		8,80
		_							
Commodity			22,748		521		(16,512)		6,75
Total derivative payables		2,803	624,701		10,009		(586,372)		51,14
Total trading liabilities		101,522	652,733		10,093		(586,372)		177,97
Accounts payable and other liabilities		5,702	1,283		53		_		7,03
Beneficial interests issued by consolidated VIEs		_	5		_		_		
Long-term debt		_	48,189		24,092		_		72,28
Total liabilities measured at fair value on a recurring basis	\$	107 224 ¢	895,058	\$		\$	(596 379)	\$	
Total nashities (fleasured at rail value on a recultting Dasis	ð	107,224 \$	050,000	ð	37,801	ð	(586,372)	φ	453,71

⁽a) At June 30, 2023, and December 31, 2022, included total U.S. GSE obligations of \$93.5 billion and \$73.8 billion, respectively, which were mortgage-related.

(b) Physical commodities inventories are generally accounted for at the lower of cost or net realizable value. "Net realizable value" is a termdefined in U.S. GAAP as not exceeding fair value less costs to sell ("transaction costs"). Transaction costs for the Firm's physical commodities inventories are either not applicable or immaterial to the value of the inventory. Therefore, net realizable value approximates fair value for the Firm's physical commodities inventories. When fair value hedging has been applied (or when net realizable value is below cost), the carrying value of physical commodities approximates fair value, because under fair value hedge accounting, the cost basis is adjusted for changes in fair value. Refer to Note 5 for a further discussion of the Firm's hedge accounting relationships. To provide consistent fair value disclosure information, all physical commodities inventories have been included in each period presented. each period presented.

(c) Balances reflect the reduction of securities owned (long positions) by the amount of identical securities sold but not yet purchased (short positions).

- (d) Certain investments that are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient are not required to be classified in the fair value hierarchy. At June 30, 2023, and December 31, 2022, the fair values of these investments, which include certain hedge funds, private equity funds, real estate and other funds, were \$956 million and \$950 million, respectively. Included in these balances at June 30, 2023, and December 31, 2022, were trading assets of \$40 million and \$43 million, respectively, and other assets of \$916 million and \$907 million, respectively.
- (e) At June 30, 2023, and December 31, 2022, included \$9.5 billion and \$9.7 billion, respectively, of residential first-lien mortgages, and \$6.8 billion of commercial first-lien mortgages for both periods. Residential mortgage loans include conforming mortgage loans originated with the intent to sell to U.S. GSEs and government agencies of \$3.3 billion and \$2.4 billion, respectively.
- (f) As permitted under U.S. GAAP, the Firmhas elected to net derivative receivables and derivative payables and the related cash collateral received and paid when a legally enforceable master netting agreement exists. The level 3 balances would be reduced if netting were applied, including the netting benefit associated with cash collateral.

Level 3 valuations

Refer to Note 2 of JPMorgan Chase's 2022 Form 10-K for further information on the Firm's valuation process and a detailed discussion of the determination of fair value for individual financial instruments.

The following table presents the Firm's primary level 3 financial instruments, the valuation techniques used to measure the fair value of those financial instruments, the significant unobservable inputs, the range of values for those inputs and the weighted or arithmetic averages of such inputs. While the determination to classify an instrument within level 3 is based on the significance of the unobservable inputs to the overall fair value measurement, level 3 financial instruments typically include observable components (that is, components that are actively quoted and can be validated to external sources) in addition to the unobservable components. The level 1 and/or level 2 inputs are not included in the table. In addition, the Firm manages the risk of the observable components of level 3 financial instruments using securities and derivative positions that are classified within levels 1 or 2 of the fair value hierarchy.

The range of values presented in the table is representative of the highest and lowest level input used to value the significant groups of instruments within a product/instrument classification. Where provided, the weighted averages of the input values presented in the table are calculated based on the fair value of the instruments that the input is being used to value.

In the Firm's view, the input range, weighted and arithmetic average values do not reflect the degree of input uncertainty or an assessment of the reasonableness of the Firm's estimates and assumptions. Rather, they reflect the characteristics of the various instruments held by the Firm and the relative distribution of instruments within the range of characteristics. For example, two option contracts may have similar levels of market risk exposure and valuation uncertainty, but may have significantly different implied volatility levels because the option contracts have different underlyings, tenors, or strike prices. The input range and weighted average values will therefore vary from period-to-period and parameter-to-parameter based on the characteristics of the instruments held by the Firm at each balance sheet date.

Level 3 inputs(a)

Dan divetille et money	Fair value	Principal valuation technique Discounted cash flows	Unabaanahla innuts(a)	Danas of the	Average ⁽ⁱ⁾		
Product/Instrument Residential mortgage-backed securities and loans(b)	(in millions) \$ 1,641		Unobservable inputs(g)	Range of in			
			Yield	6%	40%	7%	
			Prepayment speed	3%	11%	8%	
			Conditional default rate	0%	5% 110%	0%	
O	0.040	NA-d-st	Loss severity	0% \$0		3% \$84	
Commercial mortgage-backed securities and loans(c)	2,318	Market comparables	Price		\$101		
Corporate debt securities	789	Market comparables	Price	\$0	\$242	\$95	
Loans ^(d)	1,671	Market comparables	Price	\$0	\$108	\$78	
Non-U.S. government debt securities	199	Market comparables	Price	\$6 \$106		\$91	
Net interest rate derivatives	(1,105)	Option pricing	Interest rate volatility	26 bps	674 bps	131 bps	
			Interest rate spread volatility	37 bps	77 bps	64 bps	
			Bermudan switch value	0%	58%	20%	
			Interest rate correlation	(82)%	90%	15%	
			IR-FX correlation	(35)%	60%	5%	
	(17)	Discounted cash flows	Prepayment speed	0%	15%	5%	
Net credit derivatives	673	Discounted cash flows	Credit correlation	35%	65%	48%	
			Credit spread	0 bps	11,279 bps	342 bps	
			Recovery rate	10%	90%	40%	
	16	Market comparables	Price	\$15	\$115	\$83	
Net foreign exchange derivatives	461	Option pricing	IR-FX correlation	(40)%	60%	19%	
	(72)	Discounted cash flows	Prepayment speed		%	11%	
			Interest rate curve	0%	30%	6%	
Net equity derivatives	(1,881)	Option pricing	Forward equity price ^(h)	84%	142%	101%	
			Equity volatility	3%	167%	32%	
			Equity correlation	15%	100%	58%	
			Equity-FX correlation	(86)%	60%	(29)%	
			Equity-IR correlation	10%	35%	21%	
Net commodity derivatives	(353)	Option pricing	Oil commodity forward	\$95 / BBL	\$249 / BBL	\$172 / BBL	
			Natural gas commodity forward	\$1 / MMBTU	\$7 / MMBTU	\$4 / MMBTU	
			Commodity volatility	5%	175%	90%	
			Commodity correlation	(28)%	80%	26%	
MSRs .	8,229	Discounted cash flows	Refer to Note 15				
Long-term debt, short-term borrowings, and deposits ^(e)	27,806	Option pricing	Interest rate volatility	26 bps	674 bps	131 bps	
		· · •	Bermudan switch value	0%	58%	20%	
			Interest rate correlation	(82)%	90%	15%	
			IR-FX correlation	(35)%	60%	5%	
			Equity correlation	15%	100%	58%	
			Equity-FX correlation	(86)%	60%	(29)%	
			Equity-PA correlation	10%	35%	21%	
	1,376	Discounted cash flows	Credit correlation	35%	65%	48%	
	1,376	DISCOULITED CASTLLIONS	Credit Correlation	30%	00%	4070	

- (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
- (b) Comprises U.S. GSE and government agency securities of \$706 million, nonagency securities of \$5 million and non-trading loans of \$930 million.
- (c) Comprises nonagency securities of \$6 million, trading loans of \$72 million and non-trading loans of \$2.2 billion.
- (d) Comprises trading loans of \$1.0 billion and non-trading loans of \$638 million.
- (e) Long-term debt, short-term borrowings and deposits include structured notes issued by the Firm that are financial instruments that typically contain embedded derivatives. The estimation of the fair value of structured notes includes the derivative features embedded within the instrument. The significant unobservable inputs are broadly consistent with those presented for derivative receivables.
- (f) Includes equity securities of \$843 million including \$213 million in Other assets, for which quoted prices are not readily available and the fair value is generally based on internal valuation techniques such as BBITDA multiples and comparable analysis. All other level 3 assets and liabilities are insignificant both individually and in aggregate.

 (g) Price is a significant unobservable input for certain instruments. When quoted market prices are not readily available, reliance is generally placed on price-based internal valuation
- techniques. The price input is expressed assuming a par value of \$100.
- (h) Forward equity price is expressed as a percentage of the current equity price.
- (i) Amounts represent weighted averages except for derivative related inputs where arithmetic averages are used.

Changes in and ranges of unobservable inputs

Refer to Note 2 of JPMorgan Chase's 2022 Form 10-K for a discussion of the impact on fair value of changes in unobservable inputs and the relationships between unobservable inputs as well as a description of attributes of the underlying instruments and external market factors that affect the range of inputs used in the valuation of the Firm's positions.

Changes in level 3 recurring fair value measurements

The following tables include a rollforward of the Consolidated balance sheets amounts (including changes in fair value) for financial instruments classified by the Firm within level 3 of the fair value hierarchy for the three months ended June 30, 2023 and 2022. When a determination is made to classify a financial instrument within level 3, the determination is based on the significance of the unobservable inputs to the overall fair value measurement. However, level 3 financial instruments typically include, in addition to the unobservable or level 3 components, observable components (that is, components that are actively quoted and can be validated to external sources); accordingly, the gains and losses in the table below include changes in fair value due in part to observable factors that are part of the valuation methodology. Also, the Firm risk-manages the observable components of level 3 financial instruments using securities and derivative positions that are classified within level 1 or 2 of the fair value hierarchy; as these level 1 and level 2 risk management instruments are not included below, the gains or losses in the following tables do not reflect the effect of the Firm's risk management activities related to such level 3 instruments.

			_						
Three months ended June 30, 2023 (in millions)	Fair value at April 1, 2023	Total realized/unrealized gains/(losses)	Purchases(9)	Sales	Settlements ^(h)	Transfers into level 3	Transfers (out of) level	Fair value at June 30, 2023	Change in unrealized gains/(losses) related to financial instruments held at June 30, 2023
Assets:(a)									
Federal funds sold and securities purchased under resale agreements	s –	s –	s — \$. –	\$ —	s –	s –	s –	\$
Trading assets:									
Debt instruments:									
Mortgage-backed securities:									
U.S. GŞEs and government									
agencies	757	_	106	(106)	(40)	_	(11)	706	(6)
Residential – nonagency	5	6	_	(6)	_	_	_	5	
Commercial – nonagency	10	(1)				5	(8)	6	(1)
Total mortgage-backed securities Obligations of U.S. states and	772	5	106	(112)	(40)	5	(19)	717	(7)
municipalities	6	_		_	_	_	_	6	-
Non-U.S. government debt securities	169	29	50	(49)	_	_	_	199	31
Corporate debt securities	538	-	61	(43)	(2)	7	(39)	522	(2)
Loans	926	(6)	246	(65)	(18)	102	(80)	1,105	(6)
Asset-backed securities	7		4	(1)		4		14	_
Total debt instruments	2,418	28	467	(270)	(60)	118	(138)	2,563	16
Equity securities	581	(16)	50	(36)	_	104	(52)	631	(16)
Physical commodities	_	_	6	_	_	_	_	6	_
Other	140	(19)	2	_	(6)		(4)	113	(18)
Total trading assets – debt and equity instruments	3,139	(7) (c)	525	(306)	(66)	222	(194)	3,313	(18) ^(c)
Net derivative receivables:(b)									
Interest rate	754	(1,043)	60	(42)	49	(914)	14	(1,122)	(960)
Credit	452	228	_	(1)	31	2	(23)	689	240
Foreign exchange	545	(37)	51	(67)	(126)	55	(32)	389	(29)
Equity	(885)	(148)	295	(675)	(726)	349	(91)	(1,881)	9
Commodity	(287)	(50)	35	(51)	16	(12)	(4)	(353)	(71)
Total net derivative receivables	579	(1,050) (c)	441	(836)	(756)	(520)	(136)	(2,278)	(811) (c)
Available-for-sale securities:								•	
Corporate debt securities	250	17	_	_	_	_	_	267	17
Total available-for-sale securities	250	17 ^(d)	_	_	_	_	_	267	17 ^(d)
Loans	1,479	(3) (c)	2,137	(7)	(490)	760	(68)	3,808	(52) (c)
Mortgage servicing rights	7,755	275 ^(e)	546	(92)	(255)	_	-	8,229	275 (e)
Other assets	406	16 (c)	5	(2)	(14)	8	(2)	417	16 (c)
				\-/	(1-1)		(-)		

					_	-:			if:									
	_					air value meas	urements	usi	ng significa	ant	unobservable inpu	IIS					_	
																	,	Discourage of
Three months ended	F:	air value at		Total								Transf e	s	Transfers			(Change in unrealized gains/losses related
June 30, 2023	• •	April 1, 2023	re	alized/unrealized		D	0.1				0.111	into		(out of) level	Fai	ir value at	tõ	finańcial instruments
(in millions)		2023		(gains)/losses		Purchases	Sales		Issuances		Settlements(h)	level 3		3	Jur	ne 30, 2023	h	eld at June 30, 2023
Liabilities:(a)																		
Deposits	\$	2,208	\$	(51) (c)(f)	\$	_	\$ -	- \$	139	\$	(181) \$; .	- :	\$ (62)	\$	2,053	\$	(51) (c)(f)
Short-term borrowings		1,410		50 (c)(f)		_	_	-	1,191		(927)		2	(22)		1,704		29 (c)(f)
Trading liabilities - debt and equity																		
instruments		63		(1) (c)		_	(2	2)	_		(2)		6	(1)		63		(1) ^(c)
Accounts payable and other liabilities		56		5 (c)		(2)	3	3	_		_		8	(2)		68		5 (c)
Long-term debt		25,227		325 (c)(f)		_	_	-	2,667		(2,550)	1	13	(357)		25,425		354 (c)(f)

	Fair value measurements using significant unobservable inputs												
Three months ended June 30, 2022 (in millions)	Fair value a April 1, 2022	at Total realized/unrealized gains/(losses)	Purchases(g)	Sales	Settlements ⁽ⁿ⁾	Transfers into level 3	Transfers (out of) level	Fair value at June 30, 2022	Change in unrealized gains/(losses) related to financial instruments held at June 30, 2022				
Assets:(a)													
Federal funds sold and securities purchased under resale agreements	\$ —	\$ —	\$	s —	\$ —	\$ 1	s —	\$ 1	\$ —				
Trading assets:	,	·	•	•	•	·	•	•	·				
Debt instruments:													
Mortgage-backed securities:													
U.S. GSEs and government agencies	286	(1)	643	(118)	(7)	_	_	803	(2)				
Residential – nonagency	10		5	`	(1)	_	_	14	-				
Commercial – nonagency	10	_	_	_	<u> </u>	_	_	10	_				
Total mortgage-backed securities	306	(1)	648	(118)	(8)	_	_	827	(2)				
Obligations of U.S. states and municipalities	7	_	_	_	_	_	_	7	_				
Non-U.S. government debt securities		(9)	177	(86)	_	6	(16)	205	(8)				
Corporate debt securities	293	(16)	272	(12)	_	57	(20)	574	(16)				
Loans	1,049	(33)	122	(164)	(152)	254	(178)	898	(32)				
Asset-backed securities	28		1	(10)		1		20					
Total debt instruments	1,816	(59)	1,220	(390)	(160)	318	(214)	2,531	(58)				
Equity securities	663	(99)	98	(61)	-	106	(46)	661	(90)				
Physical commodities		_	2	_		_	_	2	_				
Other	175	66	6		(158)		(2)	87	60				
Total trading assets – debt and equity instruments	2,654	(92) (c)	1,326	(451)	(318)	424	(262)	3,281	(88) ^(c)				
Net derivative receivables:(b)													
Interest rate	367	160	99	(135)	105	44	(220)	420	204				
Credit	44	264	4	(3)	(65)	1	4	249	255				
Foreign exchange	76	193	15	(19)	(38)	24	(6)	245	174				
Equity	(2,583)	1,838	162	(466)	(140)	(227)	182	(1,234)	1,788				
Commodity	(414)	382	18	(69)	112	(1)	(2)	26	423				
Total net derivative receivables	(2,510)	2,837 ^(c)	298	(692)	(26)	(159)	(42)	(294)	2,844 ^(c)				
Available-for-sale securities:													
Corporate debt securities	205	(19)	_			_		186	(19)				
Total available-for-sale securities	205	(19) ^(d)	_		<u> </u>			186	(19) ^(d)				
Loans	2,072	(82) (c)	273	(95)	(250)	226	(124)	2,020	(80) (c)				
Mortgage servicing rights	7,294	654 (e)	341	(614)	(236)	_	_	7,439	654 (e)				
Other assets	341	116 ^(c)	5	(28)	(20)		(6)	408	116 ^(c)				

	_					Fair value m	neasuremer	nts u	sing significar	nt i	unobservable input	S					_	
Three months ended June 30, 2022 (in millions)	F	Fair value at April 1, 2022	re	Total alized/unrealized (gains)/losses	l	Purchases	Sales		Issuances	;	Settlements ^(h)		Transfers into level 3	Tr (out	ransfers t of) level 3	Fair value at June 30, 2022	(g	Change in unrealized ains)/losses related to financial nstruments held at June 30, 2022
Liabilities:(a)				-														
Deposits	\$	2,121	\$	(160) (c)(f)	\$	_	\$ —	\$	138 \$	6	(21)	\$	_	\$	(46)	\$ 2,032	\$	(160) (c)(f)
Short-term borrowings		2,146		14 (c)(f)		_	_		963		(1,036)		14		_	2,101		93 (c)(f)
Trading liabilities – debt and equity instruments Accounts payable and other liabilities		41 108		1 (c) (2) (c)		(20) (28)	4 1		_		_		30		<u> </u>	56 73		1 (c) (2) (c)
Long-term debt		24 394		(2.640) (c)(f)		_	_		3 470		(2.045)		179		(281)	23.077		(2 613) (c)(f)

	Fair value measurements using significant unobservable inputs													
Six months ended June 30, 2023 (in millions)	Fair value at Jan 1, 2023	t Total realized/unrealized gains/(losses)	Purchases ⁽⁹⁾	Sales	Settlements ^(h)	Transfers into (i level 3	Transfers out of) level	Fair value at June 30, 2023	Change in unrealized gains/(losses) related to financial instruments held at June 30, 2023					
Assets:(a)														
Federal funds sold and securities purchased under resale agreements	\$ —	\$ —	\$	\$ —	\$ —	\$ -\$	-	\$ —	\$ —					
Trading assets: Debt instruments:														
Mortgage-backed securities:														
U.S. GSEs and government agencies	759	7	131	(113)	(64)	_	(14)	706	2					
Residential – nonagency	5	7	_	(6)	(2)	1	_	5	1					
Commercial – nonagency	7	_			(1)	8	(8)	6	(1)					
Total mortgage-backed securities	771	14	131	(119)	(67)	9	(22)	717	2					
Obligations of U.S. states and municipalities	7	_	_	(1)	_	_	_	6	_					
Non-U.S. government debt securities	155	40	100	(96)	_	_	_	199	43					
Corporate debt securities	463	24	110	(60)	(2)	30	(43)	522	18					
Loans	759	2	682	(127)	(113)	125	(223)	1,105	1					
Asset-backed securities	23		5	(3)	(1)	5	(15)	14	(1)					
Total debt instruments	2,178	80	1,028	(406)	(183)	169	(303)	2,563	63					
Equity securities	665	(47)	108	(107)	_	140	(128)	631	(27)					
Physical Commodities	2	_	6	_	(2)	_	_	6	_					
Other	64	(40)	96	_	(4)	1	(4)	113	(19)					
Total trading assets – debt and equity instruments	2,909	(7) (c)	1,238	(513)	(189)	310	(435)	3,313	17 ^(c)					
Net derivative receivables:(b)														
Interest rate	701	(697)	95	(92)	27	(1,079)	(77)	(1,122)	(582)					
Credit	13 489	474 52	3 79	(4)	202	26 110	(25)	689 389	497					
Foreign exchange	469	52	79	(108)	(201)	119	(41)	389	29					
Equity	(384)	23	613	(1,362)	(726)	460	(505)	(1,881)	95					
Commodity	(146)	(42)	39	(118)	(111)	(11)	36	(353)	(206)					
Total net derivative receivables	673	(190) (c)	829	(1,684)	(809)	(485)	(612)	(2,278)	(167) ^(c)					
Available-for-sale securities:														
Corporate debt securities	239	28						267	28					
Total available-for-sale securities	239	28 ^(d)	_	_	<u> </u>	_	_	267	28 ^(d)					
Loans	1,418	23 ^(c)	2,285	(73)	(585)	917	(177)	3,808	24 ^(c)					
Mortgage servicing rights	7,973	264 (e)	577	(90)	(495)	_	_	8,229	264 (e)					
Other assets	405	21 ^(c)	17	(2)	(30)	8	(2)	417	21 ^(c)					

	_				Fair value m	neasur	rements	usin	g significa	nt u	unobservable inputs	3						_	
Six months ended June 30, 2023 (in millions)	I	Fair value at Jan 1, 2023	Total alized/unrealized (gains)/losses	t	Purchases	Sa	ales	Is	suances	;	Settlements ^(h)		ransfers into level 3	Ti (ou	ransfers tt of) level	Fair June	value at 30, 2023	(ga ir	hange in unrealized ains)/losses related to financial nstruments held at June 30, 2023
Liabilities:(a)																			
Deposits	\$	2,162	\$ (3) (c)(f)	\$	_	\$	_	\$	267	\$	(248)	\$	_	\$	(125)	\$ 2	2,053	\$	(31) (c)(f)
Short-term borrowings		1,401	140 (c)(f)		_		_		2,242		(2,059)		2		(22)		1,704		34 (c)(f)
Trading liabilities – debt and equity instruments Accounts payable and other liabilities		84 53	(13) ^(c)		(27) (2)		6 7		_		(2)		18 8		(3) (2)		63 68		4 (c)
Long-term debt		24 092	1 681 (c)(f)		_		_		5 400		(5.525)		204		(427)	2	5 425		1 674 (c)(f)

			Fair value n	neasurements	using significant unobservable inputs	<u> </u>			
					у при				-
Six months ended June 30, 2022 (in millions)	Fair value a Jan 1, 2022	t Total realized/unrealized gains/(losses)	l Purchases ^(g)	Sales	Settlements ⁽ⁿ⁾		Fransfers ut of) level Fair 3 Jun	r value at e 30, 2022	Change in unrealized gains/(losses) related to financial instruments held at June 30, 2022
Assets:(a)									
Federal funds sold and securities purchased under resale agreements Trading assets: Debt instruments:	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 1\$	— \$	1	\$ —
Mortgage-backed securities:									
U.S. GSEs and government agencies	265	26	665	(125)	(28)	_	_	803	24
Residential – nonagency	28	_	5	_	(12)	_	(7)	14	(1)
Commercial – nonagency	10							10	
Total mortgage-backed securities	303	26	670	(125)	(40)	_	(7)	827	23
Obligations of U.S. states and municipalities	7	_	_	_	_	_	_	7	_
Non-U.S. government debt securities		(42)	405	(266)		43	(16)	205	(106)
Corporate debt securities	332	(35)	333	(71)	(37)	98	(46)	574	(44)
Loans	708	(37)	419	(262)	(159)	525	(296)	898	(13)
Asset-backed securities	26		2	(10)	(222)	5	(3)	20	- (1.10)
Total debt instruments	1,457	(88)	1,829	(734)	(236)	671	(368)	2,531	(140)
Equity securities Physical Commodities	662	(912)	321 2	(301)	_	959	(68)	661 2	(474)
Other	160	<u>—</u> 67	26	_	(163)	_	(3)	2 87	
Total trading assets – debt and	100	01	20		(100)		(3)	O/	70
equity instruments	2,279	(933) (c)	2,178	(1,035)	(399)	1,630	(439)	3,281	(544) (c)
Net derivative receivables:(b)									
Interest rate	(16)	393	225	(229)	256	17	(226)	420	428
Credit	74	331	8	(7)	(161)	(2)	6	249	330
Foreign exchange	(419)	538	147	(43)	` 32	18	(28)	245	486
Equity	(3,626)	2,568	660	(1,025)	303	(558)	444	(1,234)	2,975
Commodity	(907)	804	68	(206)	268	(1)	_	26	469
Total net derivative receivables	(4,894)	4,634 ^(c)	1,108	(1,510)	698	(526)	196	(294)	4,688 ^(c)
Available-for-sale securities:							·	·	
Corporate debt securities	161	8	17	_	_	_	_	186	8
Total available-for-sale securities	161	8 ^(d)	17	_	_	_	_	186	8 (d)
Loans	1,933	16 ^(c)	394	(100)	(531)	616	(308)	2,020	(24) (c)
Mortgage servicing rights	5,494	1,613 (e)	1,471	(671)	(468)	_		7,439	1,613 (e)
Other assets	306	125 ^(c)	46	(28)	(37)	2	(6)	408	119 ^(c)

		Fair value measurements using significant unobservable inputs																	
Six months ended June 30, 2022 (in millions)	F	Fair value at Jan 1, 2022		Total alized/unrealized (gains)/losses	l	Purchases	Sales		lss	suances		Settlements(h)			ransfers It of) level 3	Fair June	value at e 30, 2022	(g	Change in unrealized ains)/losses related to financial nstruments held at June 30, 2022
Liabilities:(a)																			
Deposits	\$	2,317	\$	(302) (c)(f)	\$	_	\$ -	_	\$	246	\$	(69)	\$	— \$	(160)	\$	2,032	\$	(298) (c)(f)
Short-term borrowings		2,481		(387) (c)(f)		_	-	_		2,386		(2,383)		15	(11)		2,101		7 (c)(f)
Trading liabilities – debt and equity instruments		30		(16) ^(c)		(34)	3	34		_		_		44	(2)		56		15 ^(c)
Accounts payable and other liabilities		69		(6) (c)		(28)	4	13		_		_		1	(6)		73		(6) (c)
Long-term debt		24,374		(4,308) (c)(f)				_		7,520		(4,521)		442	(430)	2	23,077		(4,151) (c)(f)

⁽a) Level 3 assets at fair value as a percentage of total Firmassets at fair value (including assets measured at fair value on a nonrecurring basis) were 2% at both June 30, 2023 and December 31, 2022. Level 3 liabilities at fair value as a percentage of total Firmliabilities at fair value (including liabilities measured at fair value on a nonrecurring basis) were 8% at both June 30, 2023 and December 31, 2022, respectively.

- (b) All level 3 derivatives are presented on a net basis, irrespective of the underlying counterparty.
 (c) Predominantly reported in principal transactions revenue, except for changes in fair value for CCB mortgage loans and lending-related commitments originated with the intent to sell, and mortgage loan purchase commitments, which are reported in mortgage fees and related income.
- (d) Realized gains/(losses) on AFS securities are reported in investment securities gains/(losses). Unrealized gains/(losses) are reported in OOI. Realized and unrealized gains/(losses) recorded on level 3 AFS securities were not material both for the three and six months ended June 30, 2023 and 2022.

(e) Changes in fair value for MSRs are reported in mortgage fees and related income.

(f) Realized (gains)/losses due to DVA for fair value option elected liabilities are reported in principal transactions revenue, and were not material for the three and six months ended June 30, 2023 and 2022. Unrealized (gains)/losses are reported in OCI, and were \$23 million and \$(344) million for the three months ended June 30, 2023 and 2022, respectively and \$(277) million and \$(574) million for the six months ended June 30, 2023 and 2022, respectively.

(g) Loan originations are included in purchases.

(h) Includes financial assets and liabilities that have matured, been partially or fully repaid, impacts of modifications, deconsolidations associated with beneficial interests in VIEs and other

Level 3 analysis

Consolidated balance sheets changes

The following describes significant changes to level 3 assets since December 31, 2022, for those items measured at fair value on a recurring basis. Refer to Assets and liabilities measured at fair value on a nonrecurring basis on page 115 for further information on changes impacting items measured at fair value on a nonrecurring basis.

Three and six months ended June 30, 2023

Level 3 assets were \$26.8 billion at June 30, 2023, reflecting an increase of \$3.0 billion from March 31, 2023, and an increase of \$3.2 billion from December 31, 2022.

The increase for the three and six months ended June 30, 2023 was predominantly driven by:

• \$2.3 billion and \$2.4 billion, respectively, in non-trading loans primarily due to \$1.9 billion of loans in CIB associated with the First Republic acquisition.

Refer to the sections below for additional information.

Transfers between levels for instruments carried at fair value on a recurring basis

For the three months ended June 30, 2023, significant transfers from level 2 into level 3 included the following:

- · \$1.2 billion of gross interest rate derivative payables as a result of transition to term SOFR for certain interest rate options.
- \$760 million of non-trading loans driven by a decrease in observability.

For the three months ended June 30, 2023, there were no significant transfers from level 3 into level 2.

For the six months ended June 30, 2023, significant transfers from level 2 into level 3 included the following:

- · \$1.6 billion of gross interest rate derivative payables as a result of transition to term SOFR for certain interest rate options.
- \$901 million of gross equity derivative receivables as a result of a decrease in observability and an increase in the significance of unobservable inputs.
- \$917 million of non-trading loans driven by a decrease in observability. For the six months ended June 30, 2023, significant transfers from level 3 into level 2 included the following:
- \$1.3 billion and \$827 million of gross equity derivative receivables and gross equity derivative payables, respectively, as a result of an increase in observability and a decrease in the significance of unobservable inputs.

For the three months ended June 30, 2022, there were no significant transfers from level 2 into level 3.

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

\$930 million of gross interest rate derivative receivables as a result of an increase in observability and a decrease in the significance of unobservable inputs.

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

- \$1.6 billion of total debt and equity instruments, largely due to equity securities of \$959 million driven by a decrease in observability predominantly as a result of restricted access to certain markets.
- \$1.3 billion of gross equity derivative payables as a result of a decrease in observability and an increase in the significance of unobservable

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

- \$965 million of gross interest rate derivative receivables as a result of an increase in observability and a decrease in the significance of unobservable inputs.
- \$920 million and \$1.4 billion of gross equity derivative receivables and gross equity derivative payables, respectively, as a result of an increase in observability and a decrease in the significance of unobservable

All transfers are based on changes in the observability and/or significance of the valuation inputs and are assumed to occur at the beginning of the quarterly reporting period in which they occur.

Gains and losses

The following describes significant components of total realized/unrealized gains/(losses) for instruments measured at fair value on a recurring basis for the periods indicated. These amounts exclude any effects of the Firm's risk management activities where the financial instruments are classified as level 1 and 2 of the fair value hierarchy. Refer to Changes in level 3 recurring fair value measurements rollforward tables on pages 108-113 for further information on these instruments.

Three months ended June 30, 2023

- \$752 million of net losses on assets, driven by losses in net derivative receivables due to market movements.
- \$328 million of net losses on liabilities, driven by losses in long-term debt due to market movements.

Three months ended June 30, 2022

- \$3.4 billion of net gains on assets, largely driven by gains in net equity derivative receivables due to market movements and MSRs reflecting lower prepayment speeds on higher rates.
- \$2.8 billion of net gains on liabilities, predominantly driven by gains in long-term debt due to market movements.

Six months ended June 30, 2023

- \$139 million of net gains on assets, driven by gains in MSR reflecting lower prepayment speeds on higher rates.
- \$1.8 billion of net losses on liabilities, predominantly driven by losses in long-term debt due to market movements.

Six months ended June 30, 2022

- \$5.5 billion of net gains on assets, predominantly driven by gains in net equity derivative receivables due to market movements and MSRs reflecting lower prepayment speeds on higher rates.
- \$5.0 billion of net gains on liabilities, predominantly driven by gains in long-term debt due to market movements.

Refer to Note 15 for information on MSRs.

Credit and funding adjustments — derivatives

The following table provides the impact of credit and funding adjustments on principal transactions revenue in the respective periods, excluding the effect of any associated hedging activities. The FVA presented below includes the impact of the Firm's own credit quality on the inception value of liabilities as well as the impact of changes in the Firm's own credit quality over time.

	Thre	e month: 3	s en 0,	ded June	S	ix months 3	end 0,	ed June
(in millions)		2023		2022		2023		2022
Oredit and funding adjustments:								
Derivatives CVA	\$	66	\$	147	\$	121	\$	(165)
Derivatives FVA		63		7		55		(51)

Refer to Note 2 of JPMorgan Chase's 2022 Form 10-K for further information about both credit and funding

adjustments, as well as information about valuation adjustments on fair value option elected liabilities.

Assets and liabilities measured at fair value on a nonrecurring basis

The following tables present the assets and liabilities held as of June 30, 2023 and 2022, for which nonrecurring fair value adjustments were recorded during the six months ended June 30, 2023 and 2022, by major product category and fair value hierarchy.

	 Fai	r value hierarc	hy		
June 30, 2023 (in millions)	Level 1	Level 2		Level 3	Total fair value
Loans	\$ — \$	803	\$	840 (b)	\$ 1,643
Other assets(a)	_	7		286	293
Total assets measured at fair value on a nonrecurring basis	\$ — \$	810	\$	1,126	\$ 1,936
Accounts payable and other liabilities	_	_		_	
Total liabilities measured at fair value on a nonrecurring basis	\$ — \$	_	\$	_	\$ _

	_	Fair	value hierard	chy			
June 30, 2022 (in millions)		Level 1	Level 2		Level 3	Tota	fair value
Loans	;	\$ — \$	1,516	\$	665	\$	2,181
Other assets		_	22		1,083		1,105
Total assets measured at fair value on a nonrecurring basis	;	\$ — \$	1,538	\$	1,748	\$	3,286
Accounts payable and other liabilities		_	_		293		293
Total liabilities measured at fair value on a nonrecurring basis	;	\$ — \$	_	\$	293	\$	293

- (a) Primarily includes equity securities without readily determinable fair values that were adjusted based on observable price changes in orderly transactions from an identical or similar investment of the same issuer (measurement alternative). Of the \$286 million in level 3 assets measured at fair value on a nonrecurring basis as of June 30, 2023, \$220 million related to equity securities adjusted based on the measurement alternative. These equity securities are classified as level 3 due to the infrequency of the observable prices and/or the restrictions on the shares.
- (b) Of the \$840 million in level 3 assets measured at fair value on a nonrecurring basis as of June 30, 2023, \$23 million related to residential real estate loans carried at the net realizable value of the underlying collateral (e.g., collateral-dependent loans). These amounts are classified as level 3 as they are valued using information frombroker's price opinions, appraisals and automated valuation models and discounted based upon the Firm's experience with actual liquidation values. These discounts ranged from 3% to 56% with a weighted average of 25%.

Nonrecurring fair value changes

The following table presents the total change in value of assets and liabilities for which fair value adjustments have been recognized for the three and six months ended June 30, 2023 and 2022, related to assets and liabilities held at those dates.

		Three mor			Si	ix months 3	ed June
(in millions)		2023		2022		2023	2022
Loans	\$ (96) \$ (80)					(128)	\$ (91)
Other assets(a)	(36) (389) (99)					(45)	
Accounts payable and other liabilities		_		(269)		_	(288)
Total nonrecurring fair value gains/(losses)	se (132) \$ (738) \$ (227)				\$ (424)		

(a) Included \$(32) million and \$(387) million for the three months ended June 30, 2023 and 2022, respectively, and \$(93) million and \$(29) million for the six months ended June 30, 2023 and 2022, respectively, of net gains/(losses) as a result of the measurement alternative.

Refer to Note 12 for further information about the measurement of collateral-dependent loans.

Equity securities without readily determinable fair values

The Firm measures certain equity securities without readily determinable fair values at cost less impairment (if any), plus or minus observable price changes from an identical or similar investment of the same issuer (i.e., measurement alternative), with such changes recognized in other income.

In its determination of the new carrying values upon observable price changes, the Firm may adjust the prices if deemed necessary to arrive at the Firm's estimated fair values. Such adjustments may include adjustments to reflect the different rights and obligations of similar securities, and other adjustments that are consistent with the Firm's valuation techniques for private equity direct investments.

The following table presents the carrying value of equity securities without readily determinable fair values held as of June 30, 2023 and 2022, that are measured under the measurement alternative and the related adjustments recorded during the periods presented for those securities with observable price changes. These securities are included in the nonrecurring fair value tables when applicable price changes are observable.

		Tr	ree months	ended	June 30,	Six months e	nded J	une 30,
As of or for the period ended, (in millions)	_	2	2023		2022	 2023		2022
Other assets								
Carrying value(a)	\$	\$	4,673	\$	4,196	\$ 4,673	\$	4,196
Upward carrying value changes®			5		76	40		445
Downward carrying value changes/impairment(c)			(37)		(463)	(133)		(474)

- (a) The carrying value as of December 31, 2022 was \$4.1 billion. The period-end carrying values reflect cumulative purchases and sales in addition to upward and downward carrying value changes.
- (b) The cumulative upward carrying value changes between January 1, 2018 and June 30, 2023 were \$1.5 billion.
- (c) The cumulative downward carrying value changes/impairment between January 1, 2018 and June 30, 2023 were \$(1.0) billion.

Included in other assets above is the Firm's interest in approximately 37 million Visa Class B common shares ("Visa B shares"). These shares are subject to certain transfer restrictions and are convertible into Visa Class A common shares ("Visa A shares") at a specified conversion rate upon final resolution of certain litigation matters involving Visa. On June 29, 2023, Visa filed a Current Report on Form 8-K with the SEC indicating that the conversion rate of Visa B shares to Visa A shares decreased from 1.5991 to 1.5902 effective June 28, 2023. The conversion rate may be further adjusted by Visa depending on developments related to the litigation matters. The outcome of those litigation matters, and the effect that the resolution of those matters may have on the conversion rate, is unknown. Accordingly, as of June 30, 2023, there is significant uncertainty regarding when the transfer restrictions on Visa B shares may be terminated and what the final conversion rate for the Visa B shares will be. As a result of these considerations, as well as differences in voting rights, Visa B shares are not considered to be similar to Visa A shares, and they continue to be held at their nominal carrying value.

In connection with prior sales of Visa B shares, the Firm has entered into derivative instruments with the purchasers of the shares under which the Firm retains the risk associated with changes in the conversion rate. Under the terms of the derivative instruments, the Firm will (a) make or receive payments based on subsequent changes in the conversion rate and (b) make periodic interest payments to the purchasers of the Visa B shares. The payments under the derivative instruments will continue as long as the Visa B shares remain subject to transfer restrictions. The derivative instruments are accounted for at fair value using a discounted cash flow methodology based upon the Firm's estimate of the timing and magnitude of final resolution of the litigation matters. The derivative instruments are recorded in trading liabilities, and changes in fair value are recognized in other income. As of June 30, 2023, the Firm held derivative instruments associated with 23 million Visa B shares that the Firm had previously sold, which are all subject to similar terms and conditions.

Additional disclosures about the fair value of financial instruments that are not carried on the Consolidated balance sheets at fair value

The following table presents, by fair value hierarchy classification, the carrying values and estimated fair values at June 30, 2023, and December 31, 2022, of financial assets and liabilities, excluding financial instruments that are carried at fair value on a recurring basis, and their classification within the fair value hierarchy.

		June 30 Estimated fair va		ıne 30, 2023					Dece	ember 31, 202	2	
			Estimated 1	fair value hier	archy				Estimated	fair value hier	archy	
(in billions)	C	Carrying value	Level 1	Level 2	Level 3	Total stimated air value	(Carrying value	Level 1	Level 2		Total estimated fair value
Financial assets												
Cash and due from banks	\$	26.1 \$	26.1 \$	— \$	_	\$ 26.1	\$	27.7 \$	27.7 \$	— \$	— \$	27.7
Deposits with banks		469.1	469.0	0.1	_	469.1		539.5	539.3	0.2	_	539.5
Accrued interest and accounts receivable		111.1	_	111.1	0.1	111.2		124.7	_	124.6	0.1	124.7
Federal funds sold and securities purchased under resale agreements	I	3.0	_	3.0	_	3.0		3.7	_	3.7	_	3.7
Securities borrowed		107.7	_	107.7	_	107.7		115.3	_	115.3	_	115.3
Investment securities, held-to-maturity		408.9	185.8	189.5	_	375.3		425.3	189.1	199.5	_	388.6
Loans, net of allow ance for loan losses(a)		1,239.3	_	279.8	936.1	1,215.9		1,073.9	_	194.0	853.9	1,047.9
Other		69.2	_	66.9	2.4	69.3		101.2	_	99.6	1.7	101.3
Financial liabilities												
Deposits	\$	2,347.4 \$	5 — \$	2,347.5 \$	_	\$ 2,347.5	\$	2,311.6 \$	— \$	2,311.5 \$	— \$	2,311.5
Federal funds purchased and securities loaned or sold under repurchase agreements		49.7	_	49.7	_	49.7		50.6	_	50.6	_	50.6
Short-term borrowings(b)		23.1	_	23.1	_	23.1		28.2	_	28.2	_	28.2
Accounts payable and other liabilities		248.1	_	238.8	8.8	247.6		257.5	_	251.2	5.6	256.8
Beneficial interests issued by consolidated VIEs		19.6	_	19.6	_	19.6		12.6	_	12.6	_	12.6
Long-term debt(b)		285.4	_	232.0	51.7	283.7		223.6	_	216.5	2.8	219.3

⁽a) Fair value is typically estimated using a discounted cash flow model that incorporates the characteristics of the underlying loans (including principal, contractual interest rate and contractual fees) and other key inputs, including expected lifetime credit losses, interest rates, prepayment rates, and primary origination or secondary market spreads. For certain loans, the fair value is measured based on the value of the underlying collateral. Carrying value of the loan takes into account the loan's allowance for loan losses, which represents the loan's expected credit losses over its remaining expected life. The difference between the estimated fair value and carrying value of a loan is generally attributable to changes in market interest rates, including credit spreads, market liquidity premiums and other factors that affect the fair value of a loan but do not affect its carrying value.

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.

			Ju	ıne 30, 2023				Dece	ember 31, 2022		
			Estimated	fair value hier	archy			Estimated	fair value hiera	rchy	
(in billions)	Ca valu	rrying Ie ^{(a) (b)(c)}	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	\$	3.7 \$	_ \$	_ \$	4.9	\$ 4.9	\$ 2.3 \$	- \$	- \$	3.2	\$ 3.2

⁽a) Excludes the current carrying values of the guarantee liability and the offsetting asset, each of which is recognized at fair value at the inception of the guarantees.

(b) Includes the wholesale allowance for lending-related commitments.

The Firm does not estimate the fair value of consumer off-balance sheet lending-related commitments. In many cases, the Firm can reduce or cancel these commitments by providing the borrower notice or, in some cases as permitted by law, without notice. Refer to page 169 of JPMorgan Chase's 2022 Form 10-K for a further discussion of the valuation of lending-related commitments.

⁽b) Includes FHLB advances in level 2 of Long-term debt and Short-termborrowings and the Purchase Money Note in level 3 of Long-term debt associated with the First Republic acquisition. Refer to Notes 18 and 28 for additional information.

⁽c) As of June 30, 2023, includes fair value adjustments associated with the First Republic acquisition for other unfunded commitments to extend credit totaling \$1.6 billion. Refer to Notes 24 and 28 for additional information.

Note 3 – Fair value option

The fair value option provides an option to elect fair value for selected financial assets, financial liabilities, unrecognized firm commitments, and written loan commitments.

The Firm has elected to measure certain instruments at fair value for several reasons including to mitigate income statement volatility caused by the differences between the measurement basis of elected instruments (e.g., certain instruments that otherwise would be accounted for on an accrual basis) and the associated risk management arrangements that are accounted for on a fair value basis, as well as to better reflect those instruments that are managed on a fair value basis.

The Firm's election of fair value includes the following instruments:

- Loans purchased or originated as part of securitization warehousing activity, subject to bifurcation accounting, or managed on a fair value basis, including lending-related commitments
- · Certain securities financing agreements
- Owned beneficial interests in securitized financial assets that contain embedded credit derivatives, which would otherwise be required to be separately
 accounted for as a derivative instrument
- Structured notes and other hybrid instruments, which are predominantly financial instruments that contain embedded derivatives, that are issued or transacted as part of client-driven activities
- · Certain long-term beneficial interests issued by CIB's consolidated securitization trusts where the underlying assets are carried at fair value

Changes in fair value under the fair value option election

The following table presents the changes in fair value included in the Consolidated statements of income for the three and six months ended June 30, 2023 and 2022, for items for which the fair value option was elected. The profit and loss information presented below only includes the financial instruments that were elected to be measured at fair value; related risk management instruments, which are required to be measured at fair value, are not included in the table.

	Three months ended June 30, 2022 2022												
		2023			2022								
(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							
Federal funds sold and securities purchased under resale agreements	\$ 18	\$ —	\$ 18	\$ (145)	\$ —	\$ (145)							
Securities borrowed	(60)	_	(60)	(101)	_	(101)							
Trading assets: Debt and equity instruments, excluding loans Loans reported as trading assets:	1,160	_	1,160	(1,255)	_	(1,255)							
Changes in instrument-specific credit risk	100	_	100	(136) ^(f)	_	(136)							
Other changes in fair value	2	2 (c)	4	`(11)	_	`(11)							
Loans:				, ,		. ,							
Changes in instrument-specific credit risk	6	(5) (c)	1	(83)	11 (c)	(72)							
Other changes in fair value	(76)	(6) (c)	(82)	(501)	(260) (c)	(761)							
Other assets	(16)	(1) (d)	(17)	(2)	4 (d)	2							
Deposits ^(a)	(395)	_	(395)	382	_	382							
Federal funds purchased and securities loaned or sold under repurchase agreements	(8)	_	(8)	124	_	124							
Short-term borrow ings ^(a)	(110)	_	(110)	471	_	471							
Trading liabilities	(15)	_	(15)	54	_	54							
Beneficial interests issued by consolidated VIEs	_	_	_	_	_	_							
Other liabilities	(1)	_	(1)	(7)	_	(7)							
Long-term debt(a)(b)	(663)	(2) (c)(d)	(665)	5,405	14 (c)(d)	5,419							

				Six months end	ded	June 30,				
			2023					2022		
(in millions)	Principal transactions	All	other income	Total changes in fair value recorded (e)		Principal transactions	Al	l other income	fair	otal changes in value recorded
Federal funds sold and securities purchased under resale agreements	\$ 220	\$	_	\$ 220	\$	(375)	\$	_	\$	(375)
Securities borrowed	28		_	28		(299)		_		(299)
Trading assets: Debt and equity instruments, excluding loans Loans reported as trading assets:	2,755		_	2,755		(911)		_		(911)
Changes in instrument-specific credit risk	231		_	231		(142) ^(f)		_		(142)
Other changes in fair value	5		2 (c)	7		(22)		_		(22)
Loans: Changes in instrument-specific credit risk Other changes in fair value	71 119		(4) (c) 104 (c)	67 223		(77) (1,220)		23 ^(c) (774) ^(c)		(54) (1,994)
Other assets	14		(1) ^(d)	13		9		1 (d)		` 10´
Deposits ^(a)	(868)		_	(868)		784		_		784
Federal funds purchased and securities loaned or sold under repurchase agreements	(69)		_	(69)		206		_		206
Short-term borrowings(a)	(269)		_	(269)		773		_		773
Trading liabilities	(30)		_	(30)		(12)		_		(12)
Beneficial interests issued by consolidated VIEs			_			(1)		_		(1)
Other liabilities	(1)		_	(1)		(4)		_		(4)
Long-termdebt(a)(b)	(3,461)		(28) (c)(d)	(3,489)		9,365		33 (c)(d)		9,398

⁽a) Unrealized gains/(losses) due to instrument-specific credit risk (DVA) for liabilities for which the fair value option has been elected are recorded in OCI, while realized gains/(losses) are recorded in principal transactions revenue. Realized gains/(losses) due to instrument-specific credit risk recorded in principal transactions revenue were not material both for the three and six months ended June 30, 2023 and 2022.

(c) Reported in mortgage fees and related income.

(d) Reported in other income.

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

⁽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.

⁽e) Changes in fair value exclude contractual interest, which is included in interest income and interest expense for all instruments other than certain hybrid financial instruments in CIB. Refer to Note 7 for further information regarding interest income and interest expense.

Difference between aggregate fair value and aggregate remaining contractual principal balance outstanding

The following table reflects the difference between the aggregate fair value and the aggregate remaining contractual principal balance outstanding as of June 30, 2023, and December 31, 2022, for loans, long-term debt and long-term beneficial interests for which the fair value option has been elected.

			June	30, 2023			Decen	rber 31, 2022	
(in millions)	ŗ	ontractual orincipal tstanding	F	air value	Fair value over/(under) contractual principal outstanding	Contractual principal outstanding		Fair value	Fair value over/(under) contractual principal outstanding
Loans									
Nonaccrual loans									
Loans reported as trading assets	\$	2,737	\$	529 \$	(2,208)	\$ 2,517	\$	368 \$	(2,149)
Loans		911		760	(151)	967		829	(138)
Subtotal		3,648		1,289	(2,359)	3,484		1,197	(2,287)
90 or more days past due and government guaranteed									
Loans(a)		82		76	(6)	124		115	(9)
All other performing loans(b)									
Loans reported as trading assets		9,217		7,560	(1,657)	7,823		6,135	(1,688)
Loans		39,995		37,953	(2,042)	42,588		41,135	(1,453)
Subtotal		49,212		45,513	(3,699)	50,411		47,270	(3,141)
Total loans	\$	52,942	\$	46,878 \$	(6,064)	\$ 54,019	\$	48,582 \$	(5,437)
Long-term debt									, ,
Principal-protected debt	\$	42,889 (d)	\$	34,524 \$	(8,365)	\$ 41,341	(d) \$	31,105 \$	(10,236)
Nonprincipal-protected debt(c)		NA		44,085	NA.	NA		41,176	NA
Total long-term debt		NA	\$	78,609	NA	NA	\$	72,281	NA
Long-term beneficial interests									
Nonprincipal-protected debt(c)		NA	\$	1	NA	NA	\$	5	NA
Total long-term beneficial interests	•	NA	\$	1	NA	NA	\$	5	NA.

payment at the Firms next call date.

At June 30, 2023, and December 31, 2022, the contractual amount of lending-related commitments for which the fair value option was elected was \$10.2 billion and \$7.6 billion, respectively, with a corresponding fair value of \$264 million and \$24 million, respectively. Refer to Note 28 of JPMorgan Chase's 2022 Form 10-K, and Note 24 of this Form 10-Q for further information regarding off-balance sheet lending-related financial instruments.

⁽a) These balances are excluded from nonaccrual loans as the loans are insured and/or guaranteed by U.S. government agencies.
(b) There were no performing loans that were ninety days or more past due as of June 30, 2023, and December 31, 2022.
(c) Remaining contractual principal is not applicable to nonprincipal-protected structured notes and long-term beneficial interests. Unlike principal-protected structured notes and long-term beneficial interests, for which the Firm is obligated to return a stated amount of principal at maturity, nonprincipal-protected structured notes and long-term beneficial interests do not obligate the Firm to return a stated amount of principal at maturity, but for structured notes to return an amount based on the performance of an underlying variable or derivative feature embedded in the note. However, investors are exposed to the credit risk of the Firm as issuer for both nonprincipal-protected and principal-protected notes.
(d) Where the Firmis sues principal-protected zero-coupon or discount notes, the balance reflects the contractual principal payment at maturity or, if applicable, the contractual principal navement at the Firmis next call date

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.

			June 30	0, 2023				Decemb	er 31, 2022	
(in millions)	Lo	ng-term debt	Short-term borrowings	Deposits	Total	L	ong-term debt	Short-term borrowings	Deposits	Total
Risk exposure										
Interest rate	\$	34,860 \$	225 \$	46,527	\$ 81,612	\$	31,973	\$ 260	\$ 24,655	\$ 56,888
Credit		4,618	247	_	4,865		4,105	170	_	4,275
Foreign exchange		2,675	997	3	3,675		2,674	788	50	3,512
Equity		33,590	4,830	3,202	41,622		30,864	4,272	3,545	38,681
Commodity		2,017	· —	1 (a)	2,018		1,655	16	2 (a)	1,673
Total structured notes	\$	77,760 \$	6,299 \$	49,733	\$ 133,792	\$	71,271	\$ 5,506	\$ 28,252	\$ 105,029

⁽a) Excludes deposits linked to precious metals for which the fair value option has not been elected of \$590 million and \$602 million for the periods ended June 30, 2023 and December 31, 2022, respectively.

Note 4 – Credit risk concentrations

Concentrations of credit risk arise when a number of clients, counterparties or customers are engaged in similar business activities or activities in the same geographic region, or when they have similar economic features that would cause their ability to meet contractual obligations to be similarly affected by changes in economic conditions.

JPMorgan Chase regularly monitors various segments of its credit portfolios to assess potential credit risk concentrations and to obtain additional collateral when deemed necessary and permitted under the Firm's agreements. Senior management is significantly involved in the credit approval and review process, and risk levels are adjusted as needed to reflect the Firm's risk appetite.

In the Firm's consumer portfolio, concentrations are managed primarily by product and by U.S. geographic region, with a key focus on trends and concentrations at the portfolio level, where potential credit risk concentrations can be remedied through changes in underwriting policies and portfolio guidelines. Refer to Note 12 for additional information on the geographic composition of the Firm's consumer loan portfolios. In the wholesale portfolio, credit risk concentrations are evaluated primarily by industry and monitored regularly on both an aggregate portfolio level and on an individual client or counterparty basis.

The Firm's wholesale exposure is managed through loan syndications and participations, loan sales, securitizations, credit derivatives, master netting agreements, collateral and other risk-reduction techniques. Refer to Note 12 for additional information on loans.

The Firm does not believe that its exposure to any particular loan product or industry segment results in a significant concentration of credit risk.

Terms of loan products and collateral coverage are included in the Firm's assessment when extending credit and establishing its allowance for loan losses.

The table below presents both on-balance sheet and off-balance sheet consumer and wholesale credit exposure by the Firm's three credit portfolio segments as of June 30, 2023 and December 31, 2022. The wholesale industry of risk category is generally based on the client or counterparty's primary business activity.

			June 30	0, 202	23			Decemb	er 31,	2022	
		Credit —	On-balar	nce st	neet	Off-balance	Credit —	On-bala	nce sh	eet	Off-balance
(in millions)	е	xposure(h)(i)	Loans	D	erivatives	sheet®	exposure ^(h)	Loans	De	erivatives	sheet [®]
Consumer, excluding credit card	\$	459,050 \$	408,204	\$	— \$	50,846	\$ 344,893 \$	311,375	\$	— \$	33,518
Credit card(a)		1,072,833	191,348		_	881,485	1,006,459	185,175		_	821,284
Total consumer ^(a)		1,531,883	599,552		_	932,331	1,351,352	496,550		_	854,802
Wholesale ^(b)											
Real Estate		206,912	165,069		331	41,512	170,857	131,681		249	38,927
Individuals and Individual Entities)		141,178	122,056		730	18,392	130,815	120,424		434	9,957
Asset Managers		138,143	52,730		14,751	70,662	95,656	40,511		16,397	38,748
Consumer & Retail		125,935	47,410		2,278	76,247	120,555	45,867		1,650	73,038
Industrials		77,206	27,537		1,424	48,245	72,483	26,960		1,770	43,753
Technology, Media & Telecommunications		76.444	21,159		2,601	52,684	72.286	21.622		2,950	47.714
Healthcare		65,547	22,727		1,720	41,100	62,613	22,970		1,683	37,960
Banks & Finance Cos		61,659	34,934		4,679	22,046	51,816	32,172		3,246	16,398
State & Municipal Govt ^(d)		37,157	20,656		457	16,044	33.847	18.147		585	15,115
Utilities		35,757	7,162		3.089	25,506	36,218	9.107		3,269	23.842
Oil & Gas		33,233	9,607		1,352	22,274	38,668	9,632		5,121	23,915
Automotive		32,947	15,169		602	17,176	33,287	14,735		529	18,023
Chemicals & Plastics		22,195	6,343		510	15,342	20,030	5,771		407	13,852
Insurance		21,874	2,772		8,175	10,927	21,045	2,387		8,081	10,577
Central Govt		16,845	3,670		10,827	2,348	19,095	3,167		12,955	2,973
Metals & Mining		15,631	4,786		311	10,534	15,915	5,398		475	10,042
Transportation		15,447	5,779		606	9,062	15,009	5,005		567	9,437
Securities Firms		9,077	957		3,392	4,728	8,066	556		3,387	4,123
Financial Markets Infrastructure		4,993	184		2,491	2,318	4,962	13		3,050	1,899
All other ^(e)		135,271	97,438		3,891	33,942	123,307	87,545		4,075	31,687
Subtotal		1,273,451	668,145		64,217	541,089	1,146,530	603,670		70,880	471,980
Loans held-for-sale and loans at fair value		32,372	32,372		_	_	35,427	35,427		_	
Receivables from customers ⁽¹⁾		42,741	_		_	_	49,257	_		_	_
Total wholesale		1,348,564	700,517		64,217	541,089	1,231,214	639,097		70,880	471,980
Total exposure(g)(h)	\$	2,880,447 \$	1,300,069	\$	64,217 \$	1,473,420	\$ 2,582,566 \$	1,135,647	\$	70,880 \$	1,326,782

(a) Also includes commercial card lending-related commitments primarily in CB and CIB.
(b) The industry rankings presented in the table as of December 31, 2022, are based on the industry rankings of the corresponding exposures as of June 30, 2023, not actual rankings of such exposures at December 31, 2022.

(c) Individuals and Individual Entities predominantly consists of Global Private Bank clients within AWM and J.P. Morgan Wealth Management within COB, and includes exposure to personal investment companies and personal and testamentary trusts.

(d) In addition to the credit risk exposure to states and municipal governments (both U.S. and non-U.S.) as of June 30, 2023 and December 31, 2022, noted above, the Firmheld: \$6.8 billion and \$6.6 billion, respectively, of trading assets; \$24.0 billion and \$6.8 billion, respectively, of AFS securities; and \$11.6 billion and \$19.7 billion, respectively, of HTM securities, issued by U.S. state and municipal governments. Refer to Note 2 and Note 10 for further information.

(e) All other includes: SPEs and Private education and civic organizations, representing approximately 94% and 6%, respectively, as of June 30, 2023 and 95% and 5%, respectively, as of December 31, 2022. Refer to Note 14 for more information on exposures to SPEs.

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

(g) Excludes cash placed with banks of \$485.4 billion and \$556.6 billion, as of June 30, 2023 and December 31, 2022, respectively, which is predominantly placed with various central banks, primarily Federal Reserve Banks.

(h) Credit exposure is net of risk participations and excludes the benefit of credit derivatives used in credit portfolio management activities held against derivative receivables or loans and liquid securities and other cash collateral held against derivative receivables.
 (i) Included credit exposure associated with the First Republic acquisition consisting of \$104.6 billion in the Consumer, excluding credit card portfolio, and \$98.2 billion in the Wholesale

portfolio predominantly in Asset Managers, Real Estate, and Individuals and Individual Entities. Represents lending-related financial instruments.

Note 5 – Derivative instruments

JPMorgan Chase makes markets in derivatives for clients and also uses derivatives to hedge or manage its own risk exposures. Refer to Note 5 of JPMorgan Chase's 2022 Form 10-K for a further discussion of the Firm's use of and accounting policies regarding derivative instruments.

The Firm's disclosures are based on the accounting treatment and purpose of these derivatives. A limited number of the Firm's derivatives are designated in hedge

accounting relationships and are disclosed according to the type of hedge (fair value hedge, cash flow hedge, or net investment hedge). Derivatives not designated in hedge accounting relationships include certain derivatives that are used to manage risks associated with specified assets and liabilities ("specified risk management" positions) as well as derivatives used in the Firm's market-making businesses or for other purposes.

The following table outlines the Firm's primary uses of derivatives and the related hedge accounting designation or disclosure category.

Type of Derivative	Use of Derivative	Designation and disclosure	Affected segment or unit	10-Q page reference
Manage specifically identified risl	k exposures in qualifying hedge accounting relationships:			
Interest rate	Hedge fixed rate assets and liabilities	Fair value hedge	Corporate	130-131
• Interest rate	Hedge floating-rate assets and liabilities	Cash flow hedge	Corporate	132
Foreign exchange	Hedge foreign currency-denominated assets and liabilities	Fair value hedge	Corporate	130-131
Foreign exchange	Hedge foreign currency-denominated forecasted revenue and expense	Cash flow hedge	Corporate	132
Foreign exchange	Hedge the value of the Firm's investments in non-U.S. dollar functional currency entities	Net investment hedge	Corporate	133
• Commodity	Hedge commodity inventory	Fair value hedge	CIB, AWM	130-131
Manage specifically identified risl	k exposures not designated in qualifying hedge accounting relationships.			
Interest rate	Manage the risk associated with mortgage commitments, warehouse loans and MSRs	Specified risk management	CCB	134
• Credit	Manage the credit risk associated with wholesale lending exposures	Specified risk management	QB	134
Interest rate and foreign exchange	Manage the risk associated with certain other specified assets and liabilities	Specified risk management	Corporate	134
Market-making derivatives and ot	her activities:			
• Various	Market-making and related risk management	Market-making and other	aВ	134
• Various	Other derivatives	Market-making and other	CIB, AWM, Corporate	134

Notional amount of derivative contracts

The following table summarizes the notional amount of free-standing derivative contracts outstanding as of June 30, 2023, and December 31, 2022.

	Notional amount	(S(b)
(in billions)	 June 30, 2023 Decem	ber 31, 2022
Interest rate contracts		
Swaps	\$ 29,292 \$	24,491
Futures and forwards	3,341	2,636
Written options	3,329	3,047
Purchased options	3,390	2,992
Total interest rate contracts	39,352	33,166
Credit derivatives(a)	1,477	1,132
Foreign exchange contracts		
Oross-currency swaps	4,436	4,196
Spot, futures and forwards	8,681	7,017
Written options	867	775
Purchased options	826	759
Total foreign exchange contracts	14,810	12,747
Equity contracts		
Swaps	598	618
Futures and forwards	110	110
Written options	755	636
Purchased options	707	580
Total equity contracts	2,170	1,944
Commodity contracts		
Swaps	137	136
Spot, futures and forwards	142	136
Written options	133	117
Purchased options	110	98
Total commodity contracts	522	487
Total derivative notional amounts	\$ 58,331 \$	49,476

 ⁽a) Refer to the Credit derivatives discussion on page 135 for more information on volumes and types of credit derivative contracts.
 (b) Represents the sum of gross long and gross short third-party notional derivative contracts.

While the notional amounts disclosed above give an indication of the volume of the Firm's derivatives activity, the notional amounts significantly exceed, in the Firm's view, the possible losses that could arise from such transactions. For most derivative contracts, the notional amount is not exchanged; it is simply a reference amount used to calculate payments.

Impact of derivatives on the Consolidated balance sheets
The following table summarizes information on derivative receivables and payables (before and after netting adjustments) that are reflected on the Firm's Consolidated balance sheets as of June 30, 2023, and December 31, 2022, by accounting designation (e.g., whether the derivatives were designated in qualifying hedge accounting relationships or not) and contract type.

Free-standing derivative receivables and payables(a)

	Gros	s de	erivative receiv	/able	3		Gros	ss c	derivative paya	bles		
June 30, 2023 (in millions)	designated s hedges	D	esignated as hedges		al derivative eceivables	Net derivative receivables(b)	designated s hedges		Designated as hedges		al derivative payables	let derivative payables(b)
Trading assets and liabilities												
Interest rate	\$ 288,312	\$	_	\$	288,312	\$ 27,709	\$ 277,334	\$	8	\$	277,342	\$ 15,157
Credit	13,685		_		13,685	1,245	13,767		_		13,767	566
Foreign exchange	226,793		886		227,679	22,194	222,739		846		223,585	14,177
Equity	61,392		_		61,392	7,324	67,670		_		67,670	9,805
Commodity	16,872		768		17,640	5,745	18,465		820		19,285	6,840
Total fair value of trading assets and liabilities	\$ 607,054	\$	1,654	\$	608,708	\$ 64,217	\$ 599,975	\$	1,674	\$	601,649	\$ 46,545

	Gros	s de	rivative recei	vable	s		Gros	ss d	erivative paya	bles		
December 31, 2022 (in millions)	designated s hedges	De			tal derivative eceivables	Vet derivative receivables(b)	t designated as hedges	Designated as hedges		Total derivative payables		et derivative payables(b)
Trading assets and liabilities												
Interest rate	\$ 300,411	\$	4	\$	300,415	\$ 28,419	\$ 290,291	\$	_	\$	290,291	\$ 15,970
Credit	10,329		_		10,329	1,090	9,971		_		9,971	754
Foreign exchange	239,946		1,633		241,579	23,365	248,911		2,610		251,521	18,856
Equity	61,913		_		61,913	9,139	62,461		_		62,461	8,804
Commodity	23,652		1,705		25,357	8,867	20,758		2,511		23,269	6,757
Total fair value of trading assets and liabilities	\$ 636,251	\$	3,342	\$	639,593	\$ 70,880	\$ 632,392	\$	5,121	\$	637,513	\$ 51,141

⁽a) Balances exclude structured notes for which the fair value option has been elected. Refer to Note 3 for further information.(b) As permitted under U.S. GAAP, the Firmhas elected to net derivative receivables and derivative payables and the related cash collateral receivables and payables when a legally enforceable master netting agreement exists.

Derivatives netting

The following tables present, as of June 30, 2023, and December 31, 2022, gross and net derivative receivables and payables by contract and settlement type. Derivative receivables and payables, as well as the related cash collateral from the same counterparty, have been netted on the Consolidated balance sheets where the Firm has obtained an appropriate legal opinion with respect to the master netting agreement. Where such a legal opinion has not been either sought or obtained, amounts are not eligible for netting on the Consolidated balance sheets, and those derivative receivables and payables are shown separately in the tables below.

In addition to the cash collateral received and transferred that is presented on a net basis with derivative receivables and payables, the Firm receives and transfers additional collateral (financial instruments and cash). These amounts mitigate counterparty credit risk associated with the Firm's derivative instruments, but are not eligible for net presentation:

- collateral that consists of liquid securities and other cash collateral held at third-party custodians, which are shown separately as "Collateral not nettable on the Consolidated balance sheets" in the tables below, up to the fair value exposure amount. For the purpose of this disclosure, the definition of liquid securities is consistent with the definition of high quality liquid assets as defined in the LCR rule;
- the amount of collateral held or transferred that exceeds the fair value exposure at the individual counterparty level, as of the date presented, which is excluded from the tables below, and
- collateral held or transferred that relates to derivative receivables or payables where an appropriate legal opinion has not been either sought or obtained with respect to the master netting agreement, which is excluded from the tables below.

		June 30, 2023			December 31, 2022						
(in millions)		Amounts netted or the Consolidated balance sheets	Net	t derivative ceivables		oss derivative eceivables	t	mounts netted o he Consolidated balance sheets		Net derivative receivables	
U.S. GAAP nettable derivative receivables											
Interest rate contracts:											
Over-the-counter ("OTC")	\$ 194,218 \$	(, ,	\$	25,649	\$	203,922	\$	(178,261)	\$	25,661	
OTC-cleared	91,665	(91,508)		157		93,800		(93,424)		376	
Exchange-traded(a)	573	(526)		47		559		(311)		248	
Total interest rate contracts	286,456	(260,603)		25,853		298,281		(271,996)		26,285	
Credit contracts:											
OTC	8,850	(7,818)		1,032		8,474		(7,535)		939	
OTC-cleared	4,674	(4,622)		52		1,746		(1,704)		42	
Total credit contracts	13,524	(12,440)		1,084		10,220		(9,239)		981	
Foreign exchange contracts:											
OTC	223,998	(204,582)		19,416		237,941		(216,796)		21,145	
OTC-cleared	910	(901)		9		1,461		(1,417)		44	
Exchange-traded(a)	11	(2)		9		15		(1)		14	
Total foreign exchange contracts	224,919	(205,485)		19,434		239,417		(218,214)		21,203	
Equity contracts:											
OTC	24,672	(21,496)		3,176		30,323		(25,665)		4,658	
Exchange-traded(a)	34,196	(32,572)		1,624		28,467		(27,109)		1,358	
Total equity contracts	58,868	(54,068)		4,800		58,790		(52,774)		6,016	
Commodity contracts:											
OTC	9,317	(5,539)		3,778		14,430		(7,633)		6,797	
OTC-cleared	111	(111)		_		120		(112)		8	
Exchange-traded(a)	6,266	(6,245)		21		9,103		(8,745)		358	
Total commodity contracts	15,694	(11,895)		3,799		23,653		(16,490)		7,163	
Derivative receivables with appropriate legal opinion	599,461	(544,491)		54,970 (d)		630,361		(568,713)		61,648 ^(d)	
Derivative receivables where an appropriate legal opinion has not been either sought or obtained	9,247			9,247		9,232				9,232	
Total derivative receivables recognized on the Consolidated balance sheets	\$ 608,708		\$	64,217	\$	639,593			\$	70,880	
Collateral not nettable on the Consolidated balance sheets(b)(c)				(23,282)						(23,014)	
Net amounts			\$	40,935					\$	47,866	

		June 30, 2023				Dec	ember 31, 2022	
(in millions)		Amounts netted or the Consolidated balance sheets	Net	derivative ayables	ss derivative payables	t	mounts netted on he Consolidated balance sheets	Net derivative payables
U.S. GAAP nettable derivative payables								
Interest rate contracts:								
	\$ 180,016 \$	(' ' '	\$	12,889	\$ 190,108	\$	(176,890)	\$ 13,218
OTC-cleared	94,771	(94,554)		217	97,417		(97,126)	291
Exchange-traded(a)	512	(504)		8	327		(305)	22
Total interest rate contracts	275,299	(262,185)		13,114	287,852		(274,321)	13,531
Credit contracts:								
OTC	9,240	(8,768)		472	8,054		(7,572)	482
OTC-cleared	4,438	(4,433)		5	1,674		(1,645)	29
Total credit contracts	13,678	(13,201)		477	9,728		(9,217)	511
Foreign exchange contracts:								
OTC	220,326	(208,507)		11,819	246,457		(231,248)	15,209
OTC-cleared	993	(901)		92	1,488		(1,417)	71
Exchange-traded(a)	15			15	20			20
Total foreign exchange contracts	221,334	(209,408)		11,926	247,965		(232,665)	15,300
Equity contracts:								
OTC	28,206	(25,293)		2,913	29,833		(26,554)	3,279
Exchange-traded(a)	35,657	(32,572)		3,085	28,291		(27,103)	1,188
Total equity contracts	63,863	(57,865)		5,998	58,124		(53,657)	4,467
Commodity contracts:								
OTC	9,591	(6,061)		3,530	11,954		(7,642)	4,312
OTC-cleared	116	(116)		_	112		(112)	_
Exchange-traded(a)	7,050	(6,268)		782	9,021		(8,758)	263
Total commodity contracts	16,757	(12,445)		4,312	21,087		(16,512)	4,575
Derivative payables with appropriate legal opinion	590,931	(555,104)		35,827 ^(d)	624,756		(586,372)	38,384 ^(d)
Derivative payables where an appropriate legal opinion has not been either sought or obtained	10,718			10,718	 12,757			12,757
Total derivative payables recognized on the Consolidated balance sheets	\$ 601,649		\$	46,545	\$ 637,513			\$ 51,141
Collateral not nettable on the Consolidated balance sheets(b)(c)				(4,248)				 (3,318)
Net amounts			\$	42,297			•	\$ 47,823

⁽a) Exchange-traded derivative balances that relate to futures contracts are settled daily.
(b) Includes liquid securities and other cash collateral held at third-party custodians related to derivative instruments where an appropriate legal opinion has been obtained. For some counterparties, the collateral amounts of financial instruments may exceed the derivative receivables and derivative payables balances. Where this is the case, the total amount reported is limited to the net derivative receivables and net derivative payables balances with that counterparty.

 ⁽c) Derivative collateral relates only to OTC and OTC-cleared derivative instruments.
 (d) Net derivatives receivable included cash collateral netted of \$52.5 billion and \$51.5 billion at June 30, 2023, and December 31, 2022, respectively. Net derivatives payable included cash collateral netted of \$63.2 billion and \$69.2 billion at June 30, 2023, and December 31, 2022, respectively. Derivative cash collateral relates to OTC and OTC-cleared derivative instruments.

Liquidity risk and credit-related contingent features

Refer to Note 5 of JPMorgan Chase's 2022 Form 10-K for a more detailed discussion of liquidity risk and credit-related contingent features related to the Firm's derivative contracts.

The following table shows the aggregate fair value of net derivative payables related to OTC and OTC-cleared derivatives that contain contingent collateral or termination features that may be triggered upon a ratings downgrade, and the associated collateral the Firm has posted in the normal course of business, at June 30, 2023, and December 31, 2022.

OTC and OTC-cleared derivative payables containing downgrade triggers

(in millions)	June 30, 2023	December 31, 2022
Aggregate fair value of net derivative payables	\$ 15,243	\$ 16,023
Collateral posted	14,144	15,505

The following table shows the impact of a single-notch and two-notch downgrade of the long-term issuer ratings of JPMorgan Chase & Co. and its subsidiaries, predominantly JPMorgan Chase Bank, N.A., at June 30, 2023, and December 31, 2022, related to OTC and OTC-cleared derivative contracts with contingent collateral or termination features that may be triggered upon a ratings downgrade. Derivatives contracts generally require additional collateral to be posted or terminations to be triggered when the predefined rating threshold is breached. A downgrade by a single rating agency that does not result in a rating lower than a preexisting corresponding rating provided by another major rating agency will generally not result in additional collateral (except in certain instances in which additional initial margin may be required upon a ratings downgrade), nor in termination payment requirements. The liquidity impact in the table is calculated based upon a downgrade below the lowest current rating of the rating agencies referred to in the derivative contract.

Liquidity impact of downgrade triggers on OTC and OTC-cleared derivatives

	June 30, 2023				December 3	1, 2022
(in millions)	 Single-notch downgrade		vo-notch wngrade		Single-notch downgrade	Two-notch downgrade
Amount of additional collateral to be posted upon downgrade ^(a)	\$ 81	\$	1,241	\$	128 \$	1,293
Amount required to settle contracts with termination triggers upon downgrade ^(b)	80		811		88	925

- (a) Includes the additional collateral to be posted for initial margin.
- (b) Amounts represent fair values of derivative payables, and do not reflect collateral posted.

Derivatives executed in contemplation of a sale of the underlying financial asset

In certain instances the Firm enters into transactions in which it transfers financial assets but maintains the economic exposure to the transferred assets by entering into a derivative with the same counterparty in contemplation of the initial transfer. The Firm generally accounts for such transfers as collateralized financing transactions as described in Note 11, but in limited circumstances they may qualify to be accounted for as a sale and a derivative under U.S. GAAP. The amount of such transfers accounted for as a sale where the associated derivative was outstanding was not material at both June 30, 2023 and December 31, 2022.

Impact of derivatives on the Consolidated statements of income

The following tables provide information related to gains and losses recorded on derivatives based on their hedge accounting designation or purpose.

Fair value hedge gains and losses

The following tables present derivative instruments, by contract type, used in fair value hedge accounting relationships, as well as pre-tax gains/(losses) recorded on such derivatives and the related hedged items for the three and six months ended June 30, 2023 and 2022, respectively. The Firm includes gains/(losses) on the hedging derivative in the same line item in the Consolidated statements of income as the related hedged item.

		Gai	ns/(loss	es) recorde	d in incom	e		Income statem excluded co		OCI impact		
Three months ended June 30, 2023 (in millions)	De	Derivatives Hedged items		Incor	Income statement impact		Amortization approach	Changes in fair value	D	erivatives - Gains/(losses) recorded in OO(f)		
Contract type												
Interest rate(a)(b)	\$	(151)	\$	164	\$	13	\$	_	\$ 5	\$	_	
Foreign exchange(c)		254		(188)		66		(156)	66		15	
Conmodity(d)		422		(290)		132		· -	133		_	
Total	\$	525	\$	(314)	\$	211	\$	(156)	\$ 204	\$	15	

		Gair	ns/(loss	es) recorde	d in inco	me		Income statem excluded cor		OCI impact		
Three months ended June 30, 2022 (in millions)	De	Derivatives Hedged items		Inco	Income statement impact		Amortization approach	Changes in fair value	D	erivatives - Gains/(losses) recorded in OO(⁽¹⁾		
Contract type											_	
Interest rate(a)(b)	\$	(4,467)	\$	4,367	\$	(100)	\$	_	\$ (79)	\$	_	
Foreign exchange(c)		(818)		830		12		(115)	12		67	
Commodity ^(d)		(1,536)		1,464		(72)		`	(73)		_	
Total	\$	(6,821)	\$	6,661	\$	(160)	\$	(115)	\$ (140)	\$	67	

		Gair	ns/(loss	ses) recorde	d in inco	ome	Income stateme excluded cor		OCI impact		
Six months ended June 30, 2023 (in millions)	Der	rivatives	Hed	ged items	Inc	come statement impact	Amortization approach	Changes in fair value	D	erivatives - Gains/(losses) recorded in OO(*)	
Contract type											
Interest rate(a)(b)	\$	1,021	\$	(940)	\$	81	\$ _	\$ 15	\$	_	
Foreign exchange(c)		412		(282)		130	(329)	130		(13)	
Commodity ^(d)		(1,118)		1,335		217	_	217		<u> </u>	
Total	\$	315	\$	113	\$	428	\$ (329)	\$ 362	\$	(13)	

		Gair	es) recorde	come	Income statem excluded cor			OCI impact			
Six months ended June 30, 2022 (in millions)	Dŧ	Derivatives Hedged items		ln	come statement impact	Amortization approach	Changes in fair value		De	erivatives - Gains/(losses) recorded in OO(1)	
Contract type											
Interest rate(a)(b)	\$	(11,537)	\$	11,348	\$	(189)	\$ _	\$	(145)	\$	_
Foreign exchange ^(c)		(1,508)		1,518		10	(180)		10		212
Commodity ^(d)		(1,712)		1,611		(101)	<u> </u>		(110)		<u> </u>
Total	\$	(14,757)	\$	14,477	\$	(280)	\$ (180)	\$	(245)	\$	212

- (a) Primarily consists of hedges of the benchmark (e.g., Secured Overnight Financing Rate ("SOFR")) interest rate risk of fixed-rate long-term debt and AFS securities. Gains and losses were recorded in net interest income.
- (b) Includes the amortization of income/expense associated with the inception hedge accounting adjustment applied to the hedged item Excludes the accrual of interest on interest rate swaps and the related hedged items.
- (c) Primarily consists of hedges of the foreign currency risk of long-term debt and AFS securities for changes in spot foreign currency rates. Gains and losses related to the derivatives and the hedged items due to changes in foreign currency rates and the income statement impact of excluded components were recorded primarily in principal transactions revenue and net interest income
- (d) Consists of overall fair value hedges of physical commodities inventories that are generally carried at the lower of cost or net realizable value (net realizable value approximates fair value). Cains 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
- (e) The assessment of hedge effectiveness excludes certain components of the changes in fair values of the derivatives and hedged items such as forward points on foreign exchange forward contracts, time values and cross-currency basis spreads. Excluded components may impact earnings either through amortization of the initial amount over the life of the derivative, or through fair value changes recognized in the current period.
- (f) Represents the change in value of amounts excluded from the assessment of effectiveness under the amortization approach, predominantly cross-currency basis spreads. The amount excluded at inception of the hedge is recognized in earnings over the life of the derivative.

As of June 30, 2023 and December 31, 2022, the following amounts were recorded on the Consolidated balance sheets related to certain cumulative fair value hedge basis adjustments that are expected to reverse through the income statement in future periods as an adjustment to yield.

		Qum	Cumulative amount of fair value hedging adjustments included in the carrying a of hedged items:							
June 30, 2023 (in millions)	Carrying hedg	g amount of the led items ^{(a)(b)}	Active hedging relationships ^(d)	Discontinued hedging relationships(d)(e)	Total					
Assets										
Investment securities - AFS	\$	136,444 (c) \$	(2,752) \$	(3,462) \$	(6,214)					
Liabilities										
Long-term debt		176,509	(5,857)	(9,105)	(14,962)					

		a	Cumulative amount of fair value hedging adjustments included in the carrying of hedged items:								
December 31, 2022 (in millions)	Carry he	ing amount of the dged items(b)(c)	Active hedging relationships(d)	Discontinued hedging relationships(d)(e)	Total						
Assets											
Investment securities - AFS	\$	84,073 ^(c) \$	(4,149) \$	(1,542) \$	(5,691)						
Liabilities											
Long-term debt		175,257	(11,879)	(3,313)	(15,192)						

- (a) Excludes physical commodities with a carrying value of \$12.8 billion and \$26.0 billion at June 30, 2023 and December 31, 2022, respectively, to which the Firmapplies fair value hedge accounting. As a result of the application of hodge accounting, these inventories are carried at fair value, thus recognizing unrealized gains and losses in current periods. Since the Firm exits these positions at fair value, there is no incremental impact to net income in future periods.
- (b) Excludes hedged items where only foreign currency risk is the designated hedged risk, as basis adjustments related to foreign currency hedges will not reverse through the income statement in future periods. At June 30, 2023 and December 31, 2022, the carrying amount excluded for AFS securities is \$20.9 billion and \$20.3 billion, respectively, and for long-term debt is \$216 million and \$221 million, respectively.
- (c) Carrying amount represents the amortized cost, net of allowance if applicable. Effective January 1, 2023, the Firmadopted the new portfolio layer method hedge accounting guidance (c) Carrying amount represents the amortized cost, net or allow ance in applicable. Effective January 1, 2023, the Hirmadopied the new portfolio layer method which expanded the ability to hedge a portfolio allow more of the portfolio to be hedged. At June 30, 2023, the amortized cost of the portfolio layer method closed portfolios was \$67.8 billion, of which \$49.6 billion was designated as hedged. The cumulative amount of basis adjustments was \$(1.1) billion, reflecting \$(865) million and \$(229) million for active and discontinued hedging relationships, respectively. Refer to Note 1 and Note 10 for additional information.
 (d) Positive (negative) amounts related to assets represent cumulative fair value hedge basis adjustments that will reduce (increase) net interest income in future periods. Positive (negative) amounts related to liabilities represent cumulative fair value hedge basis adjustments that will increase (reduce) net interest income in future periods.
 (e) Represents basis adjustments existing on the balance sheet date associated with hedged items that have been de-designated from qualifying fair value hedging relationships.

Cash flow hedge gains and losses

The following tables present derivative instruments, by contract type, used in cash flow hedge accounting relationships, and the pre-tax gains/(losses) recorded on such derivatives, for the three and six months ended June 30, 2023 and 2022, respectively. The Firm includes the gains/(losses) on the hedging derivative in the same line item in the Consolidated statements of income as the change in cash flows on the related hedged item.

	Derivatives gains/(losses) recorded in income and other comprehensive income/(loss)						
Three months ended June 30, 2023 (in millions)	Amounts reclassified from AOO to income		Amounts recorded in OCI	Total change in OCI for period			
Contract type							
Interest rate(a)	\$ (474)	\$	(1,199) \$		(725)		
Foreign exchange(b)	9		80		71		
Total	\$ (465)	\$	(1,119) \$		(654)		

	Derivatives gains/(losses) recorded in income and other comprehensive income/(loss)						
Three months ended June 30, 2022 (in millions)	Amounts reclassified from AOO to income		Amounts recorded in OCI	Total change in OCI for period			
Contract type							
Interest rate(a)	\$ 86	\$	(1,509) \$	(1,595)			
Foreign exchange ^(b)	(62)		(241)	(179)			
Total	\$ 24	\$	(1,750) \$	(1,774)			

	Derivatives gains/(losses) recorded in income and other comprehensive income/(loss)								
Six months ended June 30, 2023 (in millions)	Amounts reclassified from AOOI to income		Amounts recorded in OCI	Total change in OCI for period					
Contract type									
Interest rate ^(a)	\$ (902)	\$	(738) \$		164				
Foreign exchange ^(b)	(46)		186		232				
Total	\$ (948)	\$	(552) \$		396				

	Derivatives gains/(losses) recorded in income and other comprehensive income/(loss)								
Six months ended June 30, 2022 (in millions)		Amounts reclassified from AOCI to income		Amounts recorded in OCI	Total change in OOI for period				
Contract type					_				
Interest rate(a)	\$	329	\$	(4,870) \$	(5,199)				
Foreign exchange ^(b)		(68)		(316)	(248)				
Total	\$	261	\$	(5,186) \$	(5,447)				

(a) Primarily consists of hedges of SOFR-indexed floating-rate assets. Gains and losses were recorded in net interest income.

The Firm did not experience any forecasted transactions that failed to occur for the three and six months ended June 30, 2023 and 2022.

Over the next 12 months, the Firm expects that approximately \$(1.3) billion (after-tax) of net losses recorded in AOCI at June 30, 2023, related to cash flow hedges will be recognized in income. For cash flow hedges that have been terminated, the maximum length of time over which the derivative results recorded in AOCI will be recognized in earnings is approximately seven years, corresponding to the timing of the originally hedged forecasted cash flows. For open cash flow hedges, the maximum length of time over which forecasted transactions are hedged is approximately seven years. The Firm's longer-dated forecasted transactions relate to core lending and borrowing activities.

⁽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.

Net investment hedge gains and losses
The following table presents hedging instruments, by contract type, that were used in net investment hedge accounting relationships, and the pre-tax gains/(losses) recorded on such instruments for the three and six months ended June 30, 2023 and 2022.

	Gains/(losses) recorded in income and other comprehensive income/(loss)										
	2023			2022							
Three months ended June 30, (in milions)	ts recorded in come(a)(b)	Amoun	ts recorded in OCI		ts recorded in come(a)(b)	Amour	ts recorded in OCI				
Foreign exchange derivatives	\$ 121	\$	(88)	\$	(116)	\$	3,520				

	Gains/(losses) recorded in income and other comprehensive income/(loss)										
		2023			2022						
Six months ended June 30, (in millions)		s recorded in come ^{(a)(b)}	Amou	nts recorded in OCI		ts recorded in come ^{(a)(b)}	Amoun	ts recorded in OCI			
Foreign exchange derivatives	\$	205	\$	(1,092)	\$	(247)	\$	3,858			

(a) Certain components of hedging derivatives are permitted to be excluded from the assessment of hedge effectiveness, such as forward points on foreign exchange forward contracts.

The Firmlelects to record changes in fair value of these amounts directly in other income.

(b) Excludes amounts reclassified from AOCI to income on the sale or liquidation of hedged entities. Excludes amounts reclassified from AOCI to income on the sale or liquidation of hedged entities. During the six months ended June 30, 2023, the Firmreclassified a pre-tax loss of \$41 million to other revenue related to the acquisition of CIFM. The amounts reclassified for the three months ended June 30, 2023 and three and six months ended June 30, 2022 were not material. Refer to Note 21 for further information.

Gains and losses on derivatives used for specified risk management purposes

The following table presents pre-tax gains/(losses) recorded on a limited number of derivatives, not designated in hedge accounting relationships, that are used to manage risks associated with certain specified assets and liabilities, including certain risks arising from mortgage commitments, warehouse loans, MSRs, wholesale lending exposures, and foreign currency-denominated assets and liabilities.

	Derivatives gains/(losses) recorded in income											
	٦	hree months (June 30,	ended	Si	ded June							
(in millions)		2023	2022		2023	2022						
Contract type												
Interest rate(a)	\$	(112) \$	(309)	\$	(126) \$	(538)						
Credit(b)		(67)	89		(163)	122						
Foreign exchange(c)		41	6		43	(76)						
Total	\$	(138) \$	(214)	\$	(246) \$	(492)						

- (a) Primarily represents interest rate derivatives used to hedge the interest rate risk inherent in mortgage commitments, warehouse loans and MSRs, as well as written commitments to originate warehouse loans. Gains and losses were recorded predominantly in mortgage fees and related income.
- (b) Relates to credit derivatives used to mitigate credit risk associated with lending exposures in the Firm's wholesale businesses. These derivatives do not include credit derivatives used to mitigate counterparty credit risk arising from derivative receivables, which is included in gains and losses on derivatives related to marketmaking activities and other derivatives. Gains and losses were recorded in principal transactions revenue.
- (c) Primarily relates to derivatives used to mitigate foreign exchange risk of specified foreign currency-denominated assets and liabilities. Gains and losses were recorded in principal transactions revenue.

Gains and losses on derivatives related to market-making activities and other derivatives

The Firm makes markets in derivatives in order to meet the needs of customers and uses derivatives to manage certain risks associated with net open risk positions from its market-making activities, including the counterparty credit risk arising from derivative receivables. All derivatives not included in the hedge accounting or specified risk management categories above are included in this category. Gains and losses on these derivatives are primarily recorded in principal transactions revenue. Refer to Note 6 for information on principal transactions revenue.

Credit derivatives

Refer to Note 5 of JPMorgan Chase's 2022 Form 10-K for a more detailed discussion of credit derivatives. The following tables present a summary of the notional amounts of credit derivatives and credit-related notes the Firm sold and purchased as of June 30, 2023 and December 31, 2022. The Firm does not use notional amounts of credit derivatives as the primary measure of risk management for such derivatives, because the notional amount does not take into account the probability of the occurrence of a credit event, the recovery value of the reference obligation, or related cash instruments and economic hedges, each of which reduces, in the Firm's view, the risks associated with such derivatives.

Total credit derivatives and credit-related notes

		Maximum payout/Notional amount											
June 30, 2023 (in millions)	Pro	tection sold		urchased with underlyings ^(c)		Net protection old)/purchased(d)	Other protection purchased(e)						
Credit derivatives													
Credit default swaps	\$	(649,720)	\$	677,813	\$	28,093	\$	5,774					
Other credit derivatives(a)		(55,887)		73,831		17,944		13,765					
Total credit derivatives		(705,607)		751,644		46,037		19,539					
Credit-related notes(b)		· · · · ·		_		_		8,064					
Total	\$	(705,607)	\$	751,644	\$	46,037	\$	27,603					

		Maximum payout/Notional amount											
December 31, 2022 (in millions)	Pro	otection sold		ourchased with underlyings(c)		let protection ld)/purchased(d)	Other protection purchased(*)						
Credit derivatives Credit default swaps	\$	(495,557)	\$	509,846	\$	14,289	\$	2,917					
Other credit derivatives(a)		(47,165)		65,029		17,864		11,746					
Total credit derivatives		(542,722)		574,875		32,153		14,663					
Credit-related notes(b)		_		_		_		7,863					
Total	\$	(542,722)	\$	574,875	\$	32,153	\$	22,526					

- (a) Other credit derivatives predominantly consist of credit swap options and total return swaps.
- (b) Represents Other protection purchased by CIB, primarily in its market-making businesses.
- (c) Represents the total notional amount of protection purchased where the underlying reference instrument is identical to the reference instrument on protection sold; the notional amount
- of protection purchased for each individual identical underlying reference instrument may be greater or lower than the notional amount of protection sold.

 (d) Does not take into account the fair value of the reference obligation at the time of settlement, which would generally reduce the amount the seller of protection pays to the buyer of
- protection in determining settlement value.

 (e) Represents protection purchased by the Firmon referenced instruments (single-name, portfolio or index) where the Firmhas not sold any protection on the identical reference

The following tables summarize the notional amounts by the ratings, maturity profile, and total fair value, of credit derivatives as of June 30, 2023, and December 31, 2022, where JPMorgan Chase is the seller of protection. The maturity profile is based on the remaining contractual maturity of the credit derivative contracts. The ratings profile is based on the rating of the reference entity on which the credit derivative contract is based. The ratings and maturity profile of credit derivatives where JPMorgan Chase is the purchaser of protection are comparable to the profile reflected below.

Protection sold — credit derivatives ratings(a)/maturity profile

June 30, 2023 (in millions)	<1 year	1–5 years >5 years		>5 years	Total notional amount		Fair value of receivables ^(b)		Fair value of payables ^(b)		ı	Vet fair value	
Risk rating of reference entity Investment-grade Noninvestment-grade	\$ (103,323) (38,784)	\$	(412,661) (106,800)	\$	(37,836) (6,203)	\$	(553,820) (151,787)	\$	4,357 2,575	\$	(1,281) (3,606)	\$	3,076 (1,031)
Total	\$ (142,107)	\$	(519,461)	\$	(44,039)	\$	(705,607)	\$	6,932	\$	(4,887)	\$	2,045

December 31, 2022 (in millions)	<1 year	1–5 years	:	>5 years	r	Total notional amount	Fair value of receivables(b)	Fair value of payables(b)		Net fair value
Risk rating of reference entity										
Investment-grade	\$ (90,484)	\$ (294,791)	\$	(30,822)	\$	(416,097)	\$ 2,324	\$ (1,495)	\$	829
Noninvestment-grade	(33,244)	(87,011)		(6,370)		(126,625)	1,267	(3,209)		(1,942)
Total	\$ (123,728)	\$ (381,802)	\$	(37,192)	\$	(542,722)	\$ 3,591	\$ (4,704)	\$	(1,113)

- (a) The ratings scale is primarily based on external credit ratings defined by S&P and Moody's.
- (b) Amounts are shown on a gross basis, before the benefit of legally enforceable master netting agreements including cash collateral netting.

Note 6 – Noninterest revenue and noninterest expense

Noninterest revenue

Refer to Note 6 of JPMorgan Chase's 2022 Form 10-K for a discussion of the components of and accounting policies for the Firm's noninterest revenue.

Investment banking fees

The following table presents the components of investment banking fees.

	Т	hree months June 30,	ended	S		enc 30,	ended June 0,		
(in millions)		2023	2022		2023		2022		
Underwriting									
Equity	\$	317 \$	230	\$	550	\$	472		
Debt		704	711		1,376		1,685		
Total underwriting		1,021	941		1,926		2,157		
Advisory		492	645		1,236		1,437		
Total investment banking fees	\$	1,513 \$	1,586	\$	3,162	\$	3,594		

Principal transactions

The following table presents all realized and unrealized gains and losses recorded in principal transactions revenue. This table excludes interest income and interest expense on trading assets and liabilities, which are an integral part of the overall performance of the Firm's client-driven market-making activities in CIB and fund deployment activities in Treasury and CIO. Refer to Note 7 for further information on interest income and interest expense.

Trading revenue is presented primarily by instrument type. The Firm's client-driven market-making businesses generally utilize a variety of instrument types in connection with their market-making and related risk-management activities; accordingly, the trading revenue presented in the table below is not representative of the total revenue of any individual LOB.

	Tł	nree mor June		S	Six months ended June 30,					
(in millions)		2023		2022		2023		2022		
Trading revenue by instrument type										
Interest rate(a)	\$	1,781	\$	376	\$	3,567	\$	845		
Credit(b)		419		279 (c)		1,053		736 (c)		
Foreign exchange		1,435		1,425		2,986		2,749		
Equity		2,941		2,303		5,634		4,558		
Commodity		368		499		1,294		1,246		
Total trading revenue		6,944		4,882		14,534		10,134		
Private equity gains/(losses)		(34)		108		(9)		(39)		
Principal transactions S	\$	6,910	\$	4,990	\$	14,525	\$	10,095		

- (a) Includes the impact of changes in funding valuation adjustments on derivatives
- (b) Includes the impact of changes in credit valuation adjustments on derivatives, net of the associated hedging activities.
- (c) Includes markdowns on held-for-sale positions, primarily unfunded commitments, in the bridge financing portfolio.

Lending- and deposit-related fees

The following table presents the components of lending- and depositrelated fees.

	1	Three months June 30,		S	ed June		
(in millions)		2023	2022		2023		2022
Lending-related fees(a)	\$	590 \$	362	\$	959	\$	724
Deposit-related fees		1,238	1,511		2,489		2,988
Total lending- and deposit- related fees	\$	1,828 \$	1,873	\$	3,448	\$	3,712

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

Deposit-related fees include the impact of credits earned by clients that reduce such fees.

Asset management fees

The following table presents the components of asset management fees.

	Thr	ree months end 30,	ded June	S	ix months 3	ed June	
(in millions)		2023	2022		2023		2022
Asset management fees Investment management fees(a)(b) All other asset management	\$	3,695 \$	3,425	\$	7,085	\$	6,987
fees(c)		79	92		154		182
Total asset management fees	\$	3,774 \$	3,517	\$	7,239	\$	7,169

- (a) Represents fees earned from managing assets on behalf of the Firm's clients, including investors in Firm-sponsored funds and owners of separately managed investment accounts.
- (b) Includes the impact of the First Republic acquisition. Refer to Note 28 for additional information.
- (c) Represents fees for services that are ancillary to investment management services, such as commissions earned on the sales or distribution of mutual funds to clients.

Commissions and other fees

The following table presents the components of commissions and other fees.

		Three months June 30,	ended	S		end 0,	ended June),	
(in millions)		2023	2022		2023		2022	
Commissions and other fees								
Brokerage commissions(a)	\$	722 \$	738	\$	1,469	\$	1,548	
Administration fees(b)		575	590		1,132		1,223	
All other commissions and fees	;	442	395		833		662	
Total commissions and other fees	\$	1,739 \$	1,723	\$	3,434	\$	3,433	

- (a) Represents commissions earned when the Firmacts as a broker, by facilitating its clients' purchases and sales of securities and other financial instruments.
- (b) Predominantly includes fees for custody, securities lending, funds services and securities clearance.
- (c) Includes travel-related and annuity sales commissions, depositary receipt-related service fees, as well as other service fees, which are recognized as revenue when the services are rendered.

Card income

The following table presents the components of card income.

	Th	ree month 3	ided June	Six months ended June 30					
(in millions)		2023 2022				2023	2022		
Interchange and merchant processing income	\$	7,885	\$	7,214	\$	15,024	\$	13,449	
Rewards costs and partner payments		(6,392)		(5,641)		(11,901)		(10,511)	
Other card income(a)		(399)		(440)		(795)		(830)	
Total card income	\$	1,094	\$	1,133	\$	2,328	\$	2,108	

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

Refer to Note 15 for further information on mortgage fees and related income.

Other income

This revenue category includes operating lease income, as well as losses associated with the Firm's tax-oriented investments, predominantly alternative energy equity-method investments in CIB.

The following table presents certain components of other income:

	Three months ended June 30six months ended June 30								
(in millions)		2023	2022	2023	2022				
Operating lease income	\$	7\$6	945\$	1,4\$1	1,993				
Losses on tax-oriented investments(a)		(462)	(427)	(874)	(835)				
Estimated bargain purcha gain associated with the Republic acquisition ^(b)	se e First	2,712	_	2,712	_				
Gain related to the acquise of CIFM ^{c)}	sition		_	339					

- (a) The losses associated with these tax-oriented investments are more than offset by lower income tax expense from the associated tax credits.
- (b) Refer to Note 28 for additional information on the First Republic acquisition.
- (c) Gain on the original minority interest in CIFM upon the Firmts acquisition of the remaining 51% of the entity.

Refer to Note 17 for information on operating lease income included within other income.

Noninterest expense

Other expense

Other expense on the Firm's Consolidated statements of income includes the following:

	T	hree months of June 30,	Six months ended Jun 30,					
(in millions)		2023	2022		2023		2022	
Legal expense	\$	420 \$	73	\$	596	\$	192	
FDIC-related expense		338	216		655		414	
First Republic-related expense(a)		599	_		599		_	

(a) Refer to Note 28 for additional information on the First Republic acquisition.

FDIC Special Assessment

In May 2023, the FDIC issued a notice of proposed rulemaking recommending a special assessment related to the systemic risk determination made on March 12, 2023, to recover losses to the Deposit Insurance Fund ("DIF") arising from the protection of uninsured depositors resulting from recent bank resolutions. In its current form, the rule would impose a special assessment at an annual rate of 12.5 basis points on certain banks' estimated uninsured deposits reported as of December 31, 2022. The Firm expects to be subject to special assessments imposed by the FDIC to recover losses to the DIF.

Note 7 – Interest income and Interest expense

Refer to Note 7 of JPMorgan Chase's 2022 Form 10-K for a description of JPMorgan Chase's accounting policies regarding interest income and

The following table presents the components of interest income and interest expense.

	Three months June 30		5		Six months ended Jun 30,			
(in millions)	2023	2022		2023		2022		
Interest income								
Loans(a)	\$ 20,306 \$	11,626	\$	38,014	\$	22,259		
Taxable securities	4,194	2,289		8,161		4,268		
Non-taxable securities(b)	343	245		591		490		
Total investment securities(a)	4,537	2,534		8,752		4,758		
Trading assets - debt instruments	4,013	2,049		7,659		3,816		
Federal funds sold and securities purchased under								
resale agreements	3,767	543		6,898		940		
Securities borrowed	1,866	173		3,582		86		
Deposits with banks	5,189	1,079		10,008		1,317		
All other interest-earning assets(c)	1,966	642		3,735		966		
Total interest income	\$ 41,644 \$	18,646	\$	78,648	\$	34,142		
Interest expense								
Interest-bearing deposits	\$ 9,591 \$	898	\$	17,228	\$	1,080		
Federal funds purchased and securities loaned or sold under								
repurchase agreements	3,400	445		6,204		558		
Short-term borrowings(d)	428	113		849		157		
Trading liabilities – debt and all other interest-bearing								
liabilities ^(e)	2,373	471		4,344		662		
Long-term debt	3,876	1,561		7,189		2,637		
Beneficial interest issued by consolidated VIEs	197	30		344		48		
Total interest expense	\$ 19,865 \$	3,518	\$	36,158	\$	5,142		
Net interest income	\$ 21,779 \$	15,128	\$	42,490	\$	29,000		
Provision for credit losses	2,899	1,101		5,174		2,564		
Net interest income after provision for credit losses	\$ 18,880 \$	14,027	\$	37,316	\$	26,436		

- (a) Includes the amortization/accretion of unearned income (e.g., purchase premiums/discounts and net deferred fees/costs).

 (b) Represents securities which are tax-exempt for U.S. federal income tax purposes.

 (c) Includes interest earned on brokerage-related held-for-investment customer receivables, which are classified in accrued interest and accounts receivable, and all other interest-earning assets which are classified in other assets on the Consolidated balance sheets.
- (d) Includes commercial paper.
- (e) All other interest-bearing liabilities includes interest expense on brokerage-related customer payables.

Note 8 – Pension and other postretirement employee benefit plans

Refer to Note 8 of JPMorgan Chase's 2022 Form 10-K for a discussion of JPMorgan Chase's pension and OPEB plans.

The following table presents the net periodic benefit costs reported in the Consolidated statements of income for the Firm's defined benefit pension, defined contribution and OPEB plans.

		Three months ended June 30,				Six months ended June 30,		
	_	2023 2022				2023	2022	
(in millions)	_	Pension and OPEB plans			Pension and OPEB p		plans	
Total net periodic defined benefit plan cost/(credit)	,	5	(94) \$	(75)	\$	(188) \$	(139)	
Total defined contribution plans			397	357		762	701	
Total pension and OPEB cost included in noninterest expense	•	\$	303 \$	282	\$	574 \$	562	

As of June 30, 2023 and December 31, 2022, the fair values of plan assets for the Firm's significant defined benefit pension and OPEB plans were \$20.5 billion and \$19.9 billion, respectively.

Note 9 - Employee share-based incentives

Refer to Note 9 of JPMorgan Chase's 2022 Form 10-K for a discussion of the accounting policies and other information relating to employee share-based incentives

The Firm recognized the following noncash compensation expense related to its various employee share-based incentive plans in its Consolidated statements of income.

	Three m	onths ine 30		Si	Six months ended June 30,				
(in millions)	202	3	2022		2023		2022		
Cost of prior grants of restricted stock units ("RSUs"), performance share units ("RSUs") and stock appreciation rights ("SARs") that are amortized over their applicable vesting periods	\$ 449	\$	378	\$	806	\$	649		
Accrual of estimated costs of share-based awards to be granted in future periods, predominantly those to full-career eligible employees	385	·	441		898		976		
Total noncash compensation expense related to employee share-based incentive plans	\$ 834	. \$	819	\$	1,704	\$	1,625		

In the first quarter of 2023, in connection with its annual incentive grant for the 2022 performance year, the Firm granted 20 million RSUs and 801 thousand PSUs with weighted-average grant date fair values of \$138.57 per RSU and \$139.81 per PSU.

Note 10 - Investment securities

Investment securities consist of debt securities that are classified as AFS or HTM. Debt securities classified as trading assets are discussed in Note 2. Predominantly all of the Firm's AFS and HTM securities are held by Treasury and ClO in connection with its asset-liability management activities. At June 30, 2023, the investment securities portfolio consisted of debt securities with an average credit rating of AA+ (based upon external ratings where available, and where not available, based primarily upon internal risk ratings).

Effective January 1, 2023, the Firm adopted the portfolio layer method hedge accounting guidance which permitted a transfer of HTM securities to AFS upon adoption. The Firm

transferred obligations of U.S. states and municipalities with a carrying value of \$7.1 billion resulting in the recognition of \$38 million net pre-tax unrealized losses in AOCI. This transfer was a noncash transaction. Refer to Note 1 and Note 21 for additional information.

During 2022, the Firm transferred \$78.3 billion of investment securities from AFS to HTM for capital management purposes. AOCl included pretax unrealized losses of \$4.8 billion on the securities at the date of transfer. Refer to Note 10 of JPMorgan Chase's 2022 Form 10-K for additional information regarding the investment securities portfolio.

The amortized costs and estimated fair values of the investment securities portfolio were as follows for the dates indicated.

		June 30	, 2023				December :	31, 2022		
	Amortized	Gross unrealized	Gross unrealized		_	Amortized	Gross unrealized	Gross unrealized		
(in millions)	cost(c)(d)	gains	losses	Fair value		cost(c)(d)	gains	losses	ŀ	air value
Available-for-sale securities										
Mortgage-backed securities:										
U.S. GSEs and government agencies	\$ 84,749 \$	326 \$	5,307	\$ 79,768	\$	77,194 \$	479 \$	6,170	\$	71,503
Residential:										
U.S.	1,803	1	119	1,685		1,576	1	111		1,466
Non-U.S.	1,861	4	6	1,859		3,176	5	27		3,154
Commercial	2,223	1	168	2,056		2,113		155		1,958
Total mortgage-backed securities	90,636	332	5,600	85,368		84,059	485	6,463		78,081
U.S. Treasury and government agencies	63,998	297	1,558	62,737		95,217	302	3,459		92,060
Obligations of U.S. states and municipalities	24,279	172	428	24,023		7,103	86	403		6,786
Non-U.S. government debt securities	22,588	20	568	22,040		20,360	14	678		19,696
Corporate debt securities	410	_	22	388		381	_	24		357
Asset-backed securities:										
Collateralized loan obligations	5,506	3	72	5,437		5,916	1	125		5,792
Other	3,324	2	57	3,269		3,152	2	69		3,085
Unallocated portfolio layer fair value basis adjustments ^(a)	(865)	_	(865)	NA		NA	NA	NA		NA
Total available-for-sale securities	209,876	826	7,440	203,262	(e)	216,188	890	11,221		205,857
Held-to-maturity securities(b)										
Mortgage-backed securities:										
U.S. GSEs and government agencies	110,517	29	13,201	97,345		113,492	35	13,709		99,818
U.S. Residential	10,293	3	1,206	9,090		10,503	3	1,244		9,262
Commercial	10,712	7	741	9,978		10,361	10	734		9,637
Total mortgage-backed securities	131,522	39	15,148	116,413		134,356	48	15,687		118,717
U.S. Treasury and government agencies	202,655	_	16,825	185,830		207,463	_	18,363		189,100
Obligations of U.S. states and municipalities	11,617	44	758	10,903		19,747	53	1,080		18,720
Asset-backed securities:										
Collateralized Ioan obligations	61,095	42	951	60,186		61,414	4	1,522		59,896
Other	2,052	_	84	1,968		2,325	_	110		2,215
Total held-to-maturity securities	408,941	125	33,766	375,300		425,305	105	36,762		388,648
Total investment securities, net of allowance for credit losses	\$ 618,817 \$	951 \$	41,206	\$ 578,562	\$	641,493 \$	995 \$	47,983	\$	594,505

⁽a) Represents the amount of portfolio layer method basis adjustments related to AFS securities hedged in a closed portfolio. Under U.S. GAAP portfolio layer method basis adjustments are not allocated to individual securities, however the amounts impact the unrealized gains or losses for the individual securities being hedged. Refer to Note 1 and Note 5 for additional information.

⁽b) The Firmpurchased \$520 million and \$4.1 billion of HTM securities for the three and six months ended June 30, 2023, respectively, and \$14.3 billion and \$27.5 billion for the three and six months ended June 30, 2022, respectively.

⁽c) The amortized cost of investment securities is reported net of allowance for credit losses of \$104 million and \$96 million at June 30, 2023 and December 31, 2022, respectively.

⁽d) Excludes \$2.5 billion of accrued interest receivable at both June 30, 2023 and December 31, 2022. The Firmfuld not reverse through interest income any accrued interest receivable for the three and six months ended June 30, 2023 and 2022. Refer to Note 10 of JRVbrgan Chase's 2022 Form 10-K for further discussion of accounting policies for accrued interest receivable on investment securities.

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

AFS securities impairment
The following tables present the fair value and gross unrealized losses by aging category for AFS securities at June 30, 2023 and December 31, 2022. The tables exclude U.S. Treasury and government agency securities and U.S. GSE and government agency MBS with unrealized losses of \$6.9 billion and \$9.6 billion, at June 30, 2023 and December 31, 2022, respectively; changes in the value of these securities are generally driven by changes in interest rates rather than changes in their credit profile given the explicit or implicit guarantees provided by the U.S. government.

Fair value	unrea	ths Gross lized losses	F		hs or more Gross unrealized losses	Total fair value	Total gross unrealized losses
	unrea		Б	air value	Gross unrealized losses	Total fair value	Total gross unrealized losses
371							
371							
371							
371							
0/ 1	\$	7	\$	1,253 \$	112	\$ 1,624	\$ 119
4		_		1,635	6	1,639	6
154		3		1,761	165	1,915	168
529		10		4,649	283	5,178	293
10,757		123		1,961	305	12,718	428
8,745		64		5,316	504	14,061	568
123		2		77	20	200	22
20		_		5,066	72	5,086	72
1,157		16		1,888	41	3,045	57
24 224	(a) C	245	•	49.0E7.¢	4 225	¢ 40.200	\$ 1,440
	4 154 529 10,757 8,745 123	154 529 10,757 8,745 123 20 1,157	4 — 154 3 529 10 10,757 123 8,745 64 123 2 20 — 1,157 16	4 — 154 3 3 529 10 10,757 123 8,745 64 123 2 2 20 — 1,157 16	4 — 1,635 154 3 1,761 529 10 4,649 10,757 123 1,961 8,745 64 5,316 123 2 77 20 — 5,066 1,157 16 1,888	4 — 1,635 6 154 3 1,761 165 529 10 4,649 283 10,757 123 1,961 305 8,745 64 5,316 504 123 2 77 20 20 — 5,066 72 1,157 16 1,888 41	4 — 1,635 6 1,639 154 3 1,761 165 1,915 529 10 4,649 283 5,178 10,757 123 1,961 305 12,718 8,745 64 5,316 504 14,061 123 2 77 20 200 20 — 5,066 72 5,086 1,157 16 1,888 41 3,045

			Availabl	zed losses			
		Less tha	n 12 months	12 mon	ths or more		
December 31, 2022 (in millions)	F	air 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.	\$	1,187	5 71	\$ 260 \$	40	\$ 1,447	\$ 111
Non-U.S.		2,848	25	70	2	2,918	27
Commercial		1,131	74	813	81	1,944	155
Total mortgage-backed securities		5,166	170	1,143	123	6,309	293
Obligations of U.S. states and municipalities		3,051	241	364	162	3,415	403
Non-U.S. government debt securities		6,941	321	3,848	357	10,789	678
Corporate debt securities		150	2	207	22	357	24
Asset-backed securities:							
Collateralized loan obligations		3,010	61	2,701	64	5,711	125
Other		2,586	51	256	18	2,842	69
Total available-for-sale securities with gross unrealized losses	\$	20,904	846	\$ 8,519 \$	746	\$ 29,423	\$ 1,592

⁽a) Includes the impact of the First Republic acquisition, primarily impacting obligations of U.S. states and municipalities. Refer to Note 28 for additional information.

HTM securities – credit risk Credit quality indicator

The primary credit quality indicator for HTM securities is the risk rating assigned to each security. At June 30, 2023 and December 31, 2022, all HTM securities were rated investment grade and were current and accruing, tith approximately 99% and 98% rated at least AA+, respectively.

Allowance for credit losses on investment securities

The allowance for credit losses on investment securities was \$104 million and \$47 million as of June 30, 2023 and 2022, respectively, which included a cumulative-effect adjustment to retained earnings related to the transfer of HTM securities to AFS for the six months ended June 30, 2023.

Refer to Note 10 of JPMorgan Chase's 2022 Form 10-K for further discussion of accounting policies for AFS and HTM securities.

Selected impacts of investment securities on the Consolidated statements of income

State ments of moonie									
	Th	ree months end 30,	led June	Six months ended Jun 30,					
(in millions)		2023	2022		2023	2022			
Realized gains	\$	198 \$	69	\$	329 \$	82			
Realized losses		(1,098)	(222)		(2,097)	(629)			
Investment securities losses	\$	(900) \$	(153)	\$	(1,768) \$	(547)			
Provision for credit losses	\$	13 \$	6	\$	14 \$	5			

Contractual maturities and yields

The following table presents the amortized cost and estimated fair value at June 30, 2023, of JPMorgan Chase's investment securities portfolio by contractual maturity.

By remaining maturity June 30, 2023 (in millions)		Due in one year or less	Due after one year through five years		Due after five years through 10 years	Due after 10 years		Total
Available-for-sale securities								
Mortgage-backed securities								
Amortized cost	\$	15 \$	- , -	\$	5,077 \$	81,922	\$	90,636
Fair value		14	3,488		5,057	76,809		85,368 (d)
Average yield(a)		2.18 %	4.55 %	ó	5.98 %	4.40 %		4.49 %
U.S. Treasury and government agencies								
Amortized cost	\$	7,471 \$	36,773	\$	13,276 \$	6,478	\$	63,998
Fair value Fair value		7,384	35,699		13,300	6,354		62,737
Average yield ^(a)		0.35 %	4.56 %	ó	5.97 %	6.52 %		4.56 %
Obligations of U.S. states and municipalities								
Amortized cost	\$	11 \$	72	\$	1,244 \$	22,952	\$	24,279
Fair value Fair value		11	70		1,243	22,699		24,023 (d)
Average yield(a)		5.58 %	3.82 %	ó	4.27 %	5.60 %		5.53 %
Non-U.S. government debt securities								
Amortized cost	\$	13,373 \$	3,423	\$	3,352 \$	2,440	\$	22,588
Fair value		13,360	3,321		2,929	2,430		22,040
Average yield®		4.78 %	2.97 %	ó	1.23 %	3.61 %		3.86 %
Corporate debt securities								
Amortized cost	\$	199 \$	227	\$	14 \$	_	\$	440
Fair value Fair value		151	224		13	_		388
Average yield(a)		15.97 %	11.75 %	6	4.10 %	—%		13.42 %
Asset-backed securities								
Amortized cost	\$	— \$	1,313	\$	3,875 \$	3,642	\$	8,830
Fair value		_	1,291		3,836	3,579		8,706 ^(d)
Average yield(a)		—%	3.46 %	ó	5.98 %	6.06 %		5.64 %
Total available-for-sale securities								
Amortized cost(b)	\$	21,069 \$	45,430	\$	26,838 \$	117,434	\$	210,771
Fair value		20,920	44,093		26,378	111,871		203,262 (d)
Average yield(a)		3.32 %	4.44 %	ó	5.30 %	4.78 %		4.63 %
Held-to-maturity securities								
Mortgage-backed securities								
Amortized cost	\$	99 \$	3,835	\$	10,482 \$	117,142	\$	131,558
Fair value		97	3,555		9,212	103,549		116,413
Average yield(a)		6.21 %	2.75 %	ó	2.53 %	2.99 %		2.95 %
U.S. Treasury and government agencies								
Amortized cost	\$	60,878 \$	92,403	\$	49,374 \$	_	\$	202,655
Fair value		59,517	85,053		41,260	_		185,830
Average yield®		0.46 %	0.93 %	ó	1.27 %	—%		0.87 %
Obligations of U.S. states and municipalities								
Amortized cost	\$	— \$	_	\$	640 \$	11,015	\$	11,655
Fair value		_ `	_	•	608	10,295	•	10,903
Average yield(a)		—%	—%	ó	4.39 %	4.04 %		4.06 %
Asset-backed securities								
Amortized cost	\$	— \$	74	\$	21,388 \$	41,685	\$	63,147
Fair value	·	_ `	74	٠	21,139	40,941	•	62,154
Average yield®		—%	6.15 %	ó	5.87 %	6.00 %		5.96 %
Total held-to-maturity securities		,,,	2.10 /		70	/		,3
Amortized cost ^(b)	\$	60,977 \$	96,312	\$	81,884 \$	169,842	\$	409,015
Fair value	~	59,614	88,682	Ψ	72,219	154,785	*	375,300
		00,017						

⁽a) Average yield is computed using the effective yield of each security owned at the end of the period, weighted based on the amortized cost of each security. The effective yield considers the contractual coupon, amortization of premiums and accretion of discounts, and the effect of related hedging derivatives, including closed portfolio hedges. Taxable-equivalent amounts are used where applicable. The effective yield excludes unscheduled principal prepayments; and accordingly, actual maturities of securities may differ from their contractual or expected maturities as certain securities may be prepaid. However, for certain callable debt securities, the average yield is calculated to the earliest call date.

contractual or expected maturities as certain securities may be prepaid. However, for certain callable debt securities, the average yield is calculated to the earliest call date.

(b) For purposes of this table, the amortized cost of available-for-sale securities excludes the allowance for credit losses of \$(30) million and the portfolio layer fair value hedge basis adjustments of \$(865) million at June 30, 2023. The amortized cost of held-to-maturity securities also excludes the allowance for credit losses of \$(74) million at June 30, 2023.

⁽c) Substantially all of the Firm's U.S. residential MBS and collateralized mortgage obligations are due in 10 years or more, based on contractual maturity. The estimated weighted-average life, which reflects anticipated future prepayments, is approximately eight years for agency residential MBS, seven years for agency residential collateralized mortgage obligations, and six years for nonagency residential collateralized mortgage obligations.

⁽d) Includes AFS securities associated with the First Republic acquisition, primarily impacting due after 10 years. Refer to Note 28 for additional information.

Note 11 – Securities financing activities

Refer to Note 11 of JPMorgan Chase's 2022 Form 10-K for a discussion of accounting policies relating to securities financing activities. Refer to Note 3 for further information regarding securities financing agreements for which the fair value option has been elected. Refer to Note 25 for further information regarding assets pledged and collateral received in securities financing agreements.

The table below summarizes the gross and net amounts of the Firm's securities financing agreements as of June 30, 2023 and December 31, 2022. When the Firm has obtained an appropriate legal opinion with respect to a master netting agreement with a counterparty and where other relevant netting criteria under U.S. GAAP are met, the Firm nets, on the Consolidated balance sheets, the balances outstanding under its securities financing agreements with the same counterparty. In addition, the Firm exchanges securities and/or cash collateral with its counterparty to reduce the economic exposure with the counterparty, but such collateral is not eligible for net Consolidated balance

sheet presentation. Where the Firm has obtained an appropriate legal opinion with respect to the counterparty master netting agreement, such collateral, along with securities financing balances that do not meet all these relevant netting criteria under U.S. GAAP, is presented in the table below as "Amounts not nettable on the Consolidated balance sheets," and reduces the "Net amounts" presented. Where a legal opinion has not been either sought or obtained, the securities financing balances are presented gross in the "Net amounts" below. In transactions where the Firm is acting as the lender in a securities-for-securities lending agreement and receives securities that can be pledged or sold as collateral, the Firm recognizes the securities received at fair value within other assets and the obligation to return those securities within accounts payable and other liabilities on the Consolidated balance sheets.

	June 30, 2023													
(in millions)		Gross amounts	Amounts netted on the Consolidated balance sheets	Amounts presented on the Consolidated balance sheets	Amounts not nettable on the Consolidated balance sheets ^(b)	an	Net rounts(c)							
Assets														
Securities purchased under resale agreements	\$	561,426	\$ (235,867)	\$ 325,559	\$ (319,986)	\$	5,573							
Securities borrowed		205,579	(42,016)	163,563	(119,543)		44,020							
Liabilities														
Securities sold under repurchase agreements	\$	496,866	\$ (235,867)	\$ 260,999	\$ (226,664)	\$	34,335							
Securities loaned and other(a)		50,551	(42,016)	8,535	(8,457)		78							

	December 31, 2022													
(in millions)		Gross amounts	Amounts netted on the Consolidated balance sheets	Amounts presented on the Consolidated balance sheets	Amounts not nettable on the Consolidated balance sheets(b)		Net ounts(c)							
Assets														
Securities purchased under resale agreements	\$	597,912	\$ (282,411)	\$ 315,501	\$ (304,120)	\$	11,381							
Securities borrowed		228,279	(42,910)	185,369	(131,578)		53,791							
Liabilities							_							
Securities sold under repurchase agreements	\$	480,793	\$ (282,411)	\$ 198,382	\$ (167,427)	\$	30,955							
Securities loaned and other(a)		52,443	(42,910)	9,533	(9,527)		6							

⁽a) Includes securities-for-securities lending agreements of \$5.0 billion and \$7.0 billion at June 30, 2023 and December 31, 2022, respectively, accounted for at fair value, where the Firmis acting as lender.

⁽b) In some cases, collateral exchanged with a counterparty exceeds the net asset or liability balance with that counterparty. In such cases, the amounts reported in this column are limited to the related net asset or liability with that counterparty.

⁽c) Includes securities financing agreements that provide collateral rights, but where an appropriate legal opinion with respect to the master netting agreement has not been either sought or obtained. At June 30, 2023 and December 31, 2022, included \$4.5 billion and \$6.0 billion, respectively, of securities purchased under resale agreements; \$39.6 billion and \$49.0 billion, respectively, of securities borrowed; \$33.3 billion and \$29.1 billion, respectively, of securities sold under repurchase agreements; and securities loaned and other which were not material at both June 30, 2023 and December 31, 2022.

The tables below present as of June 30, 2023, and December 31, 2022 the types of financial assets pledged in securities financing agreements and the remaining contractual maturity of the securities financing agreements.

			Gross liabi	lity balanc	e			
	June 3	0, 2023		December 31, 2022				
(in millions)	urities sold under repurchase agreements	Sec	urities loaned and other		ies sold under ase agreements	Sec	urities loaned and other	
Mortgage-backed securities								
U.S. GSEs and government agencies	\$ 72,006	\$	_	\$	58,050	\$	_	
Residential - nonagency	2,333		_		2,414		_	
Commercial - nonagency	2,178		_		2,007		_	
U.S. Treasury, GSEs and government agencies	223,411		987		191,254		1,464	
Obligations of U.S. states and municipalities	2,038		_		1,735		5	
Non-U.S. government debt	127,427		1,509		155,156		1,259	
Corporate debt securities	36,575		1,882		37,121		461	
Asset-backed securities	3,816		_		2,981		_	
Equity securities	27,082		46,173		30,075		49,254	
Total	\$ 496,866	\$	50,551	\$	480,793	\$	52,443	

			Remaining c	ontractua	l maturity of the	e agreen	rents	
June 30, 2023 (in millions)	vernight and continuous	Uр	to 30 days	30	– 90 days		eater than 90 days	Total
Total securities sold under repurchase agreements	\$ 268,240	\$	120,621	\$	30,120	\$	77,885	\$ 496,866
Total securities loaned and other	49,166		243		2		1,140	50,551

				Remaining co	ontractua	l maturity of the	e agreem	ents		
December 31, 2022 (in millions)		ernight and ontinuous	Цþ	to 30 days	30	– 90 days		eater than 90 days		Total
Total securities sold under repurchase agreements	\$	205,235	\$	170,696	\$	37,120	\$	67,742	\$	480,793
Total securities loaned and other	50,138 1,285 3 1,017									

Transfers not qualifying for sale accounting

At both June 30, 2023, and December 31, 2022, the Firm held \$692 million of financial assets for which the rights have been transferred to third parties; however, the transfers did not qualify as a sale in accordance with U.S. GAAP. These transfers have been recognized as collateralized financing transactions. The transferred assets are recorded in trading assets and loans, and the corresponding liabilities are recorded predominantly in short-term borrowings on the Consolidated balance sheets.

Note 12 - Loans

Loan accounting framework

The accounting for a loan depends on management's strategy for the loan. The Firm accounts for loans based on the following categories:

- Originated or purchased loans held-for-investment (i.e., "retained")
- · Loans held-for-sale
- · Loans at fair value

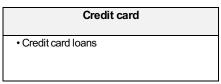
Refer to Note 12 of JPMorgan Chase's 2022 Form 10-K for a detailed discussion of loans, including accounting policies. Refer to Note 3 of this Form 10-Q for further information on the Firm's elections of fair value accounting under the fair value option. Refer to Note 2 of this Form 10-Q for information on loans carried at fair value and classified as trading assets.

On January 1, 2023 the Firm adopted the Financial Instruments - Credit Losses: Troubled Debt Restructurings and Vintage Disclosures accounting guidance as discussed in Note 1. The adoption of this guidance eliminated the existing accounting and disclosure requirements for TDRs, and implemented additional disclosure requirements for FDMs. The disclosure requirements for FDMs are effective for periods beginning on or after January 1, 2023. Refer to Note 12 of JPMorgan Chase's 2022 Form 10-K for a detailed discussion on loan modifications prior to January 1, 2023, which were accounted for and reported as TDRs. This new guidance also requires disclosure of current period gross charge-offs by vintage origination year, effective for periods beginning on or after January 1, 2023.

Loan portfolio

The Firm's loan portfolio, including loans of \$149.8 billion associated with the First Republic acquisition, is divided into three portfolio segments, which are the same segments used by the Firm to determine the allowance for loan losses: Consumer, excluding credit card; Credit card; and Wholesale. Within each portfolio segment the Firm monitors and assesses the credit risk in the following classes of loans, based on the risk characteristics of each loan class.

Consumer, excluding credit card
Residential real estate ^(a) Auto and other ^(b)



Wholesale ^{(c)(d)}	
Secured by real estate	
Commercial and industrial	
Other ^(e)	

•

- (a) Includes scored mortgage and home equity loans held in COB and AWM, and scored mortgage loans held in CIB.
- (b) Includes scored auto, business banking loans and overdrafts in BWM and other consumer unsecured loans in CIB.
- (c) Includes loans held in CIB, CB, AVM, Corporate as well as risk-rated BWM and auto dealer loans held in CCB, for which the wholesale methodology is applied when determining the allowance for loan losses.
- (d) The wholesale portfolio segment's classes align with loan classifications as defined by the bank regulatory agencies, based on the loan's collateral, purpose, and type of borrower.
 (e) Includes loans to financial institutions, states and political subdivisions, SFEs, nonprofits, personal investment companies and trusts, as well as loans to individuals and individual entities (predominantly Global Private Bank clients within AWM and J.P. Morgan Wealth Management within CCB). Refer to Note 14 of JPMorgan Chase's 2022 Form 10-K for more information on

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

June 30, 2023 (in millions)	Consur cr	ner, excluding edit card	Oredit card	Wholesale	Total(b)(c)
Retained	\$	396,195 ^(a)	\$ 191,348	\$ 668,145 ^(a)	\$ 1,255,688
Held-for-sale		549	_	5,043	5,592
At fair value		11,460 (a)	_	27,329	38,789
Total	\$	408,204	\$ 191,348	\$ 700,517	\$ 1,300,069
December 31, 2022	Consur	ner excludina			
December 31, 2022 (in millions)		ner, excluding edit card	Credit card	Wholesale	Total(b)(c)
			\$ Credit card 185,175	\$ Wholesale 603,670	\$ Total(b)(c) 1,089,598
(in millions)		edit card		\$ 	\$
(in millions) Retained		edif card 300,753	185,175	\$ 603,670	\$ 1,089,598

- (a) Includes loans associated with the First Republic acquisition consisting of \$91.9 billion of retained loans and \$1.9 billion loans at fair value in consumer, excluding credit card and \$56.0 billion of retained loans in wholesale.
- (b) Excludes \$6.0 billion and \$5.2 billion of accrued interest receivables as of June 30, 2023 and December 31, 2022, respectively. Accrued interest receivables written off was not material for the three and six months ended June 30, 2023 and 2022.
- (c) Loans (other than those for which the fair value option has been elected) are presented net of unamortized discounts and premiums and net deferred loan fees or costs. These amounts were not material as of June 30, 2023, and December 31, 2022.

The following tables provide information about the carrying value of retained loans purchased, sold and reclassified to held-for-sale during the periods indicated. Loans that were reclassified to held-for-sale and sold in a subsequent period are excluded from the sales line of this table.

				2023			2022								
Three months ended June 30, (in millions)	Co	nsumer, excluding credit card	a	redit card	Wholesale		Total	Co	nsumer, excluding credit card	С	redit card	Wholesale	Total		
Purchases	\$	92,002 (b)(c)(d)	\$	<u> </u>	58,398	(b)	\$ 150,400	\$	973 (c)(d)	\$	— \$	228 9	\$ 1,201		
Sales		438		_	9,709		10,147		82		_	12,005	12,087		
Retained loans reclassified to held-for- sale ^(a)		81		_	771		852		66		_	415	481		

				2023			2022								
Six months ended June 30, 2022 (in millions)	Co	nsumer, excluding credit card	a	redit card	Wholesale		Total	Co	nsumer, excluding credit card		edit card	Wholesale	Total		
Purchases	\$	92,081 (b)(c)(d)	\$	— \$	58,561 (b)	\$	150,642	\$	1,092 (c)(d)	\$	— 	394 \$	1,486		
Sales		438		_	18,880		19,318		129		_	21,712	21,841		
Retained loans reclassified to held-for- sale ^(a)		124		_	1,085		1,209		142		_	688	830		

- (a) Reclassifications of loans to held-for-sale are non-cash transactions.
- (b) Includes loans acquired in the First Republic acquisition consisting of \$91.9 billion in Consumer, excluding credit card and \$58.4 billion in Wholesale.
- (c) Includes purchases of residential real estate loans, including the Firm's voluntary repurchases of certain delinquent loans from loan pools as permitted by Government National Mortgage Association ("Ginnie Mae") guidelines for the three and six months ended June 30, 2023 and 2022. The Firmtypically elects to repurchase these delinquent loans as it continues to service themand/or manage the foreclosure process in accordance with applicable requirements of Ginnie Mae, FHA, RHS, and/or VA.
- (d) Excludes purchases of retained loans of \$1.6 billion and \$6.0 billion for the three months ended June 30, 2023 and 2022, and \$2.3 billion and \$9.2 billion for the six months ended June 30, 2023 and 2022, respectively, which are predominantly sourced through the correspondent origination channel and underwritten in accordance with the Firm's standards.

Gains and losses on sales of loans

Net gains/(losses) on sales of loans and lending-related commitments (including adjustments to record loans and lending-related commitments held-for-sale at the lower of cost or fair value) recognized in noninterest revenue for the three and six months ended June 30, 2023, was \$14 million and \$37 million, respectively, of which \$16 million and \$43 million, respectively, related to loans. Net gains/(losses) on sales of loans and lending-related commitments for the three and six months ended June 30, 2022, was \$(352) million and \$(314) million, respectively, of which \$(67) million and \$(32) million, respectively, related to loans. In addition, the sale of loans may also result in write downs, recoveries or changes in the allowance recognized in the provision for credit losses.

Consumer, excluding credit card loan portfolio

Consumer loans, excluding credit card loans, consist primarily of scored residential mortgages, home equity loans and lines of credit, auto and business banking loans, with a focus on serving the prime consumer credit market. The portfolio also includes home equity loans secured by junior liens, prime mortgage loans with an interest-only payment period and certain payment-option loans that may result in negative amortization.

The following table provides information about retained consumer loans, excluding credit card, by class.

(in millions)	June 30, 2023	December 31, 2022
Residential real estate	\$ 328,010 (a)	\$ 237,561
Auto and other	68,185	63,192
Total retained loans	\$ 396,195	\$ 300,753

(a) Included \$91.9 billion of loans associated with the First Republic acquisition.

Delinquency rates are the primary credit quality indicator for consumer loans. Refer to Note 12 of JPMorgan Chase's 2022 Form 10-K for further information on consumer credit quality indicators.

Residential real estate

Delinquency is the primary credit quality indicator for retained residential real estate loans. The following tables provide information on delinquency and gross charge-offs for the six months ended June 30, 2023.

	June 30, 2023															
	 Term loans by origination year ⁽¹⁾										Revolving loans					
(in millions, except ratios)	2023		2022		2021		2020		2019	F	Prior to 2019		Within the volving perior		Converted to term loans	Total
Current(e) 30–149 days past due 150 or more days past due	\$ 13,596 3	\$	65,317 19 6	\$	86,325 44 2	\$	57,052 29 6	\$	22,211 41 10	\$	65,271 710 473	\$	7,584 39	\$	8,877 216 176	\$ 326,233 1,101 676
Total retained loans	\$ 13,599	\$	65,342	\$	86,371	\$	57,087	\$	22,262	\$	66,454	\$	7,626	\$	9,269	\$ 328,010
% of 30+ days past due to total retained loans ^{d)(e)}	0.02	%	0.04 %	%	0.05	%	0.06	%	0.23 %	%	1.75 %		0.55 %	6	4.23 %	0.54 %
Gross charge-offs	\$ _	\$	_	\$	_	\$	_	\$	_	\$	52	\$	14	\$	4	\$ 70

_									De	cember 31,	2022										
		Term loans by origination year ⁽⁾																			
(in millions, except ratios)	2	022		2021		2020		2019		2018		Prior to 20	18	Withir			nverted to loans	term		Total	
Loan delinquency(a)(b)					4									_		_			_		
Current \$ 30–149 days past due	5	39,934 29	•	, -	72 \$ 11	43,3	315 \$ 14	15,3	397 \$ 20	6,339 20		49,6 5	532 597	\$	5,589 15		-,	685 208	\$,963 914
150 or more days past due		1			1		6		10		7	4	180		4			175			684
Total retained loans	;	39,964	\$	66,0	34 \$	43,3	35 \$	15,4	127 \$	6,366	3 \$	50,7	709	\$	5,608	\$	10,	068	\$	237.	,561
% of 30+ days past due to total retained loans	0.0	08	%	0.02	%	0.05	%	0.19	%	0.42	%	2.07	%	0.34	1 '	%	3.80	%		0.66	%

- (a) Individual delinquency classifications include mortgage loans insured by U.S. government agencies which were not material at June 30, 2023 and December 31, 2022
 (b) At June 30, 2023 and December 31, 2022, loans under payment deferral programs offered in response to the COVID-19 pandemic which are still within their deferral period and performing according to their modified terms are generally not considered delinquent.
 (c) Included \$5.6 billion, \$26.2 billion, \$26.2 billion, \$22.0 billion, \$15.0 billion, \$7.5 billion, and \$12.9 billion of termloans originated in 2023, 2022, 2021, 2020, 2019 and prior to 2019, respectively, and \$2.5 billion of revolving loans within the revolving period associated with the First Republic acquisition.
- (d) Excludes mortgage loans that are 30 or more days past due insured by U.S. government agencies which were not material at June 30, 2023 and December 31, 2022. These amounts have been excluded based upon the government guarantee.
- (e) Included \$158 million of 30+ days past due loans associated with the First Republic acquisition.
- (f) Purchased loans are included in the year in which they were originated.

Approximately 37% of the total revolving loans are senior lien loans; the remaining balance are junior lien loans. The lien position the Firm holds is considered in the Firm's allowance for credit losses. Revolving loans that have been converted to term loans have higher delinquency rates than those that are still within the revolving period. That is primarily because the fully-amortizing payment that is generally required for those products is higher than the minimum payment options available for revolving loans within the revolving period.

Nonaccrual loans and other credit quality indicators

The following table provides information on nonaccrual and other credit quality indicators for retained residential real estate loans.

(in millions, except weighted-average data)	June 30, 2023		D	ecember 31, 2022
Nonaccrual loans(a)(b)(c)(d)(e)	\$ 3,641		\$	3,745
Current estimated LTV ratios(9(g)(h)				
Greater than 125% and refreshed FICO scores:				
Equal to or greater than 660	\$ 68		\$	2
Less than 660	5			_
101% to 125% and refreshed FICO scores:				
Equal to or greater than 660	569			174
Less than 660	11			6
80% to 100% and refreshed FICO scores:				
Equal to or greater than 660	17,260	(1)		12,034
Less than 660	254			184
Less than 80% and refreshed FICO scores:				
Equal to or greater than 660	298,791	(1)		215,096
Less than 660	9,526	(1)		8,659
No FICO/LTV available	1,526			1,406 ^(k)
Total retained loans	\$ 328,010	(m)	\$	237,561
Weighted average LTV ratio ⁽¹⁾⁽¹⁾	51 9	%		51 %
Weighted average FICO(9)(i)	771			769
Geographic region(i)(k)				
California	\$ 128,038	(n)	\$	73,112
New York	49,413	(n)		34,471
Florida	22,518	(n)		18,870
Texas	15,448			14,968
Massachusetts	14,351	(n)		6,380
Ilinois	11,052			11,296
Colorado	10,765			9,968
Washington	9,778			9,060
New Jersey	8,106			7,108
,	7,142			5,432
Connecticut	,			,
Connecticut All other Total retained loans	\$ 51,399 328,010	(m)	\$	46,896 237,561

- (a) Includes collateral-dependent residential real estate loans that are charged down to the fair value of the underlying collateral less costs to sell. The Firm reports, in accordance with regulatory guidance, residential real estate loans that have been discharged under Chapter 7 bankruptcy and not reaffirmed by the borrower ("Chapter 7 loans") as collateral-dependent nonaccrual loans, regardless of their delinquency status. At June 30, 2023, approximately 9% of Chapter 7 residential real estate loans were 30 days or more past due.
- (b) Mortgage loans insured by U.S. government agencies excluded from nonaccrual loans were not material at June 30, 2023 and December 31, 2022.
- (c) Generally, all consumer nonaccrual loans have an allowance. In accordance with regulatory guidance, certain nonaccrual loans that are considered collateral-dependent have been charged down to the lower of amortized cost or the fair value of their underlying collateral less costs to sell. If the value of the underlying collateral improves subsequent to charge down, the related allowance may be negative.
- (d) Interest income on nonaccrual loans recognized on a cash basis was \$44 million and \$45 million and \$89 million and \$90 million for the three and six months ended June 30, 2023 and 2022, respectively.
- Generally excludes loans under payment deferral programs offered in response to the COVID-19 pandemic.
- 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 Firmon at least a quarterly basis.
- (h) Includes residential real estate loans, primarily held in LLCs in AVM 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. Excludes loans with no FICO and/or LTV data available.
- (i) The geographic regions presented in the table are ordered based on the magnitude of the corresponding loan balances at June 30, 2023.
 (k) Prior-period amounts have been revised to conform with the current presentation.
- Included \$4.3 billion in equal to or greater than 660 FICO scores within 80% to 100% LTV ratio, and \$85.3 billion and \$1.2 billion in equal to or greater than 660 and less than 660 FICO scores, respectively, within less than 80% LTV ratio associated with the First Republic acquisition.
- (m) Included \$91.9 billion of loans associated with the First Republic acquisition.
- (n) Included \$55.5 billion, \$15.2 billion, \$3.6 billion and \$8.0 billion in California, New York, Florida and Massachusetts, respectively, associated with the First Republic acquisition.

Loan modifications

The Firm grants certain modifications of residential real estate loans to borrowers experiencing financial difficulty, which effective January 1, 2023, are reported as FDMs. The Firm's proprietary modification programs as well as government programs, including U.S. GSE programs, that generally provide various modifications to borrowers experiencing financial difficulty including, but not limited to, interest rate reductions, term extensions, other-than-insignificant payment delay and principal forgiveness that would otherwise have been required under the terms of the original agreement, are considered FDMs.

For the three and six months ended June 30, 2023, residential real estate FDMs were \$35 million and \$75 million, respectively. The financial effects of the FDMs, which were largely in the form of term extensions and interest rate reductions, included extending the weighted-average life of the loans by 15 years and 18 years, and reducing the weighted-average contractual interest rate from 6.90% to 4.21% and 6.75% to 4.01% for the three and six months ended June 30, 2023, respectively. There were no additional commitments to lend to borrowers experiencing financial difficulty whose loans have been modified as FDMs. In addition to FDMs, the Firm also had \$33 million and \$48 million of loans subject to a trial modification, and \$3 million and \$5 million of Chapter 7 loans for the three and six months ended June 30, 2023, respectively. The changes to the TDR accounting guidance eliminated the TDR reasonably expected and concession assessment criteria. Accordingly, trial modifications and Chapter 7 loans were considered TDRs, but not FDMs.

For periods ending prior to January 1, 2023, modifications of residential real estate loans where the Firm granted concessions to borrowers who were experiencing financial difficulty were generally accounted for and reported as TDRs. For the three and six months ended June 30, 2022, new TDRs were \$115 million and \$233 million, respectively. There were no additional commitments to lend to borrowers whose residential real estate loans have been modified in TDRs. Refer to Note 12 of JPMorgan Chase's 2022 Form 10-K for further information on TDRs.

Nature and extent of modifications

The following table provides information about how residential real estate loans were modified in TDRs during the period presented.

	•	
	Three months ended June 30,	Six months ended June 30,
	2022	2022
Number of loans approved for a trial modification	1,165	2,691
Number of loans permanently modified	1,289	2,831
Concession granted:(a)		
Interest rate reduction	45 %	56 %
Term or payment extension	54	67
Principal and/or interest deferred	10	12
Principal forgiveness	1	1
Other(b)	46	36

- (a) Represents concessions granted in permanent modifications as a percentage of the number of loans permanently modified. The sum of the percentages exceeds 100% because predominantly all of the modifications include more than one type of concession. Concessions offered on trial modifications are generally consistent with those granted on permanent modifications.
- (b) Includes variable interest rate to fixed interest rate modifications and payment delays that meet the definition of a TDR

Financial effects of modifications and redefaults

The following table provides information about the financial effects of the various concessions granted in modifications of residential real estate loans and about redefaults of certain loans modified in TDRs for the period presented.

•		
/ W	Three months ended Jui 30,	ne Six months ended June 30,
(in millions, except weighted- average data)	2022	2022
Weighted-average interest rate of loans with interest rate reductions – before TDR		% 4.55 %
Weighted-average interest rate of loans with interest rate reductions – after TDR	3.36	3.31
Weighted-average remaining contractual term (in years) of loans with termor payment extensions – before TDR	22	2 23
Weighted-average remaining contractual term (in years) of loans with termor payment extensions – after TDR	38	8 39
Charge-offs recognized upon permanent modification	\$ 1	\$ 1
Principal deferred	4	11
Principal forgiven	_	1
Balance of loans that redefaulted within one year of permanent modification(a)	\$ 27	\$ 70

⁽a) Represents loans permanently modified in TDRs that experienced a payment default in the period presented, and for which the payment default occurred within one year of the modification. The dollar amount presented represents the balance of such loans at the end of the reporting period in which such loans defaulted.

Active and suspended foreclosure

At June 30, 2023 and December 31, 2022, the Firm had residential real estate loans, excluding those insured by U.S. government agencies, with a carrying value of \$566 million and \$565 million, respectively, that were not included in REO, but were in the process of active or suspended foreclosure.

Auto and other

Delinquency is the primary credit quality indicator for retained auto and other loans. The following tables provide information on delinquency and gross charge-offs for the six months ended June 30, 2023.

								J	une 30, 202	23							
	 Term loans by origination year											Revolving loans					
(in millions, except ratios)	2023		2022		2021		2020		2019	Р	rior to 2019		Within the revolving period		converted to term loans		Total
Loan delinquency																	
Current	\$ 17,763	\$	18,062	\$	16,287	\$	8,801	\$	2,765	\$	1,041	\$	2,544	\$	113	\$	67,376
30-119 days past due	121		234		216		79		48		28		14		15		755
120 or more days past due	_		1		25		13		_		1		2		12		54
Total retained loans	\$ 17,884	\$	18,297	\$	16,528	\$	8,893	\$	2,813	\$	1,070	\$	2,560	\$	140	\$	68,185
% of 30+ days past due to total retained loans ^{a)}	0.68	%	1.28	%	1.26	%	0.83	%	1.71	%	2.71 %		0.63	%	19.29	%	1.11 %
Gross charge-offs	\$ 106	\$	168	\$	82	\$	28	\$	16	\$	30	\$	_	\$	1	\$	431

									Dec	ember 31, 2	2022							
			Term loans by origination year										Revolving loans					
(in millions, except ratios)		2022		2021		2020		2019		2018	Pr	ior to 2018		Mthin the revolving period		Converted to term loans		Total
Loan delinquency																		
Current	\$	22,187	\$	20,212	\$	11,401	\$	3,991	\$	1,467	\$	578	\$	2,342	\$	118	\$	62,296
30-119 days past due		263		308		100		68		33		17		12		10		811
120 or more days past due		_		53		24		_		_		1		2		5		85
Total retained loans	\$	22,450	\$	20,573	\$	11,525	\$	4,059	\$	1,500	\$	596	\$	2,356	\$	133	\$	63,192
% of 30+ days past due to total retained loans ^{a)}	d	1.17	%	1.15	%	0.83	%	1.68 ^c	%	2.20 %	%	3.02 %		0.59	%	11.28 %	%	1.18 %

⁽a) At June 30, 2023 and December 31, 2022, auto and other loans excluded \$50 million and \$153 million, respectively, of PPP loans guaranteed by the SBA that are 30 or more days past due. These amounts have been excluded based upon the SBA guarantee.

Nonaccrual and other credit quality indicators

The following table provides information on nonaccrual and other credit quality indicators for retained auto and other consumer loans.

		Total Auto a	nd other
(in millions)	 J	une 30, 2023	December 31, 2022
Nonaccrual loans(a)(b)(c)	\$	143 \$	129
Geographic region ^(d)			
California	\$	10,353 \$	9,689
Texas		8,070	7,216
Florida		5,344	4,847
New York		4,634	4,345
Illinois		3,062	2,839
New Jersey		2,462	2,219
Pennsylvania		1,873	1,822
Georgia		1,858	1,708
Arizona		1,700	1,551
Ohio		1,672	1,603
All other		27,157	25,353
Total retained loans	\$	68,185 \$	63,192

- (a) At June 30, 2023 and December 31, 2022, nonaccrual loans excluded \$39 million and \$101 million, respectively, of PPP loans 90 or more days past due and guaranteed by the SBA, of which \$38 million and \$76 million, respectively, were no longer accruing interest based on the guidelines set by the SBA. Typically the principal balance of the loans is insured and interest is guaranteed at a specified reimbursement rate subject to meeting the guidelines set by the SBA. There were no loans that were not guaranteed by the SBA that are 90 or more days past due and still accruing interest at June 30, 2023 and December 31, 2022.

 (b) Generally, all consumer nonaccrual loans have an allowance. In accordance with regulatory quidance, certain proaccrual loans that are considered collateral.
- (b) Generally, all consumer nonaccrual loans have an allowance. In accordance with regulatory guidance, certain nonaccrual loans that are considered collateraldependent have been charged down to the lower of amortized cost or the fair value of their underlying collateral less costs to sell. If the value of the underlying collateral improves subsequent to charge down, the related allowance may be negative.
- (c) Interest income on nonaccrual loans recognized on a cash basis was not material for the three and six months ended June 30, 2023 and 2022.
- (d) The geographic regions presented in this table are ordered based on the magnitude of the corresponding loan balances at June 30, 2023.

Loan modifications

The Firm grants certain modifications of auto and other loans to borrowers experiencing financial difficulty, which effective January 1, 2023, are reported as FDMs. For the three and six months ended June 30, 2023 and 2022, auto and other FDMs were not material and there were no additional commitments to lend to borrowers modified as FDMs.

For the three and six months ended June 30, 2022, auto and other TDRs were not material.

Credit card loan portfolio

The credit card portfolio segment includes credit card loans originated and purchased by the Firm. Delinquency rates are the primary credit quality indicator for credit card loans.

Refer to Note 12 of JPMorgan Chase's 2022 Form 10-K for further information on the credit card loan portfolio, including credit quality indicators.

The following tables provide information on delinquency and gross charge-offs for the six months ended June 30, 2023.

			June 30, 2023		
(in millions, except ratios)	Wthin the revol period		Converted to term loa	ns	Total
Loan delinquency					
Current and less than 30 days past due and still accruing	\$ 187,	340	\$ 755	\$	188,095
30–89 days past due and still accruing	1,	80	68		1,648
90 or more days past due and still accruing	1,	70	35		1,605
Total retained loans	\$ 190,	190	\$ 858	\$	191,348
Loan delinquency ratios					
% of 30+ days past due to total retained loans	1	.65 %	12.00	%	1.70
% of 90+ days past due to total retained loans		.82	4.08		0.84
Gross charge-offs	\$ 2,	57	\$ 75	\$	2,432
			December 31, 2022	2	
n millions, except ratios)	Within the revo	ving	Converted to term loa	ans	Total

(in millions, except ratios)	With	in the revolving period	Converted t	o term loar	าร	Total
Loan delinquency						
Current and less than 30 days past due and still accruing	\$	181,793	\$	696	\$	182,489
30-89 days past due and still accruing		1,356		64		1,420
90 or more days past due and still accruing		1,230		36		1,266
Total retained loans	\$	184,379	\$	796	\$	185,175
Loan delinquency ratios						
% of 30+ days past due to total retained loans		1.40 %	6	12.56	%	1.45 %
% of 90+ days past due to total retained loans		0.67		4.52		0.68

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

(in millions, except ratios)	June 30, 2023	December 31, 2022
Geographic region ^(a)		
California	\$ 29,258 \$	28,154
Texas	19,992	19,171
New York	15,511	15,046
Florida	13,439	12,905
Illinois	10,457	10,089
New Jersey	7,902	7,643
Ohio	5,898	5,792
Colorado	5,840	5,493
Pennsylvania	5,549	5,517
Arizona	4,647	4,487
All other	72,855	70,878
Total retained loans	\$ 191,348 \$	185,175
Percentage of portfolio based on carrying value with estimated refreshed FICO scores		
Equal to or greater than 660	86.4 %	86.8 %
Less than 660	13.4	13.0
No FICO available	0.2	0.2

⁽a) The geographic regions presented in the table are ordered based on the magnitude of the corresponding loan balances at June 30, 2023.

Loan modifications

The Firm grants certain modifications of credit card loans to borrowers experiencing financial difficulty, which effective January 1, 2023, are reported as FDMs. These modifications involve placing the customer on a fixed payment plan, generally for 60 months, and typically include reducing the interest rate on the credit card under long-term programs. If the cardholder does not comply with the modified payment terms, then the credit card loan continues to age and will ultimately be charged-off in accordance with the Firm's standard charge-off policy. In most cases, the Firm does not reinstate the borrower's line of credit.

The following tables provide information on credit card loan modifications considered FDMs.

Three months ended June 30, 2023 (in millions)	Amortized cost basis	% of loan modifications to total retained credit card loans	Financial effect of loan modification
Loan modification			Term extension with a reduction in the weighted average contractual interest rate from 23.27% to
Term extension and interest rate reduction(a)(b)	\$ 181	0.09 %	6 3.57%
Total	\$ 181		
Six months ended June 30, 2023	Amortized	% of loan modifications to total retained	Francis of the start of the second of the start
(in millions)	cost basis	credit card loans	Financial effect of loan modification
(in millions) Loan modification	cost basis	credit card loans	Hnancial effect of loan modification
Loan modification			Termextension with a reduction in the weighted average contractual interest rate from 22.96% to
	\$ cost basis		

- (a) Term extension includes credit card loans whose terms have been modified under long-term programs by placing the customer on a fixed payment plan.
- (b) The interest rates represent weighted average at enrollment.

For both the three and six months ended June 30, 2023, the Firm also had \$26 million of loans subject to trial modifications. The changes to the TDR accounting guidance eliminated the TDR reasonably expected and concession assessment criteria. Accordingly, trial modifications are not considered FDMs.

The following table provides information on the payment status of FDMs during the three and six months ended June 30, 2023.

		Amortized	cost basis	
	T	Three months ended June 30,	Six months ended 30,	June
(in millions)		2023	3	2023
Current and less than 30 days past due and still accruing	\$	128	\$	264
30-89 days past due and still accruing		32		38
90 or more days past due and still accruing		21		24
Total	\$	181	\$	326

There were \$6 million FDMs that re-defaulted during both the three and six months ended June 30, 2023 which were a combination of term extension and interest rate reduction.

For credit card loans modified as FDMs, payment default is deemed to have occurred when the borrower misses two consecutive contractual payments. Defaulted modified credit card loans remain in the modification program and continue to be charged off in accordance with the Firm's standard charge-off policy.

For periods ending prior to January 1, 2023, modifications of credit card loans where the Firm granted concessions to borrowers who were experiencing financial difficulty were generally accounted for and reported as TDRs. Refer to Note 12 of JPMorgan Chase's 2022 Form 10-K for further information on TDRs.

Financial effects of modifications and redefaults

The following table provides information about the financial effects of the concessions granted on credit card loans modified in TDRs and redefaults. New enrollments were less than 1% of total retained credit card loans.

(in millions, except	Three months ended June 30,	Six months June 3	
w eighted-average data)	2022		2022
Balance of new TDRs(a)	\$ 81	\$	163
Weighted-average interest rate of loans – before TDR	18.94	%	18.47 %
Weighted-average interest rate of loans – after TDR	4.62		4.75
Balance of loans that redefaulted within one year of modification(b)	\$ 8	\$	17

- (a) Represents the outstanding balance prior to modification.
- (b) Represents loans modified in TDRs that experienced a payment default in the period presented, and for which the payment default occurred within one year of the modification. The amount presented represents the balance of such loans as of the end of the quarter in which they defaulted.

Wholesale loan portfolio

Wholesale loans include loans made to a variety of clients, ranging from large corporate and institutional clients, to small businesses and high-net-worth individuals. The primary credit quality indicator for wholesale loans is the internal risk rating assigned to each loan. Refer to Note 12 of JPMorgan Chase's 2022 Form 10-K for further information on these risk ratings.

Internal risk rating is the primary credit quality indicator for retained wholesale loans. The following tables provide information on internal risk rating and gross charge-offs for the six months ended June 30, 2023.

	Secured b	y re	al estate	Commercial	and	industrial	Ot	:her(b)		Total reta	ained	loans
(in millions, except ratios)	Jun 30, 2023		Dec 31, 2022	Jun 30, 2023		Dec 31, 2022	Jun 30, 2023		Dec 31, 2022	 Jun 30, 2023		Dec 31, 2022
Loans by risk ratings												
Investment-grade	\$ 120,652	\$	99,552	\$ 74,505	\$	76,275	\$ 256,821	\$	249,585	\$ 451,978	\$	425,412
Noninvestment-grade:												
Noncriticized	36,387		23,272	84,133		81,393	77,360		57,888	197,880		162,553
Criticized performing	4,314		3,662	9,980		8,974	1,400		1,106	15,694		13,742
Criticized nonaccrual	518		246	1,437		1,018	638		699	2,593		1,963
Total noninvestment-grade	41,219		27,180	95,550		91,385	79,398		59,693	216,167		178,258
Total retained loans(a)	\$ 161,871	\$	126,732	\$ 170,055	\$	167,660	\$ 336,219	\$	309,278	\$ 668,145	\$	603,670
% of investment-grade to total retained loans	74.54	%	78.55 %	43.81 %	6	45.49 %	76.39 %	%	80.70 %	67.65 %	,	70.47 %
% of total criticized to total retained loans	2.99		3.08	6.71		5.96	0.61		0.58	2.74		2.60
% of criticized nonaccrual to total retained loans	0.32		0.19	0.85		0.61	0.19		0.23	0.39		0.33

- (a) As of June 30, 2023 included \$33.9 billion of Secured by real estate loans, \$3.9 billion of Commercial and industrial loans, and \$18.2 billion of Other loans associated with the First Republic acquisition.
- (b) Includes loans to financial institutions, states and political subdivisions, SPEs, nonprofits, personal investment companies and trusts, as well as loans to individuals and individual entities (predominantly Global Private Bank clients within AWM and J.P. Morgan Wealth Management within CCB). Refer to Note 14 of JPM organ Chase's 2022 Form 10-K for more information on SPEs.

					Se	cured by real es June 30, 2023					
	_			Term loans by orig	ination year			Rev	olvir	ng Ioans	
(in millions)		2023	2022	2021	2020	2019	Prior to 2019	Within the revolving perio		Converted to term loans	Total
Loans by risk ratings Investment-grade Noninvestment-grade	\$	6,381 \$ 2.606	29,986 \$ 11.527	26,336 \$ 8.058	17,251 \$ 4.225	16,256 \$ 4,270	23,159 9,251	\$ 1,28 1,28			\$ 120,652 41,219
Total retained loans(a)	\$	8,987 \$	41,513 \$	34,394 \$	21,476 \$	20,526 \$	32,410	\$ 2,56	_		\$ 161,871
Gross charge-offs	\$	- \$	25 \$	21 \$	— \$	— \$	47	\$ -	— \$	_	\$ 93

						cured by real es December 31, 20				
	_		٦	Term loans by origi	Revolv	ving loans				
(in millions)		2022	2021	Within the revolving period	Converted to term loans	Total				
Loans by risk ratings										
Investment-grade	\$	24,134 \$	22,407 \$	14,773 \$	14,666 \$	5,277 \$	17,289	\$ 1,006	\$ —	\$ 99,55
Noninvestment-grade		6,072	5,602	3,032	3,498	2,395	5,659	920	2	27,18
Total retained loans	\$	30,206 \$	28,009 \$	17,805 \$	18,164 \$	7,672 \$	22,948	\$ 1,926	\$ 2	\$ 126,73

⁽a) As of June 30, 2023 included \$3.0 billion, \$11.0 billion, \$6.3 billion, \$4.4 billion, \$3.0 billion, and \$5.4 billion of retained loans originated in 2023, 2022, 2021, 2020, 2019 and prior to 2019, respectively, and \$799 million of revolving loans within the revolving period associated with the First Republic acquisition.

		Commercial and industrial												
						June 30, 202	23							
Term loans by origination year									Revolving	loans				
(in millions)		2023	2022	Within the Co	onverted to term loans		Total							
Loans by risk ratings														
Investment-grade	\$	10,777 \$	12,726 \$	6,324 \$	2,510 \$	1,314	\$ 1,268	\$	39,585 \$	1	\$	74,505		
Noninvestment-grade		10,510	19,667	11,130	2,827	1,828	1,445		48,051	92		95,550		
Total retained loans(a)	\$	21,287 \$	32,393 \$	17,454 \$	5,337 \$	3,142 \$	\$ 2,713	\$	87,636 \$	93	\$	170,055		
Gross charge-offs	\$	— \$	6 \$	20 \$	1 \$	2 9	\$ 6	\$	149 \$	4	\$	188		

					nmercial and indu December 31, 20								
		Т	erm loans by origi	nation year				Revolving	loans				
(in millions)	2022 2021 2020 2019 2018 Prior to 2018 Within the Converted to term revolving period loans												
Loans by risk ratings													
Investment-grade	\$ 21,072 \$	8,338 \$	3,045 \$	1,995 \$	748 \$	989	\$	40,087 \$	1	\$	76,275		
Noninvestment-grade	24,088	12,444	3,459	2,506	525	1,014		47,267	82		91,385		
Total retained loans	\$ 45,160 \$	20,782 \$	6,504 \$	4,501 \$	1,273 \$	2,003	\$	87,354 \$	83	\$	167,660		

(a) As of June 30, 2023 included \$231 million, \$764 million, \$444 million, \$346 million, \$92 million, and \$270 million of retained loans originated in 2023, 2022, 2021, 2020, 2019 and prior to 2019, respectively, and \$1.7 billion of revolving loans within the revolving period associated with the First Republic acquisition.

						Other(a) June 30, 202	3						
	_	Term loans by origination year Revolving loans											
(in millions)		2023	2022	2021	2020	2019	Prior to 2019		Within the olving period	Converted to term loans		Total	
Loans by risk ratings Investment-grade Noninvestment-grade	\$	24,067 \$ 6,821	21,496 \$ 12,769	11,927 \$ 6,803	10,970 \$ 2,368	4,139 \$ 760	\$ 7,700 2,083	\$	173,951 \$ 47,735	5 2,571 59	\$	256,821 79,398	
Total retained loans(b)	\$	30,888 \$	34,265 \$	18,730 \$	13,338 \$	4,899	\$ 9,783	\$	221,686 \$	2,630	\$	336,219	
Gross charge-offs	\$	— \$	— \$	5 \$	5 \$	_ ;	\$ —	\$	3 \$	· –	\$	13	

						Other(a) December 31, 2	022					
			1	Term loans by origi	nation year				Revolvino	gloans		
(in millions)		2022	2021	2020	2019	2018	Prior to 2018		Mithin the olving period		Total	
Loans by risk ratings Investment-grade	\$	32.121 \$	15.864 \$	13,015 \$	4.529 \$	2.159 \$	§ 7,251	\$	171.049 \$	3,597	\$	249,585
Noninvestment-grade	•	16,829	7,096	1,821	699	451	475	•	32,240	82	·	59,693
Total retained loans	\$	48,950 \$	22,960 \$	14,836 \$	5,228 \$	2,610 \$	\$ 7,726	\$	203,289 \$	3,679	\$	309,278

⁽a) Includes loans to financial institutions, states and political subdivisions, SPEs, nonprofits, personal investment companies and trusts, as well as loans to individuals and individual entities (predominantly Global Private Bank clients within AWM and J.P. Morgan Wealth Management within CCB). Refer to Note 14 of JPMorgan Chase's 2022 Form 10-K for more information on SPEs.

⁽b) As of June 30, 2023 included \$128 million, \$615 million, \$708 million, \$877 million, \$168 million, and \$1.3 billion of retained loans originated in 2023, 2022, 2021, 2020, 2019 and prior to 2019, respectively, \$14.3 billion of revolving loans within the revolving period, and \$55 million converted to termloans associated with the First Republic acquisition.

The following table presents additional information on retained loans secured by real estate, which consists of loans secured wholly or substantially by a lien or liens on real property at origination.

	 Multifamily		 Other commercia	al	To	otal retained loans sec	cured b	y real estate
(in millions, except ratios)	Jun 30, 2023	Dec 31, 2022	Jun 30, 2023	Dec 31, 2022		Jun 30, 2023		Dec 31, 2022
Retained loans secured by real estate	\$ 100,732 \$	79,139	\$ 61,139 \$	47,593	\$	161,871 (a)	\$	126,732
Criticized	2,141	1,916	2,691	1,992		4,832		3,908
% of criticized to total retained loans secured by real estate	2.13 %	2.42 %	4.40 %	4.19 %		2.99 %		3.08 %
Criticized nonaccrual	\$ 56 \$	51	\$ 462 \$	195	\$	518	\$	246
% of criticized nonaccrual loans to total retained loans secured by real estate	0.06 %	0.06 %	0.76 %	0.41 %		0.32 %		0.19 %

(a) Included \$21.0 billion and \$13.0 billion of Multifamily and Other commercial loans associated with the First Republic acquisition.

Geographic distribution and delinquency

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

	Secured by re	al estate	Commer and indu	rcial strial	Other		Total retained lo	oans
(in millions)	 Jun 30, 2023	Dec 31, 2022	Jun 30, 2023	Dec 31, 2022	Jun 30, 2023	Dec 31, 2022	Jun 30, 2023	Dec 31, 2022
Loans by geographic distribution(a)(b)								
Total U.S.	\$ 158,936 \$	123,740	\$ 129,316 \$	125,324	\$ 257,319 \$	230,525	\$ 545,571 \$	479,589
Total non-U.S.	2,935	2,992	40,739	42,336	78,900	78,753	122,574	124,081
Total retained loans	\$ 161,871 \$	126,732	\$ 170,055 \$	167,660	\$ 336,219 \$	309,278	\$ 668,145 \$	603,670
Loan delinquency								
Current and less than 30 days past due and still accruing	\$ 161,138 \$	126,083	\$ 167,082 \$	165,415	\$ 334,237 \$	307,511	\$ 662,457 \$	599,009
30-89 days past due and still accruing	215	402	1,317	1,127	1,232	1,015	2,764	2,544
90 or more days past due and still accruing(c)	_	1	219	100	112	53	331	154
Criticized nonaccrual	518	246	1,437	1,018	638	699	2,593	1,963
Total retained loans	\$ 161,871 \$	126.732	\$ 170.055 \$	167.660	\$ 336,219 \$	309.278	\$ 668.145 \$	603,670

- (a) The U.S. and non-U.S. distribution is determined based predominantly on the domicile of the borrower.
- (b) Borrowers associated with the First Republic acquisition are predominantly domiciled in the U.S.
- (c) Represents loans that are considered well-collateralized and therefore still accruing interest.

Nonaccrual loans

The following table provides information on retained wholesale nonaccrual loans.

	 Secured by rea	al estate	Commerciand indust	cial trial		Other		Total retained loa	ans
(in millions)	 Jun 30, 2023	Dec 31, 2022	Jun 30, 2023	Dec 31, 2022	Jun 30, Dec 31, 2023 2022			Jun 30, 2023	Dec 31, 2022
Nonaccrual loans									
With an allowance	\$ 281 \$	172	\$ 1,035 \$	686	\$	340 \$	487	\$ 1,656 \$	1,345
Without an allowance(a)	237	74	402	332		298	212	937	618
Total nonaccrual loans(b)	\$ 518 \$	246	\$ 1.437 \$	1.018	\$	638 \$	699	\$ 2.593 \$	1.963

- (a) When the discounted cash flows or collateral value equals or exceeds the amortized cost of the loan, the loan does not require an allowance. This typically occurs when the loans have been partially charged off and/or there have been interest payments received and applied to the loan balance.
- (b) Interest income on nonaccrual loans recognized on a cash basis was not material for the three and six months ended June 30, 2023 and 2022.

Loan modifications

The Firm grants certain modifications of wholesale loans to borrowers experiencing financial difficulty, which effective January 1, 2023, are reported as FDMs. The following tables provide information about Commercial and industrial and Other Ioan modifications considered FDMs.

				Commercial	and	industrial		
		Three months en	nde		anu	iiuusiiiai	Six months ende	d June 30, 2023
(in millions)	Amortized ost basis	% of loan modifications to total retained Commercial and industrial loans		Financial effect of loan modification		Amortized cost basis	% of loan modifications to total retained Commercial and industrial loans	Financial effect of loan modification
Loan modification								
Single modifications								
Term extension	\$ 306	0.18	%	Extended loans by a weighted-average of 8 months	\$	423	0.25 %	Extended loans by a weighted-average of 10 months
Other-than-insignificant payment delay	5	_	%	Provided payment deferrals with delayed amounts primarily re-amortized over the remaining tenor		5	— %	Provided payment deferrals with delayed amounts primarily re-amortized over the remaining tenor
Multiple modifications				_				-
Interest Rate Reduction and Term Extension	\$ 1	_	%	Reduced weighted-average contractual interest by -191 bps and extended loans by a weighted-average of 17 months	\$	1	— %	Reduced weighted-average contractual interest by -191 bps and extended loans by a weighted-average of 17 months
								Extended loans by a weighted-average of 64 months and reduced amortized cost basis of the loans by \$23mm
Term extension and principal forgiveness		_	%			40	0.02 %	·
Total	\$ 312				\$	469	=	

					0	Other								
			Three months e	nde	ed June 30, 2023		d June 30, 2023							
(in millions)	A	mortized ost basis	% of loan modifications to total retained Other loans	0	Financial effect of loan modification	ć	Amortized cost basis	% of loan modifications to total retained Other loans	Financial effect of loan modification					
Loan modification														
Single modifications														
Interest rate reduction	\$	11			Reduced weighted-average contractual interest by 654 bps	\$	11		Reduced weighted-average contractual interest by 654 bps					
Term extension		38	0.01	%	Extended loans by a weighted-average of 3 months		54	0.02 %	Extended loans by a weighted-average of 6 months					
Multiple modifications														
Payment Delay and Term Extension	•	235	0.07	%	Provided payment deferrals with delayed amounts primarily recaptured at the end of the deferral period and extended loans by a weighted-average of 144 months	\$	235	0.07 %	Provided payment deferrals with delayed amounts primarily recaptured at the end of the deferral period and extended loans by a weighted-average of 144 months					
Total	\$	284	0.07	/0	OF ITT HOURS	\$	300	0.07 /0	OI ITTIIOIUS					

The following tables provide information on the payment status of Commercial and industrial and Other FDMs during the three and six months ended June 30, 2023.

		Amortized cost basis									
		Commercial a	and industrial	Other							
(in millions)	Three m	onths ended June 30, 2023	Six months ended June 30, 2023	Three months ended June 30, 2023	Six months ended June 30, 2023						
Current and less than 30 days past due and still accruing	\$	242 \$	331	\$ - 9	_						
30-89 days past due and still accruing		_	_	_	_						
90 or more days past due and still accruing		3	3	_	_						
Criticized nonaccrual		67	135	284	300						
Total	\$	312 9	469	\$ 284 9	300						

The following table provides information on Commercial and industrial FDMs that re-defaulted during the three and six months ended June 30, 2023. There were no Other FDM re-defaults during the three and six months ended June 30, 2023.

	Amortized	Amortized cost basis							
(in millions)	Three months ended June 30, 2023	Six months ended June 30, 2023							
Loan modification									
Term extension	3	7							
Total ^(a)	3	7							

(a) Represents FDMs that were 30 days or more past due

Additional commitments to lend to borrowers experiencing financial difficulty whose Commercial and industrial loans have been modified as FDMs were \$438 million and \$1.3 billion for the three and six months ended June 30, 2023.

There were no additional commitments to lend to borrowers experiencing financial difficulties whose Other loans have been modified as FDMs for the three and six months ended June 30, 2023.

For the three and six months ended June 30, 2023, Secured by real estate FDMs were \$77 million and \$85 million respectively. The financial effects of FDMs were largely term extensions which extended the loans by a weighted-average of nine months. There were no re-defaults during the three months ended June 30, 2023 and \$1 million in modified term extensions that re-defaulted during the six months ended June 30, 2023. There were no additional commitments to lend to borrowers experiencing financial difficulty whose loans have been modified as FDMs for the three and six months ended June 30, 2023.

Prior to January 1, 2023, certain loan modifications were considered TDRs.

For the three and six months ended June 30, 2022, new TDRs were \$60 million and \$479 million, respectively. New TDRs for the three and six months ended June 30, 2022 reflected extended maturity dates and covenant waivers primarily in the Commercial and Industrial loan class. For the three and six months ended June 30, 2022, the impact of these modifications were not material to the Firm.

As a result of the elimination of the requirement to assess whether a modification is reasonably expected or involves a concession, the population of loans considered FDMs is greater than those previously considered TDRs.

Note 13 - Allowance for credit losses

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

On January 1, 2023 the Firm adopted the Financial Instruments - Credit Losses: Troubled Debt Restructurings accounting guidance as described in Note 1.

The adoption of this guidance eliminated the requirement to measure the allowance for TDRs using a DCF methodology and allowed the option of a non-DCF portfolio-based approach for modified loans to borrowers experiencing financial difficulty. If a DCF methodology is still applied for these modified loans, the discount rate must be the post-modification effective interest rate, instead of the pre-modification effective interest rate.

The Firm elected to change from an asset-specific allowance approach to its non-DCF, portfolio-based allowance approach for modified loans to troubled borrowers for all portfolios except collateral-dependent loans and nonaccrual risk-rated loans, for which the asset-specific allowance approach will continue to apply.

This guidance was adopted under the modified retrospective method which resulted in a net decrease to the allowance for credit losses of \$587 million and an increase to retained earnings of \$446 million, after-tax predominantly driven by residential real estate and credit card.

Refer to Note 13 of JPMorgan Chase's 2022 Form 10-K for a detailed discussion of the allowance for credit losses and the related accounting policies.

Allowance for credit losses and related information

The table below summarizes information about the allowances for credit losses and includes a breakdown of loans and lending-related commitments by impairment methodology. Refer to Note 10 of JPMorgan Chase's 2022 Form 10-K and Note 10 of this Form 10-Q for further information on the allowance for credit losses on investment securities.

			2023	3				20)22		
C' " 111 00	(Consumer,					Consumer, cluding credit				
Six months ended June 30, (in millions)		excluding of credit card	Credit card	Wholesale	Total	exc	cluding credit card	Credit card	Wholesale		Total
Allowance for loan losses		or our our u	Or other other	r i i i i i i i i i i i i i i i i i i i	10101		ou u	Or other other	· · · · · · · · · · · · · · · · · · ·		10101
Beginning balance at January 1,	\$	2.040 \$	11,200 \$	6,486 \$	19.726	\$	1.765 \$	10.250 \$	4.371	\$	16.386
Cumulative effect of a change in accounting principle ^(a)	•	(489)	(100)	2	(587)	•	NA NA	NA	NA	•	NA
Gross charge-offs		501	2,432	294	3,227		384	1,505	123		2,012
Gross recoveries collected		(247)	(386)	(46)	(679)		(311)	(419)	(43)		(773)
Net charge-offs/(recoveries)		254	2,046	248	2,548		73	1,086	80		1,239
Provision for loan losses		751	2,546	2,067	5,364		237	1,236	1,125		2,598
Other		_	_	25	25		_	_	5		5
Ending balance at June 30,	\$	2,048 \$	11,600 \$	8,332 \$	21,980	\$	1,929 \$	10,400 \$	5,421	\$	17,750
Allowance for lending-related commitments											
Beginning balance at January 1,	\$	76 \$	_ \$	2,306 \$	2,382	\$	113 \$	— \$	2,148	\$	2,261
Provision for lending-related commitments		52	_	(253)	(201)		(2)	_	(37)		(39)
Other		1		4	5		(1)		1		
Ending balance at June 30,	\$	129 \$	_ \$	2,057 \$	2,186	\$	110 \$	— \$	2,112	\$	2,222
Total allowance for investment securities					104		NA	NA	NA		47
Total allowance for credit losses(b)(c)	\$	2,177 \$	11,600 \$	10,389 \$	24,270	\$	2,039 \$	10,400 \$	7,533	\$	20,019
Allowance for loan losses by impairment methodology											
Asset-specific ^(d)	\$	(971) \$	— \$	478 \$	(493)	\$	(676) \$	227 \$	332	\$	(117)
Portf olio-based		3,019	11,600	7,854	22,473		2,605	10,173	5,089		17,867
Total allowance for loan losses	\$	2,048 \$	11,600 \$	8,332 \$	21,980	\$	1,929 \$	10,400 \$	5,421	\$	17,750
Loans by impairment methodology											
Asset-specific ^(d)	\$	3,439 \$	— \$	2,587 \$	6,026	\$	12,683 \$	827 \$	2,408	\$	15,918
Portf olio-based		392,756	191,348	665,558	1,249,662		289,948	164,667	581,857		1,036,472
Total retained loans	\$	396,195 \$	191,348 \$	668,145 \$	1,255,688	\$	302,631 \$	165,494 \$	584,265	\$	1,052,390
Collateral-dependent loans											
Net charge-offs	\$	5 \$	_ \$	77 \$	82	\$	(15) \$	— \$	8	\$	(7)
Loans measured at fair value of collateral less cost to sell		3,388	_	762	4,150		3,935	_	607		4,542
Allowance for lending-related commitments by impairment methodology											
Asset-specific	\$	— \$	— \$	65 \$	65	\$	— \$	— \$	78	\$	78
Portf olio-based		129		1,992	2,121		110		2,034		2,144
Total allowance for lending-related commitments(e)	\$	129 \$	_ \$	2,057 \$	2,186	\$	110 \$	— \$	2,112	\$	2,222
Lending-related commitments by impairment methodology				·							
Asset-specific	\$	— \$	_ \$	332 \$	332	\$	— \$	— \$	397	\$	397
Portf olio-based ^(f)		32,428		521,408	553,836		26,809		458,038		484,847
Total lending-related commitments	\$	32,428 \$	- \$	521,740 \$	554,168	\$	26,809 \$	— \$	458,435	\$	485,244

- (a) Represents the impact to the allowance for loan losses upon the adoption of the Financial Instruments Credit Losses: Troubled Debt Restructurings accounting guidance.
 (b) At June 30, 2023, in addition to the allowance for credit losses in the table above, the Firmalso had an allowance for credit losses of \$18 million associated with certain accounts receivable in CIB.
- (c) As of June 30, 2023 included \$1.2 billion allowance for credit losses associated with the First Republic acquisition.
- (d) Includes collateral-dependent loans, including those for which foreclosure is deemed probable, and nonaccrual risk-rated loans for all periods presented. Prior periods also include non collateral-dependent TDRs or reasonably expected TDRs and modified PCD loans.
- (e) The allow ance for lending-related commitments is reported in accounts payable and other liabilities on the Consolidated balance sheets.

 (f) At June 30, 2023 and 2022, lending-related commitments excluded \$18.4 billion and \$13.7 billion, respectively, for the consumer, excluding credit card portfolio segment; \$881.5 billion and \$774.0 billion, respectively, for the credit card portfolio segment; and \$19.3 billion and \$29.1 billion, respectively, for the wholesale portfolio segment, which were not subject to the allow ance for lending-related commitments. Prior period amount for wholesale lending-related commitments, including the amount not subject to allow ance, has been revised to conform with the current presentation.

Discussion of changes in the allowance

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Note 14 – Variable interest entities

Refer to Note 1 and Note 14 of JPMorgan Chase's 2022 Form 10-K for a further description of the Firm's accounting policies and involvement with VIEs.

The following table summarizes the most significant types of Firm-sponsored VIEs by business segment. The Firm considers a "Firm-sponsored" VIE to include any entity where: (1) JPMorgan Chase is the primary beneficiary of the structure; (2) the VIE is used by JPMorgan Chase to securitize Firm assets; (3) the VIE issues financial instruments with the JPMorgan Chase name; or (4) the entity is a JPMorgan Chase-administered asset-backed commercial paper conduit.

Line of Business	Transaction Type	Activity	Form 10-Q page references
	Credit card securitization trusts	Securitization of originated credit card receivables	165
OOB	Mortgage securitization trusts	Servicing and securitization of both originated and purchased residential mortgages	165-167
aв	Mortgage and other securitization trusts	Securitization of both originated and purchased residential and commercial mortgages, and other consumer loans	165-167
	Multi-seller conduits	Assisting clients in accessing the financial markets in a cost- efficient manner and structuring transactions to meet investor needs	167
	Municipal bond vehicles	Financing of municipal bond investments	167

The Firm also invests in and provides financing and other services to VIEs sponsored by third parties. Refer to pages 168-169 of this Note for more information on consolidated VIE assets and liabilities as well as the VIEs sponsored by third parties.

Significant Firm-sponsored VIEs

Credit card securitizations

As a result of the Firm's continuing involvement, the Firm is considered to be the primary beneficiary of its Firm-sponsored credit card securitization trust, the Chase Issuance Trust.

Firm-sponsored mortgage and other securitization trusts

The Firm securitizes (or has securitized) originated and purchased residential mortgages, commercial mortgages and other consumer loans primarily in its CCB and CIB businesses. Depending on the particular transaction, as well as the respective business involved, the Firm may act as the servicer of the loans and/or retain certain beneficial interests in the securitization trusts.

The following tables present the total unpaid principal amount of assets held in Firm-sponsored private-label securitization entities, including those in which the Firm has continuing involvement, and those that are consolidated by the Firm. Continuing involvement includes servicing the loans, holding senior interests or subordinated interests (including amounts required to be held pursuant to credit

risk retention rules), recourse or guarantee arrangements, and derivative contracts. In certain instances, the Firm's only continuing involvement is servicing the loans. The Firm's maximum loss exposure from retained and purchased interests is the carrying value of these interests.

	Principal amount outstanding							JPVorgan Chase interest in securitized assets in nonconsolidated VIEs(c)(d)(e)							
June 30, 2023 (in millions)	Total a	ssets held by h tization VIEs	Assets neld in consolidated securitization VIEs	Assets held in nonconsolidated securitization VIEs with continuing involvement		Trading assets	Investment securities	Other financial assets	Total interests held by JPMbrgan Chase						
Securitization-related(a)															
Residential mortgage:															
Prime/Alt-A and option ARMs	\$	56,604 \$	715 \$	38,439	\$	681 \$	2,060 \$	23	\$ 2,764						
Subprime		9,300	_	1,353		4		_	4						
Commercial and other(b)		162,779	_	127,826		893	5,443	668	7,004						
Total	\$	228,683 \$	715 \$	167,618	\$	1,578 \$	7,503 \$	691	\$ 9,772						

		Prir	ncipal amount outstand	ing	J	JPMbrgan Chase interest in securitized assets in nonconsolidated VIEs(c)(d)(e)						
December 31, 2022 (in millions)	Total a	ssets held by tization VIEs	Assets held in consolidated securitization VIEs	Assets held in nonconsolidated securitization VIEs with continuing involvement	_	Trading assets	Investment securities	Other financial assets	Total interests held by JPMorgan Chase			
Securitization-related(a)												
Residential mortgage:												
Prime/Alt-A and option ARMs	\$	55,362	\$ 754	\$ 37,058	\$	744 \$	1,918 \$	\$ -\$	2,662			
Subprime		9,709	_	1,743		10	_	_	10			
Commercial and other(b)		164,915	_	127,037		888	5,373	670	6,931			
Total	\$	229,986	\$ 754	\$ 165,838	\$	1,642 \$	7,291 \$	\$ 670 \$	9,603			

- (a) Excludes U.S. GSEs and government agency securitizations and re-securitizations, which are not Firm-sponsored.
- (b) Consists of securities backed by commercial real estate loans and non-mortgage-related consumer receivables.
- (c) Excludes the following: retained servicing; securities retained from loan sales and securitization activity related to U.S. GSEs and government agencies; interest rate and foreign exchange derivatives primarily used to manage interest rate and foreign exchange risks of securitization entities; senior securities of \$104 million and \$134 million at June 30, 2023 and December 31, 2022, respectively, and subordinated securities which were \$92 million and \$34 million at June 30, 2023 and December 31, 2022, respectively, which the Firmpurchased in connection with CIB's secondary market-making activities.
- (d) Includes interests held in re-securitization transactions.
- (e) As of both June 30, 2023 and December 31, 2022, 84% of the Firm's retained securitization interests, which are predominantly carried at fair value and include amounts required to be held pursuant to credit risk retention rules, were risk-rated "A" or better, on an S&P-equivalent basis. The retained interests in prime residential mortgages consisted of \$2.7 billion and \$2.6 billion of investment-grade retained interests at June 30, 2023 and December 31, 2022, respectively, and noninvestment-grade retained interests were not material at both June 30, 2023 and December 31, 2022. The retained interests in commercial and other securitization trusts consisted of \$5.9 billion and \$5.8 billion of investment-grade retained interests at June 30, 2023 and December 31, 2022 respectively, and \$1.1 billion of noninvestment-grade retained interests at both June 30, 2023 and December 31, 2022, respectively.

Residential mortgage

The Firm securitizes residential mortgage loans originated by CCB, as well as residential mortgage loans purchased from third parties by either CCB or ClB.

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.

	Thr	ree month	is end 30,	ded June	Six months ended June 30,					
(in millions)		2023		2022		2023		2022		
Transfers of securities to VIEs										
U.S. GSEs and government agencies	\$	6,261	\$	7,373	\$	9,667	\$	13,449		

VIEs during the three and six months ended June 30, 2023 and 2022, respectively and retained interests in any such Firm-sponsored VIEs as of June 30, 2023 and December 31, 2022 were not material.

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

		Nonconsolidated re-securitization VIEs					
(in millions)	Jui	ne 30, 2023		December 31, 2022			
U.S. GSEs and government agencies							
Interest in VIEs	\$	3,412	\$	2,580			

As of June 30, 2023, and December 31, 2022, the Firm did not consolidate any U.S. GSE and government agency re-securitization VIEs or any Firmsponsored private-label re-securitization VIEs.

Multi-seller conduits

In the normal course of business, JPMorgan Chase makes markets in and invests in commercial paper issued by the Firm-administered multi-seller conduits. The Firm held \$12.4 billion and \$13.8 billion of the commercial paper issued by the Firm-administered multi-seller conduits at June 30, 2023, and December 31, 2022, respectively, which have been eliminated in consolidation. The Firm's investments reflect the Firm's funding needs and capacity and were not driven by market illiquidity. Other than the amounts required to be held pursuant to credit risk retention rules, the Firm is not obligated under any agreement to purchase the commercial paper issued by the Firm-administered multi-seller conduits.

Deal-specific liquidity facilities, program-wide liquidity and credit enhancement provided by the Firm have been eliminated in consolidation. The Firm or the Firm-administered multi-seller conduits provide lending-related commitments to certain clients of the Firm-administered multi-seller conduits. The unfunded commitments were \$11.3 billion and \$10.6 billion at June 30, 2023, and December 31, 2022, respectively, and are reported as off-balance sheet lending-related commitments in other unfunded commitments to extend credit. Refer to Note 24 for more information on off-balance sheet lending-related commitments.

Municipal bond vehicles

Municipal bond vehicles or tender option bond ("TOB") trusts allow institutions to finance their municipal bond investments at short-term rates. TOB transactions are known as customer TOB trusts and noncustomer TOB trusts. Customer TOB trusts are sponsored by a third party.

The Firm serves as sponsor for all non-customer TOB transactions.

Consolidated VIE assets and liabilities

The following table presents information on assets and liabilities related to VIEs consolidated by the Firm as of June 30, 2023 and December 31, 2022.

				Assets	3				Liabilities					
									eneficial interests					
							Total		in in			Total		
June 30, 2023 (in millions)	Tra	ading assets	Loans		Other(c)		assets(d)		VIE assets(e)		Other ^(f)	liabilities		
VIEprogram type														
Firm-sponsored credit card trusts	\$	_ \$	\$ 9,168	5	82	\$	9,250	\$	999	\$	2 \$	1,001		
Firm-administered multi-seller conduits		1	28,598		169		28,768		16,383		31	16,414		
Municipal bond vehicles		2,313	_		21		2,334		2,133		10	2,143		
Mortgage securitization entities(a)		_	733		10		743		132		60	192		
Other		54	626	(b)	250		930		_		144	144		
Total	\$	2,368	\$ 39,125		532	\$	42,025	\$	19,647	\$	247 \$	19,894		

Assets							Liabilities					
December 31, 2022 (in millions)	Tra	ading assets	Loans		Other(c)	Total assets(d)		Beneficial interesion in VIE assets(e)		Other ^(f)	Total liabilities	
VIEprogram type												
Firm-sponsored credit card trusts	\$	— \$	9,699	\$	100	\$ 9	799	\$ 1,9	99 \$	2 \$	2,001	
Firm-administered multi-seller conduits		_	22,819		170	22	989	9,2	36	39	9,275	
Municipal bond vehicles		2,089	_		7	2	096	1,2	32	10	1,242	
Mortgage securitization entities(a)		_	781		10		791	1.	13	67	210	
Other		62	1,112 (b)		263	1	437		_	161	161	
Total	\$	2,151 \$	34,411	\$	550	\$ 37	112	\$ 12,6	0 \$	279 \$	12,889	

- (a) Includes residential mortgage securitizations.
- (b) Primarily includes purchased supply chain finance receivables and purchased auto loan securitizations in CIB.
- (c) Includes assets classified as cash and other assets on the Consolidated balance sheets.
- (d) The assets of the consolidated VIEs included in the programtypes 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
- (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 JRVbrgan Chase. Included in beneficial interests in VIE assets are long-term beneficial interests of \$1.1 billion and \$2.1 billion at June 30, 2023, and December 31, 2022, respectively.
- (f) Includes liabilities classified as accounts payable and other liabilities on the Consolidated balance sheets.

VIEs sponsored by third parties

The Firm enters into transactions with VIEs structured by other parties. These include, for example, acting as a derivative counterparty, liquidity provider, investor, underwriter, placement agent, remarketing agent, trustee or custodian. These transactions are conducted at arm's-length, and individual credit decisions are based on the analysis of the specific VIE, taking into consideration the quality of the underlying assets. Where the Firm does not have the power to direct the activities of the VIE that most significantly impact the VIE's economic performance, or a variable interest that could potentially be significant, the Firm generally does not consolidate the VIE, but it records and reports these positions on its Consolidated balance sheets in the same manner it would record and report positions in respect of any other third-party transaction.

Tax credit vehicles

The Firm holds investments in unconsolidated tax credit vehicles, which are limited partnerships and similar entities that own and operate affordable housing, energy, and other projects. These entities are primarily considered VIEs. A third party is typically the general partner or managing

member and has control over the significant activities of the tax credit vehicles, and accordingly the Firm does not consolidate tax credit vehicles. The Firm generally invests in these partnerships as a limited partner and earns a return primarily through the receipt of tax credits allocated to the projects. The maximum loss exposure, represented by equity investments and funding commitments, was \$32.4 billion and \$30.2 billion at June 30, 2023, and December 31, 2022, of which \$12.6 billion and \$10.6 billion was unfunded at June 30, 2023, and December 31, 2022, respectively. The Firm assesses each project and to reduce the risk of loss, may withhold varying amounts of its capital investment until the project qualifies for tax credits. Refer to Note 25 of JPMorgan Chase's 2022 Form 10-K for further information on affordable housing tax credits and Note 24 of this Form 10-Q for more information on off-balance sheet lending-related commitments.

Customer municipal bond vehicles (TOB trusts)

The Firm may provide various services to customer TOB trusts, including remarketing agent, liquidity or tender option provider. In certain customer TOB transactions, the Firm, as liquidity provider, has entered into a reimbursement agreement with the Residual holder.

In those transactions, upon the termination of the vehicle, the Firm has recourse to the third-party Residual holders for any shortfall. The Firm does not have any intent to protect Residual holders from potential losses on any of the underlying municipal bonds. The Firm does not consolidate customer TOB trusts, since the Firm does not have the

power to make decisions that significantly impact the economic performance of the municipal bond vehicle.

The Firm's maximum exposure as a liquidity provider to customer TOB trusts at June 30, 2023 and December 31, 2022 was \$5.9 billion and \$5.8 billion, respectively. The fair value of assets held by such VIEs at both June 30, 2023 and December 31, 2022 was \$8.2 billion.

Loan securitizations

The Firm has securitized and sold a variety of loans, including residential mortgages, credit card receivables, commercial mortgages and other consumer loans.

Securitization activity

The following table provides information related to the Firm's securitization activities for the three and six months ended June 30, 2023 and 2022, related to assets held in Firm-sponsored securitization entities that were not consolidated by the Firm, and where sale accounting was achieved at the time of the securitization.

	Three months ended June 30,				Six months ended June 30,										
	20	23			20	22		2023				2022			
(in millions)	Residential mortgage ^(d)	С	ommercial and other(e)		Residential mortgage ^(d)	О	commercial and other(e)		Residential mortgage ^(d)	α	ommercial and other(e)		Residential mortgage ^(d)	Cor	mercial and other®
Principal securitized	\$ 2,216	\$	376	\$	3,028	\$	3,950	\$	3,289	\$	376	\$	9,523	\$	7,058
All cash flows during the period:(a)															
Proceeds received from loan sales as financial instruments(b)(c)	\$ 2,123	\$	380	\$	2,754	\$	3,869	\$	3,153	\$	380	\$	9,129	\$	6,975
Servicing fees collected	6		1		20		_		12		1		44		_
Cash flows received on interests	86		91		127		54		160		178		282		125

- (a) Excludes re-securitization transactions.
- (b) Predominantly includes Level 2 assets.
- (c) The carrying value of the loans accounted for at fair value approximated the proceeds received upon loan sale.
- (d) Represents prime mortgages. Excludes loan securitization activity related to U.S. GSEs and government agencies.
- (e) Includes commercial mortgage and other consumer loans.

Loans and excess 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 24 of this Form 10-Q for additional information about the Firm's loan sales- and securitization-related indemnifications and Note 15 for additional information about the impact of the Firm's sale of certain excess 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.

	Th	Three months ended June 30,			Six months ended Jui 30,				
(in millions)		2023	2022		2023	2022			
Carrying value of loans sold	\$	6,323 \$	10,721	\$	9,021 \$	34,389			
Proceeds received from loan sales as cash		33	4		40	13			
Proceeds from loan sales as securities(a)(b)		6,220	10,551		8,882	33,809			
Total proceeds received from loan sales(c)	\$	6,253 \$	10,555	\$	8,922 \$	33,822			
Gains/(losses) on loan sales(d)(e	\$	— \$	_	\$	— \$	_			

- (a) Includes securities from U.S. GSEs and Ginnie Mae that are generally sold shortly after receipt or retained as part of the Firm's investment securities portfolio.
- (b) Included in level 2 assets.
- (c) Excludes the value of MSRs retained upon the sale of loans.
- (d) Gains/(losses) on loan sales include the value of MSRs.
- (e) The carrying value of the loans accounted for at fair value approximated the proceeds received upon loan sale.

Options to repurchase delinquent loans

In addition to the Firm's obligation to repurchase certain loans due to material breaches of representations and warranties as discussed in Note 24, the Firm also has the option to repurchase delinquent loans that it services for Ginnie Mae loan pools, as well as for other U.S. government

agencies under certain arrangements. The Firm typically elects to repurchase delinquent loans from Ginnie Mae loan pools as it continues to service them and/or manage the foreclosure process in accordance with the applicable requirements, and such loans continue to be insured or guaranteed. When the Firm's repurchase option becomes exercisable, such loans must be reported on the Consolidated balance sheets as a loan with a corresponding liability. Refer to Note 12 for additional information.

The following table presents loans the Firm repurchased or had an option to repurchase, real estate owned, and foreclosed government-guaranteed residential mortgage loans recognized on the Firm's Consolidated balance sheets as of June 30, 2023 and December 31, 2022. Substantially all of these loans and real estate are insured or guaranteed by U.S. government agencies.

(in millions)	June 30, 2023	December 31, 2022
Loans repurchased or option to repurchase(a)	\$ 752 \$	839
Real estate owned	9	10
Foreclosed government-guaranteed residential mortgage loans ^(b)	23	27

- (a) Predominantly all of these amounts relate to loans that have been repurchased from Ginnie Mae loan pools.
- (b) Relates to voluntary repurchases of loans, which are included in accrued interest and accounts receivable.

Loan delinquencies and liquidation losses

The table below includes information about components of and delinquencies related to nonconsolidated securitized financial assets held in Firm-sponsored private-label securitization entities, in which the Firm has continuing involvement as of June 30, 2023, and December 31, 2022.

								Net liqu	idation los	ses/((recoveries)	
		Securitized	assets		90 days pa	ast due	Thre	e months end 30,	led June	S	ix months ended 30,	d June
(in millions)	Ju	ne 30, 2023	December 31, 2022	Jun	ne 30, 2023	December 31, 2022		2023	2022		2023	2022
Securitized loans												
Residential mortgage:												
Prime / Alt-A & option ARMs	\$	38,439 \$	37,058	\$	482 \$	511	\$	3 \$	(21)	\$	10 \$	(27)
Subprime		1,353	1,743		141	212		2	(3)		4	(3)
Commercial and other		127,826	127,037		1,231	948		_	5		19	11
Total loans securitized	\$	167,618 \$	165,838	\$	1,854 \$	1,671	\$	5 \$	(19)	\$	33 \$	(19)

Note 15 - Goodwill and Mortgage servicing rights

Refer to Note 15 of JPMorgan Chase's 2022 Form 10-K for a discussion of the accounting policies related to goodwill and mortgage servicing rights.

Goodwil

The following table presents goodwill attributed to the reportable business segments and Corporate.

(in millions)	June 30, 2023	December 31, 2022
Consumer & Community Banking	\$ 32,116 \$	32,121
Corporate & Investment Bank	8,253	8,008
Commercial Banking	2,985	2,985
Asset & Wealth Management	8,344	7,902
Corporate	682	646
Total goodwill	\$ 52,380 \$	51,662

The following table presents changes in the carrying amount of goodwill.

	Th	Three months ended June 30,			Six months ended Ju 30,				
(in millions)		2023		2022	2023		2022		
Balance at beginning of period	\$	52,144	\$	50,298 \$	51,662	\$	50,315		
Changes during the period from									
Business combinations(a)		236		470	687		470		
Other ^(b)		_		(71)	31		(88)		
Balance at June 30,	\$	52,380	\$	50,697 \$	52,380	\$	50,697		

- (a) For the three and six months ended June 30, 2023, represents estimated goodwill associated with the acquisition of Aurmi Inc. in CIB in the second quarter, and the acquisition of the remaining 51% interest in CIPMin AWMin the first quarter. For the three and six months ended June 30, 2022, represents estimated goodwill associated with the acquisitions of Frosch Travel Group, LLC in CCB and Volkswagen Payments S.A. in CIB.
- (b) Predominantly foreign currency adjustments.

Goodwill impairment testing

Goodwill is tested for impairment during the fourth quarter of each fiscal year, or more often if events or circumstances, such as adverse changes in the business climate, indicate that there may be an impairment. Refer to Note 15 of JPMorgan Chase's 2022 Form 10-K for a further discussion of the Firm's goodwill impairment testing.

Unanticipated declines in business performance, increases in credit losses, increases in capital requirements, as well as deterioration in economic or market conditions, adverse regulatory or legislative changes or increases in the estimated market cost of equity, could cause the estimated fair values of the Firm's reporting units to decline in the future, which could result in a material impairment charge to earnings in a future period related to some portion of the associated goodwill.

As of June 30, 2023, the Firm reviewed current economic conditions, estimated market cost of equity, as well as actual business results and projections of business performance. Based on such reviews, the Firm has concluded that goodwill was not impaired as of June 30, 2023, or December 31, 2022, nor was goodwill written off due to impairment during the six months ended June 30, 2023 or 2022.

Mortgage servicing rights

MSRs represent the fair value of expected future cash flows for performing servicing activities for others. The fair value considers estimated future servicing fees and ancillary revenue, offset by estimated costs to service the loans, and generally declines over time as net servicing cash flows are received, effectively amortizing the MSR asset against contractual servicing and ancillary fee income. MSRs are either purchased from third parties or recognized upon sale or securitization of mortgage loans if servicing is retained. Refer to Notes 2 and 15 of JPMorgan Chase's 2022 Form 10-K for a further description of the MSR asset, interest rate risk management, and the valuation of MSRs.

The following table summarizes MSR activity for the three and six months ended June 30, 2023 and 2022.

		As of or for the		As of or for the	
(in millions, except where otherwise noted)	<u> </u>	2023	2022	2023	2022
Fair value at beginning of period	\$	7,755	\$ 7,294	\$ 7,973	\$ 5,494
MSR activity:					
Originations of MSRs		78	181	110	596
Purchase of MSRs ^(a)		468	160	467	875
Disposition of MSRs ^(b)		(92)	(614)	(90)	(671)
Net additions/(dispositions)		454	(273)	487	800
Changes due to collection/realization of expected cash flows		(255)	(236)	(495)	(468)
Changes in valuation due to inputs and assumptions:					
Changes due to market interest rates and other(c)		283	653	261	1,547
Changes in valuation due to other inputs and assumptions:					
Projected cash flows (e.g., cost to service)		2	_	2	_
Discount rates		_	_	_	_
Prepayment model changes and other ^(d)		(10)	1	1	66
Total changes in valuation due to other inputs and assumptions		(8)	1	3	66
Total changes in valuation due to inputs and assumptions		275	654	264	1,613
Fair value at June 30,	\$	8,229	\$ 7,439	\$ 8,229	\$ 7,439
Changes in unrealized gains/(losses) included in income related to MSRs held at June 30,	\$	275	\$ 654	\$ 264	\$ 1,613
Contractual service fees, late fees and other ancillary fees included in income		388	395	776	765
Third-party mortgage loans serviced at June 30, (in billions)		605	576	605	576
Servicer advances, net of an allowance for uncollectible amounts, at June 30(e)		595	1,166	595	1,166

- (a) Includes purchase price adjustments associated with MSRs purchased in the prior quarter, primarily as a result of loans that prepaid within 90 days of settlement, allowing the Firmto
- recover the purchase price.

 (b) Includes excess MSRs transferred to agency-sponsored trusts in exchange for stripped mortgage-backed securities ("SMBS"). In each transaction, a portion of the SMBS was acquired by third parties at the transaction date; the Firmacquired the remaining belance of those SMBS as transferred to agency-sponsored trusts in exchange for stripped mortgage-backed securities.
- (c) Represents both the impact of changes in estimated future prepayments due to changes in market interest rates, and the difference between actual and expected prepayments.

 (d) Represents changes in prepayments other than those attributable to changes in market interest rates.
- (e) Represents amounts the Firmpays 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 fromfuture cash flows from the trust or the underlying loans. The Firms credit risk associated with these servicer advances is minimal because reimbursement of the advances is typically senior to all cash payments to investors. In addition, the Firm maintains the right to stop payment to investors if the collateral is insufficient to cover the advance. However, certain of these servicer advances may not be recoverable if they were not made in accordance with applicable rules and agreements.

The following table presents the components of mortgage fees and related income (including the impact of MSR risk management activities) for the three and six months ended June 30, 2023 and 2022.

	Thre	ee months ended	June 30,	Six months ended a	June 30,
(in millions)		2023	2022	2023	2022
CCB mortgage fees and related income					<u>.</u>
Production revenue	\$	102 \$	150	177 \$	361
Net mortgage servicing revenue:					
Operating revenue:					
Loan servicing revenue		402	435	802	803
Changes in MSR asset fair value due to collection/realization of expected cash flows		(255)	(236)	(495)	(468)
Total operating revenue		147	199	307	335
Risk management:					<u>.</u>
Changes in MSR asset fair value due to market interest rates and other(a)		283	653	261	1,547
Other changes in MSR asset fair value due to other inputs and assumptions in model(b)		(8)	1	3	66
Changes in derivative fair value and other		(250)	(626)	(251)	(1,476)
Total risk management		25	28	13	137
Total net mortgage servicing revenue		172	227	320	472
Total CCB mortgage fees and related income		274	377	497	833
All other		4	1	2	5
Mortgage fees and related income	\$	278 \$	378	499 \$	838

(a) Represents both the impact of changes in estimated future prepayments due to changes in market interest rates, and the difference between actual and expected prepayments.

(b) Represents the aggregate impact of changes in model inputs and assumptions such as projected cash flows (e.g., cost to service), discount rates and changes in prepayments other than those attributable to changes in market interest rates (e.g., changes in prepayments due to changes in home prices).

Changes in fair value based on variations in assumptions generally cannot be easily extrapolated, because the relationship of the change in the assumptions to the change in fair value are often highly interrelated and may not be linear. In the following table, the effect that a change in a particular assumption may have on the fair value is calculated without changing any other assumption. In reality, changes in one factor may result in changes in another, which would either magnify or counteract the impact of the initial change.

The table below outlines the key economic assumptions used to determine the fair value of the Firm's MSRs at June 30, 2023, and December 31, 2022, and outlines hypothetical sensitivities of those fair values to immediate adverse changes in those assumptions, as defined below.

(in millions, except rates)	Jun 30, 2023	Dec 31, 2022
Weighted-average prepayment speed assumption (constant prepayment rate)	6.27 %	6.12 %
Impact on fair value of 10% adverse change	\$ (186)	\$ (183)
Impact on fair value of 20% adverse change	(361)	(356)
Weighted-average option adjusted spread(a)	5.77 %	5.77 %
Impact on fair value of a 100 basis point adverse change	\$ (348)	\$ (341)
Impact on fair value of a 200 basis point adverse change	(668)	(655)

(a) Includes the impact of operational risk and regulatory capital.

Note 16 - Deposits

Refer to Note 17 of JPMorgan Chase's 2022 Form 10-K for further information on deposits.

As of June 30, 2023 and December 31, 2022, noninterest-bearing and interest-bearing deposits were as follows.

		I 00	D 04
(in millions)		June 30, 2023	December 31, 2022
		2023	2022
U.S. offices			
Noninterest-bearing (included \$47,870 and \$26,363 at fair value)(a)	\$ *	656,778	\$ 644,902
Interest-bearing (included \$572 and \$586 at fair value)(a)		1,311,893	1,276,346
Total deposits in U.S. offices		1,968,671	1,921,248
Non-U.S. offices			
Noninterest-bearing (included \$1,331 and \$1,398 at fair value)(a)		24,268	27,005
Interest-bearing (included \$1,795 and \$273 at fair value) ^(a)		406,023	391,926
Total deposits in non-U.S. offices		430,291	418,931
Total deposits	\$	2,398,962	\$ 2,340,179

⁽a) Includes structured notes classified as deposits for which the fair value option has been elected. Refer to Note 3 for further discussion.

As of June 30, 2023 and December 31, 2022, time deposits in denominations that met or exceeded the insured limit were as follows.

		December 31,
(in millions)	June 30, 2023	2022
U.S. offices	\$ 98,725	\$ 64,622
Non-U.S. offices(a)	85,937	77,907
Total	\$ 184,662	\$ 142,529

⁽a) Represents all time deposits in non-U.S. offices as these deposits typically exceed the insured limit.

As of June 30, 2023, the remaining maturities of interest-bearing time deposits in each of the 12-month periods ending June 30 were as follows.

June 30, (in millions)	U.S.	1	Non-U.S.	Total
2024	145,737		83,015	228,752
2025	1,213		194	1,407
2026	309		71	380
2027	160		25	185
2028	95		1,087	1,182
After 5 years	533		214	747
Total	\$ 148,047	\$	84,606	\$ 232,653

Note 17 - Leases

Refer to Note 18 of JPMorgan Chase's 2022 Form 10-K for a further discussion on leases.

Firm as lessee

At June 30, 2023, JPMorgan Chase and its subsidiaries were obligated under a number of noncancellable leases, predominantly operating leases for premises and equipment used primarily for business purposes.

Operating lease liabilities and right-of-use ("ROU") assets are recognized at the lease commencement date based on the present value of the future minimum lease payments over the lease term.

The carrying values of the Firm's operating leases were as follows:

(in millions)	June	e 30, 2023	De	cember 31, 2022
Right-of-use assets	\$	8,399 (a)	\$	7,782
Lease liabilities		8.756 (a)		8.183

 (a) Includes \$756 million of right-of-use assets and corresponding lease liabilities, associated with the First Republic acquisition.

The Firm's net rental expense was \$448 million and \$484 million for the three months ended June 30, 2023 and 2022 and \$935 million and \$976 million for the six months ended June 30, 2023 and 2022, respectively.

Firm as lessor

The Firm's lease financings are predominantly auto operating leases, and are included in other assets on the Firm's Consolidated balance sheets.

The following table presents the Firm's operating lease income, included within other income, and the related depreciation expense, included within technology, communications and equipment expense, on the Consolidated statements of income:

	Th	ree months June 30		Six months of June 30	
(in millions)		2023	2022	2023	2022
Operating lease income	\$	716 \$	945 \$	1,471 \$	1,993
Depreciation expense		457	668	876	1,379

Note 18 – Long-term debt

JPMorgan Chase issues long-term debt denominated in various currencies, predominantly U.S. dollars, with both fixed and variable interest rates. Included in senior and subordinated debt below are various equity-linked or other indexed instruments, which the Firm has elected to measure at fair value; changes in fair value are recorded in principal transactions revenue in the Consolidated statements of income, except for unrealized gains/(losses) due to DVA which are recorded in OCI. The following table is a summary of long-term debt carrying values (including unamortized premiums and discounts, issuance costs, valuation adjustments and fair value adjustments, where applicable) by remaining contractual maturity as of June 30, 2023.

By remaining maturity					June 3	30, 20	23			Dece	ember 31, 2022
(in millions, except rates)			Under 1 year		1-5 years		After 5 years		Total		Total
Parent company											
Senior debt:	Fixed rate	\$	6,709	\$	84,418	\$	96,845	\$	187,972	\$	194,515
	Variable rate		367		7,226		2,200		9,793		11,565
	Interest rates(f)		2.29 %		2.82 %		3.53 %		3.15 %		3.06 %
Subordinated debt:	Fixed rate	\$	_	\$	8,815	\$	8,877	\$	17,692	\$	19,693
	Variable rate		_		_		_		_		_
	Interest rates(f)		—%		4.54 %		4.69 %		4.62 %		4.50 %
	Subt	otal\$	7,076	\$	100,459	\$	107,922	\$	215,457	\$	225,773
Subsidiaries											
Federal Home Loan Banks advances:	Fixed rate	\$	7,443	\$	17,609	\$	42	\$	25,094 (g)	\$	93
	Variable rate		7,000		4,000		_		11,000		11,000
	Interest rates(f)		4.64 %		4.29 %		6.07 %		4.43 %		4.32 %
Purchase Money Note(a):	Fixed rate	\$	_	\$	48,883	\$	_	\$	48,883		NA
	Interest rates(f)		—%		3.40 %		—%		3.40 %		NA
Senior debt:	Fixed rate	\$	3,000	\$	7,333	\$	6,395	\$	16,728	\$	15,383
	Variable rate		17,426		21,968		5,451		44,845		41,506
	Interest rates(f)		3.95 %		4.98%		1.52 %		1.88 %		2.02 %
Subordinated debt:	Fixed rate	\$	_	\$	258	\$	_	\$	258	\$	262
	Variable rate		_		_		_		_		_
	Interest rates(f)		—%		8.25 %		—%		8.25 %		8.25 %
	Subt	otal\$	34,869	\$	100,051	\$	11,888	\$	146,808	\$	68,244
Junior subordinated debt:	Fixed rate	\$	_	\$	_	\$	540	\$	540	\$	550
	Variable rate		_		357		916		1,273		1,298
	Interest rates(f)		—%		5.86 %		7.17 %		6.91 %		6.33 %
	Subt	otal\$	_	\$	357	\$	1,456	\$	1,813	\$	1,848
Total long-term debt(b)(c)(d)		\$	41,945	\$	200,867	\$	121,266	\$	364,078 (h)(i)	\$	295,865
Long-term beneficial interests:	Fixed rate	\$	_	\$	999	\$	_	\$	999	\$	1.999
	Variable rate	*	_	•	_	•	132	•	132	Ψ	143
	Interest rates(f)		-%		3.97 %		3.59 %		3.93 %		2.81 %
Total long-term beneficial interests ^(e)		\$	_	\$	999	\$	132	\$	1,131	\$	2,142

- (a) As of June 30, 2023, reflects the Purchase Money Note associated with the First Republic acquisition. Refer to Note 28 for additional information.
 (b) Included long-termdebt of \$87.7 billion and \$13.8 billion secured by assets totaling \$221.2 billion and \$208.3 billion at June 30, 2023 and December 31, 2022, respectively. The amount of long-term debt secured by assets does not include amounts related to hybrid instruments.
- (c) Included \$78.6 billion and \$72.3 billion of long-term debt accounted for at fair value at June 30, 2023 and December 31, 2022, respectively.
- (d) Included \$11.2 billion and \$10.3 billion of outstanding zero-coupon notes at June 30, 2023 and December 31, 2022, respectively. The aggregate principal amount of these notes at their respective maturities is \$45.7 billion and \$45.3 billion, respectively. The aggregate principal amount reflects the contractual principal payment at maturity, which may exceed the contractual principal payment at the Firm's next call date, if applicable.
- (e) Included on the Consolidated balance sheets in beneficial interests issued by consolidated VIEs. Also included amounts accounted for at fair value which were not material at June 30, 2023 and December 31, 2022. Excluded short-term commercial paper and other short-term beneficial interests of \$18.5 billion and \$10.5 billion at June 30, 2023 and December 31, 2022,
- (f) The interest rates shown are the weighted average of contractual rates in effect at June 30, 2023 and December 31, 2022, respectively, including non-U.S. dollar fixed- and variablerate issuances, which excludes the effects of the associated derivative instruments used in hedge accounting relationships, if applicable. The interest rates shown exclude structured notes accounted for at fair value.
- (g) As of June 30, 2023, included \$25.0 billion of FHLB advances associated with the First Republic acquisition. Refer to Note 28 for additional information.
- (h) As of June 30, 2023, long-term debt in the aggregate of \$191.7 billion was redeemable at the option of JPMorgan Chase, in whole or in part, prior to maturity, based on the terms
- The aggregate carrying values of debt that matures in each of the 12-month periods ending June 30, 2024, 2025, 2026, 2027 and 2028 is \$41.9 billion, \$58.5 billion, \$38.0 billion, \$29.2 billion and \$75.2 billion, respectively.

The weighted-average contractual interest rates for total long-term debt excluding structured notes accounted for at fair value were 3.45% and 3.26% as of June 30, 2023 and December 31, 2022, respectively. In order to modify exposure to interest rate and currency exchange rate movements, JPMorgan Chase utilizes derivative instruments, primarily interest rate and cross-currency interest rate swaps, in conjunction with some of its debt issuances. The use of these instruments modifies the Firm's interest expense on the associated debt. The modified weighted-average interest rates for total long-term debt, including the effects of related derivative instruments, were 5.02% and 4.89% as of June 30, 2023 and December 31, 2022, respectively.

JPMorgan Chase & Co. has guaranteed certain long-term debt of its subsidiaries, including structured notes. These guarantees rank pari passu with the Firm's other unsecured and unsubordinated indebtedness. The amount of such guaranteed long-term debt and structured notes was \$34.5 billion and \$28.2 billion at June 30, 2023 and December 31, 2022, respectively.

The Firm's unsecured debt does not contain requirements that would call for an acceleration of payments, maturities or changes in the structure of the existing debt, provide any limitations on future borrowings or require additional collateral, based on unfavorable changes in the Firm's credit ratings, financial ratios, earnings or stock price.

Note 19 - Preferred stock

Refer to Note 21 of JPMorgan Chase's 2022 Form 10-K for a further discussion on preferred stock.

The following is a summary of JPMorgan Chase's non-cumulative preferred stock outstanding as of June 30, 2023 and December 31, 2022, and the quarterly dividend declarations for the three and six months ended June 30, 2023 and 2022.

	Share	S ⁽⁸⁾	Carrying (in milli	value ions)						Dividend per s	declared hare		
		December 31.	June 30,	December		Contractual rate in effect at June 30,	Earliest	Floating annualized	Three months June 30	s ended), s	Six months e	ended June 30,	
	June 30, 2023	2022	2023	31, 2022	Issue date	2023	redemption date(b)	rate(°)	2023	2022	2023	2022	
Fixed-rate:													
Series DD	169,625	169,625 \$	1,696 \$	1,696	9/21/2018	5.750 %	12/1/2023	NA	\$ 143.75 \$	143.75	\$287.50	\$287.50	
Series EE	185,000	185,000	1,850	1,850	1/24/2019	6.000	3/1/2024	NA	150.00	150.00	300.00	300.00	
Series GG	90,000	90,000	900	900	11/7/2019	4.750	12/1/2024	NA	118.75	118.75	237.50	237.50	
Series JJ	150,000	150,000	1,500	1,500	3/17/2021	4.550	6/1/2026	NA	113.75	113.75	227.50	227.50	
Series LL	185,000	185,000	1,850	1,850	5/20/2021	4.625	6/1/2026	NA	115.63	115.63	231.26	231.26	
Series MM	200,000	200,000	2,000	2,000	7/29/2021	4.200	9/1/2026	NA	105.00	105.00	210.00	210.00	
Fixed-to-floating-ra	ate:												
Series I	_	— \$	— \$	· —	4/23/2008	– %	4/30/2018	SOFR + 3.47%	\$ — \$	119.03	\$ —	\$211.16	
Series Q	150,000	150,000	1,500	1,500	4/23/2013	LIBOR + 3.25	5/1/2023	SOFR + 3.25	218.48	128.75	347.23	257.50	(d)
Series R	150,000	150,000	1,500	1,500	7/29/2013	6.000	8/1/2023	SOFR + 3.30	150.00	150.00	300.00	300.00	
Series S	200,000	200,000	2,000	2,000	1/22/2014	6.750	2/1/2024	SOFR + 3.78	168.75	168.75	337.50	337.50	
Series U	100,000	100,000	1,000	1,000	3/10/2014	6.125	4/30/2024	SOFR + 3.33	153.13	153.13	306.25	306.25	
Series V	_	_	_	_	6/9/2014	_	7/1/2019	SOFR + 3.32	_	108.36	_	194.76	
Series X	160,000	160,000	1,600	1,600	9/23/2014	6.100	10/1/2024	SOFR + 3.33	152.50	152.50	305.00	305.00	
Series Z	_	_	_	_	4/21/2015	_	5/1/2020	SOFR + 3.80	_	_	_	_	
Series CC	125,750	125,750	1,258	1,258	10/20/2017	LIBOR + 2.58	11/1/2022	SOFR + 2.58	201.36	115.63	384.15	231.25	(e)
Series FF	225,000	225,000	2,250	2,250	7/31/2019	5.000	8/1/2024	SOFR + 3.38	125.00	125.00	250.00	250.00	
Series HH	300,000	300,000	3,000	3,000	1/23/2020	4.600	2/1/2025	SOFR + 3.125	115.00	115.00	230.00	230.00	
Series II	150,000	150,000	1,500	1,500	2/24/2020	4.000	4/1/2025	SOFR + 2.745	100.00	100.00	200.00	200.00	
Series KK	200,000	200,000	2,000	2,000	5/12/2021	3.650	6/1/2026	CMT + 2.85	91.25	91.25	182.50	182.50	
Total preferred stock	2,740,375	2,740,375 \$	27,404 \$	27,404									

(a) Represented by depositary shares.

(b) Fixed-to-floating rate notes convert to a floating rate at the earliest redemption date.

(d) The dividend rate for Series Q preferred stock became floating and payable quarterly starting on May 1, 2023; prior to which the dividend rate was fixed at 5.15% or \$257.50 per share payable semiannually. The dividend rate for each quarterly dividend period commencing August 1, 2023 will be three-month term SOFR (plus a spread adjustment of 0.26% per annum) plus the spread of 3.25%.

(e) The dividend rate for Series CC preferred stock became floating and payable quarterly starting on November 1, 2022; prior to which the dividend rate was fixed at 4.625% or \$231.25 per share payable semiannually. The dividend rate for each quarterly dividend period commencing August 1, 2023 will be three-month term SOFR (plus a spread adjustment of 0.26% per annum) plus the spread of 2.58%.

Each series of preferred stock has a liquidation value and redemption price per share of \$10,000, plus accrued but unpaid dividends. The aggregate liquidation value was \$27.8 billion at June 30, 2023.

Redemptions

On October 31, 2022, the Firm redeemed all \$2.9 billion of its fixed to floating rate non-cumulative perpetual preferred stock, Series I.

On October 3, 2022, the Firm redeemed all \$2.5 billion of its fixed-to-floating rate non-cumulative preferred stock, Series V.

On February 1, 2022, the Firm redeemed all \$2.0 billion of its fixed-to-floating rate non-cumulative preferred stock, Series Z.

⁽c) On March 1, 2023, the Firmannounced that, after June 30, 2023, CME TermSOFR will be the replacement reference rate for certain outstanding securities issued by the Firmthat used U.S. dollar LIBOR as the reference rate, including fixed-to-floating rate preferred stock. References in the table to "SOFR" mean a floating annualized rate equal to three-month term SOFR (plus a spread adjustment of 0.26% per annum) plus the spreads noted. The reference to "CMIT" means a floating annualized rate equal to the five-year Constant Maturity Treasury ("CMIT") rate plus the spread noted.

Note 20 - Earnings per share

Refer to Note 23 of JPMorgan Chase's 2022 Form 10-K for a discussion of the computation of basic and diluted earnings per share ("EPS"). The following table presents the calculation of basic and diluted EPS for the three and six months ended June 30, 2023 and 2022.

	Th	ree months er 30,	nded June	5	Six months end 30,	ded June
(in millions, except per share amounts)		2023	2022		2023	2022
Basic earnings per share						
Net income	\$	14,472 \$	8,649	\$	27,094 \$	16,931
Less: Preferred stock dividends		373	410		729	807
Net income applicable to common equity		14,099	8,239		26,365	16,124
Less: Dividends and undistributed earnings allocated to participating						
securities		88	44		161	85
Net income applicable to common stockholders	\$	14,011 \$	8,195	\$	26,204 \$	16,039
Total weighted-average basic						
shares outstanding		2,943.8	2,962.2		2,956.1	2,969.6
Net income per share	\$	4.76 \$	2.77	\$	8.86 \$	5.40
Diluted earnings per share	,					
Net income applicable to common stockholders	\$	14,011 \$	8,195	\$	26,204 \$	16,039
Total w eighted-average basic shares outstanding		2,943.8	2,962.2		2,956.1	2,969.6
Add: Dilutive impact of unvested PSUs, nondividend-earning RSUs and SARs		4.5	4.1		4.4	4.1
Total weighted-average diluted shares outstanding		2.948.3	2.966.3		2.960.5	2,973.7
Net income per share	\$	4.75 \$	2.76	\$	8.85 \$	5.39

Note 21 – Accumulated other comprehensive income/(loss)

AOCI includes the after-tax change in unrealized gains and losses on investment securities, foreign currency translation adjustments (including the impact of related derivatives), fair value changes of excluded components on fair value hedges, cash flow hedging activities, net gain/(loss) related to the Firm's defined benefit pension and OPEB plans, and fair value option-elected liabilities arising from changes in the Firm's own credit risk (DVA).

As of or for the three months ended June 30, 2023 (in millions)	gair on	hrealized ns/(losses) investment securities	adjus	anslation tments, net hedges	F	air value hedges	ash flow nedges	per	ned benefit nsion and HB plans	n fair value ected liabilities	con	mulated other prehensive ome/(loss)
Balance at April 1, 2023	\$	(6,912)	\$	(1,348)	\$	(54)	\$ (4,858)	\$	(1,506)	\$ 260	\$	(14,418)
Net change		757		70		11	(497)		(6)	(207)		128
Balance at June 30, 2023	\$	(6,155) (a)	\$	(1,278)	\$	(43)	\$ (5,355)	\$	(1,512)	\$ 53	\$	(14,290)

As of or for the three months ended June 30, 2022 (in millions)	gaii on	Inrealized ns/(losses) investment securities	adjus	anslation tments, net hedges	air value hedges	Cash flow hedges	/	pens	ed benefit sion and B plans	on fair value ected liabilities	con	mulated other prehensive ome/(loss)
Balance at April 1, 2022	\$	(4,813)	\$	(996)	\$ (21)	\$ (3,087)	\$	(143)	\$ (507)	\$	(9,567)
Net change		(4,031)		(679)	51	(1,348	5)		20	1,185		(4,802)
Balance at June 30, 2022	\$	(8,844) (a)	\$	(1,675)	\$ 30	\$ (4,435	5)	\$	(123)	\$ 678	\$	(14,369)

As of or for the six months ended June 30, 2023 (in millions)	gair on	nrealized ns/(losses) investment ecurities	adjus	anslation tments, net hedges	F	Fair value hedges	ash flow nedges	per	ned benefit nsion and B plans	on fair value ected liabilities	cor	mulated other mprehensive come/(loss)
Balance at January 1, 2023	\$	(9,124)	\$	(1,545)	\$	(33)	\$ (5,656)	\$	(1,451)	\$ 468	\$	(17,341)
Net change		2,969		267		(10)	301		(61)	(415)		3,051
Balance at June 30, 2023	\$	(6,155) (a)	\$	(1,278)	\$	(43)	\$ (5,355)	\$	(1,512)	\$ 53	\$	(14,290)

As of or for the six months ended June 30, 2022 (in millions)	gai on	Inrealized ns/(losses) investment securities	adjus	anslation tments, net hedges	air value hedges	ash flow nedges	pens	ed benefit sion and B plans	on fair value ected liabilities	con	mulated other prehensive ome/(loss)
Balance at January 1, 2022	\$	2,640	\$	(934)	\$ (131)	\$ (296)	\$	(210)	\$ (1,153)	\$	(84)
Net change		(11,484)		(741)	161	(4,139)		87	1,831		(14,285)
Balance at June 30, 2022	\$	(8,844) (a)	\$	(1,675)	\$ 30	\$ (4,435)	\$	(123)	\$ 678	\$	(14,369)

⁽a) As of June 30, 2023 includes after-tax net unamortized unrealized gains/(losses) of \$(29) million related to HTM securities that have been transferred to AFS as permitted by the new hedge accounting guidance adopted on January 1, 2023. As of June 30, 2023 and 2022 includes after-tax net unamortized unrealized gains/(losses) of \$(1.1) billion and \$(1.4) billion, related to AFS securities that have been transferred to HTM, respectively. Refer to Note 10 of this Form 10-Q, and Note 10 of JPVorgan Chase's 2022 Form 10-K for further information.

The following table presents the pre-tax and after-tax changes in the components of OCI.

			2023			2022		
Three months ended June 30, (in millions)	Pre-tax	Т	ax effect	After-tax	Pre-tax	Tax effect	,	After-tax
Unrealized gains/(losses) on investment securities:								
Net unrealized gains/(losses) arising during the period	\$ 95	\$	(21)	\$ 74	\$ (5,456)	\$ 1,308	\$	(4,148)
Reclassification adjustment for realized (gains)/losses included in net income ^(a)	900		(217)	683	153	(36)		117
Net change	995		(238)	757	(5,303)	1,272		(4,031)
Translation adjustments(b):								
Translation	126		10	136	(3,550)	193		(3,357)
Hedges	(88)		22	(66)	3,524	(846)		2,678
Net change	38		32	70	(26)	(653)		(679)
Fair value hedges, net change ^(c) :	15		(4)	11	67	(16)		51
Cash flow hedges:								
Net unrealized gains/(losses) arising during the period	(1,119)		268	(851)	(1,750)	420		(1,330)
Reclassification adjustment for realized (gains)/losses included in net income ^(d)	465		(111)	354	(24)	6		(18)
Net change	(654)		157	(497)	(1,774)	426		(1,348)
Defined benefit pension and OPEB plans, net change:	(8)		2	(6)	33	(13)		20
DVA on fair value option elected liabilities, net change:	(273)		66	(207)	1,558	(373)		1,185
Total other comprehensive income/(loss)	\$ 113	\$	15	\$ 128	\$ (5,445)	\$ 643	\$	(4,802)

			2023				2022	
Six months ended June 30, (in millions)	Pre-tax	Ta	ax effect	After-tax		Pre-tax	Tax effect	After-tax
Unrealized gains/(losses) on investment securities:								
Net unrealized gains/(losses) arising during the period	\$ 2,137	\$	(511)	\$ 1,626	\$	(15,658)	\$ 3,758	\$ (11,900)
Reclassification adjustment for realized (gains)/losses included in net income ^(a)	1,768		(425)	1,343		547	(131)	416
Net change	3,905		(936)	2,969		(15,111)	3,627	(11,484)
Translation adjustments(b):								
Translation	1,099		(31)	1,068		(3,891)	217	(3,674)
Hedges	(1,051)		250	(80)	3,862	(929)	2,933
Net change	48		219	267		(29)	(712)	(741)
Fair value hedges, net change(c):	(13)		3	(10)	212	(51)	161
Cash flow hedges:								
Net unrealized gains'(losses) arising during the period	(552)		132	(420)	(5,186)	1,245	(3,941)
Reclassification adjustment for realized (gains/losses included in net income ^(d)	948		(227)	72		(261)	63	(198)
Net change	396		(95)	30		(5,447)	1,308	(4,139)
Defined benefit pension and OPEB plans, net change:	(79)		18	(61)	123	(36)	87
DVA on fair value option elected liabilities, net change:	(547)		132	(41)	2,417	(586)	1,831
Total other comprehensive loss	\$ 3,710	\$	(659)	\$ 3,05	\$	(17,835)	\$ 3,550	\$ (14,285)

(a) The pre-tax amount is reported in Investment securities gains/(losses) in the Consolidated statements of income.
 (b) Reclassifications of pre-tax realized gains/(losses) on translation adjustments and related hedges are reported in other income/expense in the Consolidated statements of income. During the six months ended June 30, 2023, the Firm reclassified a net pre-tax loss of \$(5) million to other revenue related to the acquisition of CIFMof which \$(41) million related to the net investment hedge loss. The amounts were not material for the three ended June 30, 2023 and for the three and six months ended June 30, 2022.
 (c) Represents changes in fair value of cross-currency swaps attributable to changes in cross-currency basis spreads, which are excluded from the assessment of hedge effectiveness and recorded in other comprehensive income. The initial cost of cross-currency basis spreads is recognized in earnings as part of the accrual of interest on the cross currency swaps.
 (d) The pre-tax amounts are primarily recorded in noninterest revenue, net interest income and compensation expense in the Consolidated statements of income.

Note 22 – Restricted cash and other restricted assets

Refer to Note 26 of JPMorgan Chase's 2022 Form 10-K for a detailed discussion of the Firm's restricted cash and other restricted assets.

Certain of the Firm's cash and other assets are restricted as to withdrawal or usage. These restrictions are imposed by various regulatory authorities based on the particular activities of the Firm's subsidiaries.

The Firm is also subject to rules and regulations established by other U.S. and non-U.S. regulators. As part of its compliance with the respective regulatory requirements, the Firm's broker-dealer activities are subject to certain restrictions on cash and other assets.

The following table presents the components of the Firm's restricted cash:

(in billions)	June 30, 2023	December 31, 2022
Segregated for the benefit of securities and cleared derivative customers	\$ 17.0 \$	18.7
Cash reserves at non-U.S. central banks and held for other general purposes	8.6	8.1
Total restricted cash(a)	\$ 25.6 \$	26.8

(a) Comprises \$24.3 billion and \$25.4 billion in deposits with banks, and \$1.3 billion and \$1.4 billion in cash and due frombanks on the Consolidated balance sheet as of June 30, 2023 and December 31, 2022, respectively.

Also, as of June 30, 2023 and December 31, 2022, the Firm had the following other restricted assets:

- Cash and securities pledged with clearing organizations for the benefit of customers of \$36.9 billion and \$42.4 billion, respectively.
- Securities with a fair value of \$23.4 billion and \$31.7 billion, respectively, were also restricted in relation to customer activity.

Note 23 – Regulatory capital

Refer to Note 27 of JPMorgan Chase's 2022 Form 10-K for a detailed discussion on regulatory capital.

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

Under the risk-based capital and leverage-based guidelines of the Federal Reserve, JPMorgan Chase is required to maintain minimum ratios for CET1 capital, Tier 1 capital, Total capital, Tier 1 leverage and the SLR. Failure to meet these minimum requirements could cause the Federal Reserve to take action. IDI subsidiaries are also subject to these capital requirements established by their respective primary regulators.

The following table presents the risk-based regulatory capital ratio requirements and well-capitalized ratios to which the Firm and its IDI subsidiaries were subject as of June 30, 2023 and December 31, 2022.

	Standardized ratio require	l capital ments	Advanc capital r requirem	atio	Well-capitalized ratios				
	BHCa)(b)	ID (c)	BHCa)(b)	D (c)	BHO _d)	ID (e)			
Risk-based	capital ratios								
CET1 capital	12.5 %	7.0 %	11.0 %	7.0 %	NA	6.5 %			
Tier 1	44.0		40.5		0.00/				
capital	14.0	8.5	12.5	8.5	6.0 %	8.0			
Total capital	16.0	10.5	14.5	10.5	10.0	10.0			

Note: The table above is as defined by the regulations issued by the Federal Reserve, OCC and FDIC and to which the Firmand its IDI subsidiaries are subject.

- (a) Represents the regulatory capital ratio requirements applicable to the Firm The CET1, Tier 1 and Total capital ratio requirements each include a respective minimum requirement plus a GSIB surcharge of 4.0% as calculated under Method 2; plus a 4.0% SOB for Basel III Standardized ratios and a fixed 2.5% capital conservation buffer for Basel III Advanced ratios. The countercyclical buffer is currently set to 0%
- by the federal banking agencies.
 (b) For the period ended December 31, 2022, the CET1, Tier 1, and Total capital ratio requirements under Basel III Standardized applicable to the Firmwere 12.0%, 13.5% and 15.5%, respectively; the Basel III Advanced CET1, Tier 1, and Total capital ratio requirements applicable to the Firmwere 10.5%, 12.0%, and 14.0%, respectively.
- (c) Represents requirements for JPVorgan Chase's IDI subsidiaries. The CET1, Tier 1 and Total capital ratio requirements include a fixed capital conservation buffer requirement of 2.5% that is applicable to the IDI subsidiaries. The IDI subsidiaries are not subject to the GSIB surcharge.
- (d) Represents requirements for bank holding companies pursuant to regulations issued by the Federal Reserve.
- (e) Répresents requirements for IDI subsidiaries pursuant to regulations issued under the FDIC Improvement Act.

The following table presents the leverage-based regulatory capital ratio requirements and well-capitalized ratios to which the Firm and its IDI subsidiaries were subject as of June 30, 2023 and December 31, 2022.

	Capital requiren		Well-capital	ized ratios
	BHC	IDI	BHO _{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 Firmand its IDI subsidiaries are subject.

 (a) Represents minimum SLR requirement of 3.0%, as well as supplementary leverage buffer requirements of 2.0% and 3.0% for BHC and IDI subsidiaries, respectively.
- (b) The Federal Reserve's regulations do not establish well-capitalized thresholds for these measures for BHCs.

CECL regulatory capital transition

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

Additionally, effective January 1, 2023, the Firm phased out 50% of the other CECL capital transition provisions which impacted Tier 2 capital, adjusted average assets, total leverage exposure and RWA, as applicable. Refer to Note 27 of JPMorgan Chase's 2022 Form 10-K for further information on CECL capital transition provisions.

The following tables present risk-based capital metrics under both the Basel III Standardized and Basel III Advanced approaches and leverage-based capital metrics for JPMorgan Chase and JPMorgan Chase Bank, N.A. As of June 30, 2023 and December 31, 2022, JPMorgan Chase and JPMorgan Chase Bank, N.A. were well-capitalized and met all capital requirements to which each was subject.

	Basel III S	Stanc	lardized	Basel III Advanced						
June 30, 2023 (in millions, except ratios)	JPMbrgan Chase & Co.		JPMbrgan Chase Bank, N.A.		JPMbrgan Chase & Co.		JPIVbrgan Chase Bank, N.A.			
Risk-based capital metrics:(a)										
CET1 capital	\$ 235,827	\$	279,233	\$	235,827	\$	279,233			
Tier 1 capital	262,585		279,236		262,585		279,236			
Total capital	295,281		298,582		281,953 (b))	285,500			
Risk-weighted assets	1,706,927		1,642,804		1,694,714 ()	1,541,700			
CET1 capital ratio	13.8	%	17.0 %		13.9 %		18.1 %			
Tier 1 capital ratio	15.4		17.0		15.5		18.1			
Total capital ratio	17.3		18.2		16.6		18.5			

		Basel III S	tano	dardized	Basel III Advanced						
December 31, 2022 (in millions, except ratios)	_	JPMbrgan Chase & Co.	JPMorgan Chase Bank, N.A.			JPMbrgan Chase & Co.		JRWorgan Chase Bank, N.A.			
Risk-based capital metrics:(a)											
CET1 capital	\$	218,934	\$	269,668	\$	218,934	\$	269,668			
Tier 1 capital		245,631		269,672		245,631		269,672			
Total capital		277,769		288,433	264,583			275,255			
Risk-weighted assets		1,653,538		1,597,072		1,609,773		1,475,602			
CET1 capital ratio		13.2 9	%	16.9 %		13.6 %		18.3 %			
Tier 1 capital ratio		14.9		16.9		15.3		18.3			
Total capital ratio		16.8		18.1		16.4		18.7			

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

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

	June 30, 2	2023		December 3	31, 2022
Three months ended (in millions, except ratios)	JPMbrgan Chase & Co.	JPMbrgan Chase Bank, N.A.	JPMbrgan Chase & Co.		JPMbrgan Chase Bank, N.A.
Leverage-based capital metrics:(a)					
Adjusted average assets(b)	\$ 3,796,579 \$	3,308,478	\$	3,703,873 \$	3,249,912
Tier 1 leverage ratio	6.9 %	8.4 %		6.6 %	8.3 %
Total leverage exposure	\$ 4,492,761 \$	3,993,500	\$	4,367,092 \$	3,925,502
SLR	5.8 %	7.0 %		5.6 %	6.9 %

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

Note 24 – Off–balance sheet lending-related financial instruments, guarantees, and other commitments

JPMorgan Chase provides lending-related financial instruments (e.g., commitments and guarantees) to address the financing needs of its customers and clients. The contractual amount of these financial instruments represents the maximum possible credit risk to the Firm should the customer or client draw upon the commitment or the Firm be required to fulfill its obligation under the guarantee, and should the customer or client subsequently fail to perform according to the terms of the contract. Most of these commitments and guarantees have historically been refinanced, extended, cancelled, or expired without being drawn or a default occurring. As a result, the total contractual amount of these instruments is not, in the Firm's view, representative of its expected future credit exposure or funding requirements. Refer to Note 28 of JPMorgan Chase's 2022 Form 10-K for a further discussion of lending-related commitments and guarantees, and the Firm's related accounting policies.

To provide for expected credit losses in wholesale and certain consumer lending-related commitments, an allowance for credit losses on lending-related commitments is maintained. Refer to Note 13 for further information regarding the allowance for credit losses on lending-related commitments.

The following table summarizes the contractual amounts and carrying values of off-balance sheet lending-related financial instruments, guarantees and other commitments at June 30, 2023, and December 31, 2022. The amounts in the table below for credit card, home equity and certain scored business banking lending-related commitments represent the total available credit for these products. The Firm has not experienced, and does not anticipate, that all available lines of credit for these products will be utilized at the same time. The Firm can reduce or cancel credit card and certain scored business banking lines of credit by providing the borrower notice or, in some cases as permitted by law, without notice. In addition, the Firm typically closes credit card lines when the borrower is 60 days or more past due. The Firm may reduce or close HELOCs when there are significant decreases in the value of the underlying property, or when there has been a demonstrable decline in the creditworthiness of the horrower.

Off-balance sheet lending-related financial instruments, guarantees and other commitments

On-balance sheet lending-related infanc	iai	TIOU UTITOTICO	, guaranto		ual amount	100				Carrying	value	(i)
			Ju	ıne 30, 2023	Dec 31, 2022		Jun 30, 2023		Dec 31, 2022			
By remaining maturity (in millions)	E		Expires after year through 3 years	xpires after 3 years through 5 years	Expires after 5 years	Total		Total				
Lending-related		<u> </u>	0) 00.0	o y ou. o	0 y 0a. 0	10101		1 Otto				
Consumer, excluding credit card:												
Residential real estate(a)	\$	9,164 \$	5,873 \$	6,304	12,692 \$	34,033	\$	21,287	\$	714 (i)	\$	75
Auto and other		14,203	324	´ —	2,286	16,813		12,231		236 (i)		_
Total consumer, excluding credit card		23,367	6,197	6,304	14,978	50,846		33,518		950		75
Credit card(b)		881,485	_	_	_	881,485		821,284		_		_
Total consumer(c)		904,852	6,197	6,304	14,978	932,331		854,802		950		75
Wholesale:												
Other unfunded commitments to extend credit(d)		123,374	160,273	202,330	23,345	509,322		440,407		3,564 (h)(j)		2,328 (h)
Standby letters of credit and other financial								07.400				400
guarantees(d)		14,960	8,073	4,274	1,099	28,406		27,439	517			408
Other letters of credit(d)		3,022	233	106		<u> </u>		4,134		23		6
Total wholesale ^(c)		141,356	168,579	206,710	24,444	541,089	471,980				•	2,742
Total lending-related	\$	1,046,208 \$	174,776 \$	213,014	39,422 \$	1,473,420	\$	1,326,782	\$	5,054	\$	2,817
Other guarantees and commitments												
Securities lending indermification agreements and guarantees ^(e)	\$	296.547 \$	— \$	_ :	s — \$	296,547	\$	283,386	\$	_	\$	_
Derivatives qualifying as guarantees	Ψ	3,861	228 [¥]	11,959	40,852	56,900	Ψ	59,180	Ψ	181	Ψ	649
Unsettled resale and securities borrowed agreements		108.556	585	,	.5,552	109,141		116,975				
Unsettled repurchase and securities loaned	•	100,550	303	_	_	109, 141		110,975		_		(2)
agreements		92,811	547	_	_	93,358		66,407		_		(7)
Loan sale and securitization-related indemnifications:		-				•						. ,
Mortgage repurchase liability		NA.	NA	NA	NA	NA		NA		76		76
Loans sold with recourse		NA	NA	NA	NA	768		820		27		28
Exchange & clearing house guarantees and		440.400				440.400		404.000				
commitments(f)		140,102	-	400	2.574	140,102		191,068		-		
Other guarantees and commitments(9)		6,569	848	166	3,574	11,157		8,634		43		53

(a) Includes certain commitments to purchase loans from correspondents.

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

 (c) Predominantly all consumer and wholesale lending-related commitments primarily in CB air CB.
 (d) As of June 30, 2023, and December 31, 2022, reflected the contractual amount net of risk participations totaling \$87 million and \$71 million, respectively, for other unfunded commitments to extend credit; \$8.0 billion and \$8.2 billion, respectively, for standby letters of credit and other financial guarantees; \$425 million and \$512 million, respectively, for other letters of credit. In regulatory filings with the Federal Reserve these commitments are shown gross of risk participations.

(e) As of June 30, 2023, and December 31, 2022, collateral held by the Firm in support of securities lending indemnification agreements was \$312.6 billion and \$298.5 billion, respectively. Securities lending collateral primarily consists of cash, G7 government securities, and securities issued by U.S. GSEs and government agencies

(f) As of June 30, 2023, and December 31, 2022, includes guarantees to the Fixed Income Clearing Corporation under the sponsored member repo program and commitments and guarantees

associated with the Firm's membership in certain clearing houses.

associated with the Firm's membership in certain clearing nouses.

(g) As of June 30, 2023, and December 31, 2022, primarily includes unfunded commitments related to certain tax-oriented equity investments, unfunded commitments to purchase secondary market loans, and other equity investment commitments.

(h) As of June 30, 2023 and December 31, 2022 includes net markdowns on held-for-sale positions related to unfunded commitments in the bridge financing portfolio.

(i) For lending-related products, the carrying value includes the allowance for lending-related commitments and the guarantee liability; for derivative-related products, and lending-related commitments for which the fair value option was elected, the carrying value represents the fair value.

(j) As of June 30, 2023, includes fair value adjustments associated with the First Republic acquisition for residential real estate lending-related commitments totaling \$576 million, for auto and other lending-related commitments totaling \$236 million and for other unfunded commitments to extend credit totaling \$1.6 billion. Refer to Note 28 for additional information.

Other unfunded commitments to extend credit

Other unfunded commitments to extend credit generally consist of commitments for working capital and general corporate purposes, extensions of credit to support commercial paper facilities and bond financings in the event that those obligations cannot be remarketed to new investors, as well as committed liquidity facilities to clearing organizations. The Firm also issues commitments under multipurpose facilities which could be drawn upon in several forms, including the issuance of a standby letter of credit.

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 June 30, 2023, and December 31, 2022.

Standby letters of credit, other financial guarantees and other letters of credit

		June 3	0, 202	3	December	31, 20	2022		
(in millions)	С	andby letters of redit and other ncial guarantees		Other letters of credit	(tandby letters of credit and other ancial guarantees		Other letters of credit	
Investment-grade(a)	\$	19,574	\$	2,385	\$	19,205	\$	3,040	
Noninvestment-grade(a)		8,832		976		8,234		1,094	
Total contractual amount	\$	28,406	\$	3,361	\$	27,439	\$	4,134	
Allowance for lending-related commitments	\$	146	\$	23	\$	82	\$	6	
Guarantee liability		371		_		326		_	
Total carrying value	\$	517	\$	23	\$	408	\$	6	
Commitments with collateral	\$	16,414	\$	549	\$	15,296	\$	795	

(a) The ratings scale is based on the Firm's internal risk ratings. Refer to Note 12 for further information on internal risk ratings.

Derivatives qualifying as guarantees

The Firm transacts in certain derivative contracts that have the characteristics of a guarantee under U.S. GAAP. Refer to Note 28 of JPMorgan Chase's 2022 Form 10-K for further information on these derivatives.

The following table summarizes the derivatives qualifying as guarantees as of June 30, 2023, and December 31, 2022.

(in millions)	June 30, 2023	December 31, 2022
Notional amounts		
Derivative guarantees	\$ 56,900	\$ 59,180
Stable value contracts with contractually limited exposure	31,715	31,820
Maximum exposure of stable value contracts with contractually limited exposure	1,442	2,063
Fair value		
Derivative payables	181	649

In addition to derivative contracts that meet the characteristics of a guarantee, the Firm is both a purchaser and seller of credit protection in the credit derivatives market. Refer to Note 5 for a further discussion of credit derivatives.

Merchant charge-backs

Under the rules of payment networks, in its role as a merchant acquirer, the Firm's Merchant Services business in CIB Payments, retains a contingent liability for disputed processed credit and debit card transactions that result in a charge-back to the merchant. If a dispute is resolved in the cardholder's favor, the Firm will (through the cardholder's issuing bank) credit or refund the amount to the cardholder and will charge back the transaction to the merchant. If the Firm is unable to collect the amount from the merchant, the Firm will bear the loss for the amount credited or refunded to the cardholder. The Firm mitigates this risk by withholding future settlements, retaining cash reserve accounts or obtaining other collateral. In addition, the Firm recognizes a valuation allowance that covers the payment or performance risk related to charge-backs.

Loan sales and securitization-related indemnifications

In connection with the Firm's mortgage loan sale and securitization activities with GSEs the Firm has made representations and warranties that the loans sold meet certain requirements, and that may require the Firm to repurchase mortgage loans and/or indemnify the loan purchaser if such representations and warranties are breached by the Firm.

The liability related to repurchase demands associated with private label securitizations is separately evaluated by the Firm in establishing its litigation reserves. Refer to Note 26 of this Form 10-Q and Note 30 of JPMorgan Chase's 2022 Form 10-K for additional information regarding litigation.

Sponsored member repo program

The Firm acts as a sponsoring member to clear eligible overnight and term resale and repurchase agreements through the Government Securities Division of the Fixed Income Clearing Corporation ("FICC") on behalf of clients that become sponsored members under the FICC's rules. The Firm also guarantees to the FICC the prompt and full payment and performance of its sponsored member clients' respective obligations under the FICC's rules. The Firm minimizes its liability under these guarantees by obtaining a security interest in the cash or high-quality securities collateral that the clients place with the clearing house therefore the Firm expects the risk of loss to be remote. The Firm's maximum possible exposure, without taking into consideration the associated collateral, is included in the Exchange & clearing house guarantees and commitments line on page 185. Refer to Note 11 of JPMorgan Chase's 2022 Form 10-K for additional information on credit risk mitigation practices on resale agreements and the types of collateral pledged under repurchase agreements.

Guarantees of subsidiaries

The Parent Company has guaranteed certain long-term debt and structured notes of its subsidiaries, including JPMorgan Chase Financial Company LLC ("JPMFC"), a 100%-owned finance subsidiary. All securities issued by JPMFC are fully and unconditionally guaranteed by the Parent Company and no other subsidiary of the Parent Company guarantees these securities. These guarantees, which rank pari passu with the Firm's unsecured and unsubordinated indebtedness, are not included in the table on page 185 of this Note. Refer to Note 20 of JPMorgan Chase's 2022 Form 10-K for additional information.

Note 25 - Pledged assets and collateral

Refer to Note 29 of JPMorgan Chase's 2022 Form 10-K for a discussion of the Firm's pledged assets and collateral.

Pledged assets

The Firm pledges financial assets that it owns to maintain potential borrowing capacity at discount windows with Federal Reserve banks, various other central banks and FHLBs. Additionally, the Firm pledges assets for other purposes, including to collateralize repurchase and other securities financing agreements, to cover short sales and to collateralize derivative contracts and deposits. Certain of these pledged assets may be sold or repledged or otherwise used by the secured parties and are parenthetically identified on the Consolidated balance sheets as assets pledged.

The following table presents the Firm's pledged assets.

(in billions)	June 30, 2023	December 31, 2022
Assets that may be sold or repledged or otherwise used by secured parties	\$ 161.3	\$ 110.8
Assets that may not be sold or repledged or otherwise used by secured parties(a)	288.4	114.8
Assets pledged at Federal Reserve banks and FHLBs(b)	621.8	567.6
Total pledged assets	\$ 1,071.5	\$ 793.2

- (a) As of June 30, 2023, included \$120.0 billion of assets pledged to the FDIC as part of the shared-loss agreements associated with the First Republic acquisition. Refer to Note 28 for additional information.
- (b) As of June 30, 2023, included \$23.7 billion of assets pledged to the FHLB associated with the First Republic acquisition.

Total pledged assets do not include assets of consolidated VIEs; these assets are used to settle the liabilities of those entities. Refer to Note 14 for additional information on assets and liabilities of consolidated VIEs. Refer to Note 11 for additional information on the Firm's securities financing activities. Refer to Note 20 of JPMorgan Chase's 2022 Form 10-K for additional information on the Firm's long-term debt.

Collateral

The Firm accepts financial assets as collateral that it is permitted to sell or repledge, deliver or otherwise use. This collateral is generally obtained under resale and other securities financing agreements, prime brokerage-related held-for-investment customer receivables and derivative contracts. Collateral is generally used under repurchase and other securities financing agreements, to cover short sales and to collateralize derivative contracts and deposits.

The following table presents the fair value of collateral accepted.

(in billions)	Jı	une 30, 2023	Decem	ber 31, 2022
Collateral permitted to be sold or repledged, delivered, or otherwise used	\$	1,303.7	\$	1,346.9
Collateral sold, repledged, delivered or otherwise used		986.3		1,019.4

Note 26 - Litigation

Contingencies

As of June 30, 2023, the Firm and its subsidiaries and affiliates are defendants or respondents in numerous legal proceedings, including private, civil litigations, government investigations or regulatory enforcement matters. The litigations range from individual actions involving a single plaintiff to class action lawsuits with potentially millions of class members. Investigations and regulatory enforcement matters involve both formal and informal proceedings, by both governmental agencies and self-regulatory organizations. These legal proceedings are at varying stages of adjudication, arbitration or investigation, and involve each of the Firm's lines of business and several geographies and a wide variety of claims (including common law tort and contract claims and statutory antitrust, securities and consumer protection claims), some of which present novel legal theories.

The Firm believes the estimate of the aggregate range of reasonably possible losses, in excess of reserves established, for its legal proceedings is from \$0 to approximately \$1.3 billion at June 30, 2023. This estimated aggregate range of reasonably possible losses was based upon information available as of that date for those proceedings in which the Firm believes that an estimate of reasonably possible loss can be made. For certain matters, the Firm does not believe that such an estimate can be made, as of that date. The Firm's estimate of the aggregate range of reasonably possible losses involves significant judgment, given:

- the number, variety and varying stages of the proceedings, including the fact that many are in preliminary stages,
- the existence in many such proceedings of multiple defendants, including the Firm, whose share of liability (if any) has yet to be determined.
- the numerous yet-unresolved issues in many of the proceedings, including issues regarding class certification and the scope of many of the claims, and
- the uncertainty of the various potential outcomes of such proceedings, including where the Firm has made assumptions concerning future rulings by the court or other adjudicator, or about the behavior or incentives of adverse parties or regulatory authorities, and those assumptions prove to be incorrect.

In addition, the outcome of a particular proceeding may be a result which the Firm did not take into account in its estimate because the Firm had deemed the likelihood of that outcome to be remote. Accordingly, the Firm's estimate of the aggregate range of reasonably possible losses will change from time to time, and actual losses may vary significantly.

Set forth below are descriptions of the Firm's material legal proceedings.

1MDB Litigation. J.P. Morgan (Suisse) SA was named as a defendant in a civil litigation filed in May 2021 in Malaysia by 1Malaysia Development Berhad ("1MDB"), a Malaysian state-owned and controlled investment fund. J.P. Morgan (Suisse) SA was served in August 2022. The claim alleges "dishonest assistance" against J.P. Morgan (Suisse) SA in relation to payments of \$300 million and \$500 million, from 2009 and 2010, respectively, received from 1MDB and paid into an account at J.P. Morgan Suisse (SA) held by 1MDB PetroSaudi Limited, a joint venture company between 1MDB and PetroSaudi Holdings (Cayman) Limited. In September 2022, the Firm filed an application challenging the validity of service and the Malaysian Court's jurisdiction to hear the claim. In April 2023, 1MDB discontinued its claim against J.P. Morgan (Suisse) SA, but requested permission of the Court to refile in the future, which the Court took under consideration.

Amrapali. India's Enforcement Directorate ("ED") is investigating J.P. Morgan India Private Limited in connection with investments made in 2010 and 2012 by two offshore funds formerly managed by JPMorgan Chase entities into residential housing projects developed by the Amrapali Group ("Amrapali"). In 2017, numerous creditors filed civil claims against Amrapali, including petitions brought by home buyers relating to delays in delivering or failure to deliver residential units. The home buyers' petitions have been overseen by the Supreme Court of India and are ongoing. In August 2021, the ED issued an order fining J.P. Morgan India Private Limited approximately \$31.5 million. The Firm is appealing the order and the fine. Relatedly, in July 2019, the Supreme Court of India issued an order making preliminary findings that Amrapali and other parties, including unspecified JPMorgan Chase entities and the offshore funds that had invested in the projects, violated certain currency control and money laundering provisions, and ordering the ED to conduct a further inquiry under India's Prevention of Money Laundering Act ("PMLA") and Foreign Exchange Management Act ("FEMA"). In May 2020, the ED attached approximately \$25 million from J.P. Morgan India Private Limited in connection with the criminal PMLA investigation. The Firm is responding to and cooperating with the PMLA investigation.

Foreign Exchange Investigations and Litigation. The Firm previously reported settlements with certain government authorities relating to its foreign exchange ("FX") sales and trading activities and controls related to those activities. Among those resolutions, in May 2015, the Firm pleaded guilty to a single violation of federal antitrust law. The Department of Labor ("DOL") granted the Firm exemptions that permit the Firm and its affiliates to continue to rely on the Qualified Professional Asset Manager exemption under the Employee Retirement Income Security Act ("ERISA")

through the ten-year disqualification period following the antitrust plea. The only remaining FX-related governmental inquiry is a South Africa Competition Commission matter which is currently pending before the South Africa Competition Tribunal.

With respect to civil litigation matters, in August 2018, the United States District Court for the Southern District of New York granted final approval to the Firm's settlement of a consolidated class action brought by U.S.based plaintiffs, which principally alleged violations of federal antitrust laws based on an alleged conspiracy to manipulate foreign exchange rates and also sought damages on behalf of persons who transacted in FX futures and options on futures. Although certain members of the settlement class filed requests to the Court to be excluded from the class, an agreement to resolve their claims was reached in December 2022. The District Court denied certification of a putative class action against the Firm and other foreign exchange dealers on behalf of certain parties who purchased foreign currencies at allegedly inflated rates and granted summary judgment against the named plaintiffs in March 2023. Those plaintiffs have filed a notice of appeal. In addition, some FX-related individual and putative class actions based on similar alleged underlying conduct have been filed outside the U.S., including in the U.K., Israel, the Netherlands, Brazil and Australia. An agreement to resolve one of the UK actions was reached in December 2022. In July 2023, the U.K. Court of Appeal overturned the Competition Appeal Tribunal's earlier denial of a request for class certification on an opt-out basis. In Israel, a settlement in principle has been reached in the putative class action, which remains subject to court approval.

Interchange Litigation. Groups of merchants and retail associations filed a series of class action complaints alleging that Visa and Mastercard, as well as certain banks, conspired to set the price of credit and debit card interchange fees and enacted related rules in violation of antitrust laws. In 2012, the parties initially settled the cases for a cash payment, but that settlement was reversed on appeal and remanded to the United States District Court for the Eastern District of New York.

The original class action was divided into two separate actions, one seeking primarily monetary relief and the other seeking primarily injunctive relief. In September 2018, the parties to the monetary class action finalized an agreement which amends and supersedes the prior settlement agreement. Pursuant to this settlement, the defendants collectively contributed an additional \$900 million to the approximately \$5.3 billion previously held in escrow from the original settlement. In December 2019, the amended settlement agreement was approved by the District Court. In March 2023, the United States Court of Appeals for the Second Circuit affirmed the District Court's approval of the settlement, and two merchants have filed petitions for rehearing of the Appellate Court's approval. Based on the percentage of merchants that opted out of the amended class settlement, \$700 million has been returned to the

defendants from the settlement escrow in accordance with the settlement agreement. The injunctive class action continues separately, and in September 2021, the District Court granted plaintiffs' motion for class certification in part, and denied the motion in part.

Of the merchants who opted out of the amended damages class settlement, certain merchants filed individual actions raising similar allegations against Visa and Mastercard, as well as against the Firm and other banks. While some of those actions remain pending, the defendants have reached settlements with the merchants who opted out representing approximately 65% of the combined Mastercard-branded and Visabranded payment card sales volume.

Jeffrey Epstein Litigation. JPMorgan Chase Bank, N.A. was named as a defendant in two lawsuits filed in the United States District Court for the Southern District of New York alleging that JPMorgan Chase Bank, N.A. knowingly facilitated Jeffrey Epstein's sex trafficking and other unlawful conduct by providing banking services to Epstein until 2013. One case, which was filed in November 2022, was a putative class action filed by an alleged sex-trafficking victim of Epstein, and the other case, which was filed in December 2022, was brought on behalf of the government of the United States Virgin Islands and also alleges certain Virgin Islands statutory claims. In March 2023, the Court granted in part and denied in part JPMorgan Chase Bank, N.A.'s motions to dismiss these complaints, allowing some claims to proceed in both lawsuits. Also in March 2023, JPMorgan Chase Bank, N.A. filed third-party complaints impleading the Firm's former employee, James Edward Staley, into the two lawsuits. asserting claims for indemnification, contribution, breach of fiduciary duty and violation of the faithless servant doctrine. In May 2023, the Court denied Staley's motion to dismiss the impleader complaints. In June 2023, the Court granted the putative class' motion for class certification and granted a preliminary approval of a settlement between the class and JPMorgan Chase Bank, N.A., pursuant to which JPMorgan Chase Bank, N.A. will pay \$290 million to a fund for Epstein survivors. The actions involving the government of the United States Virgin Islands and Staley are proceeding.

LIBOR and Other Benchmark Rate Investigations and Litigation. JPMorgan Chase has responded to inquiries from various governmental agencies and entities around the world relating primarily to the British Bankers Association's ("BBA") London Interbank Offered Rate ("LIBOR") for various currencies and the European Banking Federation's Euro Interbank Offered Rate ("EURIBOR"). The Swiss Competition Commission's investigation relating to EURIBOR, to which the Firm and one other bank remain subject, continues. In December 2016, the European Commission issued a decision against the Firm and other banks finding an infringement of European antitrust rules relating to EURIBOR. The Firm has filed an appeal of that decision with the European General Court, and that appeal is pending.

In addition, the Firm has been named as a defendant along with other banks in various individual and putative class actions related to benchmark rates, including U.S. dollar LIBOR. In actions related to U.S. dollar LIBOR during the period that it was administered by the BBA, the Firm has obtained dismissal of certain actions and resolved certain other actions, and others are in various stages of litigation. The United States District Court for the Southern District of New York has granted class certification of antitrust claims related to bonds and interest rate swaps sold directly by the defendants, including the Firm. A consolidated putative class action related to the period that U.S. dollar LIBOR was administered by ICE Benchmark Administration has been dismissed. In addition, a group of individual plaintiffs filed a lawsuit asserting antitrust claims, alleging that the Firm and other defendants were engaged in an unlawful agreement to set U.S. dollar LIBOR and conspired to monopolize the market for LIBORbased consumer loans and credit cards. In September 2022, the Court dismissed plaintiffs' complaint in its entirety, and plaintiffs filed an amended complaint asserting similar antitrust claims, which defendants have moved to dismiss. The Firm's settlements of putative class actions related to the Singapore Interbank Offered Rate and the Singapore Swap Offer Rate, and the Australian Bank Bill Swap Reference Rate received final court approval in November 2022, while the settlement related to Swiss franc LIBOR remains subject to court approval.

Securities Lending Antitrust Litigation. JPMorgan Chase Bank, N.A., J.P. Morgan Securities LLC, J.P. Morgan Prime, Inc., and J.P. Morgan Strategic Securities Lending Corp. are named as defendants in a putative class action filed in the United States District Court for the Southern District of New York. The complaint asserts violations of federal antitrust law and New York State common law in connection with an alleged conspiracy to prevent the emergence of anonymous exchange trading for securities lending transactions. Defendants' motion to dismiss the complaint was denied. Plaintiffs have moved to certify a class in this action, which defendants have opposed. The parties have reached an agreement in principle to settle this action, subject to final documentation and court approval.

Shareholder Litigation. Several shareholder putative class actions, as well as shareholder derivative actions purporting to act on behalf of the Firm, have been filed against the Firm, its Board of Directors and certain of its current and former officers.

Certain of these shareholder suits relate to historical trading practices by former employees in the precious metals and U.S. treasuries markets and related conduct which were the subject of the Firm's resolutions with the DOJ, CFTC and SEC in September 2020, and fiduciary activities that were separately the subject of a resolution between JPMorgan Chase Bank, N.A. and the OCC in November 2020. One of these shareholder derivative suits was filed in the Supreme Court of the State of New York in May 2022, asserting breach of fiduciary duty and unjust enrichment claims relating to the historical trading practices and related conduct and fiduciary activities which

were the subject of the resolutions described above. In December 2022, the court granted defendants' motion to dismiss this action in full, and in January 2023, the plaintiff filed a notice of appeal, which remains pending. A second shareholder derivative action was filed in the United States District Court for the Eastern District of New York in December 2022 relating to the historical trading practices and related conduct, which asserts breach of fiduciary duty and contribution claims and alleges that the shareholder is excused from making a demand to commence litigation because such a demand would have been futile. Defendants have moved to dismiss the complaint. In addition, a consolidated putative class action is pending in the United States District Court for the Eastern District of New York on behalf of shareholders who acquired shares of JPMorgan Chase common stock during the putative class period, alleging that certain SEC filings of the Firm were materially false or misleading because they did not disclose certain information relating to the historical trading practices and conduct. Defendants have moved to dismiss the amended complaint in this action.

A separate shareholder derivative suit was filed in March 2022 in the United States District Court for the Eastern District of New York asserting breaches of fiduciary duty and violations of federal securities laws based on the alleged failure of the Board of Directors to exercise adequate oversight over the Firm's compliance with records preservation requirements which were the subject of resolutions between certain of the Firm's subsidiaries and the SEC and the CFTC. Defendants' motion to dismiss the amended complaint is pending.

Two shareholder derivative suits were filed in May and June 2023, respectively, in the United States District Court for the Southern District of New York asserting breaches of fiduciary duty and unjust enrichment based on the alleged failure of the Board of Directors and James Dimon to exercise adequate oversight with respect to the Firm's provision of banking services to Jeffrey Epstein. These actions allege that the shareholders are excused from making a demand to commence litigation because such a demand would have been futile. These actions were consolidated and defendants have moved to dismiss the amended complaint filed by the plaintiffs.

* * *

In addition to the various legal proceedings discussed above, JPMorgan Chase and its subsidiaries are named as defendants or are otherwise involved in a substantial number of other legal proceedings. The Firm believes it has meritorious defenses to the claims asserted against it in its currently outstanding legal proceedings and it intends to defend itself vigorously. Additional legal proceedings may be initiated from time to time in the future.

The Firm has established reserves for several hundred of its currently outstanding legal proceedings. In accordance with the provisions of U.S. GAAP for contingencies, the Firm accrues for a litigation-related liability when it is probable

that such a liability has been incurred and the amount of the loss can be reasonably estimated. The Firm evaluates its outstanding legal proceedings each quarter to assess its litigation reserves, and makes adjustments in such reserves, upward or downward, as appropriate, based on management's best judgment after consultation with counsel. The Firm's legal expense was \$420 million and \$73 million for the three months ended June 30, 2023 and 2022, respectively. There is no assurance that the Firm's litigation reserves will not need to be adjusted in the future.

In view of the inherent difficulty of predicting the outcome of legal proceedings, particularly where the claimants seek very large or indeterminate damages, or where the matters present novel legal theories, involve a large number of parties or are in early stages of discovery, the Firm cannot state with confidence what will be the eventual outcomes of the currently pending matters, the timing of their ultimate resolution or the eventual losses, fines, penalties or consequences related to those matters. JPMorgan Chase believes, based upon its current knowledge and after consultation with counsel, consideration of the material legal proceedings described above and after taking into account its current litigation reserves and its estimated aggregate range of possible losses, that the other legal proceedings currently pending against it should not have a material adverse effect on the Firm's consolidated financial condition. The Firm notes, however, that in light of the uncertainties involved in such proceedings, there is no assurance that the ultimate resolution of these matters will not significantly exceed the reserves it has currently accrued or that a matter will not have material reputational consequences. As a result, the outcome of a particular matter may be material to JPMorgan Chase's operating results for a particular period, depending on, among other factors, the size of the loss or liability imposed and the level of JPMorgan Chase's income for that period.

Note 27 – Business segments

The Firm is managed on an LOB basis. There are four major reportable business segments - Consumer & Community Banking, Corporate & Investment Bank, Commercial Banking and Asset & Wealth Management. In addition, there is a Corporate segment. The business segments are determined based on the products and services provided, or the type of customer served, and they reflect the manner in which financial information is currently evaluated by the Firm's Operating Committee. Segment results are presented on a managed basis. Refer to Segment results below, and Note 32 of JPMorgan Chase's 2022 Form 10-K for a further discussion of JPMorgan Chase's business segments.

Seament results

The following table provides a summary of the Firm's segment results as of or for the three and six months ended June 30, 2023 and 2022, on a managed basis. The Firm's definition of managed basis starts with the reported U.S. GAAP results and includes certain reclassifications to present total net revenue for the Firm (and each of the reportable business segments) on an FTE basis.

Accordingly, revenue from investments that receive tax credits and taxexempt securities is presented in the managed results on a basis comparable to taxable investments and securities. Refer to Note 32 of JPMorgan Chase's 2022 Form 10-K for additional information on the Firm's managed basis.

Capital allocation

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

Segment results and reconciliation(a)

Segment results	anu	recon	Cilial	IOI1	7														
As of or for the three months		Comm	Consun nunity		ng	Corporate & Investment Bank							Commerc	ial Ba	anking	,	Asset & Wealt	h Man	agement
ended June 30, (in millions, except ratios)		2023			2022			2023		2022			2023		2022		2023		2022
Noninterest revenue	\$	3,54	43	\$	3,850	(b)	\$	10,802	\$	8,805	(b)	\$	835	\$	904	\$	3,358	\$	3,084
Net interest income		13,69	90		8,708			1,717		3,198			3,153		1,779		1,585		1,222
Total net revenue		17,23	33		12,558			12,519		12,003			3,988		2,683		4,943		4,306
Provision for credit losses		1,86	62		761			38		59			1,097		209		145		44
Noninterest expense		8,31	13		7,658	(b)		6,894		6,810	(b)		1,300		1,156		3,163		2,919
Income/(loss) before income tax expense/(benefit)		7,05	58		4,139			5,587		5,134			1,591		1,318		1,635		1,343
Income tax expense/(benefit)		1,75	52		1,031	(b)		1,495		1,417	(b)		383		324		409		339
Net income/(loss)	\$	5,30	06	\$	3,108		\$	4,092	\$	3,717		\$	1,208	\$	994	\$	1,226	\$	1,004
Average equity	\$	54,34	46	\$	50,000		\$	108,000	\$	103,000		\$	29,505	\$	25,000	\$	16,670	\$	17,000
Total assets		620,19	93		500,219			1,432,054		1,403,558			305,280		242,456		247,118		235,553
ROE	38	В	%	24	%		1	5 %	1	4 %		1	6 %	1	15 %	2	9 %	2	3 %
Overhead ratio	48	В		61			5	55	5	7		3	3	4	13	6	4	6	3

As of or for the three months	 Con	porate	e	Reconcili	ng Items ^{a)}	Total	
ended June 30, (in millions, except ratios)	2023		2022	2023	2022	2023	2022
Noninterest revenue	\$ 1,980	\$	(244)	\$ (990)	\$ (812)	\$ 19,528 \$	15,587
Net interest income	1,738		324	(104)	(103)	21,779	15,128
Total net revenue	3,718		80	(1,094)	(915)	41,307	30,715
Provision for credit losses	(243)		28	· —	· <u>-</u>	2,899	1,101
Noninterest expense	1,152		206	_	_	20,822	18,749
Income/(loss) before income tax expense/(benefit)	2,809		(154)	(1,094)	(915)	17,586	10,865
Income tax expense/(benefit)	169		20	(1,094)	(915)	3,114	2,216
Net income/(loss)	\$ 2,640	\$	(174)	\$ _	\$ —	\$ 14,472 \$	8,649
Average equity	\$ 69,364	\$	52,986	\$ _	\$ —	\$ 277,885 \$	247,986
Total assets	1,263,595		1,459,528	NA	NA	3,868,240	3,841,314
ROE	NM		NM	NM	NM	20 %	13 %
Overhead ratio	NM		NM	NM	NM	50	61

⁽a) Segment managed results reflect revenue on an FTE basis with the corresponding income tax impact recorded within income tax expense/(benefit). These adjustments are eliminated in reconciling items to arrive at the Firms reported U.S. GAAP results.

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

egment results and reconciliation(a)

3											
s of or for the six months ended June 30.		Consume Community			Corporate Investmen	& t Bank	Commercial E	Banking		Asset & Wealth Ma	nagement
(in millions, except ratios)	_	2023	2022		2023	2022	2023	2022		2023	2022
oninterest revenue	\$	7,16%	7,705	\$	22,32\$	18,809 \$	1,61\$6	1,771	\$	6,698	6,323
et interest income		26,523	17,035		3,794	6,770	5,883	3,310		3,036	2,298
stal net revenue		33,689	24,740		26,119	25,579	7,499	5,081		9,727	8,621
Provision for credit losses		3,264	1,439		96	504	1,514	366		173	198
oninterest expense		16,378	15,310		14,377	14,179	2,608	2,285		6,254	5,779
Income/(loss) before income tax expense/(benefit)		14,047	7,988		11,646	10,902	3,377	2,430		3,300	2,644
Income tax expense/(benefit)		3,498	1,972		3,133	2,819	822	586		707	632
et income/(loss)	\$	10,549	6,016	\$	8,51\$	8,089 \$	2,55\$	1,844	\$	2,59\$	2,012
Average equity	\$	53,18\$	50,000	\$	108,00\$	103,000 \$	29,00\$5	25,000	\$	16,337	17,000
otal assets		620,193	500,219		1,432,054	1,403,558	305,280	242,456		247,118	235,553
DE		39 %	23 %	6	15 %	15 %	17 %	14 %	6	31 %	23 %
verhead ratio		49	62		55	55	35	45		64	67

s of or for the six months	_	Corpora	te	Reconciling I	tems ^{a)}	Total	
ended June 30, (in millions, except ratios)		2023	2022	2023	2022	2023	2022
oninterest revenue	\$	1,22\$	(589)	\$ (1,85\$)	(1,587)	\$ 37,16\$6	32,432
et interest income		3,478	(212)	(224)	(201)	42,490	29,000
ntal net revenue		4,703	(801)	(2,081)	(1,788)	79,656	61,432
Provision for credit losses		127	57	_	_	5,174	2,564
oninterest expense		1,312	390	_	_	40,929	37,940
ncome/(loss) before income tax expense/(benefit)		3,264	(1,248)	(2,081)	(1,788)	33,553	20,928
Income tax expense/(benefit)		380	(218)	(2,081)	(1,788)	6,459	3,997
et income/(loss)	\$	2,88%	(1,030)	\$ \$	_ :	\$ 27,09\$4	16,931
Average equity	\$	68,03\$	55,234	\$ \$	_ ;	\$ 274,569	250,234
otal assets		1,263,595	1,459,528	NA	NA	3,868,240	3,841,314
DE .		NM	NM	NM	NM	19 %	13 %
verhead ratio		NM	NM	NM	NM	51	62

⁽a) Segment managed results reflect revenue on an FTE basis with the corresponding income tax impact recorded within income tax expense/(benefit). These adjustments are eliminated in reconciling items to arrive at the Firms reported U.S. GAAP results.

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

Note 28 - Business combinations

On May 1, 2023, JPMorgan Chase acquired certain assets and assumed certain liabilities of First Republic Bank (the "First Republic acquisition") from the Federal Deposit Insurance Corporation ("FDIC"), as receiver, for \$67.9 billion, resulting in an estimated bargain purchase gain of \$2.7 billion recorded in other income. The estimated bargain purchase gain represents the excess of the estimated fair value of the net assets acquired above the purchase price. The First Republic acquisition further advances the Firm's wealth management strategy and is complementary to the Firm's existing franchises.

The Firm has determined that this acquisition constitutes a business combination under U.S. GAAP. Accordingly, the initial recognition of the assets acquired and liabilities assumed were generally measured at their estimated fair values as of May 1, 2023. The determination of those fair values required management to make certain market-based assumptions about expected future cash flows, discount rates and other valuation inputs at the time of the acquisition. The Firm believes that the fair value estimates of the assets acquired and liabilities assumed provide a reasonable basis for determining the estimated bargain purchase gain. The Firm and the FDIC have not yet completed the settlement process under which the purchase price, and the identification of the assets acquired and liabilities assumed, will be finalized. The finalization of this settlement process may impact the amount of the estimated bargain purchase gain. The purchase and assumption agreement entered into with the FDIC allows for final settlement to occur up to a year after the acquisition date.

In addition, the purchase price and the estimated bargain purchase gain could change pending management's finalization of its acquisition date fair value estimates for certain of the assets acquired and liabilities assumed (such as loans and commitments, intangible assets and leases), which may take place up to one year from the acquisition date, as permitted by U.S. GAAP.

In connection with the First Republic acquisition, the Firm and the FDIC entered into two shared-loss agreements with respect to certain loans and lending-related commitments (the "shared-loss assets"): the Commercial Shared-Loss Agreement ("CSLA") and the Single-Family Shared-Loss Agreement ("SFSLA"). The CSLA covers 80% of credit losses, on a paripassu basis, over 5 years with a subsequent 3-year recovery period for certain acquired commercial loans and other real estate exposure. The SFSLA covers 80% of credit losses, on a pari-passu basis, for 7 years for certain acquired loans secured by mortgages on real property or shares in cooperative property constituting a primary residence. The indemnification assets which represent the fair value of the CSLA and SFSLA are reflected in the total assets acquired.

As part of the consideration paid, JPMorgan Chase issued a five-year, \$50 billion secured note to the FDIC (the "Purchase Money Note"). The Purchase Money Note bears interest at a fixed rate of 3.4% and is secured by certain of the acquired loans. The Purchase Money Note is prepayable upon notice to the FDIC.

The Firm had placed a \$5 billion deposit with First Republic Bank on March 16, 2023, as part of \$30 billion of deposits provided by a consortium of large U.S. banks. The Firm's \$5 billion deposit was effectively settled as part of the acquisition and the associated allowance for credit losses was released upon closing. The Firm subsequently repaid the remaining \$25 billion of deposits to the consortium of banks, including accrued interest through the payment date on May 9, 2023.

The computation of the purchase price, the estimated fair value of the assets acquired and liabilities assumed as part of the First Republic acquisition and the related estimated bargain purchase gain are presented below.

(in millions)	price	value purchase allocation as of May 1, 2023
Purchase price consideration	•	_
Amounts paid/due to the FDIC, net of cash acquired(a)	\$	13,589
Purchase Money Note (at fair value)		48,848
Settlement of First Republic deposit and other related party transactions ^(b)		5,447
Contingent consideration - Shared-loss agreements		15
Purchase price consideration	\$	67,899
Assets		
Securities	\$	30,285
Loans		152,335
Core deposit and customer relationship intangibles		1,462
Indermification assets - Shared-loss agreements		675
Accounts receivable and other assets ^(c)		7,551
Total assets acquired	\$	192,308
Liabilities		
Deposits	\$	87,507
FHLB advances		27,919
Lending-related commitments		2,409
Accounts payable and other liabilities(c)		3,006
Deferred tax liabilities		856
Total liabilities assumed	\$	121,697
Fair value of net assets acquired	\$	70,611
Estimated gain on acquisition, after income taxes	\$	2,712

- (a) Includes \$10.6 billion of cash paid to the FDIC at acquisition and \$3.7 billion payable to the FDIC, less cash acquired of \$680 million.
- (b) Includes \$447 million of securities financing transactions with First Republic Bank that were effectively settled on the acquisition date.
- (c) Other assets include \$1.2 billion in tax-oriented investments and \$756 million of lease right-of-use assets. Other liabilities include the related tax-oriented investment liabilities of \$669 million and lease liabilities of \$756 million. Refer to Note 14 and Note 17 for additional information.

The issuance of the \$50 billion Purchase Money Note, the effective settlement of the Firm's \$5 billion deposit and \$447 million of securities financing with First Republic Bank, and the \$3.7 billion payable to the FDIC as part of the purchase price consideration are considered non-cash transactions.

The following describes the accounting policies and fair value methodologies generally used by the Firm for the following assets acquired and liabilities assumed: core deposit and customer relationship intangibles, shared-loss agreements and the related indemnification assets, Purchase Money Note, and FHLB advances.

Refer to JPMorgan Chase's 2022 Form 10-K for a discussion of the Firm's accounting policies and valuation methodologies for securities, loans, deposits, and lending-related commitments.

Core deposit and customer relationship intangibles

Core deposit and certain wealth management customer relationship intangibles were acquired as part of the First Republic transaction. The core deposit intangible of \$1.3 billion was valued by discounting estimated after-tax cost savings over the remaining useful life of the deposits using the favorable source of funds method. The after-tax cost savings were estimated based on the difference between the cost of maintaining the core deposit base relative to the cost of next best alternative funding sources available to market participants. The customer relationship intangibles of \$187 million were valued by discounting estimated after-tax earnings over their remaining useful lives using the multi-period excess earnings method. Both intangible asset valuations utilized assumptions that the Firm believes a market participant would use to estimate fair values, such as growth and attrition rates, projected fee income as well

as related costs to service the relationships, and discount rates. The core deposit and customer relationship intangibles will be amortized over a projected period of future cash flows of approximately 7 years. As of June 30, 2023, the carrying values of the core deposit and customer relationship intangibles were \$1.2 billion and \$183 million, respectively, reflecting accumulated amortization of approximately \$30 million and \$4 million, respectively.

Indemnification assets - Shared-loss agreements

The indemnification assets represent forecasted recoveries from the FDIC associated with the shared-loss assets over the respective shared loss recovery periods. The indemnification assets were recorded at fair value in other assets on the Consolidated balance sheets on the acquisition date. The fair values of the indemnification assets were estimated based on the timing of the forecasted losses underlying the related allowance for credit losses.

The subsequent quarterly remeasurement of the indemnification assets will be based on changes in amount and timing of forecasted losses in the allowance for credit losses associated with the shared loss assets and will be recorded in other income. Under certain circumstances, the Firm may be required to make a payment to the FDIC upon termination of the shared-loss agreements based on the level of actual losses and recoveries on the shared-loss assets. The estimated potential future payment is reflected as contingent consideration as part of the purchase price consideration.

Purchase Money Note and FHLB advances

The Purchase Money Note is recorded in long-term debt on the Consolidated balance sheets. The fair value of the Purchase Money Note was estimated based on a discounted cash flow methodology and incorporated estimated market discount rates.

The FHLB advances assumed in the acquisition are recorded in short-term borrowings and in long-term debt. The fair value of the FHLB advances was based on a discounted cash flow methodology and considered the observed FHLB advance issuance rates.

Loans

The following table presents the unpaid principal balance and estimated fair value of the loans acquired as of May 1, 2023.

	May	1, 202	23
(in millions)	UPB		Fair value
Residential real estate	\$ 106,240	\$	91,906
Auto and other	3,092	!	2,031
Total consumer	109,332		93,937
Secured by real estate	37,119	,	33,605
Commercial & industrial	4,333	i	3,933
Other	22,597		20,860
Total wholesale	64,049	i	58,398
Total loans	\$ 173,381	\$	152,335

Unaudited pro forma condensed combined financial information

Included in the Firm's Consolidated statements of income are noninterest revenue, net interest income and net income contributed by First Republic since the acquisition date of May 1, 2023 of \$3.1 billion, \$897 million and \$2.4 billion, respectively, for the three and six months ended June 30, 2023.

The following table presents certain unaudited pro forma financial information for the three and six months ended June 30, 2023 and 2022 as if the First Republic acquisition had occurred on January 1, 2022, including recognition of the estimated bargain purchase gain of \$2.7 billion and the provision for credit losses of \$1.2 billion. Additional adjustments include the interest on the Purchase Money Note and the impact of amortizing and accreting certain estimated fair value adjustments related to intangible assets and loans.

The Firm expects to achieve operating cost savings and other business synergies resulting from the acquisition that are not reflected in the pro forma amounts. The pro forma information is not necessarily indicative of the historical results of operations had the acquisition occurred on January 1, 2022, nor is it indicative of the results of operations in future periods, particularly in light of recent changes in market and economic conditions.

	Three months	end	ed June 30,	Six months ended June	30,
(in millions)	2023		2022	2023	2022
Noninterest revenue	\$ 16,924	\$	15,853	\$ 34,832 \$	35,675
Net interest income	22,184		16,180	44,084	30,997
Net income	13,565		9,086	26,726	18,887



Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of JPMorgan Chase & Co.:

Results of Review of Interim Financial Statements

We have reviewed the accompanying consolidated balance sheet of JPMorgan Chase & Co. and its subsidiaries (the "Firm") as of June 30, 2023, and the related consolidated statements of income, comprehensive income and changes in stockholders' equity for the three-month and sixmonth periods ended June 30,2023 and 2022 and the consolidated statements of cash flows for the six-month periods ended June 30, 2023 and 2022, including the related notes (collectively referred to as the "interim financial statements"). Based on our reviews, we are not aware of any material modifications that should be made to the accompanying interim financial statements for them to be in conformity with accounting principles generally accepted in the United States of America.

We have previously audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheet of the Firm as of December 31, 2022, and the related consolidated statements of income, comprehensive income, changes in stockholders' equity and of cash flows for the year then ended (not presented herein), and in our report dated February 21, 2023, which included a paragraph describing a change in the manner of accounting for credit losses on certain financial instruments in 2020, we expressed an unqualified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying consolidated balance sheet information as of December 31, 2022, is fairly stated, in all material respects, in relation to the consolidated balance sheet from which it has been derived.

Basis for Review Results

These interim financial statements are the responsibility of the Firm's management. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Firm in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB. We conducted our review in accordance with the standards of the PCAOB. A review of interim financial information consists principally of applying analytical procedures and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with the standards of the PCAOB, the objective of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an opinion.

ricevatulouse Coopers LLP

August 3, 2023

JPMorgan Chase & Co. Consolidated average balance sheets, interest and rates (unaudited) (Taxable-equivalent interest and rates; in millions, except rates)

	Three mo	onths ended J	lune 30, 2023		Three n	onths ended Ju	ne 30, 2022
	Average balance	Interest ^(f)	Rate (annualized)		Average balance	Interest ^(f)	Rate (annualized)
Assets							
Deposits with banks	\$ 495,018 \$	5,189	4.20 %	\$	694,644 \$	1,079	0.62 %
Federal funds sold and securities purchased under resale agreements	326,563	3,767	4.63		305,132	543	0.71
Securities borrowed	191,393	1,866	3.91		207,437	173	0.33
Trading assets – debt instruments	391,945	4,025	4.12		273,736	2,058	3.02
Taxable securities	578,876	4,194	2.91		644,037	2,289	1.43
Nontaxable securities(a)	32,676	390	4.79		28,762	309	4.31
Total investment securities	611,552	4,584	3.01 (g)		672,799	2,598	1.55 (g)
Loans	1,238,237	20,351	6.59		1,093,106	11,656	4.28
All other interest-earning assets®	89,072	1,966	8.85		139,040	642	1.85
Total interest-earning assets	3,343,780	41,748	5.01		3,385,894	18,749	2.22
Allowance for loan losses	(20,055)	•			(17,194)	•	
Cash and due from banks	25,228				28,712		
Trading assets – equity and other instruments	169,558				151,309		
Trading assets – derivative receivables	63,339				84,483		
Goodwill, MSRs and other intangible Assets	62,530				59,355		
All other noninterest-earning assets	207,008				219,084		
Total assets	\$ 3,851,388			\$	3,911,643		
Liabilities							
Interest-bearing deposits	\$ 1,715,699 \$	9,591	2.24 %	\$	1,790,421 \$	898	0.20 %
Federal funds purchased and securities loaned or sold under repurchase agreements	263,718	3,400	5.17		233,376	445	0.76
Short-term borrowings(c)	35,335	428	4.87		50,833	113	0.91
Trading liabilities – debt and all other interest-bearing liabilities (%)	293,269	2,373	3,25		274,435	471	0.69
Beneficial interests issued by consolidated VIEs	15,947	197	4.95		10,577	30	1.11
Long-termdebt	294,239	3.876	5.28		246,195	1.561	2.54
Total interest-bearing liabilities	2,618,207	19.865	3.04		2.605.837	3,518	0.54
Noninterest-bearing deposits	671,715				741,891	5,010	
Trading liabilities – equity and other instruments(e)	28,513				40.937		
Trading liabilities – derivative payables	46,934				61,026		
All other liabilities, including the allowance for lending-related commitments	180,730				181,128		
Total liabilities	3,546,099				3.630.819		
Stockholders' equity							
Preferred stock	27,404				32,838		
Common stockholders' equity	277,885				247,986		
Total stockholders' equity	305,289				280.824		
Total liabilities and stockholders' equity	\$ 3.851.388			\$	3,911,643		
Interest rate spread	 -,,		1.97 %	<u>_</u>	3,0,0 .0		1.68 %
Net interest income and net yield on interest-earning assets	\$	21,883	2.62		\$	15,231	1.80

(a) Represents securities which are tax-exempt for U.S. federal income tax purposes.
(b) Includes brokerage-related held-for-investment customer receivables, which are classified in accrued interest and accounts receivable, and all other interest-earning assets, which are classified in other assets on the Consolidated Balance Sheets.

classified in other assets on the Consolidated Balance Sheets.

(c) Includes commercial paper.

(d) All other interest-bearing liabilities include brokerage-related customer payables.

(e) The combined balance of trading liabilities – debt and equity instruments was \$153.7 billion and \$140.2 billion for the three months ended June 30, 2023 and 2022, respectively.

(f) Interest includes the effect of certain related hedging derivatives. Taxable-equivalent amounts are used where applicable.

(g) The annualized rate for securities based on amortized cost was 2.96% and 1.52% for the three months ended June 30, 2023 and 2022, respectively, and does not give effect to changes in fair value that are reflected in AOCI.

JPMorgan Chase & Co. Consolidated average balance sheets, interest and rates (unaudited) (Taxable-equivalent interest and rates; in millions, except rates)

	Six months ended June 30, 2023			 Six months ended June 30, 2022			
		Average balance	Interest ^(f)	Rate (annualized)	Average balance	Interest ^(f)	Rate (annualized)
Assets							
Deposits with banks	\$	500,311 \$	10,008	4.03 %	\$ 718,346 \$	1,317	0.37 %
Federal funds sold and securities purchased under resale agreements		319,911	6,898	4.35	300,070	940	0.63
Securities borrowed		192,114	3.582	3.76	212.704	86	0.08
Trading assets – debt instruments		374,908	7,685	4.13	272,931	3,833	2.83
Taxable securities		587,750	8,161	2.80	643,340	4,268	1.34
Nontaxable securities(a)		29,022	698	4.85	28,647	616	4.34
Total investment securities		616,772	8,859	2.90 (g)	671,987	4,884	1.47 (g)
Loans		1,184,231	38,105	6.49	1,080,939	22,317	4.16
All other interest-earning assets(b)		92,372	3,735	8.15	136,902	966	1.42
Total interest-earning assets		3,280,619	78,872	4.85	3,393,879	34,343	2.04
Allow ance for loan losses		(19,593)	·		(16,807)	•	
Cash and due from banks		25,640			28,340		
Trading assets – equity and other instruments		160,868			154,093		
Trading assets – derivative receivables		63,929			75,956		
Goodwill, MSRs and other intangible Assets		61,697			58,455		
All other noninterest-earning assets		207,913			215,313		
Total assets	\$	3,781,073			\$ 3,909,229		
Liabilities							
nterest-bearing deposits	\$	1,692,993 \$	17,228	2.05 %	\$ 1,785,896 \$	1,080	0.12 %
Federal funds purchased and securities loaned or sold under		250 045	6 204	4.05	241 740	EEO	0.47
repurchase agreements		258,045	6,204 849	4.85 4.63	241,749 49,360	558 157	0.47 0.64
Short-term borrow ings© Trading liabilities – debt and all other interest-bearing		37,039	849	4.03	49,360	15/	0.04
rrading liabilities – debt and all other interest-bearing liabilities(d)(e)		285,467	4,344	3.07	268,762	662	0.50
Beneficial interests issued by consolidated VIEs		14,722	344	4.71	10,733	48	0.90
_ong-termdebt		271,912	7.189	5.33	250.165	2.637	2.13
Total interest-bearing liabilities		2,560,178	36,158	2.85	2.606.665	5.142	0.40
Noninterest-bearing deposits		661,138			738,083		
Trading liabilities – equity and other instruments(e)		29.137			42.159		
Trading liabilities – derivative payables		48,139			57,792		
All other liabilities, including the allowance for lending-related		,			,		
commitments		180,517			181,116		
Total liabilities		3,479,109			3,625,815		
Stockholders' equity							
Preferred stock		27,404			33,180		
Common stockholders' equity		274,560			250,234		
Total stockholders' equity		301,964			283,414		
Total liabilities and stockholders' equity	\$	3,781,073			\$ 3,909,229		
nterest rate spread				2.00 %	 		1.64 %
Net interest income and net yield on interest-earning assets		\$	42,714	2.63	\$	29,201	1.74

(a) Represents securities which are tax-exempt for U.S. federal income tax purposes.
(b) Includes brokerage-related held-for-investment customer receivables, which are classified in accrued interest and accounts receivable, and all other interest-earning assets, which are classified in other assets on the Consolidated Balance Sheets.
(c) Includes commercial paper.
(d) All other interest-bearing liabilities include brokerage-related customer payables.
(e) The combined balance of trading liabilities – debt and equity instruments was \$148.5 billion and \$140.2 billion for the six months ended June 30, 2023 and 2022, respectively.
(f) Interest includes the effect of certain related hedging derivatives. Taxable-equivalent amounts are used where applicable.
(g) The annualized rate for securities based on amortized cost was 2.85% and 1.45% for the six months ended June 30, 2023 and 2022, respectively, and does not give effect to changes in fair value that are reflected in AOCI.

GLOSSARY OF TERMS AND ACRONYMS

2022 Form 10-K: Annual report on Form 10-K for year ended December 31, 2022, filed with the U.S. Securities and Exchange Commission.

ABS: Asset-backed securities

Active foreclosures: Loans referred to foreclosure where formal foreclosure proceedings are ongoing. Includes both judicial and non-judicial states.

AFS: Available-for-sale

Allowance for loan losses to total retained loans: represents periodend 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 Ioan and Iease origination volume: Dollar amount of auto Ioans and Ieases originated.

AWM: Asset & Wealth Management

Beneficial interests issued by consolidated VIEs: represents the interest of third-party holders of debt, equity securities, or other obligations, issued by VIEs that JPMorgan Chase consolidates.

BHC: Bank holding company

BWM: Banking & Wealth Management

Bridge Financing Portfolio: A portfolio of held-for-sale unfunded loan commitments and funded loans. The unfunded commitments include both short-term bridge loan commitments that will ultimately be replaced by longer term financing as well as term loan commitments. The funded loans include term loans and funded revolver facilities.

CB: Commercial Banking

CCAR: Comprehensive Capital Analysis and Review

CCB: Consumer & Community Banking

CDS: Credit default swaps

CECL: Current Expected Credit Losses

CEO: Chief Executive Officer

CET1 capital: Common equity Tier 1 capital

CFO: Chief Financial Officer

CFTC: Commodity Futures Trading Commission

CIB: Corporate & Investment Bank

CIO: Chief Investment Office

Client assets: Represent assets under management as well as custody, brokerage, administration and deposit accounts.

Client deposits and other third-party liabilities: Deposits, as well as deposits that are swept to on-balance sheet liabilities (e.g., commercial paper, federal funds purchased and securities loaned or sold under repurchase agreements) as part of client cash management programs.

Client investment assets: Represent assets under management as well as custody, brokerage and annuity accounts, and deposits held in investment accounts.

CLTV: Combined loan-to-value **CMT**: Constant Maturity Treasury

Collateral-dependent: A loan is considered to be collateral-dependent when repayment of the loan is expected to be provided substantially through the operation or sale of the-collateral when the borrower is experiencing financial difficulty, including when foreclosure is deemed probable based on borrower delinquency.

Commercial Card: provides a wide range of payment services to corporate and public sector clients worldwide through the commercial card products. Services include procurement, corporate travel and entertainment, expense management services, and business-to-business payment solutions.

Credit derivatives: Financial instruments whose value is derived from the credit risk associated with the debt of a third-party issuer (the reference entity) which allow one party (the protection purchaser) to transfer that risk to another party (the protection seller). Upon the occurrence of a credit event by the reference entity, which may include, among other events, the bankruptcy or failure to pay its obligations, or certain restructurings of the debt of the reference entity, neither party has recourse to the reference entity. The protection purchaser has recourse to the protection seller for the difference between the face value of the CDS contract and the fair value at the time of settling the credit derivative contract. The determination as to whether a credit event has occurred is generally made by the relevant International Swaps and Derivatives Association ("ISDA") Determinations Committee.

Criticized: Criticized loans, lending-related commitments and derivative receivables that are classified as special mention, substandard and doubtful categories for regulatory purposes and are generally consistent with a rating of CCC+/Caa1 and below, as defined by S&P and Moody's.

CRR: Capital Requirements Regulation **CVA:** Credit valuation adjustment

Deposit margin: Represents net interest income expressed as a percentage of average deposits.

DVA: Debit valuation adjustment

EC: European Commission

Eligible HQLA: Eligible high-quality liquid assets, for purposes of calculating the LCR, is the amount of unencumbered HQLA that satisfy certain operational considerations as defined in the LCR rule.

Eligible LTD: Long-term debt satisfying certain eligibility criteria

Embedded derivatives: are implicit or explicit terms or features of a financial instrument that affect some or all of the cash flows or the value of the instrument in a manner similar to a derivative. An instrument containing such terms or features is referred to as a "hybrid." The component of the hybrid that is the non-derivative instrument is referred to as the "host." For example, callable debt is a hybrid instrument that contains a plain vanilla debt instrument (i.e., the host) and an embedded option that allows the issuer to redeem the debt issue at a specified date for a specified amount (i.e., the embedded derivative). However, a floating rate instrument is not a hybrid composed of a fixed-rate instrument and an interest rate swap.

EPS: Earnings per share

ERISA: Employee Retirement Income Security Act of 1974

ESG: Environmental, Social and Governance

ETD: "Exchange-traded derivatives": Derivative contracts that are executed on an exchange and settled via a central clearing house.

EU: European Union Expense categories:

- Volume- and/or revenue-related expenses generally correlate with changes in the related business/transaction volume or revenue.
 Examples of volume- and revenue-related expenses include commissions and incentive compensation, depreciation expense related to operating lease assets, and brokerage expense related to equities trading transaction volume.
- Investments include expenses associated with supporting medium- to longer-term strategic plans of the Firm. Examples of investments include initiatives in technology (including related compensation), marketing, and compensation for new bankers and client advisors.
- Structural expenses are those associated with the day-to-day cost of running the bank and are expenses not covered by the above two categories. Examples of structural expenses include employee salaries and benefits, as well as noncompensation costs such as real estate and all other expenses.

Fannie Mae: Federal National Mortgage Association

FASB: Financial Accounting Standards Board

FCA: Financial Conduct Authority

FDIC: Federal Deposit Insurance Corporation

FDM: "Financial difficulty modification" applies to loan modifications effective January 1, 2023, and is deemed to occur when the Firm modifies specific terms of the original loan agreement. The following types of modifications are considered FDMs: principal forgiveness, interest rate reduction, other-than-insignificant payment delay, term extension or a combination of these modifications.

Federal Reserve: The Board of the Governors of the Federal Reserve System

FFIEC: Federal Financial Institutions Examination Council

FHA: Federal Housing Administration

FHLB: Federal Home Loan Bank

FICO score: A measure of consumer credit risk based on information in consumer credit reports produced by Fair Isaac Corporation. Because certain aged data is excluded from credit reports based on rules in the Fair Credit Reporting Act, FICO scores may not reflect all historical information about a consumer.

FICC: Fixed Income Clearing Corporation
FINRA: Financial Industry Regulatory Authority

Firm: JPMorgan Chase & Co.

Forward points: represents the interest rate differential between two currencies, which is either added to or subtracted from the current exchange rate (i.e., "spot rate") to determine the forward exchange rate.

Freddie Mac: Federal Home Loan Mortgage Corporation

Free-standing derivatives: is a derivative contract entered into either separate and apart from any of the Firm's other financial instruments or equity transactions. Or, in conjunction with some other transaction and is legally detachable and separately exercisable.

FTE: Fully taxable-equivalent

FVA: Funding valuation adjustment

FX: Foreign exchange

G7: "Group of Seven nations": Countries in the G7 are Canada, France, Germany, Italy, Japan, the U.K. and the U.S.

G7 government securities: Securities issued by the government of one of the G7 nations.

Ginnie Mae: Government National Mortgage Association

GSIB: Global systemically important banks

HELOC: Home equity line of credit

Home equity – senior lien: represents loans and commitments where JPMorgan Chase holds the first security interest on the property.

Home equity – junior lien: represents loans and commitments where JPMorgan Chase holds a security interest that is subordinate in rank to other liens.

HQLA: High-quality liquid assets

HTM: Held-to-maturity

IBOR: Interbank Offered Rate

IDI: Insured depository institutions

IHC: JPMorgan Chase Holdings LLC, an intermediate holding company Investment-grade: An indication of credit quality based on JPMorgan Chase's internal risk assessment system. "Investment grade" generally represents a risk profile similar to a rating of a "BBB-"/"Baa3" or better, as defined by independent rating agencies.

IR: Interest rate

ISDA: International Swaps and Derivatives Association

JPMorgan Chase: JPMorgan Chase & Co.

JPMorgan Chase Bank, N.A.: JPMorgan Chase Bank, National

Association

JPMorgan Chase Foundation or Foundation: a not-for-profit organization that makes contributions for charitable and educational numoses

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

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 Ioans: Loans for which interest income is not recognized on an accrual basis. Loans (other than credit card loans and certain consumer loans insured by U.S. government agencies) are placed on nonaccrual status when full payment of principal and interest is not expected, regardless of delinquency status, or when principal and

interest has been in default for a period of 90 days or more unless the loan is both well-secured and in the process of collection. Collateral-dependent loans are typically maintained on nonaccrual status.

Nonperforming assets: Nonperforming assets include nonaccrual loans, nonperforming derivatives and certain assets acquired in loan satisfactions, predominantly real estate owned and other commercial and personal property.

NSFR: Net Stable Funding Ratio

OCC: Office of the Comptroller of the Currency

OCI: Other comprehensive income/(loss)

OPEB: Other postretirement employee benefit

OTC: "Over-the-counter derivatives": Derivative contracts that are negotiated, executed and settled bilaterally between two derivative counterparties, where one or both counterparties is a derivatives dealer.

OTC cleared: "Over-the-counter cleared derivatives": Derivative contracts that are negotiated and executed bilaterally, but subsequently settled via a central clearing house, such that each derivative counterparty is only exposed to the default of that clearing house.

Overhead ratio: Noninterest expense as a percentage of total net revenue.

Parent Company: JPMorgan Chase & Co.

Participating securities: represents unvested share-based compensation awards containing nonforfeitable rights to dividends or dividend equivalents (collectively, "dividends"), which are included in the earnings per share calculation using the two-class method. JPMorgan Chase grants restricted stock and RSUs to certain employees under its share-based compensation programs, which entitle the recipients to receive nonforfeitable dividends during the vesting period on a basis equivalent to the dividends paid to holders of common stock. These unvested awards meet the definition of participating securities. Under the two-class method, all earnings (distributed and undistributed) are allocated to each class of common stock and participating securities, based on their respective rights to receive dividends.

PCD: "Purchased credit deteriorated" assets represent acquired financial assets that as of the date of acquisition have experienced a more-than-insignificant deterioration in credit quality since origination, as determined by the Firm.

Pillar 1: The Basel framework consists of a three "Pillar" approach. Pillar 1 establishes minimum capital requirements, defines eligible capital instruments, and prescribes rules for calculating RWA.

Pillar 3: The Basel framework consists of a three "Pillar" approach. Pillar 3 encourages market discipline through disclosure requirements which allow market participants to assess the risk and capital profiles of banks.

PPP: Paycheck Protection Program under the Small Business Association ("SBA")

PRA: Prudential Regulation Authority

Pre-provision profit/(loss): represents total net revenue less noninterest expense. The Firm believes that this financial measure is useful in assessing the ability of a lending institution to generate income in excess of its provision for credit losses.

Principal transactions revenue: Principal transactions revenue is driven by many factors, including the bid-offer spread, which is the difference between the price at which the Firm is willing to buy a financial or other instrument and the price at which the Firm is willing to sell that instrument. It also consists of realized (as a result of closing out or termination of transactions, or interim cash payments) and unrealized (as a result of changes in valuation) gains and losses on financial and other instruments (including those accounted for under the fair value option) primarily used in client-driven market-making activities and on private equity investments. In connection with its client-driven market-making activities, the Firm transacts in debt and equity instruments, derivatives and commodities (including physical commodities inventories and financial instruments that reference commodities). Principal transactions revenue also includes certain realized and unrealized gains and losses related to hedge accounting and specified risk-management activities, including: (a) certain derivatives designated in qualifying hedge accounting relationships (primarily fair value hedges of commodity and foreign exchange risk), (b) certain derivatives used for specific risk management purposes, primarily to mitigate credit risk and foreign exchange risk, and (c) other derivatives.

PSU(s): Performance share units

Regulatory VaR: Daily aggregated VaR calculated in accordance with regulatory rules.

REO: Real estate owned

Reported basis: Financial statements prepared under U.S. GAAP, which excludes the impact of taxable-equivalent adjustments.

Retained loans: Loans that are held-for-investment (i.e. excludes loans held-for-sale and loans at fair value).

Revenue wallet: Total fee revenue based on estimates of investment banking fees generated across the industry (i.e., the revenue wallet) from investment banking transactions in M&A, equity and debt underwriting, and loan syndications. Source: Dealogic, a third-party provider of investment banking competitive analysis and volume based league tables for the above noted industry products.

RHS: Rural Housing Service of the U.S. Department of Agriculture

ROE: Return on equity

ROTCE: Return on tangible common equity

ROU assets: Right-of-use assets **RSU(s)**: Restricted stock units

RWA: "Risk-weighted assets": Basel III establishes two comprehensive

approaches for calculating RWA (a

Standardized approach and an Advanced approach) which include capital requirements for credit risk, market risk, and in the case of Basel III Advanced, also operational risk. Key differences in the calculation of credit risk RWA between the Standardized and Advanced approaches are that for Basel III Advanced, credit risk RWA is based on risk-sensitive approaches which largely rely on the use of internal credit models and parameters, whereas for Basel III Standardized, credit risk RWA is generally based on supervisory risk-weightings which vary primarily by counterparty type and asset class. Market risk RWA is calculated on a generally consistent basis between Basel III Standardized and Basel III Advanced.

S&P: Standard and Poors

SA-CCR: Standardized Approach for Counterparty Credit Risk SAR as it pertains to Hong Kong: Special Administrative Region SAR(s) as it pertains to employee stock awards: Stock appreciation rights

SCB: Stress capital buffer

Scored portfolios: Consumer loan portfolios that predominantly include residential real estate loans, credit card loans, auto loans to individuals and certain small business loans.

SEC: U.S. Securities and Exchange Commission

Securitized Products Group: Comprised of Securitized Products and tax-oriented investments.

Seed capital: Initial JPMorgan capital invested in products, such as mutual funds, with the intention of ensuring the fund is of sufficient size to represent a viable offering to clients, enabling pricing of its shares, and allowing the manager to develop a track record. After these goals are achieved, the intent is to remove the Firm's capital from the investment.

Shelf securities: Securities registered with the SEC under a shelf registration statement that have not been issued, offered or sold. These securities are not included in league tables until they have actually been issued.

Single-name: Single reference-entities SLR: Supplementary leverage ratio SOFR: Secured Overnight Financing Rate

SPEs: Special purpose entities

Structural interest rate risk: represents interest rate risk of the non-trading assets and liabilities of the Firm.

Structured notes: Structured notes are financial instruments whose cash flows are linked to the movement in one or more indexes, interest rates, foreign exchange rates, commodities prices, prepayment rates, underlying reference pool of loans or other market variables. The notes typically contain embedded (but not separable or detachable) derivatives. Contractual cash flows for principal, interest, or both can vary in amount and timing

throughout the life of the note based on non-traditional indexes or non-traditional uses of traditional interest rates or indexes.

Suspended foreclosures: Loans referred to foreclosure where formal foreclosure proceedings have started but are currently on hold, which could be due to bankruptcy or loss mitigation. Includes both judicial and non-judicial states.

Taxable-equivalent basis: In presenting managed results, the total net revenue for each of the business segments and the Firm is presented on a tax-equivalent basis. Accordingly, revenue from investments that receive tax credits and tax-exempt securities is presented in the managed results on a basis comparable to taxable investments and securities; the corresponding income tax impact related to tax-exempt items is recorded within income tax expense.

TBVPS: Tangible book value per share

TCE: Tangible common equity

TDR: "Troubled debt restructuring" applies to loan modifications granted prior to January 1, 2023 and is deemed to occur when the Firm modifies the original terms of a loan agreement by granting a concession to a borrower that is experiencing financial difficulty. Loans with short-term and other insignificant modifications that are not considered concessions are not TDRs.

TLAC: Total Loss Absorbing Capacity

U.K.: United Kingdom

U.S.: United States of America

U.S. GAAP: Accounting principles generally accepted in the United States of America.

U.S. government agencies: U.S. government agencies include, but are not limited to, agencies such as Ginnie Mae and FHA, and do not include Fannie Mae and Freddie Mac which are U.S. government-sponsored enterprises ("U.S. GSEs"). In general, obligations of U.S. government agencies are fully and explicitly guaranteed as to the timely payment of principal and interest by the full faith and credit of the U.S. government in the event of a default.

U.S. GSE(s): "U.S. government-sponsored enterprises" are quasi-governmental, privately-held entities established or chartered by the U.S. government to serve public purposes as specified by the U.S. Congress to improve the flow of credit to specific sectors of the economy and provide certain essential services to the public. U.S. GSEs include Fannie Mae and Freddie Mac, but do not include Ginnie Mae or FHA. U.S. GSE obligations are not explicitly guaranteed as to the timely payment of principal and interest by the full faith and credit of the U.S. government.

U.S. Treasury: U.S. Department of the Treasury

Unaudited: Financial statements and/or information that have not been subject to auditing procedures by an independent registered public accounting firm.

VA: U.S. Department of Veterans Affairs

VaR: "Value-at-risk" is a measure of the dollar amount of potential loss from adverse market moves in an ordinary market environment.

VIEs: Variable interest entities

Warehouse loans: consist of prime mortgages originated with the intent to sell that are accounted for at fair value and classified as loans.

CONSUMER & COMMUNITY BANKING ("CCB")

Debit and credit card sales volume: Dollar amount of card member purchases, net of returns.

Deposit margin: Represents net interest income expressed as a percentage of average deposits.

Home Lending Production and Home Lending Servicing revenue comprises the following:

Net mortgage servicing revenue: Includes operating revenue earned from servicing third-party mortgage loans, which is recognized over the period in which the service is provided; changes in the fair value of 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 Card Services net revenue (annualized) expressed as a percentage of average loans for the period.

Auto Ioan and lease origination volume: Dollar amount of auto Ioans and Ieases 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 tenyear (if applicable) Morningstar Rating metrics. For U.S.-domiciled funds, separate star ratings are provided at the individual share class level. The Nomura "star rating" is based on three-year risk-adjusted performance only. Funds with fewer than three years of history are not rated and hence excluded from these rankings. All ratings, the assigned peer

categories and the asset values used to derive these rankings are sourced from the applicable fund rating provider. Where applicable, the fund rating providers redenominate asset values into U.S. dollars. The percentage of AUM is based on star ratings at the share class level for U.S.-domiciled funds, and at a "primary share class" level to represent the star rating of all other funds, except for Japan, for which Nomura provides ratings at the fund level. The performance data may have been different if all share classes had been included. Past performance is not indicative of future results.

Percentage of mutual fund assets under management in funds ranked in the 1st or 2nd quartile (one, three, and five years): All quartile rankings, the assigned peer categories and the asset values used to derive these rankings are sourced from the fund rating providers. Quartile rankings are based on the net-of-fee absolute return of each fund. Where applicable, the fund rating providers redenominate asset values into U.S. dollars. The percentage of AUM is based on fund performance and associated peer rankings at the share class level for U.S.-domiciled funds, at a "primary share class" level to represent the quartile ranking for U.K., Luxembourg and Hong Kong funds and at the fund level for all other funds. The performance data may have been different if all share classes had been included. Past performance is not indicative of future results.

"Primary share class" means the C share class for European funds and Acc share class for Hong Kong and Taiwan funds. If these share classes are not available, the oldest share class is used as the primary share class.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Refer to the Market Risk Management section of Management's discussion and analysis and pages 131-138 of JPMorgan Chase's 2022 Form 10-K for a discussion of the quantitative and qualitative disclosures about market risk.

Item 4. Controls and Procedures.

As of the end of the period covered by this report, an evaluation was carried out under the supervision and with the participation of the Firm's management, including its Chairman and Chief Executive Officer and its Chief Financial Officer, of the effectiveness of its disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934). Based on that evaluation, the Chairman and Chief Executive Officer and the Chief Financial Officer concluded that these disclosure controls and procedures were effective. Refer to Exhibits 31.1 and 31.2 for the Certifications furnished by the Chairman and Chief Executive Officer and Chief Financial Officer, respectively.

The Firm is committed to maintaining high standards of internal control over financial reporting. Nevertheless, because of its inherent limitations, internal control over financial reporting may not prevent or detect all misstatements. Deficiencies or lapses in internal controls may occur from time to time, and there can be no assurance that any such deficiencies will not result in significant deficiencies or material weaknesses in internal control in the future and collateral consequences therefrom. Refer to "Management's report on internal control over financial reporting" on page 155 of JPMorgan Chase's 2022 Form 10-K for further information.

On May 1, 2023, the Firm acquired certain assets and assumed certain liabilities of First Republic Bank from the FDIC. The Firm has included internal controls over these acquired assets and assumed liabilities in its evaluation of the effectiveness of disclosure controls and procedures. Otherwise, there was no change in the Firm's internal control over financial reporting (as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934) that occurred during the three months ended June 30, 2023, that has materially affected, or is reasonably likely to materially affect, the Firm's internal control over financial reporting.

Part II - Other Information

Item 1. Legal Proceedings.

Refer to the discussion of the Firm's material legal proceedings in Note 26 of this Form 10-Q for information that updates the disclosures set forth under Part I, Item 3: Legal Proceedings, in JPMorgan Chase's 2022 Form 10-K.

Item 1A. Risk Factors.

The following discussion supplements the discussion of risk factors affecting the Firm as set forth in Part I, Item 1A: Risk Factors on pages 9-32 of JPMorgan Chase's 2022 Form 10-K and Forward-Looking Statements on page 95 of this Form 10-Q. The discussion of risk factors, as so supplemented, sets forth the material risk factors that could affect JPMorgan Chase's financial condition and operations. Readers should not consider any descriptions of such factors to be a complete set of all potential risks that could affect the Firm.

JPMorgan Chase's acquisition of certain assets and liabilities of First Republic Bank may not result in all of the benefits anticipated.

On May 1, 2023, JPMorgan Chase Bank, N.A. acquired certain assets and assumed certain liabilities of First Republic Bank from the FDIC (the "First Republic acquisition"). There can be no assurance that the First Republic acquisition will have the anticipated positive results, including with respect to:

- · the total cost of integration
- the time required to complete the integration
- the amount of longer-term cost savings
- the overall performance of the assets and liabilities acquired in the First Republic acquisition, or
- · an improved price for JPMorgan Chase's common stock.

Integration of an acquired business can be complex and costly, and typically will involve the combination of relevant accounting and data processing systems and management controls, as well as managing relevant relationships with employees, clients, suppliers and other business partners. Integration efforts could divert management attention and resources, which could adversely affect JPMorgan Chase's operations or results. In addition, JPMorgan Chase could incur unanticipated costs or losses in connection with the First Republic acquisition and its integration efforts.

Acquisitions may also result in business disruptions that cause JPMorgan Chase to lose clients and customers, or cause clients and customers to move their business to competing financial institutions. It is possible that the integration process could result in the disruption of ongoing businesses or inconsistencies in standards, controls, procedures and policies that could adversely affect JPMorgan Chase's ability to maintain relationships with clients, customers, depositors and employees. In addition, the loss of key employees in connection with the First Republic acquisition could adversely affect JPMorgan Chase's ability to successfully conduct its business.

Supervision and regulation

Refer to the Supervision and regulation section on pages 4–8 of JPMorgan Chase's 2022 Form 10-K for information on Supervision and Regulation.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

The Firm did not have any unregistered sale of equity securities during the three months ended June 30, 2023.

Repurchases under the common share repurchase program Refer to Capital Risk Management on pages 48-53 of this Form 10-Q and pages 86-96 of JPMorgan Chase's 2022 Form 10-K for information regarding repurchases under the Firm's common share repurchase program

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

Shares repurchased pursuant to the common share repurchase program during the six months ended June 30, 2023 were as follows.

Six months ended June 30, 2023	Total number of shares of common stock repurchased	ge price paid per of common stock(a)	egate purchase price of non stock repurchases (in millions)(a)	lar value of remaining ithorized repurchase (in millions)(a)(b)
First quarter	21,995,253	\$ 133.67	\$ 2,940	\$ 26,693
April	5,327,553	\$ 134.39	\$ 716	\$ 25,977
May	6,251,030	136.77	855	25,122
June	5,132,716	140.66	722	24,400
Second quarter	16,711,299	\$ 137.20	\$ 2,293	\$ 24,400
Year-to-date	38,706,552	\$ 135.19	\$ 5,233	\$ 24,400

- (a) Excludes excise tax and commissions cost. As part of the Inflation Reduction Act of 2022, a 1% excise tax was imposed on net share repurchases effective January 1, 2023. (b) Represents the amount remaining under the \$30 billion repurchase program

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

Director and executive officer trading arrangements

The following table provides information concerning Rule 10b5-1 trading arrangements adopted in the second quarter of 2023 by any director or any executive officer who is subject to the filing requirements of Section 16 of the Securities Exchange Act of 1934. These trading arrangements are intended to satisfy the affirmative defense of Rule 10b5-1(c). Certain of the Firm's directors and executive officers may participate in employee stock purchase plans, 401(k) plans or dividend reinvestment plans of the Firm that have been designed to comply with Rule 10b5-1(c). No non-Rule 10b5-1 trading arrangements were adopted by any director or executive officer during the second quarter of 2023. Additionally, no Rule 10b5-1 or non-Rule 10b5-1 trading arrangements were terminated by any director or executive officer in the second quarter of 2023.

Name	Title	Adoption date	Duration ^(a)	Aggregate number of shares to be sold
Stacey Friedman	General Counsel	May 6, 2023	May 6, 2023 - December 29, 2023	8,620
Marianne Lake	Co-CEO, COB	May 12, 2023	May 12, 2023 - December 29, 2023	32,243

⁽a) Subject to compliance with Rule 10b5-1, duration could cease earlier than the final date shown above to the extent that the aggregate number of shares to be sold under the trading arrangement have been sold.

Iran threat reduction disclosure

Pursuant to Section 219 of the Iran Threat Reduction and Syria Human Rights Act of 2012, which added Section 13(r) to the Securities Exchange Act of 1934, an issuer is required to disclose in its annual or quarterly reports, as applicable, whether it or any of its affiliates knowingly engaged in certain activities, transactions or dealings relating to Iran or with individuals or entities designated pursuant to certain Executive Orders. Disclosure may be required even where the activities, transactions or dealings were conducted in compliance with applicable law. As of the date of this report, the Firm is not aware of any activity, transaction or dealing by any of its affiliates during the quarter ended June 30, 2023 that requires disclosure under Section 219.

During the first guarter of 2023, a foreign-incorporated subsidiary of JPMorgan Chase & Co. processed a transaction in the amount of EUR 9.90 for its client, a non-U.S. subsidiary of a U.S. insurance provider, where the transaction originated from an external account held by an individual designated under 31 C.F.R. Part 594. The transaction, which was received into the client's account held at the foreign-incorporated subsidiary of JPMorgan Chase & Co., was for the premium of a non-life insurance product that is now suspended and no funds were made available to the designated individual. The transaction was processed in error. JPMorgan Chase & Co. charged a fee of \$0.006 for this transaction. JPMorgan Chase & Co. does not intend to engage in such transactions in the future.

Item 6. Exhibits.

Exhibit No.	Description of Exhibit
15	Letter re: Unaudited Interim Financial Information.(a)
22	Subsidiary Guarantors and Issuers of Guaranteed Securities. (a)
31.1	Certification.(a)
31.2	Certification.(a)
32	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.(b)
101.INS 101.SCH 101.CAL 101.DEF 101.LAB 101.PRE	The instance document does not appear in the interactive data file because its XBRL tags are embedded within the Inline XBRL document. (c) XBRL Taxonomy Extension Schema Document. (a) XBRL Taxonomy Extension Calculation Linkbase Document. (a) XBRL Taxonomy Extension Definition Linkbase Document. (a) XBRL Taxonomy Extension Label Linkbase Document. (a) XBRL Taxonomy Extension Presentation Linkbase Document. (a)
104	Cover Page Interactive Data File (embedded within the Inline XBRL document and included in Exhibit 101).

⁽a) Filed herewith.
(b) Furnished herewith. This exhibit shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, or otherwise subject to the liability of that Section. Such exhibit shall not be deemed incorporated into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934.
(c) Pursuant to Rule 405 of Regulation S-T, includes the following financial information included in the Firm's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2023, formatted in XBRL (eXtensible Business Reporting Language) interactive data files: (i) the Consolidated statements of income (unaudited) for the three and six months ended June 30, 2023 and 2022, (ii) the Consolidated statements of comprehensive income (unaudited) for the three and six months ended June 30, 2023 and 2022, (iii) the Consolidated statements of changes in stockholders' equity (unaudited) for the three and six months ended June 30, 2023, and 2022, (v) the Consolidated statements of cash flows (unaudited) for the six months ended June 30, 2023 and 2022, and (vi) the Notes to Consolidated Financial Statements (unaudited).

SIGNATURE

	JPMorgan Chase & Co.
	(Registrant)
By:	/s/ Elena Korablina
	Elena Korablina
	Managing Director and Firmwide Controller
	(Principal Accounting Officer)

Date: August 3, 2023