JPMORGAN CHASE & CO
Form 10-Q
November 01, 2016

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	Commission file
September 30, 2016	number 1-5805

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

Delaware	13-2624428
(State or other jurisdiction of incorporation or organization)	(I.R.S. employer identification no.)
270 Park Avenue, New York, New York	10017
(Address of principal executive offices)	(Zip Code)

Registrant’s telephone number, including area code: (212) 270-6000

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).
x Yes o No
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer x	Accelerated filer o
Non-accelerated filer (Do not check if a smaller reporting company) o	Smaller reporting company o

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

Number of shares of common stock outstanding as of September 30, 2016: 3,578,264,278

FORM 10-Q
TABLE OF CONTENTS

JPMorgan Chase & Co.
Consolidated financial highlights
(unaudited)

As of or for the period ended, (in millions, except share, ratio, headcount data and where otherwise noted)	3Q16	2Q16	1Q16	4Q15	3Q15	Nine months ended September 30, 2016	2015
Selected income statement data							
Total net revenue	$24,673	$24,380	$23,239	$22,885	$22,780	$72,292	$70,658
Total noninterest expense	14,463	13,638	13,837	14,263	15,368	41,938	44,751
Pre-provision profit	10,210	10,742	9,402	8,622	7,412	30,354	25,907
Provision for credit losses	1,271	1,402	1,824	1,251	682	4,497	2,576
Income before income tax expense	8,939	9,340	7,578	7,371	6,730	25,857	23,331
Income tax expense/(benefit)	2,653	3,140	2,058	1,937	(74)	7,851	4,323
Net income	$6,286	$6,200	$5,520	$5,434	$6,804	$18,006	$19,008
Earnings per							

share data							
Net income: Basic	$1.60	$1.56	$1.36	$1.34	$1.70	$4.51	$4.72
Diluted	1.58	1.55	1.35	1.32	1.68	4.48	4.68
Average shares: Basic	3,597.4	3,635.8	3,669.9	3,674.2	3,694.4	3,634.4	3,709.2
Diluted	3,629.6	3,666.5	3,696.9	3,704.6	3,725.6	3,664.3	3,742.2
Market and per common share data							
Market capitalization	238,277	224,449	216,547	241,899	224,438	238,277	224,438
Common shares at period-end	3,578.3	3,612.0	3,656.7	3,663.5	3,681.1	3,578.3	3,681.1
Share price[a]: High	$67.90	$66.20	$64.13	$69.03	$70.61	$67.90	$70.61
Low	58.76	57.05	52.50	58.53	50.07	52.50	50.07
Close	66.59	62.14	59.22	66.03	60.97	66.59	60.97
Book value per share	63.79	62.67	61.28	60.46	59.67	63.79	59.67
Tangible book value per share (“TBVPS”)[b]	51.23	50.21	48.96	48.13	47.36	51.23	47.36
Cash dividends declared per share	0.48	0.48	0.44	0.44	0.44	1.40	1.28
Selected ratios and metrics							
Return on common equity (“ROE”)	10 %	10 %	9 %	9 %	12 %	10 %	11 %

Return on tangible common equity (“ROTCE”)[b]	13	13	12	11	15	13	14
Return on assets (“ROA”)	1.01	1.02	0.93	0.90	1.11	0.99	1.02
Overhead ratio	59	56	60	62	67	58	63
Loans-to-deposits ratio	65	66	64	65	64	65	64
High quality liquid assets (“HQLA”) (in billions)[c]	$539	$516	$505	$496	$505	$539	$505
Common equity Tier 1 (“CET1”) capital ratio[d]	12.0%	12.0 %	11.9%	11.8 %	11.5 %	12.0 %	11.5 %
Tier 1 capital ratio[d]	13.6	13.6	13.5	13.5	13.3	13.6	13.3
Total capital ratio[d]	15.1	15.2	15.1	15.1	14.9	15.1	14.9
Tier 1 leverage ratio[d]	8.5	8.5	8.6	8.5	8.4	8.5	8.4
Selected balance sheet data (period-end)							
Trading assets	$374,837	$380,793	$366,153	$343,839	$361,708	$374,837	$361,708
Securities	272,401	278,610	285,323	290,827	306,660	272,401	306,660
Loans	888,054	872,804	847,313	837,299	809,457	888,054	809,457
Core loans	795,077	775,813	746,196	732,093	698,988	795,077	698,988
	779,383	760,721	737,297	715,282	680,224	759,207	655,753

Average core loans							
Total assets	2,521,029	2,466,096	2,423,808	2,351,698	2,416,635	2,521,029	2,416,635
Deposits	1,376,138	1,330,958	1,321,816	1,279,715	1,273,106	1,376,138	1,273,106
Long-term debt(e)	309,418	295,627	290,754	288,651	292,503	309,418	292,503
Common stockholders' equity	228,263	226,355	224,089	221,505	219,660	228,263	219,660
Total stockholders' equity	254,331	252,423	250,157	247,573	245,728	254,331	245,728
Headcount	242,315	240,046	237,420	234,598	235,678	242,315	235,678
Credit quality metrics							
Allowance for credit losses	$15,304	$15,187	$15,008	$14,341	$14,201	$15,304	$14,201
Allowance for loan losses to total retained loans	1.61%	1.64%	1.66%	1.63%	1.67%	1.61%	1.67%
Allowance for loan losses to retained loans excluding purchased credit-impaired loans(f)	1.37	1.40	1.40	1.37	1.40	1.37	1.40
Nonperforming assets	$7,779	$7,757	$8,023	$7,034	$7,294	$7,779	$7,294
Net charge-offs	1,121	1,181	1,110	1,064	963	3,412	3,022
Net charge-off rate	0.51%	0.56%	0.53%	0.52%	0.49%	0.53%	0.53%

Note: Effective January 1, 2016, the Firm adopted new accounting guidance related to (1) the recognition and measurement of debit valuation adjustments ("DVA") on financial liabilities where the fair value option has been elected, and (2) the accounting for employee stock-based incentive payments. For additional information, see

Accounting and Reporting Developments on pages 82–83 and Notes 3, 4, and 19.

(a) Share prices shown for JPMorgan Chase's common stock are from the New York Stock Exchange.

(b) TBVPS and ROTCE are considered key financial performance measures. For further discussion of these measures, see Explanation and Reconciliation of the Firm's Use of Non-GAAP Financial Measures and Key Financial Performance Measures on pages 16–17.

(c) HQLA represents the amount of assets that qualify for inclusion in the liquidity coverage ratio under the final U.S. rule ("U.S. LCR"). For additional information, see HQLA on page 74.

(d) Ratios presented are calculated under the Basel III Transitional capital rules and represent the Collins Floor. See Capital Management on pages 67–73 for additional information on Basel III.

(e) Included unsecured long-term debt of $226.8 billion, $220.6 billion, $216.1 billion, $211.8 billion and $214.6 billion at September 30, 2016, June 30, 2016, March 31, 2016, December 31, 2015 and September 30, 2015, respectively.

(f) Excluded the impact of residential real estate purchased credit-impaired ("PCI") loans, a non-GAAP financial measure. For further discussion of these measures, see Explanation and Reconciliation of the Firm's Use of Non-GAAP Financial Measures and Key Performance Measures on pages 16–17. For further discussion, see Allowance for credit losses on pages 57–59.

INTRODUCTION

The following is management's discussion and analysis ("MD&A") of the financial condition and results of operations of JPMorgan Chase & Co. ("JPMorgan Chase" or the "Firm") for the third quarter of 2016.

This Form 10-Q should be read in conjunction with JPMorgan Chase's Annual Report on Form 10-K for the year ended December 31, 2015, filed with the U.S. Securities and Exchange Commission ("2015 Annual Report" or 2015 "Form 10-K"), to which reference is hereby made. See the Glossary of terms and acronyms on pages 172–176 for definitions of terms and acronyms used throughout this Form 10-Q.

The MD&A included in this Form 10-Q contains statements that are forward-looking within the meaning of the Private Securities Litigation Reform Act of 1995. These statements are based on the current beliefs and expectations of JPMorgan Chase's management and are subject to significant risks and uncertainties. Actual results may differ from those set forth in the forward-looking statements. 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, see Forward-looking Statements on page 84 of this Form 10-Q and Part I, Item 1A, Risk Factors, on pages 8–18 of JPMorgan Chase's 2015 Annual Report.

JPMorgan Chase & Co., a financial holding company incorporated under Delaware law in 1968, is a leading global financial services firm and one of the largest banking institutions in the United States of America ("U.S."), with operations worldwide; the Firm had $2.5 trillion in assets and $254.3 billion in stockholders' equity as of September 30, 2016. 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 in the U.S. and many of the world's most prominent corporate, institutional and government clients.

JPMorgan Chase's principal bank subsidiaries are JPMorgan Chase Bank, National Association ("JPMorgan Chase Bank, N.A."), a national banking association with U.S. branches in 23 states, and Chase Bank USA, National Association ("Chase Bank USA, N.A."), a national banking association that is the Firm's credit card-issuing bank. JPMorgan Chase's principal nonbank subsidiary is J.P. Morgan Securities LLC ("JPMorgan Securities"), the Firm's U.S. investment banking firm. The bank and nonbank subsidiaries of JPMorgan Chase operate nationally as well as through overseas branches and subsidiaries, representative offices and subsidiary foreign banks. One of the Firm's principal operating subsidiaries in the United Kingdom ("U.K.") is J.P. Morgan Securities plc, a subsidiary of JPMorgan Chase Bank, N.A.

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 is the Consumer & Community Banking ("CCB") segment. The Firm's wholesale business segments are Corporate & Investment Bank ("CIB"), Commercial Banking ("CB"), and Asset Management ("AM"). For a description of the Firm's business segments, and the products and services they provide to their respective client bases, refer to Note 33 of JPMorgan Chase's 2015 Annual Report.

EXECUTIVE OVERVIEW

This executive overview of the MD&A highlights selected information and may 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 and its various lines of business, this Form 10-Q should be read in its entirety.

Financial performance of JPMorgan Chase (unaudited) As of or for the period ended, (in millions, except per share data and ratios)	Three months ended September 30, 2016	2015	Change	Nine months ended September 30, 2016	2015	Change
Selected income statement data						
Total net revenue	$24,673	$22,780	8 %	$72,292	$70,658	2%
Total noninterest expense	14,463	15,368	(6)	41,938	44,751	(6)
Pre-provision profit	10,210	7,412	38	30,354	25,907	17
Provision for credit losses	1,271	682	86	4,497	2,576	75
Net income	6,286	6,804	(8)	18,006	19,008	(5)
Diluted earnings per share	$1.58	$1.68	(6)%	$4.48	$4.68	(4)%
Selected ratios and metrics						
Return on common equity	10 %	12 %		10 %	11 %	
Return on tangible common equity	13	15		13	14	
Tangible book value per share	$51.23	$47.36	8 %	$51.23	$47.36	8%
Capital ratios[(a)]						
CET1	12.0 %	11.5 %		12.0 %	11.5 %	
Tier 1 capital	13.6	13.3		13.6	13.3	

(a) Ratios presented are calculated under the transitional Basel III rules and represent the Collins Floor. See Capital Management on pages 67–73 for additional information on Basel III.

Business Overview

JPMorgan Chase reported strong results in the third-quarter of 2016 with net income of $6.3 billion, or $1.58 per share, on net revenue of $24.7 billion. The Firm reported ROE of 10% and ROTCE of 13%.

Net income declined 8% compared with the prior-year reflecting higher income tax expense in the current quarter. The prior-year quarter included tax benefits of $2.2 billion due to the resolution of tax audits and the release of deferred taxes.

Total net revenue increased 8% compared with the prior-year. Net interest income was $11.6 billion, up 6%, primarily driven by loan growth and the net impact of higher interest rates, partially offset by lower investment securities balances. Noninterest revenue was $13.1 billion, up 10%, primarily driven by higher Markets and Investment Banking revenue in CIB.

Noninterest expense was $14.5 billion, down 6% compared with the prior-year, driven by lower legal expense, partially offset by higher compensation expense.

The provision for credit losses was $1.3 billion, an increase from $682 million, reflecting an increase in the allowance for credit losses in the current quarter compared with a decrease in the prior-year. The consumer provision reflected an increase in the allowance for credit losses of approximately $225 million, reflecting loan growth in the credit card portfolio, including newer vintages which, as anticipated, have higher loss rates compared to the overall portfolio. The wholesale provision was a benefit, primarily driven by a net allowance reduction of approximately $50 million in the Oil & Gas portfolio.

The total allowance for credit losses was $15.3 billion at September 30, 2016, and the Firm had a loan loss coverage ratio, excluding the PCI portfolio, of 1.37%, compared with 1.40% in the prior-year. The Firm’s nonperforming assets totaled $7.8 billion, an increase from the prior-year level of $7.3 billion.

Firmwide average core loans increased 15% compared with the prior-year quarter and increased 2% compared with the second quarter of 2016.

Within CCB, average core loans increased 19% from the prior-year. CCB had record growth in average deposits, an increase of $58 billion, or 11%, from the prior-year. Credit card sales volume increased 10%, and merchant processing volume increased 13%, from the prior-year. CCB had 26 million active mobile customers in the third quarter of 2016, an increase of 17% from the prior-year.

CIB maintained its #1 ranking for Global Investment Banking fees with a 8.1% wallet share for the nine months ended September 30, 2016. Within CB, average loans increased 14% from the prior-year as loans in the commercial and industrial client segment increased 10% and loans in the commercial real estate client segment increased 19%. AM had record average loans, an increase of 5% over the prior-year, and 80% of AM's mutual fund assets under management ranked in the 1st or 2nd quartiles over the past 5 years.

For a detailed discussion of results by line of business, refer to the Business Segment Results on pages 18–40.

The Firm added to its capital, ending the third quarter of 2016 with a TBVPS of $51.23, up 8% over the prior-year. The Firm's estimated Basel III Advanced Fully Phased-In CET1

capital and ratio were $181 billion and 11.9%, respectively. The Fully Phased-In supplementary leverage ratio ("SLR") for the Firm and for JPMorgan Chase Bank, N.A. were each 6.6% at September 30, 2016. The Firm also was compliant with the Fully Phased-In U.S. LCR and had $539 billion of HQLA as of September 30, 2016. For further discussion of the liquidity coverage ratio ("LCR") and HQLA, see Liquidity Risk Management on pages 74–78.
ROTCE, TBVPS and core loans are considered key financial performance measures. Each of the Fully Phased-In capital and leverage measures is considered a key regulatory capital measure. For a further discussion of these measures, see Explanation and Reconciliation of the Firm's Use of Non-GAAP Financial Measures and Key Performance Measures on pages 16–17, and Capital Management on pages 67–73.
JPMorgan Chase continues to support consumers, businesses and communities around the globe. The Firm provided credit and raised capital of $1.7 trillion for commercial and consumer clients during the first nine months of 2016:

- $195 billion of credit for consumers
- $18 billion of credit for U.S. small businesses
- $555 billion of credit for corporations
- $895 billion of capital raised for corporate clients and non-U.S. government entities
- $74 billion of credit and capital raised for nonprofit and U.S. government entities, including states, municipalities, hospitals and universities

Regulatory and business developments
On October 1, 2016, the Firm filed with the Federal Reserve and the Federal Deposit Insurance Corporation ("FDIC") its submission (the "2016 Resolution Submission"), describing how the Firm remediated the deficiencies and providing a status report of its actions to address the shortcomings identified by the agencies in the Firm's 2015 Resolution Plan and communicated to the Firm in April 2016. On October 4, 2016, the two agencies made public a subsection of that submission which is available on the FDIC's and Federal Reserve's websites, as well on the Firm's website. As previously disclosed, in April 2016, the Federal Reserve and the FDIC jointly provided firm-specific feedback on the 2015 Resolution Plans of eight systemically important domestic banking institutions, and determined that five of these 2015 Resolution Plans, including that of the Firm, were not credible or would not facilitate an orderly resolution under the U.S. Bankruptcy Code, as provided under the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"). In addition to the deficiencies in the Firm's 2015 Resolution Plan identified by the agencies, the FDIC and Federal Reserve also identified certain shortcomings which were required to be satisfactorily addressed in the Firm's Resolution Plan due on July 1, 2017.
The Firm has taken several steps to address the FDIC's and Federal Reserve's feedback, including, among other actions, increasing its liquidity reserves and pre-positioning significant amounts of capital and liquidity at the Firm's "material legal entities" (as defined in its 2016 Resolution Submission); the establishment of a new subsidiary that will become an "intermediate holding company" and will have

contributed to it the stock of substantially all of JPMorgan Chase & Co.'s direct subsidiaries (other than JPMorgan Chase Bank, N.A.), as well as other assets and intercompany indebtedness owing to JPMorgan Chase & Co., made refinements to the Firm's liquidity and capital governance frameworks; and created a Firm-wide "trigger framework" that identifies key actions and escalations that would need to be taken, as well as decisions that would need to be made, at critical points in time if certain defined liquidity and/or capital metrics fall below defined thresholds. The FDIC and the Federal Reserve are reviewing the 2016 Resolution Submission to assess whether the Firm has adequately addressed and remediated the identified deficiencies. If the FDIC and the Federal Reserve jointly conclude that the Firm has not adequately remediated the identified deficiencies, the two agencies may jointly impose more stringent capital or liquidity requirements on the Firm as well as restrictions on the growth, activities or operations of the Firm or its subsidiaries.
Various regulatory and governmental agencies have made inquiries to the Firm about its sales practices with retail customers, including, among other matters, the Firm's incentive-compensation structures related to such sales practices. The Firm is responding to these inquiries.
On October 3, 2016, the Firm implemented Securities and Exchange Commission ("SEC") rules governing money-market funds requiring a floating net asset value be calculated for institutional prime money-market funds. As a result of these new rules, the Firm experienced increased client activity in the third quarter and transfers from certain

money-market funds into government funds and deposit products.
On October 13, 2016 the IRS issued final and temporary regulations under Section 385 of the U.S. Internal Revenue Code dealing with the recharacterization of certain related-party debt as equity for U.S. income tax purposes. These regulations significantly narrowed the scope of the proposed regulations, which were issued in April 2016. As revised, the regulations should not have a meaningful impact to the Firm.
Beginning September 1, 2016, rules promulgated by U.S. prudential regulators and the Commodity Futures Trading Commission ("CFTC") requiring both the collecting and posting of variation margin and initial margin in respect of non-centrally cleared derivatives, inclusive of inter-affiliate transactions, became effective. The Firm has implemented the requirements of the rules that have become effective.
On June 23, 2016, the U.K. conducted a referendum and voted to leave the European Union. Many international banks, including the Firm, operate substantial parts of their European Union businesses from entities based in the U.K. Upon the U.K. leaving the European Union, the regulatory and legal environment that would then exist, and to which the Firm’s U.K. operations would then be subject, will depend on, in certain respects, the nature of the arrangements agreed to with the European Union and other trading partners.
These arrangements cannot be predicted, but currently the Firm does not believe any of the likely identified scenarios would threaten the viability of the Firm’s business units or

the Firm's ability to serve clients across the European Union and in the U.K. However, it is possible that under some scenarios, changes to the Firm's legal entity structure and operations would be required, which might result in a less efficient operating model across the Firm's European legal entities.

On June 29, 2016, the Federal Reserve informed the Firm that it did not object, on either a quantitative or qualitative basis, to the Firm's 2016 capital plan, submitted under the Comprehensive Capital Analysis and Review ("CCAR"). For additional information see Capital Management on pages 67–73.

On April 6, 2016, the U.S. Department of Labor ("DOL") issued its final "fiduciary" rule. The rule will deem many of the investment, rollover and asset management recommendations from broker-dealers, banks and other financial institutions to clients regarding their individual retirement accounts and other retirement accounts fiduciary "investment advice" under the Employee Retirement Income Security Act of 1974 ("ERISA"), as amended. Among the most significant impacts of the rule and related prohibited transaction exemptions will be the impact on the fee and compensation practices at financial institutions and on certain fee and revenue sharing arrangements among funds, fund sponsors and the financial institutions that offer investment advice to retail retirement clients. The related exemptions may require new client contracts, adherence to "impartial conduct" standards (including a requirement to act in the "best interest" of retirement clients) the adoption of related policies and procedures, as well as website and other disclosures to both investors and the DOL. The Firm believes it will be able to conform its business practices to meet the requirements of the new rule and exemptions within the prescribed time periods.

In March 2016, the Basel Committee proposed revisions to the operational and credit risk capital frameworks of Basel III and in April 2016, proposed a recalibration of the leverage ratio, changes to the definition of defaulted assets and finalized the treatment of interest rate risk in the banking book. As these proposals are finalized by the Basel Committee, U.S. banking regulators will propose requirements applicable to U.S. financial institutions. In March 2016, the Federal Reserve Board released a revised proposal to establish single-counterparty credit limits for large U.S. bank holding companies and foreign banking organizations. The Firm continues to assess the impacts as the proposed rules are finalized and will make appropriate adjustments to its businesses in response to these and other ongoing developments in regulatory requirements.

Business 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 and are subject to significant risks and uncertainties. These risks and uncertainties could cause the Firm's actual results to differ materially from those set forth in such forward-looking statements. See Forward-Looking Statements on page 84 of this Form 10-Q and Risk Factors on

pages 8–18 of JPMorgan Chase's 2015 Annual Report. There is no assurance that actual results for the full year of 2016 will be in line with the outlook set forth below, and the Firm does not undertake to update any of these forward-looking statements to reflect the impact of circumstances or events that arise after the date hereof.

JPMorgan Chase's outlook for the remainder of 2016 should be viewed against the backdrop of the global and U.S. economies, financial markets activity, the geopolitical environment, the competitive environment, client activity levels, and regulatory and legislative developments in the U.S. and other countries where the Firm does business. Each of these interrelated factors will affect the performance of the Firm and its lines of business. The Firm expects it will continue to make appropriate adjustments to its businesses and operations in response to ongoing developments in the legal and regulatory, as well as business and economic, environment in which it operates.

Management expects fourth quarter 2016 managed net interest income to be modestly higher than in the third quarter of 2016, reflecting continued strong loan growth. Management expects average core loans to be up approximately 15% for the full year 2016 compared to the prior-year, at the higher end of the previously disclosed range.

Management also expects fourth quarter 2016 managed noninterest revenue to decline compared to the third quarter of 2016, reflecting anticipated lower markets revenue, seasonally lower Mortgage Banking Revenue and higher Card new account origination costs.

The Firm continues to experience charge-offs at levels lower than its through-the-cycle expectations reflecting favorable credit trends across the consumer and wholesale portfolios (excluding the Oil & Gas and Metals & Mining portfolios). Management expects total net charge-offs of up to approximately $4.75 billion for full year 2016, with the

increase from 2015 levels driven by loan growth as well as higher charge-offs in the Oil & Gas portfolio.
The Firm continues to take a disciplined approach to managing its expenses, while investing in growth and innovation. The Firm intends to leverage its scale and improve its operating efficiencies in order to reinvest its expense savings in additional technology and marketing investments and fund other growth initiatives. As a result, the Firm expects adjusted expense for full year 2016 to be approximately $56 billion (excluding Firmwide legal expense).
In Card, Commerce Solutions & Auto, management expects revenue to decline approximately $200 million in the fourth quarter of 2016 compared to the third quarter of 2016, driven by higher Card new account origination costs on strong, but tapering demand for Sapphire Reserve through the fourth quarter of 2016; actual results will be dependent on the number of new accounts originated.
In CIB, for the fourth quarter of 2016, management expects Securities Services revenue to be approximately $875 million, depending on market conditions.

CONSOLIDATED RESULTS OF OPERATIONS

This section provides a comparative discussion of JPMorgan Chase's Consolidated Results of Operations on a reported basis for the three and nine months ended September 30, 2016 and 2015, unless otherwise specified. Factors that relate primarily to a single business segment are discussed in more detail within that business segment. For a discussion of the Critical Accounting Estimates Used by the Firm that affect the Consolidated Results of Operations, see pages 80–81 of this Form 10-Q and pages 165–169 of JPMorgan Chase's 2015 Annual Report.

Revenue

	Three months ended September 30,			Nine months ended September 30,		
(in millions)	2016	2015	Change	2016	2015	Change
Investment banking fees	$1,866	$1,604	16 %	$4,843	$5,231	(7)%
Principal transactions[(a)]	3,451	2,367	46	9,106	8,856	3
Lending- and deposit-related fees	1,484	1,463	1	4,290	4,244	1
Asset management, administration and commissions	3,597	3,845	(6)	10,902	11,667	(7)
Securities gains	64	33	94	136	129	5
Mortgage fees and related income	624	469	33	1,980	1,957	1
Card income	1,202	1,447	(17)	3,861	4,493	(14)
Other income[(b)]	782	628	25	2,844	1,796	58
Noninterest revenue	13,070	11,856	10	37,962	38,373	(1)
Net interest income	11,603	10,924	6	34,330	32,285	6
Total net revenue	$24,673	$22,780	8%	$72,292	$70,658	2%

(a) Effective January 1, 2016, changes in DVA on fair value option elected liabilities previously recorded in principal transactions revenue are recorded in other comprehensive income ("OCI"). For additional information, see the segments results of CIB and Accounting and Reporting Developments on pages 25–30 and pages 82–83, respectively.

(b) Included operating lease income of $708 million and $536 million for the three months ended September 30, 2016 and 2015, respectively, and $2.0 billion and $1.5 billion for the nine months ended September 30, 2016 and 2015, respectively.

Quarterly results

Total net revenue increased by 8% primarily reflecting higher noninterest revenue driven by strong performance in CIB, and higher net interest income in the Firm's reportable business segments.

Investment banking fees increased reflecting strong performance across products. Equity underwriting fees increased primarily driven by growth in industry-wide issuance, with a stable market backdrop and strong investor demand; debt underwriting fees increased reflecting strong industry-wide bond issuance; and advisory fees increased driven by a greater share of fees for completed transactions. For additional information on investment banking fees, see CIB segment results on pages 25–30, CB segment results on pages 31–34 and Note 6.

Principal transactions revenue increased reflecting broad-based strength across products in CIB's Fixed Income Markets business. Rates performance was particularly strong, as markets remained active throughout the quarter, post the Brexit vote and in anticipation of central bank actions and the new rules governing money market funds. Credit and Securitized Products revenue was also higher, driven by improving market sentiment across primary and secondary markets which produced robust issuance volumes and strong client trading activity. The increase in the Fixed Income Markets business was partially offset by the net results in Credit Adjustments & Other, which had a loss of $149 million in 2016 primarily driven by derivative valuation adjustments; the prior year had a $154 million gain, which included funding spread gains on fair value option elected liabilities. For additional information on principal transactions revenue, see CIB segment results on pages 25–30 and Note 6.

Lending- and deposit-related fees were relatively flat. For information on lending- and deposit-related fees, see the segment results for CCB on pages 19–24, CIB on pages 25–30, and CB on pages 31–34.

Asset management, administration and commissions revenue decreased reflecting lower performance fees in AM, and lower brokerage commissions in CIB. For additional information on these fees and commissions, see the segment discussions of CCB on pages 19–24, AM on pages 35–38 and Note 6.

Mortgage fees and related income increased due to higher mortgage servicing rights ("MSR") risk management results and higher net production revenue on higher margins, partially offset by lower servicing revenue predominantly as a result of a lower level of third party loans serviced. For further information on mortgage fees and related income, see the segment discussion of CCB on pages 19–24 and Note 16.

Card income decreased predominantly driven by higher new account origination costs, and the impact of renegotiated co-brand partnership agreements, partially offset by higher card-related fees and card sales volume. For further information, see CCB segment results on pages 19–24.

Other income increased due to higher operating lease income reflecting growth in auto operating lease assets in CCB.

Net interest income increased primarily driven by loan growth across the businesses and the net impact of higher rates, partially offset by lower investment securities balances. The Firm's average interest-earning assets and net interest yield, on a fully taxable equivalent ("FTE") basis, were $2.1 trillion and 2.24%, respectively.

Year-to-date results

Total net revenue increased by 2% primarily reflecting higher net interest income in the Firm's reportable business segments, and several gains in other income, partially offset by lower asset management fees in AM, lower investment banking fees in CIB, and lower card income in CCB.

Investment banking fees decreased due to lower equity and debt underwriting fees, partially offset by higher advisory fees. The decrease in equity and debt underwriting fees was driven by declines in industry-wide fee levels and, for debt underwriting fees, also due to fewer large acquisition financing deals. Advisory fees increased due to a greater share of fees for completed transactions.

Principal transactions revenue increased reflecting higher Fixed Income Markets revenue in Rates, Credit and Securitized Products in CIB. Rates performance was strong, with elevated market activity driven by central bank actions, and higher issuance-based flows. Credit and Securitized Products revenue improved as client risk appetite recovered driving higher primary and secondary market activity. The increase in Fixed Income Markets revenue was partially offset by the net results in Credit Adjustments & Other, which had a loss of $447 million driven by derivative valuation adjustments and wider credit spreads; the prior year had a gain of $274 million, which included funding spread gains on fair value option elected liabilities.

Lending- and deposit-related fees were relatively flat, with the increase in deposit fees associated with growth in business volume in CCB offset by lower lending-related service fees.

Asset management, administration and commissions revenue decreased reflecting the impact of weaker markets and lower performance fees in AM, and lower brokerage commissions and other fees in CIB and AM.

Mortgage fees and related income were relatively flat, with higher MSR risk management results offset by lower mortgage servicing revenue predominantly as a result of a lower level of third-party loans serviced.

Card income decreased predominantly driven by the impact of renegotiated co-brand partnership agreements and higher new account origination costs, partially offset by higher card sales volume and card-related fees. For further information, see CCB segment results on pages 19–24.

Other income increased predominantly reflecting higher operating lease income from growth in auto operating lease assets in CCB, a gain on the sale of Visa Europe interests in CCB, the impact of losses recorded in the prior year related to the accelerated amortization of cash flow hedges associated with the exit of certain non-operating deposits, and a gain on sale of an asset in AM.

Net interest income increased primarily driven by loan growth across the businesses and the net impact of higher rates, partially offset by lower investment securities balances and higher interest expense on long-term debt largely associated with hedging activity. The Firm's average interest-earning assets and net interest yield, on a FTE basis, were $2.1 trillion and 2.26%, respectively.

Provision for credit losses

	Three months ended September 30,			Nine months ended September 30,		
(in millions)	2016	2015	Change	2016	2015	Change
Consumer, excluding credit card	$262	$(389)	NM	$578	$(345)	NM
Credit card	1,038	759	37%	2,978	2,348	27%
Total consumer	1,300	370	251%	3,556	2,003	78%
Wholesale	(29)	312	NM	941	573	64%
Total provision for credit losses	$1,271	$682	86%	$4,497	$2,576	75%

Quarterly results

The provision for credit losses increased as a result of an addition to the consumer allowance for loan losses, compared with a reduction in the prior year. The addition to the consumer allowance was approximately $225 million reflecting loan growth in the credit card portfolio, including newer vintages which, as anticipated, have higher loss rates compared to the overall portfolio, as well as loan growth in the auto loan portfolio. The prior-year provision reflected a $575 million reduction in the residential real estate portfolio, due to the continued improvement in home prices and delinquencies, and increased granularity in the impairment estimates. The increase in the consumer provision for credit losses in the current quarter was partially offset by a benefit in the wholesale provision for credit losses, primarily driven by a net allowance reduction

of approximately $50 million in the Oil & Gas portfolio as a result of paydowns, loan sales, and select upgrades, partially offset by select downgrades. The prior year wholesale provision for credit losses included a net allowance increase reflecting the impact of select downgrades, including within the Oil & Gas portfolio. For a more detailed discussion of the credit portfolio and the allowance for credit losses, see the segment discussions of CCB on pages 19–24, CIB on pages 25–30, CB on pages 31–34 and the Allowance for credit losses on pages 57–59.

Year-to-date results

The provision for credit losses increased as a result of net additions to the consumer allowance for loan losses, compared with reductions in the prior year. The additions to the consumer allowance were approximately $400 million reflecting loan growth in the credit card portfolio, including newer vintages which, as anticipated, have higher loss rates compared to the overall portfolio, as well as loan growth in the auto loan portfolio; these were partially offset by reductions in the allowance for loan losses in the residential real estate portfolio due to continued improvement in home

prices and delinquencies, as well as runoff in the student loan portfolio. The prior-year provision reflected a $1.0 billion reduction in the residential real estate portfolio, due to the continued improvement in home prices and delinquencies, and increased granularity in the impairment estimates, as well as runoff in the student loan portfolio. The provision for credit losses increased also in the current period as a result of additions to the wholesale allowance for credit losses, reflecting the impact of downgrades in the Oil & Gas, Natural Gas Pipelines, and Metals & Mining portfolios.

Noninterest expense

	Three months ended September 30,			Nine months ended September 30,		
(in millions)	2016	2015	Change	2016	2015	Change
Compensation expense	$7,669	$7,320	5 %	$23,107	$23,057	—
Noncompensation expense:						
Occupancy	899	965	(7)	2,681	2,821	(5)
Technology, communications and equipment	1,741	1,546	13	5,024	4,536	11
Professional and outside services	1,665	1,776	(6)	4,913	5,178	(5)
Marketing	825	704	17	2,200	1,937	14
Other expense[(a)(b)]	1,664	3,057	(46)	4,013	7,222	(44)
Total noncompensation expense	6,794	8,048	(16)	18,831	21,694	(13)
Total noninterest expense	$14,463	$15,368	(6)%	$41,938	$44,751	(6)%

(a) Included firmwide legal expense of $(71) million and $1.3 billion for the three months ended September 30, 2016 and 2015, respectively, and $(547) million and $2.3 billion for the nine months ended September 30, 2016 and 2015, respectively

(b) Included FDIC-related expense of $360 million and $298 million for the three months ended September 30, 2016 and 2015, respectively, and $912 million and $916 million for the nine months ended September 30, 2016 and 2015, respectively.

Quarterly results

Total noninterest expense decreased by 6% driven by lower legal expense and the effect of continued expense initiatives, partially offset by higher compensation expense and investments and growth in the businesses.

Compensation expense increased predominantly driven by higher performance-based compensation expense and investments in the businesses, partially offset by the impact of continued expense reduction initiatives, including lower headcount in certain businesses.

Noncompensation expense decreased as a result of lower legal expense (including lower legal professional services expense), less utilization of contractors and reduced occupancy expense. These factors were partially offset by higher depreciation expense from growth in auto operating lease assets; higher investments in marketing; liabilities from a merchant bankruptcy in Commerce Solutions; a modest increase in reserves for mortgage servicing; and a net increase related to higher FDIC surcharges. For a further discussion of legal matters, see Note 23.

Year-to-date results

Total noninterest expense decreased by 6% driven by lower legal expense and the effect of continued expense initiatives, partially offset by investments and growth in the businesses.

Compensation expense was relatively flat, with higher performance-based compensation expense and investments in the businesses offset by the impact of continued expense reduction initiatives, including lower headcount in certain businesses.

Noncompensation expense decreased as a result of lower legal expense (including lower legal professional services expense); less utilization of contractors and reduced occupancy expense; lower regulatory-related expense; and the impact of the disposal of assets in AM. These factors were partially offset by higher depreciation expense from growth in auto operating lease assets; higher investments in marketing; liabilities from a merchant bankruptcy in Commerce Solutions; a modest increase in reserves for mortgage servicing; and the impact of a benefit recorded in the prior year from a franchise tax settlement. For a further discussion of legal matters, see Note 23.

Income tax expense

(in millions, except rate)	Three months ended September 30,			Nine months ended September 30,		
	2016	2015	Change	2016	2015	Change
Income before income tax expense	$8,939	$6,730	33 %	$25,857	$23,331	11 %
Income tax expense/(benefit)	2,653	(74)	NM	7,851	4,323	82
Effective tax rate	29.7 %	(1.1)%		30.4 %	18.5 %	

Quarterly results

The effective tax rate in the current quarter was affected by the change in mix of income and expense subject to U.S. federal and state and local taxes. The effective tax rate in 2015 was affected by $2.2 billion of tax benefits, which reduced the Firm's effective tax rate by 32.0 percentage points. The recognition of tax benefits in 2015 resulted from the resolution of various tax audits, as well as the release of U.S. deferred taxes associated with the restructuring of certain non-U.S. entities.

Year-to-date results

The effective tax rate in the current period was affected by changes in the mix of income and expense subject to U.S. federal and state and local taxes, and tax benefits from the adoption of new accounting guidance related to employee stock-based incentive payments. The effective tax rate in 2015 was affected by $2.7 billion of tax benefits, which reduced the Firm's effective tax rate by 11.7 percentage points. The recognition of tax benefits in 2015 resulted from the resolution of various tax audits, as well as the release of U.S. deferred taxes associated with the restructuring of certain non-U.S. entities. For additional details on the impact of the new accounting guidance, see Accounting and Reporting Developments on pages 82–83.

CONSOLIDATED
BALANCE
SHEETS
ANALYSIS

Consolidated balance sheets overview

The following is a discussion of the significant changes between September 30, 2016, and December 31, 2015.

Selected Consolidated balance sheets data

(in millions)	Sep 30, 2016	Dec 31, 2015	Change
Assets			
Cash and due from banks	$21,390	$20,490	4 %
Deposits with banks	396,200	340,015	17
Federal funds sold and securities purchased under resale agreements	232,637	212,575	9
Securities borrowed	109,197	98,721	11
Trading assets:			
Debt and equity instruments	309,258	284,162	9
Derivative receivables	65,579	59,677	10
Securities	272,401	290,827	(6)
Loans	888,054	837,299	6
Allowance for loan losses	(14,204)	(13,555)	5
Loans, net of allowance for loan losses	873,850	823,744	6
Accrued interest and accounts receivable	64,333	46,605	38
Premises and equipment	14,208	14,362	(1)
Goodwill	47,302	47,325	—
Mortgage servicing rights	4,937	6,608	(25)
Other intangible assets	887	1,015	(13)
Other assets	108,850	105,572	3
Total assets	$2,521,029	$2,351,698	7 %

Cash and due from banks and deposits with banks

The increase was primarily due to deposit growth and an increase in long-term debt. The Firm’s excess cash is placed with various central banks, predominantly Federal Reserve Banks.

Federal funds sold and securities purchased under resale agreements

The increase was due to the deployment of excess cash by Treasury, and higher demand for securities to cover short positions related to client-driven market-making activities in CIB. For additional information on the Firm’s Liquidity Risk Management, see pages 74–78.

Securities borrowed

The increase was driven by higher demand for securities to cover short positions related to client-driven market-making activities in CIB.

Trading assets and liabilities–debt and equity instruments

The increase in trading assets and liabilities was predominantly related to client-driven market-making activities in CIB. The increase in trading assets reflected higher debt instruments to facilitate client demand resulting in increased inventory levels, partially offset by lower equity instruments. The increase in trading liabilities reflected higher levels of short positions in both debt and equity instruments. For additional information, refer to Note 3.

Trading assets and liabilities–derivative receivables and payables

The change in derivative receivables and payables was predominantly related to client-driven market-making activities in CIB. The increase in derivative receivables reflected the impact of market movements, which increased interest rate receivables. The decrease in derivative payables reflected the impact of market movements, which reduced foreign exchange and commodity payables and increased interest rate payables.

For additional information, refer to Derivative contracts on pages 55–56, and Notes 3 and 5.

Securities

The decrease was predominantly due to net sales, maturities and paydowns of non-U.S. residential mortgage-backed securities ("MBS") and corporate debt securities reflecting a shift to loans. For additional information, see Notes 3 and 11.

Loans and allowance for loan losses

The increase in loans was driven by higher wholesale and consumer loans. The increase in wholesale loans was driven by strong originations of commercial and industrial loans in CB and CIB, and commercial real estate loans in CB. The increase in consumer loans was due to retention of originated high-quality prime mortgages in CCB and AM, and growth in auto and credit card loans in CCB.

The increase in the allowance for loan losses was attributable to additions to both the consumer and wholesale allowances. The increase in the consumer allowance was primarily driven by loan growth in the credit card portfolio, including newer vintages which, as anticipated, have higher loss rates compared to the overall portfolio, as well as loan growth in the auto loan portfolio; these were partially offset by reductions in the allowance for loan losses in the residential real estate portfolio due to continued improvement in home prices and delinquencies, and runoff in the student loan portfolio. The increase in the wholesale allowance reflected downgrades in the Oil & Gas, Natural Gas Pipelines, and Metals & Mining portfolios. For a more detailed discussion of loans and the allowance for loan losses, refer to Credit Risk Management on pages 43–59, and Notes 3, 4, 13 and 14.

Accrued interest and accounts receivable
The increase was driven by higher client receivables related to client-driven market-making activities in CIB.

Mortgage servicing rights
For additional information on MSRs, see Note 16.
Other assets
The modest increase reflected higher auto operating lease assets from growth in business volume.

Selected Consolidated balance sheets data (continued)

(in millions)	Sep 30, 2016	Dec 31, 2015	Change
Liabilities			
Deposits	$1,376,138	$1,279,715	8 %
Federal funds purchased and securities loaned or sold under repurchase agreements	168,491	152,678	10
Commercial paper	12,258	15,562	(21)
Other borrowed funds	24,479	21,105	16
Trading liabilities:			
Debt and equity instruments	95,126	74,107	28
Derivative payables	48,143	52,790	(9)
Accounts payable and other liabilities	190,412	177,638	7
Beneficial interests issued by consolidated variable interest entities ("VIEs")	42,233	41,879	1
Long-term debt	309,418	288,651	7
Total liabilities	2,266,698	2,104,125	8
Stockholders' equity	254,331	247,573	3
Total liabilities and stockholders' equity	$2,521,029	$2,351,698	7 %

Deposits
The increase was attributable to higher wholesale and consumer deposits. The increase in wholesale deposits was mainly driven by growth in client activity in CIB's Treasury Services business, and inflows in AM partly related to the new rules governing money market funds. The increase in consumer deposits reflected continuing strong growth from existing and new customers, and the impact of low attrition rates. For more information on deposits, refer to the Liquidity Risk Management discussion on pages 74–78; and Notes 3 and 17.
Federal funds purchased and securities loaned or sold under repurchase agreements
The increase was predominantly due to higher client-driven market-making activities in CIB. For additional information on the Firm's Liquidity Risk Management, see pages 74–78.
Commercial paper
The decrease reflected lower issuance in the wholesale markets consistent with Treasury's short-term funding plans. For additional information, see Liquidity Risk Management on pages 74–78.

Accounts payable and other liabilities
The increase was driven by higher client payables related to client-driven market-making activities in CIB.
Long-term debt
The increase was due to net issuance consistent with Treasury's long-term funding plans, which included liquidity actions related to the 2016 Resolution Submission. For additional information on the Firm's long-term debt activities, see Liquidity Risk Management on pages 74–78.
Stockholders' equity
The increase was due to net income and higher accumulated other comprehensive income ("AOCI"), partially offset by cash dividends on common and preferred stock and repurchases of common stock. For additional information on changes in stockholders' equity, see page 88, and on the Firm's capital actions, see Capital actions on page 72.

13

OFF-BALANCE SHEET ARRANGEMENTS

In the normal course of business, the Firm enters into various contractual obligations that may require future cash payments. Certain obligations are recognized on-balance sheet, while others are off-balance sheet under accounting principles generally accepted in the U.S. ("U.S. GAAP"). The Firm is involved with several types of off–balance sheet arrangements, including through nonconsolidated special-purpose entities ("SPEs"), which are a type of VIE, and through lending-related financial instruments (e.g., commitments and guarantees). For further discussion, see Note 21 of this Form 10-Q and Off–Balance Sheet Arrangements and Contractual Cash Obligations on pages 77–78 and Note 29 of JPMorgan Chase's 2015 Annual Report.

Special-purpose entities

The most common type of VIE is an SPE. SPEs are commonly used in securitization transactions in order to isolate certain assets and distribute the cash flows from those assets to investors. SPEs are an important part of the financial markets, including the mortgage- and asset-backed securities and commercial paper markets, as they provide market liquidity by facilitating investors' access to specific portfolios of assets and risks. The Firm holds capital, as deemed appropriate, against all SPE-related transactions and related exposures, such as derivative transactions and lending-related commitments and guarantees. For further information on the types of SPEs, see Note 15 of this Form 10-Q, and Note 1 and Note 16 of JPMorgan Chase's 2015 Annual Report.

Implications of a credit rating downgrade to JPMorgan Chase Bank, N.A.

For certain liquidity commitments to SPEs, JPMorgan Chase Bank, N.A., could be required to provide funding if its short-term credit rating were downgraded below specific levels, primarily "P-1," "A-1" and "F1" for Moody's Investor Service ("Moody's"), Standard & Poor's and Fitch, respectively. These liquidity commitments support the issuance of asset-backed commercial paper by Firm-administered consolidated SPEs. In the event of a short-term credit rating downgrade, JPMorgan Chase Bank, N.A., absent other solutions, would be required to provide funding to the SPE if the commercial paper could not be reissued as it matured. The aggregate amounts of commercial paper outstanding held by third parties as of September 30, 2016, and December 31, 2015, was $3.7 billion and $8.7 billion, respectively. The aggregate amounts of commercial paper issued by these SPEs could increase in future periods should clients of the Firm-administered consolidated SPEs draw down on certain unfunded lending-related commitments. These unfunded lending-related commitments were $9.1 billion and $5.6 billion at September 30, 2016, and December 31, 2015, respectively. The Firm could facilitate the refinancing of some of the clients' assets in order to reduce the funding obligation. For further information,

see the discussion of Firm-administered multiseller conduits in Note 15.

The Firm also acts as liquidity provider for certain municipal bond vehicles. The Firm's obligation to perform as liquidity provider is conditional and is limited by certain termination events, which include bankruptcy or failure to pay by the municipal bond issuer and any credit enhancement provider, an event of taxability on the municipal bonds or the immediate downgrade of the municipal bond to below investment grade. See Note 15 for additional information.

Off–balance sheet lending-related financial instruments, guarantees, and other commitments

JPMorgan Chase provides lending-related financial instruments (e.g., commitments and guarantees) to meet the financing needs of its customers. The contractual amount of these financial instruments represents the maximum possible credit risk to the Firm should the counterparty draw upon the commitment or the Firm be required to fulfill its obligation under the guarantee, and should the counterparty subsequently fail to perform according to the terms of the contract. Most of these commitments and guarantees are refinanced, extended, cancelled, or expire without being drawn or a default occurring. As a result, the total contractual amount of these instruments is not, in the Firm's view, representative of its actual future credit exposure or funding requirements. For further discussion of lending-related financial instruments, guarantees and other commitments, and the Firm's accounting for them, see Lending-related commitments on page 55 and Note 21 (including the table that presents the related amounts by contractual maturity as of September 30, 2016). For a discussion of liabilities associated with loan sales and securitization-related indemnifications, see Note 21.

CONSOLIDATED
CASH FLOWS
ANALYSIS

Consolidated cash flows overview

The following is a discussion of cash flow activities during the nine months ended September 30, 2016 and 2015.

(in millions)	Nine months ended September 30, 2016	2015
Net cash provided by/(used in)		
Operating activities	$(18,715)	$57,299
Investing activities	(112,102)	79,722
Financing activities	131,699	(143,513)
Effect of exchange rate changes on cash	18	(81)
Net increase/(decrease) in cash and due from banks	$900	$(6,573)

Operating activities

Operating assets and liabilities can vary significantly in the normal course of business due to the amount and timing of cash flows, which are affected by client-driven and risk management activities and market conditions. The Firm believes cash flows from operations, available cash balances and its capacity to generate cash through secured and unsecured sources are sufficient to meet the Firm's operating liquidity needs.

Cash used in operating activities in 2016 resulted from client-driven market-making activities in CIB that resulted in an increase in trading assets, which were largely offset by an increase in trading liabilities; an increase in accrued interest and accounts receivables driven by higher client receivables; and an increase in securities borrowed driven by higher demand for securities to cover short positions; and higher net originations and purchases of loans held-for-sale. In 2016 and 2015, cash was also provided by net income after noncash operating adjustments. In 2015, cash was provided by a decrease in trading assets predominantly due to lower client-driven market-making activities in CIB resulting in lower levels of equity securities; and higher
net proceeds from loan securitizations and sales activities. These outflows were partially offset by a decrease in accounts payable and other liabilities due to lower brokerage customer payables related to client activity
in CIB.

Investing activities

Cash used in investing activities during 2016 resulted from net originations of consumer and wholesale loans; an increase in deposits with banks primarily due to growth in deposits and an increase in long-term debt; and an increase in securities purchased under resale agreements due to the deployment of excess cash by Treasury and higher demand for securities to cover short positions related to client-driven market-making activities in CIB. Partially offsetting these cash outflows were net proceeds from paydowns, maturities, sales and purchases of investment securities. Cash provided by investing activities during 2015 predominantly reflected a net decrease in deposits with banks due to the Firm's actions to reduce wholesale non-operating deposits; and net proceeds from paydowns,

maturities, sales and purchases of investment securities. Partially offsetting these net inflows was cash used for net originations of consumer and wholesale loans.

Financing activities

Cash provided by financing activities in 2016 resulted from higher consumer and wholesale deposits; an increase in securities loaned or sold under repurchase agreements predominantly due to higher client-driven market-making activities in CIB; and higher net proceeds from long-term borrowings consistent with Treasury's long-term funding plans, which included liquidity actions related to the 2016 Resolution Submission. Cash used in financing activities in 2015 reflected the aforementioned actions to reduce wholesale non-operating deposits, partially offset by higher consumer deposits; and lower levels of commercial paper due to the discontinuation of a cash management product (which offered customers the option of sweeping their deposits into commercial paper) and lower issuances in the wholesale markets. Partially offsetting these outflows were net proceeds from long-term borrowings and the issuance of preferred stock. For both periods, cash was used for repurchases of common stock and dividends on common and

preferred stock.
* * *
For a further discussion of the activities affecting the Firm's cash flows, see Consolidated Balance Sheets Analysis on pages 12–13, Capital Management on pages 67–73, and Liquidity Risk Management on pages 74–78 of this Form 10-Q, and page 75 of JPMorgan Chase's 2015 Annual Report.

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

Non-GAAP financial measures

The Firm prepares its Consolidated Financial Statements using U.S. GAAP; these financial statements appear on pages 85–89. That presentation, which is referred to as "reported" basis, provides the reader with an understanding of the Firm's results that can be tracked consistently from year-to-year and enables a comparison of the Firm's performance with other companies' U.S. GAAP financial statements.

In addition to analyzing the Firm's results on a reported basis, management reviews the Firm's results, including the overhead ratio and the results of the lines of business, on a "managed" basis, which are non-GAAP financial measures. The Firm's definition of managed basis starts with the reported U.S. GAAP results and includes certain reclassifications to present total net revenue for the Firm (and each of the reportable business segments) on an FTE basis. Accordingly, revenue from investments that receive tax credits and tax-exempt securities is presented in the managed results on a basis comparable to taxable investments and securities. This non-GAAP financial measure allows management to assess the comparability of

revenue from year-to-year arising from both taxable and tax-exempt sources. The corresponding income tax impact related to tax-exempt items is recorded within income tax expense. These adjustments have no impact on net income as reported by the Firm as a whole or by the lines of business.

Management also uses certain non-GAAP financial measures at the business-segment level, because it believes these other non-GAAP financial measures provide information to investors about the underlying operational performance and trends of the particular business segment and, therefore, facilitate a comparison of the business segment with the performance of its competitors. For additional information on these non-GAAP measures, see Business Segment Results on pages 18–40.

Additionally, certain credit metrics and ratios disclosed by the Firm exclude PCI loans, and are therefore non-GAAP measures. For additional information on these non-GAAP measures, see Credit Risk Management on pages 43–59.

Non-GAAP financial measures used by the Firm may not be comparable to similarly named non-GAAP financial measures used by other companies.

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

	Three months ended September 30,					
	2016			2015		
(in millions, except ratios)	Reported results	Fully taxable-equivalent adjustments[a]	Managed basis	Reported results	Fully taxable-equivalent adjustments[a]	Managed basis
Other income	$782	$ 540	$1,322	$628	$ 477	$1,105
Total noninterest revenue	13,070	540	13,610	11,856	477	12,333
Net interest income	11,603	299	11,902	10,924	278	11,202
Total net revenue	24,673	839	25,512	22,780	755	23,535
Pre-provision profit	10,210	839	11,049	7,412	755	8,167
Income before income tax expense	8,939	839	9,778	6,730	755	7,485
Income tax expense	$2,653	$ 839	$3,492	$(74)	$ 755	$681
Overhead ratio	59 %	NM	57 %	67 %	NM	65 %

	Nine months ended September 30,					
	2016			2015		
(in millions, except ratios)	Reported results	Fully taxable-equivalent adjustments[a]	Managed basis	Reported results	Fully taxable-equivalent adjustments[a]	Managed basis
Other income	$2,844	$ 1,620	$4,464	$1,796	$ 1,405	$3,201

Total noninterest revenue	37,962	1,620	39,582	38,373	1,405	39,778
Net interest income	34,330	897	35,227	32,285	823	33,108
Total net revenue	72,292	2,517	74,809	70,658	2,228	72,886
Pre-provision profit	30,354	2,517	32,871	25,907	2,228	28,135
Income before income tax expense	25,857	2,517	28,374	23,331	2,228	25,559
Income tax expense	$7,851	$ 2,517	$10,368	$4,323	$ 2,228	$6,551
Overhead ratio	58 %	NM	56 %	63 %	NM	61 %

(a) Predominantly recognized in CIB and CB business segments and Corporate.

16

Net interest income excluding markets-based activities

In addition to reviewing net interest income on a managed basis, management also reviews net interest income excluding CIB's markets-based activities to assess the performance of the Firm's lending, investing (including asset-liability management) and deposit-raising activities.

The data presented below are non-GAAP financial measures due to the exclusion of CIB's markets-based activities. Management believes this exclusion provides investors and analysts with another measure by which to analyze the non-markets-related business trends of the Firm and provides a comparable measure to other financial institutions that are primarily focused on lending, investing and deposit-raising activities.

Net interest income excluding CIB markets-based activities data

	Three months ended September 30,			Nine months ended September 30,		
(in millions, except rates)	2016	2015	Change	2016	2015	Change
Net interest income – managed basis[(a)(b)]	$11,902	$11,202	6 %	$35,227	$33,108	6 %
Less: Markets-based net interest income[(c)]	1,442	1,164	24	4,240	3,661	16
Net interest income excluding markets[(a)]	$10,460	$10,038	4	$30,987	$29,447	5
Average interest-earning assets	$2,116,493	$2,056,890	3	$2,080,133	$2,100,773	(1)
Less: Average markets-based interest-earning assets	488,971	476,120	3	490,364	495,460	(1)
Average interest-earning assets excluding markets	$1,627,522	$1,580,770	3 %	$1,589,769	$1,605,313	(1)%
Net interest yield on average interest-earning assets – managed basis	2.24 %	2.16 %		2.26 %	2.11 %	
Net interest yield on average markets-based interest-earning assets	1.17	0.97		1.15	0.99	
Net interest yield on average interest-earning assets excluding markets	2.56 %	2.52 %		2.60 %	2.45 %	

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

(b) For a reconciliation of net interest income on a reported and managed basis, see reconciliation from the Firm's reported U.S. GAAP results to managed basis on page 16

(c) Markets-based net interest income, in the table above, is lower than the net interest income line item in the CIB Markets table on page 29 by $183 million and by $129 million for the three months ended September 30, 2016 and 2015, respectively, and by $463 million and by $358 million, for the nine months ended September 30, 2016 and 2015, respectively. The primary difference is markets-based net interest income, in the table above, excludes net interest income from loans held in CIB Markets.

Key performance measures

Tangible common equity ("TCE"), ROTCE and TBVPS are considered key financial performance measures. TCE represents the Firm's common stockholders' equity (i.e., total stockholders' equity less preferred stock) less goodwill and identifiable intangible assets (other than MSRs), net of related deferred tax liabilities. ROTCE measures the Firm's net income applicable to common equity as a percentage of average TCE. TBVPS represents the Firm's TCE at period-end divided by common shares at period-end. TCE, ROTCE, and TBVPS are meaningful to the Firm, as well as investors and analysts, in assessing the Firm's use of equity.

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

Tangible common equity	Period-end		Average			
			Three months ended September 30,		Nine months ended September 30,	
(in millions, except per share and ratio data)	Sep 30, 2016	Dec 31, 2015	2016	2015	2016	2015

Common stockholders’ equity	$228,263	$221,505	$226,089	$217,023	$224,034	$214,389
Less: Goodwill	47,302	47,325	47,302	47,428	47,314	47,468
Less: Certain identifiable intangible assets	887	1,015	903	1,064	938	1,112
Add: Deferred tax liabilities[(a)]	3,232	3,148	3,226	2,991	3,205	2,909
Tangible common equity	$183,306	$176,313	$181,110	$171,522	$178,987	$168,718
Return on tangible common equity	NA	NA	13 %	15 %	13 %	14 %
Tangible book value per share	$51.23	$48.13	NA	NA	NA	NA

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

The Firm’s capital, risk-weighted assets ("RWA"), and capital and leverage ratios that are presented under Basel III Standardized and Advanced Fully Phased-In rules and the Firm’s, JPMorgan Chase Bank, N.A.’s and Chase Bank USA, N.A.’s SLRs calculated under the Basel III Advanced Fully Phased-In rules are considered key regulatory capital measures. Such measures are used by banking regulators, investors and analysts to assess the Firm’s regulatory capital position and to compare the Firm’s regulatory capital to that of other financial services companies.

For additional information on these measures, see Capital Management on pages 67–73.

Core loans are also considered a key performance measure. Core loans include loans considered central to the Firm’s ongoing businesses; and exclude loans classified as trading assets, runoff portfolios, discontinued portfolios and portfolios the Firm has an intent to exit. Core loans are meaningful to the Firm and its investors and analysts in assessing actual growth in the loan portfolio.

BUSINESS
SEGMENT
RESULTS

The Firm is managed on a line of business basis. There are four major reportable business segments – Consumer & Community Banking, Corporate & Investment Bank, Commercial Banking and Asset 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 management. Results of these lines of business are presented on a managed basis. For a definition of managed basis, see Explanation and Reconciliation of the Firm's use of Non-GAAP Financial Measures and Key Performance Measures, on pages 16–17.

Description of business segment reporting methodology

Results of the business segments are intended to reflect each segment as if it were a stand-alone business. The management reporting process that derives business segment results allocates income and expense using market-based methodologies. The Firm also assesses the level of capital required for each line of business on at least an annual basis. For further information about line of business capital, see Line of business equity on page 71.

The Firm periodically assesses the assumptions, methodologies and reporting classifications used for segment reporting, and further refinements may be implemented in future periods.

For a further discussion of those methodologies, see Business Segment Results – Description of business segment reporting methodology on pages 83–84 of JPMorgan Chase's 2015 Annual Report.

The following discussions of the business segment results are based on a comparison of the three and nine months ended September 30, 2016 versus the corresponding period in the prior year, unless otherwise specified.

Segment results – managed basis

The following tables summarize the business segment results for the periods indicated.

Three months ended September 30,	Total net revenue			Total noninterest expense			Pre-provision profit/(loss)		
(in millions)	2016	2015	Change	2016	2015	Change	2016	2015	Change
Consumer & Community Banking	$11,328	$10,879	4%	$6,510	$6,237	4%	$4,818	$4,642	4%
Corporate & Investment Bank	9,455	8,168	16	4,934	6,131	(20)	4,521	2,037	122
Commercial Banking	1,870	1,644	14	746	719	4	1,124	925	22
Asset Management	3,047	2,894	5	2,130	2,109	1	917	785	17
Corporate	(188)	(50)	NM	143	172	(17)	(331)	(222)	(49)
Total	$25,512	$23,535	8%	$14,463	$15,368	(6)%	$11,049	$8,167	35%

Three months ended September 30,	Provision for credit losses			Net income/(loss)			Return on common equity	
(in millions, except ratios)	2016	2015	Change	2016	2015	Change	2016	2015
Consumer & Community Banking	$1,294	$389	233 %	$2,204	$2,630	(16)%	16 %	20 %
Corporate & Investment Bank	67	232	(71)	2,912	1,464	99	17	8
Commercial Banking	(121)	82	NM	778	518	50	18	14
Asset Management	32	(17)	NM	557	475	17	24	20
Corporate	(1)	(4)	75	(165)	1,717	NM	NM	NM
Total	$1,271	$682	86 %	$6,286	$6,804	(8)%	10%	12 %

Nine months ended September 30,	Total net revenue			Total noninterest expense			Pre-provision profit/(loss)		
(in millions)	2016	2015	Change	2016	2015	Change	2016	2015	Change
Consumer & Community Banking	$33,896	$32,598	4%	$18,602	$18,637	—	$15,294	$13,961	10 %
Corporate & Investment Bank	26,755	26,473	1	14,820	16,925	(12)	11,935	9,548	25
Commercial Banking	5,490	5,125	7	2,190	2,131	3	3,300	2,994	10

Asset Management	8,958	9,074	(1)	6,303	6,690	(6)	2,655	2,384	11
Corporate	(290)	(384)	24	23	368	(94)	(313)	(752)	58
Total	$74,809	$72,886	3%	$41,938	$44,751	(6)%	$32,871	$28,135	17 %

Nine months ended September 30,	Provision for credit losses			Net income/(loss)			Return on common equity	
(in millions, except ratios)	2016	2015	Change	2016	2015	Change	2016	2015
Consumer & Community Banking	$3,545	$2,021	75%	$7,350	$7,382	—	18 %	18 %
Corporate & Investment Bank	761	251	203	7,384	6,342	16	14	13
Commercial Banking	158	325	(51)	1,970	1,641	20	15	15
Asset Management	37	(13)	NM	1,665	1,428	17	24	20
Corporate	(4)	(8)	50	(363)	2,215	NM	NM	NM
Total	$4,497	$2,576	75%	$18,006	$19,008	(5)%	10%	11 %

CONSUMER & COMMUNITY BANKING

For a discussion of the business profile of CCB, see pages 85–93 of JPMorgan Chase's 2015 Annual Report and Line of Business Metrics on page 177.

Selected income statement data

	Three months ended September 30,			Nine months ended September 30,		
(in millions, except ratios)	2016	2015	Change	2016	2015	Change
Revenue						
Lending- and deposit-related fees	$841	$836	1 %	$2,390	$2,320	3 %
Asset management, administration and commissions	531	565	(6)	1,596	1,648	(3)
Mortgage fees and related income	624	469	33	1,980	1,955	1
Card income	1,099	1,335	(18)	3,543	4,165	(15)
All other income	773	524	48	2,303	1,466	57
Noninterest revenue	3,868	3,729	4	11,812	11,554	2
Net interest income	7,460	7,150	4	22,084	21,044	5
Total net revenue	11,328	10,879	4	33,896	32,598	4
Provision for credit losses	1,294	389	233	3,545	2,021	75
Noninterest expense						
Compensation expense	2,453	2,413	2	7,255	7,421	(2)
Noncompensation expense[(a)]	4,057	3,824	6	11,347	11,216	1
Total noninterest expense	6,510	6,237	4	18,602	18,637	—
Income before income tax expense	3,524	4,253	(17)	11,749	11,940	(2)
Income tax expense	1,320	1,623	(19)	4,399	4,558	(3)
Net income	$2,204	$2,630	(16)	$7,350	$7,382	—
Revenue by line of business						
Consumer & Business Banking	$4,719	$4,555	4	$13,885	$13,396	4
Mortgage Banking	1,874	1,555	21	5,671	5,137	10
Card, Commerce Solutions & Auto	4,735	4,769	(1)	14,340	14,065	2
Mortgage fees and related income details:						
Net production revenue	247	176	40	670	646	4
Net mortgage servicing revenue[(b)]	377	293	29	1,310	1,309	—
Mortgage fees and related income	$624	$469	33 %	$1,980	$1,955	1 %
Financial ratios						
Return on common equity	16 %	20 %		18 %	18 %	
Overhead ratio	57	57		55	57	

Note: In the discussion and the tables which follow, CCB presents certain financial measures which exclude the impact of PCI loans; these are non-GAAP financial measures.

(a) Included operating lease depreciation expense of $504 million and $372 million for the three months ended September 30, 2016 and 2015, respectively, and $1.4 billion and $1.0 billion for the nine months ended September 30, 2016 and 2015, respectively.

(b)

Included MSR risk management of $38 million and $(123) million for the three months ended September 30, 2016 and 2015, respectively, and $240 million and $(121) million for the nine months ended September 30, 2016 and 2015, respectively.

Quarterly results
Consumer & Community Banking net income was $2.2 billion, a decrease of 16%, driven by higher provision for credit losses and noninterest expense, partially offset by higher net revenue.
Net revenue was $11.3 billion, an increase of 4%. Net interest income was $7.5 billion, up 4%, driven by higher deposit balances and higher loan balances, partially offset by an increase in the reserve for uncollectible interest and fees and deposit spread compression. Noninterest revenue was $3.9 billion, up 4%, driven by higher auto lease and card sales volume, higher MSR risk management results, net production revenue, reflecting higher mortgage production margins, and higher card-related fees, predominantly offset by higher new account origination costs and the impact of renegotiated co-brand partnership agreements in Credit Card. See Note 16 for further information regarding changes in value of the MSR asset and related hedges, and mortgage fees and related income.
The provision for credit losses was $1.3 billion, compared to $389 million in the prior year, reflecting increases in the allowance for loan losses. The current-quarter provision included a $225 million increase in the allowance for loan losses, reflecting loan growth in the credit card portfolio, including newer vintages which, as anticipated, have higher loss rates compared to the overall portfolio, as well as loan growth in the auto loan portfolio. The prior-year provision reflected a $575 million reduction in the allowance for loan losses in the residential real estate portfolio due to continued improvement in home prices and delinquencies, and increased granularity in the impairment estimates.
Noninterest expense was $6.5 billion, an increase of 4%, driven by higher auto lease depreciation, higher investment in marketing, liabilities from a merchant bankruptcy in Commerce Solutions, and a modest increase in reserves for mortgage servicing, partially offset by lower legal expense and branch efficiencies.

Year-to-date results
Consumer & Community Banking net income of $7.4 billion was flat compared with the prior year, driven by a higher provision for credit losses, offset by higher net revenue.
Net revenue was $33.9 billion, an increase of 4%. Net interest income was $22.1 billion, up 5%, driven by higher deposit balances and higher loan balances, partially offset by deposit spread compression and an increase in the reserve for uncollectible interest and fees. Noninterest revenue was $11.8 billion, up 2%, driven by higher auto lease and card sales volume, higher MSR risk management results, a gain on the sale of Visa Europe interests and higher card- and deposit-related fees, predominantly offset by the impact of renegotiated co-brand partnership agreements and higher new account origination costs in Credit Card, and lower mortgage servicing revenue predominantly as a result of a lower level of third-party loans serviced. See Note 16 for further information regarding changes in value of the MSR asset and related hedges, and mortgage fees and related income.
The provision for credit losses was $3.5 billion, an increase of 75%, reflecting increases in the allowance for loan losses. The current-year provision included a $400 million increase in the allowance for loan losses, reflecting loan growth in the credit card portfolio, including newer vintages which, as anticipated, have higher loss rates compared to the overall portfolio, as well as loan growth in the auto loan portfolio; these were partially offset by reductions in the allowance for loan losses in the residential real estate portfolio due to continued improvement in home prices and delinquencies, as well as runoff in the student loan portfolio. The prior-year provision reflected a $1.0 billion reduction in the allowance for loan losses in the residential real estate portfolio due to continued improvement in home prices and delinquencies, and increased granularity in the impairment estimates, as well as runoff in the student loan portfolio.
Noninterest expense of $18.6 billion was flat compared with the prior year, driven by lower legal expense, branch efficiencies and lower headcount-related expense, offset by higher auto lease depreciation and higher investment in marketing.

Selected metrics

(in millions, except headcount)	As of or for the three months ended September 30, 2016	2015	Change	As of or for the nine months ended September 30, 2016	2015	Change
Selected balance sheet data (period-end)						
Total assets	$521,276	$484,253	8 %	$521,276	$484,253	8 %
Loans:						
Consumer & Business Banking	23,846	22,346	7	23,846	22,346	7
Home equity	52,445	60,849	(14)	52,445	60,849	(14)
Residential mortgage and other	181,564	153,730	18	181,564	153,730	18
Mortgage Banking	234,009	214,579	9	234,009	214,579	9
Credit Card	133,435	126,979	5	133,435	126,979	5
Auto	64,512	57,174	13	64,512	57,174	13
Student	7,354	8,462	(13)	7,354	8,462	(13)
Total loans	463,156	429,540	8	463,156	429,540	8
Core loans	371,060	320,415	16	371,060	320,415	16
Deposits	605,117	539,182	12	605,117	539,182	12
Common equity	51,000	51,000	—	51,000	51,000	—
Selected balance sheet data (average)						
Total assets	$521,882	$478,914	9	$512,550	$465,782	10
Loans:						
Consumer & Business Banking	23,678	22,069	7	23,227	21,709	7
Home equity	53,501	62,025	(14)	55,604	64,442	(14)
Residential mortgage and other	180,669	146,432	23	175,059	133,341	31
Mortgage Banking	234,170	208,457	12	230,663	197,783	17
Credit Card	132,713	126,305	5	129,481	125,294	3
Auto	64,068	56,412	14	62,998	55,744	13
Student	7,490	8,622	(13)	7,759	8,911	(13)
Total loans	462,119	421,865	10	454,128	409,441	11
Core loans	367,999	309,888	19	356,072	291,728	22
Deposits	593,671	535,987	11	579,741	525,951	10
Common equity	51,000	51,000	—	51,000	51,000	—
Headcount	132,092	128,601	3%	132,092	128,601	3 %

Selected metrics

	As of or for the three months ended September 30,			As of or for the nine months ended September 30,		
(in millions, except ratio data)	2016	2015	Change	2016	2015	Change
Credit data and quality statistics						
Nonaccrual loans[(a)(b)]	$4,853	$5,433	(11)%	$4,853	$5,433	(11)%
Net charge-offs/(recoveries)[(c)]						
Consumer & Business Banking	71	50	42	180	177	2
Home equity	42	82	(49)	136	238	(43)
Residential mortgage and other	7	(41)	NM	11	(12)	NM
Mortgage Banking	49	41	20	147	226	(35)
Credit Card	838	759	10	2,528	2,348	8
Auto	79	57	39	192	140	37
Student	32	58	(45)	98	155	(37)
Total net charge-offs/(recoveries)	$1,069	$965	11	$3,145	$3,046	3
Net charge-off/(recovery) rate[(c)]						
Consumer & Business Banking	1.19 %	0.90 %		1.04 %	1.09 %	
Home equity[(d)]	0.42	0.70		0.44	0.66	
Residential mortgage and other[(d)]	0.02	(0.14)		0.01	(0.02)	
Mortgage Banking[(d)]	0.10	0.10		0.10	0.20	
Credit Card[(e)]	2.51	2.41		2.61	2.54	
Auto	0.49	0.40		0.41	0.34	
Student	1.70	2.67		1.69	2.33	
Total net charge-off/(recovery) rate[(d)]	1.00	1.02		1.01	1.12	
30+ day delinquency rate						
Mortgage Banking[(f)(g)]	1.27 %	1.74 %		1.27 %	1.74 %	
Credit Card[(h)]	1.53	1.38		1.53	1.38	
Auto	1.08	1.06		1.08	1.06	
Student[(i)]	1.81	1.99		1.81	1.99	
90+ day delinquency rate — Credit Card[(h)]	0.75	0.66		0.75	0.66	
Allowance for loan losses						
Consumer & Business Banking	$703	$703	—	$703	$703	—
Mortgage Banking excluding PCI loans	1,488	1,588	(6)	1,488	1,588	(6)
Mortgage Banking — PCI loans[(c)]	2,618	2,788	(6)	2,618	2,788	(6)
Credit Card	3,884	3,434	13	3,884	3,434	13
Auto	474	374	27	474	374	27
Student	274	324	(15)	274	324	(15)
Total allowance for loan losses[(c)]	$9,441	$9,211	2%	$9,441	$9,211	2%

(a) Excludes PCI loans. The Firm is recognizing interest income on each pool of PCI loans as they are all performing.

(b) At September 30, 2016 and 2015, nonaccrual loans excluded loans 90 or more days past due as follows: (1) mortgage loans insured by U.S. government agencies of $5.0 billion and $6.6 billion, respectively; and (2) student loans insured by U.S. government agencies under the Federal Family Education Loan Program ("FFELP") of $259 million and $289 million, respectively. These amounts have been excluded based upon the government guarantee.

(c) Net charge-offs and the net charge-off rates for the three months ended September 30, 2016 and 2015, excluded $36 million and $52 million, respectively, and for the nine months ended September 30, 2016 and 2015, excluded $124 million and $162 million, respectively, of write-offs in the PCI portfolio. These write-offs decreased the allowance for loan losses for PCI loans. For further information on PCI write-offs, see summary of changes in the allowances on page 58.

(d) Excludes the impact of PCI loans. For the three months ended September 30, 2016 and 2015, the net charge-off rates including the impact of PCI loans were as follows: (1) home equity of 0.31% and 0.52%, respectively; (2) residential mortgage and other of 0.02% and (0.11%), respectively; (3) Mortgage Banking of 0.08% and 0.08%, respectively; and (4) total CCB of 0.92% and 0.91%, respectively. For the nine months ended September 30, 2016 and 2015, the net charge-off rates including the impact of PCI loans were as follows: (1) home equity of 0.33% and 0.49%, respectively; (2) residential mortgage and other of 0.01% and (0.01%), respectively; (3) Mortgage Banking of 0.09% and 0.15%, respectively; and (4) total CCB of 0.93% and 1.00%, respectively.

(e) Average credit card loans included loans held-for-sale of $87 million and $1.3 billion for the three months ended September 30, 2016 and 2015, respectively, and $80 million and $1.9 billion for the nine months ended September 30, 2016 and 2015, respectively. These amounts are excluded when calculating the net charge-off rate.

(f) At September 30, 2016 and 2015, excluded mortgage loans insured by U.S. government agencies of $7.0 billion and $8.5 billion, respectively, that are 30 or more days past due. These amounts have been excluded based upon the government guarantee.

(g) Excludes PCI loans. The 30+ day delinquency rate for PCI loans was 10.01% and 11.29% at September 30, 2016 and 2015, respectively.

(h) Period-end credit card loans included loans held-for-sale of $89 million and $1.3 billion at September 30, 2016 and 2015, respectively. These amounts are excluded when calculating delinquency rates.

(i) Excluded student loans insured by U.S. government agencies under FFELP of $461 million and $507 million at September 30, 2016 and 2015, respectively, that are 30 or more days past due. These amounts have been excluded based upon the government guarantee.

Selected metrics

(in billions, except ratios and where otherwise noted)	As of or for the three months ended September 30, 2016	2015	Change	As of or for the nine months ended September 30, 2016	2015	Change
Business Metrics						
CCB households (in millions)	59.7	57.5	4 %	59.7	57.5	4 %
Number of branches	5,310	5,471	(3)	5,310	5,471	(3)
Active digital customers (in thousands)[a]	43,657	38,511	13	43,657	38,511	13
Active mobile customers (in thousands)[b]	26,047	22,232	17	26,047	22,232	17
Consumer & Business Banking						
Average deposits	$576.6	$519.4	11	$564.2	$510.0	11
Deposit margin	1.79 %	1.86 %		1.82 %	1.92 %	
Business banking origination volume	$1.8	$1.7	5	$5.7	$5.2	10
Client investment assets	231.6	213.3	9	231.6	213.3	9
Mortgage Banking						
Mortgage origination volume by channel						
Retail	$11.7	$9.5	23	$31.6	$27.4	15
Correspondent	15.4	20.4	(25)	42.9	56.5	(24)
Total mortgage origination volume[c]	$27.1	$29.9	(9)	$74.5	$83.9	(11)
Total loans serviced (period-end)	$863.3	$929.0	(7)	$863.3	$929.0	(7)
Third-party mortgage loans serviced (period-end)	609.2	702.6	(13)	609.2	702.6	(13)
MSR carrying value (period-end)	4.9	6.7	(27)	4.9	6.7	(27)
Ratio of MSR carrying value (period-end) to third-party mortgage loans serviced (period-end)	0.80 %	0.95 %		0.80 %	0.95 %	
MSR revenue multiple[d]	2.29 x	2.79 x		2.29 x	2.71 x	
Credit Card, excluding Commercial Card						
Sales volume	$139.2	$126.6	10	$396.9	$365.1	9
New accounts opened (in millions)	2.7	2.0	35	7.7	6.2	24
Card Services						
Net revenue rate	11.04 %	12.22 %		11.70 %	12.25 %	
Commerce Solutions						
Merchant processing volume	$267.2	$235.8	13	$778.5	$691.1	13
Auto						
Loan and lease origination volume	$9.3	$8.1	15	$27.4	$23.2	18
Average Auto operating lease assets	11.4	8.1	41%	10.5	7.5	40%

(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) Firmwide mortgage origination volume was $30.9 billion and $32.2 billion for the three months ended September 30, 2016 and 2015, respectively, and $83.9 billion and $90.5 billion for the nine months ended September 30, 2016 and 2015, respectively.

(d) Represents the ratio of MSR carrying value (period-end) to third-party mortgage loans serviced (period-end) divided by the ratio of annualized loan servicing-related revenue to third-party mortgage loans serviced (average).

Mortgage servicing-related matters

The Firm entered into various Consent Orders and settlements with federal and state governmental agencies and private parties related to mortgage servicing, origination, and residential MBS activities. The majority of these Consent Orders and settlements have been resolved and/or terminated; however, among those obligations, the mortgage servicing-related Consent Order entered into with the Federal Reserve on April 13, 2011, as amended on February 28, 2013 remains outstanding. The Audit Committee of the Board of Directors provides governance and oversight of the Federal Reserve Consent Order.

The Federal Reserve Consent Order and certain other obligations under mortgage-related settlements are the subject of ongoing reporting to various regulators and independent overseers. The Firm's compliance with certain of these settlements is detailed in periodic reports published by the independent overseers. The Firm is committed to fulfilling its commitments with appropriate diligence.

CORPORATE
&
INVESTMENT
BANK

For a discussion of the business profile of CIB, see pages 94–98 of JPMorgan Chase's 2015 Annual Report and Line of Business Metrics on page 177.

Selected income statement data

(in millions, except ratios)	Three months ended September 30, 2016	2015	Change	Nine months ended September 30, 2016	2015	Change
Revenue						
Investment banking fees	$1,855	$1,612	15 %	$4,812	$5,198	(7)%
Principal transactions	3,282	2,370	38	8,717	8,509	2
Lending- and deposit-related fees	402	389	3	1,181	1,186	—
Asset management, administration and commissions	968	1,083	(11)	3,062	3,418	(10)
All other income	183	294	(38)	927	744	25
Noninterest revenue	6,690	5,748	16	18,699	19,055	(2)
Net interest income	2,765	2,420	14	8,056	7,418	9
Total net revenue[(a)]	9,455	8,168	16	26,755	26,473	1
Provision for credit losses	67	232	(71)	761	251	203
Noninterest expense						
Compensation expense	2,513	2,434	3	7,850	8,113	(3)
Noncompensation expense	2,421	3,697	(35)	6,970	8,812	(21)
Total noninterest expense	4,934	6,131	(20)	14,820	16,925	(12)
Income before income tax expense	4,454	1,805	147	11,174	9,297	20
Income tax expense	1,542	341	352	3,790	2,955	28
Net income	$2,912	$1,464	99%	$7,384	$6,342	16 %
Financial ratios						
Return on common equity	17 %	8 %		14 %	13 %	
Overhead ratio	52	75		55	64	
Compensation expense as a percentage of total net revenue	27	30		29	31	

(a) Included tax-equivalent adjustments, predominantly due to income tax credits related to alternative energy investments; income tax credits and amortization of the cost of investments in affordable housing projects; as well as tax-exempt income from municipal bonds of $483 million and $417 million for the three months ended September 30, 2016 and 2015, respectively and $1.5 billion and $1.2 billion for the nine months ended September 30, 2016 and 2015, respectively.

Selected income statement data

(in millions)	Three months ended September 30, 2016	2015	Change	Nine months ended September 30, 2016	2015	Change
Revenue by business						
Investment Banking	$1,740	$1,530	14 %	$4,463	$4,906	(9)%
Treasury Services	917	899	2	2,693	2,730	(1)
Lending	283	334	(15)	862	1,071	(20)
Total Banking	2,940	2,763	6	8,018	8,707	(8)
Fixed Income Markets	4,334	2,933	48	11,890	10,018	19
Equity Markets	1,414	1,403	1	4,590	4,630	(1)
Securities Services	916	915	—	2,704	2,844	(5)

Credit Adjustments & Other[(a)]	(149)	154	NM	(447)	274	NM
Total Markets & Investor Services	6,515	5,405	21	18,737	17,766	5
Total net revenue	$9,455	$8,168	16 %	$26,755	$26,473	1%

(a) Effective January 1, 2016, consists primarily of credit valuation adjustments ("CVA") managed by the Credit Portfolio Group, funding valuation adjustments ("FVA") and DVA on derivatives. Results are primarily reported in Principal transactions. Prior periods also include DVA on fair value option elected liabilities. Results are presented net of associated hedging activities and net of CVA and FVA amounts allocated to Fixed Income Markets and Equity Markets. Effective January 1, 2016, changes in DVA on fair value option elected liabilities is recognized in OCI. For additional information, see Accounting and Reporting Developments on pages 82–83, and Notes 3, 4 and 19.

Quarterly results
Net income was $2.9 billion, up 99%, reflecting higher net revenue and lower noninterest expense.
Banking revenue was $2.9 billion, up 6%. Investment banking revenue was $1.7 billion, up 14%, with strong performance across products. The Firm maintained its #1 ranking for Global Investment Banking fees, according to Dealogic. Debt underwriting fees were up 12%, the highest third quarter on record with strong industry-wide bond issuance. Equity underwriting fees were up 38%, primarily driven by growth in industry-wide issuance, with a stable market backdrop and strong investor demand. Advisory fees were up 8%, driven by a greater share of fees for completed transactions. Treasury Services revenue was $917 million, up 2%. Lending revenue was $283 million, down 15%, reflecting fair value losses on hedges of accrual loans as well as lower losses on securities received from restructuring.
Markets & Investor Services revenue was $6.5 billion, up 21%, driven by higher Markets revenue, up 33%. Clients were active and risk management conditions were favorable. Fixed Income Markets revenue was up 48% reflecting broad based strength across products. Rates performance was particularly strong, with good client activity, as markets remained active throughout the quarter, post the Brexit vote and in anticipation of central bank actions as well as money market reform. Credit and Securitized Products revenue was also higher, driven by improving market sentiment across primary and secondary markets which produced robust issuance volumes and strong client trading activity. Equity Markets revenue was up 1%, compared to a strong prior-year quarter, reflecting continued strength in Asia and strength in North America derivatives, offset by weakness in cash equities volumes. Securities Services revenue remained flat from the prior year. Credit Adjustments & Other was a loss of $149 million, primarily driven by derivative valuation adjustments, compared with a $154 million gain in the prior-year quarter, which included funding spread gains on fair value option elected liabilities.
The provision for credit losses was $67 million, down $165 million from the prior-year. The current quarter reflected a lower reserve build in the Oil & Gas portfolio.
Noninterest expense was $4.9 billion, down 20%, driven by lower legal expense.

Year-to-date results
Net income was $7.4 billion, up 16%, reflecting lower noninterest expense, partially offset by higher provision for credit losses.
Banking revenue was $8.0 billion, down 8%. Investment banking revenue was $4.5 billion, down 9%, driven by lower equity and debt underwriting fees, partially offset by higher advisory fees. The Firm maintained its #1 ranking for Global Investment Banking fees, according to Dealogic. Equity underwriting fees were down 23%, driven by declines in industry-wide fee levels. Debt underwriting fees were down 8%, primarily driven by declines in industry-wide fee levels and fewer large acquisition financing deals. Advisory fees were up 5%, driven by a greater share of fees for completed transactions. Treasury Services revenue was $2.7 billion, down 1%. Lending revenue was $862 million, down 20%, reflecting fair value losses on hedges of accrual loans as well as gains on securities received from restructuring, compared to losses in the prior year.
Markets & Investor Services revenue was $18.7 billion, up 5%. Fixed Income Markets revenue of $11.9 billion was up 19%, driven by higher revenue in Rates, Credit and Securitized Products. Rates performance was strong, with elevated market activity driven by central bank actions as well as high issuance-based flows. Credit and Securitized Products revenue improved as client risk appetite recovered driving higher primary and secondary market activity. Equity Markets revenue of $4.6 billion was down 1%, compared to a strong prior-year. Securities Services revenue was $2.7 billion, down 5%, largely driven by lower fees and commissions. Credit Adjustments and Other was a loss of $447 million driven by derivative valuation adjustments and wider credit spreads, compared with a $274 million gain in the prior-year, which included funding spread gains on fair value option elected liabilities.
The provision for credit losses was $761 million, compared with $251 million in the prior year, primarily reflecting increases in the allowance for credit losses in the Oil & Gas portfolio and, to a lesser extent, the Metals & Mining portfolio.
Noninterest expense was $14.8 billion, down 12%, largely driven by lower legal expense.

Selected metrics

	As of or for the three months ended September 30,			As of or for the nine months ended September 30,		
(in millions, except headcount)	2016	2015	Change	2016	2015	Change
Selected balance sheet data (period-end)						
Assets	$825,933	$801,133	3 %	$825,933	$801,133	3 %
Loans:						
Loans retained[(a)]	117,133	101,420	15	117,133	101,420	15
Loans held-for-sale and loans at fair value	4,184	3,369	24	4,184	3,369	24
Total loans	121,317	104,789	16	121,317	104,789	16
Core loans	120,885	104,270	16	120,885	104,270	16
Common equity	64,000	62,000	3	64,000	62,000	3
Selected balance sheet data (average)						
Assets	$811,217	$789,975	3	$808,228	$833,233	(3)
Trading assets-debt and equity instruments	306,431	288,828	6	299,350	306,072	(2)
Trading assets-derivative receivables	63,829	63,561	—	62,619	69,904	(10)
Loans:						
Loans retained[(a)]	110,941	97,518	14	110,442	97,108	14
Loans held-for-sale and loans at fair value	3,864	3,827	1	3,414	4,463	(24)
Total loans	114,805	101,345	13	113,856	101,571	12
Core loans	114,380	100,809	13	113,410	100,730	13
Common equity	64,000	62,000	3	64,000	62,000	3
Headcount	49,176	49,384	—	49,176	49,384	—

(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.

Selected metrics

	As of or for the three months ended September 30,			As of or for the nine months ended September 30,		
(in millions, except ratios)	2016	2015	Change	2016	2015	Change
Credit data and quality statistics						
Net charge-offs/(recoveries)	$3	$2	50%	$139	$(24)	NM
Nonperforming assets:						
Nonaccrual loans:						
Nonaccrual loans retained[(a)]	614	464	32%	614	464	32
Nonaccrual loans held-for-sale and loans at fair value	26	12	117	26	12	117
Total nonaccrual loans	640	476	34	640	476	34
Derivative receivables	232	235	(1)	232	235	(1)
Assets acquired in loan satisfactions	75	56	34	75	56	34
Total nonperforming assets	947	767	23	947	767	23
Allowance for credit losses:						
Allowance for loan losses	1,611	1,205	34	1,611	1,205	34
Allowance for lending-related commitments	837	547	53	837	547	53
Total allowance for credit losses	2,448	1,752	40%	2,448	1,752	40%
Net charge-off/(recovery) rate	0.01%	0.01%		0.17%	(0.03)%	
Allowance for loan losses to period-end loans retained	1.38	1.19		1.38	1.19	
Allowance for loan losses to period-end loans retained, excluding trade finance and conduits[(b)]	2.02	1.85		2.02	1.85	
Allowance for loan losses to nonaccrual loans retained[(a)]	262	260		262	260	

Nonaccrual loans to total period-end loans	0.53 %	0.45 %	0.53 %	0.45 %

(a) Allowance for loan losses of $202 million and $160 million were held against these nonaccrual loans at September 30, 2016 and 2015, respectively.

(b) 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.

27

Business metrics

(in millions)	Three months ended September 30, 2016	2015	Change	Nine months ended September 30, 2016	2015	Change
Advisory	$542	$503	8%	$1,593	$1,511	5%
Equity underwriting	370	269	38	860	1,120	(23)
Debt underwriting	943	840	12	2,359	2,567	(8)
Total investment banking fees	$1,855	$1,612	15%	$4,812	$5,198	(7)%

League table results – wallet share

	Nine months ended September 30, 2016		Full-year 2015	
	Share	Rank	Share	Rank
Based on fees[(a)]				
Debt, equity and equity-related				
Global	7.4 %	# 1	7.7 %	# 1
U.S.	12.1	1	11.7	1
Long-term debt[(b)]				
Global	7.0	1	8.3	1
U.S.	11.0	2	12.0	1
Equity and equity-related				
Global[(c)]	8.0	1	7.0	1
U.S.	14.1	1	11.3	1
M&A[(d)]				
Global	9.4	2	8.4	2
U.S.	11.3	2	9.9	2
Loan syndications				
Global	7.7	2	7.5	1
U.S.	9.3	2	10.8	2
Global investment banking fees[(e)]	8.1 %	# 1	7.9 %	# 1

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

Business metrics

(in millions)	Three months ended September 30, 2016	2015	Change	Nine months ended September 30, 2016	2015	Change
Total Markets[(a)]						
Principal transactions	$3,465	$2,255	54%	$9,350	$8,328	12%
Lending- and deposit-related fees	55	49	12	165	149	11
Asset management, administration and commissions	442	536	(18)	1,459	1,602	(9)
All other income	161	203	(21)	803	550	46
Noninterest revenue	4,123	3,043	35	11,777	10,629	11
Net interest income	1,625	1,293	26	4,703	4,019	17
Total net revenue	$5,748	$4,336	33%	$16,480	$14,648	13%

(a) Represents both Fixed Income Markets and Equity Markets revenue.

(in millions, except where otherwise noted)	As of or for the three months ended September 30, 2016	2015	Change	As of or for the nine months ended September 30, 2016	2015	Change
Assets under custody ("AUC") by asset class (period-end) (in billions):						
Fixed Income	$12,857	$12,190	5%	$12,857	$12,190	5%
Equity	6,440	5,848	10	6,440	5,848	10
Other[(a)]	1,927	1,653	17	1,927	1,653	17
Total AUC	$21,224	$19,691	8	$21,224	$19,691	8
Client deposits and other third party liabilities (average)[(b)]	$381,542	$372,070	3	$371,417	$405,576	(8)
Trade finance loans (period-end)	16,957	21,138	(20)%	16,957	21,138	(20)%

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

(b) Client deposits and other third party liabilities pertain to the Treasury Services and Securities Services businesses.

29

International metrics

(in millions, except where otherwise noted)	As of or for the three months ended September 30, 2016	2015	Change	As of or for the nine months ended September 30, 2016	2015	Change
Total net revenue[(a)]						
Europe/Middle East/Africa	$2,798	$2,508	12 %	$8,078	$8,689	(7)%
Asia/Pacific	1,281	1,224	5	3,793	3,845	(1)
Latin America/Caribbean	307	300	2	1,031	851	21
Total international net revenue	4,386	4,032	9	12,902	13,385	(4)
North America	5,069	4,136	23	13,853	13,088	6
Total net revenue	$9,455	$8,168	16	$26,755	$26,473	1
Loans retained (period-end)[(a)]						
Europe/Middle East/Africa	$32,016	$25,793	24	$32,016	$25,793	24
Asia/Pacific	15,262	17,453	(13)	15,262	17,453	(13)
Latin America/Caribbean	8,896	8,418	6	8,896	8,418	6
Total international loans	56,174	51,664	9	56,174	51,664	9
North America	60,959	49,756	23	60,959	49,756	23
Total loans retained	$117,133	$101,420	15	$117,133	$101,420	15
Client deposits and other third-party liabilities (average)[(a)(b)]						
Europe/Middle East/Africa	$138,628	$130,247	6	$135,201	$146,155	(7)
Asia/Pacific	70,301	66,101	6	67,158	67,259	—
Latin America/Caribbean	22,802	21,462	6	22,555	22,800	(1)
Total international	$231,731	$217,810	6	$224,914	$236,214	(5)
North America	149,811	154,260	(3)	146,503	169,362	(13)
Total client deposits and other third-party liabilities	$381,542	$372,070	3	$371,417	$405,576	(8)
AUC (period-end) (in billions)[(a)]						
North America	$12,685	$11,944	6	$12,685	$11,944	6
All other regions	8,539	7,747	10	8,539	7,747	10
Total AUC	$21,224	$19,691	8%	$21,224	$19,691	8%

(a) Total net revenue is based predominantly on the domicile of the client or location of the trading desk, as applicable. Loans outstanding (excluding loans held-for-sale and loans at fair value), client deposits and other third-party liabilities, and AUC are based predominantly on the domicile of the client.

(b) Client deposits and other third party liabilities pertain to the Treasury Services and Securities Services businesses.

COMMERCIAL
BANKING

For a discussion of the business profile of CB, see pages 99–101 of JPMorgan Chase’s 2015 Annual Report and Line of Business Metrics on page 178.

Selected income statement data

	Three months ended September 30,			Nine months ended September 30,		
(in millions)	2016	2015	Change	2016	2015	Change
Revenue						
Lending- and deposit-related fees	$228	$229	— %	$687	$708	(3)%
Asset management, administration and commissions	14	22	(36)	54	68	(21)
All other income[(a)]	336	271	24	979	991	(1)
Noninterest revenue	578	522	11	1,720	1,767	(3)
Net interest income	1,292	1,122	15	3,770	3,358	12
Total net revenue[(b)]	1,870	1,644	14	5,490	5,125	7
Provision for credit losses	(121)	82	NM	158	325	(51)
Noninterest expense						
Compensation expense	343	311	10	999	928	8
Noncompensation expense	403	408	(1)	1,191	1,203	(1)
Total noninterest expense	746	719	4	2,190	2,131	3
Income before income tax expense	1,245	843	48	3,142	2,669	18
Income tax expense	467	325	44	1,172	1,028	14
Net income	$778	$518	50%	$1,970	$1,641	20%

(a) Includes revenue from investment banking products and commercial card transactions.

(b) Total net revenue included tax-equivalent adjustments from income tax credits related to equity investments in designated community development entities that provide loans to qualified businesses in low-income communities, as well as tax-exempt income related to municipal financing activity of $127 million and $116 million for the three months ended September 30, 2016 and 2015, respectively and $371 million and $344 million for the nine months ended September 30, 2016 and 2015, respectively.

Quarterly results

Net income was $778 million, an increase of 50%, driven by higher net revenue and a lower provision for credit losses, partially offset by higher noninterest expense.

Net revenue was $1.9 billion, an increase of 14%. Net interest income was $1.3 billion, up 15%, driven by higher average loan balances and deposit spreads. Noninterest revenue was $578 million, up 11%, driven by higher investment banking revenue.

Noninterest expense was $746 million, up 4%, driven by investments in technology and increased hiring of bankers and business-related support staff.

The provision for credit losses was a benefit of $121 million largely driven by the Oil & Gas portfolio largely due to loan sales; the prior year provision for credit losses was $82 million reflecting a modest increase in the allowance for loan losses for Oil & Gas exposure.

Year-to-date results

Net income was $2.0 billion, an increase of 20%, driven by higher net revenue and a lower provision for credit losses, partially offset by higher noninterest expense.

Net revenue was $5.5 billion, up 7%. Net interest income was $3.8 billion, up 12%, driven by higher average loan balances and deposit spreads. Noninterest revenue was $1.7 billion, down 3%, driven by lower lending- and deposit-related fees.

Noninterest expense was $2.2 billion, up 3%, driven by investments in technology and increased hiring of bankers and business-related support staff.
The provision for credit losses was $158 million, reflecting downgrades in the Oil & Gas and Natural Gas Pipeline portfolios; the prior year provision for credit losses was $325 million reflecting an increase in the allowance for loan losses for Oil & Gas exposure and other select downgrades.

Selected income statement data (continued)

(in millions, except ratios)	Three months ended September 30, 2016	2015	Change	Nine months ended September 30, 2016	2015	Change
Revenue by product						
Lending	$956	$850	12 %	$2,801	$2,542	10 %
Treasury services	693	633	9	2,067	1,926	7
Investment banking[(a)]	203	130	56	565	574	(2)
Other	18	31	(42)	57	83	(31)
Total Commercial Banking net revenue	$1,870	$1,644	14	$5,490	$5,125	7
Investment banking revenue, gross[(b)]	$600	$382	57	$1,678	$1,724	(3)
Revenue by client segment[(c)]						
Middle Market Banking	$716	$668	7	$2,121	$2,012	5
Corporate Client Banking	612	484	26	1,758	1,664	6
Commercial Term Lending	350	318	10	1,053	944	12
Real Estate Banking	117	92	27	328	262	25
Other	75	82	(9)	230	243	(5)
Total Commercial Banking net revenue	$1,870	$1,644	14 %	$5,490	$5,125	7 %
Financial ratios						
Return on common equity	18 %	14 %		15 %	15 %	
Overhead ratio	40	44		40	42	

(a) Includes total Firm revenue from investment banking products sold to CB clients, net of revenue sharing with the CIB.

(b) Represents total Firm revenue from investment banking products sold to CB clients.

(c) Certain clients were transferred from Middle Market Banking to Corporate Client Banking and from Real Estate Banking to Corporate Client Banking effective in the second and third quarter of 2016, respectively. Prior period client segment amounts were revised to conform with the current period presentation.

Selected metrics

(in millions, except headcount)	As of or for the three months ended September 30, 2016	2015	Change	As of or for the nine months ended September 30, 2016	2015	Change
Selected balance sheet data (period-end)						
Total assets	$212,189	$201,157	5 %	$212,189	$201,157	5 %
Loans:						
Loans retained	185,609	162,269	14	185,609	162,269	14
Loans held-for-sale and loans at fair value	191	213	(10)	191	213	(10)
Total loans	$185,800	$162,482	14	$185,800	$162,482	14
Core loans	185,354	161,662	15	185,354	161,662	15
Common equity	16,000	14,000	14	16,000	14,000	14
Period-end loans by client segment[(a)]						
Middle Market Banking	$53,584	$51,067	5	$53,584	$51,067	5
Corporate Client Banking	43,514	35,163	24	43,514	35,163	24
Commercial Term Lending	69,133	60,684	14	69,133	60,684	14
Real Estate Banking	13,905	10,457	33	13,905	10,457	33
Other	5,664	5,111	11	5,664	5,111	11
Total Commercial Banking loans	$185,800	$162,482	14	$185,800	$162,482	14
Selected balance sheet data (average)						
Total assets	$208,765	$197,274	6	$205,748	$197,319	4
Loans:						
Loans retained	180,962	158,845	14	175,695	154,595	14
Loans held-for-sale and loans at fair value	517	359	44	516	595	(13)
Total loans	$181,479	$159,204	14	$176,211	$155,190	14
Core loans	181,016	158,364	14	175,651	154,240	14
Average loans by client segment[(a)]						
Middle Market Banking	$52,648	$50,436	4	$51,718	$50,136	3
Corporate Client Banking	42,139	34,314	23	40,870	33,454	22
Commercial Term Lending	67,696	59,323	14	65,486	56,980	15
Real Estate Banking	13,382	10,074	33	12,597	9,640	31
Other	5,614	5,057	11	5,540	4,980	11
Total Commercial Banking loans	$181,479	$159,204	14	$176,211	$155,190	14
Client deposits and other third-party liabilities	173,696	180,892	(4)	172,502	195,874	(12)
Common equity	16,000	14,000	14	16,000	14,000	14
Headcount	8,333	7,735	8 %	8,333	7,735	8 %

(a) Certain clients were transferred from Middle Market Banking to Corporate Client Banking and from Real Estate Banking to Corporate Client Banking effective in the second and third quarter of 2016, respectively. Prior period client segment amounts were revised to conform with the current period presentation.

Selected metrics (continued)	As of or for the three months ended September 30,			As of or for the nine months ended September 30,		
(in millions, except ratios)	2016	2015	Change	2016	2015	Change
Credit data and quality statistics						
Net charge-offs/(recoveries)	$44	$ (2)	NM	$110	$ 5	NM
Nonperforming assets						
Nonaccrual loans:						
Nonaccrual loans retained[(a)]	1,212	423	187	1,212	423	187
Nonaccrual loans held-for-sale and loans at fair value	—	16	(100)	—	16	(100)
Total nonaccrual loans	1,212	439	176	1,212	439	176
Assets acquired in loan satisfactions	1	4	(75)	1	4	(75)
Total nonperforming assets	1,213	443	174	1,213	443	174
Allowance for credit losses:						
Allowance for loan losses	2,858	2,782	3	2,858	2,782	3
Allowance for lending-related commitments	244	170	44	244	170	44
Total allowance for credit losses	3,102	2,952	5 %	3,102	2,952	5 %
Net charge-off/(recovery) rate[(b)]	0.10%	—		0.08 %	—	
Allowance for loan losses to period-end loans retained	1.54	1.71		1.54	1.71	
Allowance for loan losses to nonaccrual loans retained[(a)]	236	658		236	658	
Nonaccrual loans to period-end total loans	0.65	0.27		0.65	0.27	

(a) Allowance for loan losses of $221 million and $80 million was held against nonaccrual loans retained at September 30, 2016 and 2015, respectively.

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

34

ASSET
MANAGEMENT

For a discussion of the business profile of AM, see pages 102–104 of JPMorgan Chase's 2015 Annual Report and Line of Business Metrics on pages 178–179.

Selected income statement data

(in millions, except ratios)	Three months ended September 30, 2016	2015	Change	Nine months ended September 30, 2016	2015	Change
Revenue						
Asset management, administration and commissions	$2,087	$2,237	(7)%	$6,205	$6,847	(9)%
All other income	190	24	NM	509	342	49
Noninterest revenue	2,277	2,261	1	6,714	7,189	(7)
Net interest income	770	633	22	2,244	1,885	19
Total net revenue	3,047	2,894	5	8,958	9,074	(1)
Provision for credit losses	32	(17)	NM	37	(13)	NM
Noninterest expense						
Compensation expense	1,279	1,218	5	3,769	3,806	(1)
Noncompensation expense	851	891	(4)	2,534	2,884	(12)
Total noninterest expense	2,130	2,109	1	6,303	6,690	(6)
Income before income tax expense	885	802	10	2,618	2,397	9
Income tax expense	328	327	—	953	969	(2)
Net income	$557	$475	17	$1,665	$1,428	17
Revenue by line of business						
Global Investment Management	$1,497	$1,483	1	$4,420	$4,686	(6)
Global Wealth Management	1,550	1,411	10	4,538	4,388	3
Total net revenue	$3,047	$2,894	5%	$8,958	$9,074	(1)%
Financial ratios						
Return on common equity	24 %	20 %		24 %	20 %	
Overhead ratio	70	73		70	74	
Pre-tax margin ratio:						
Global Investment Management	31	31		31	29	
Global Wealth Management	27	24		27	24	
Asset Management	29	28		29	26	

Quarterly results

Net income was $557 million, an increase of 17%, reflecting higher net revenue.

Net revenue was $3.0 billion, an increase of 5%, driven by higher net interest income due to higher deposit and loan spreads, and loan growth.

Noninterest expense was $2.1 billion, an increase of 1%, driven by higher performance-based compensation.

Year-to-date results

Net income was $1.7 billion, an increase of 17%, reflecting lower noninterest expense, partially offset by lower net revenue.

Net revenue was $9.0 billion, a decrease of 1%. Net interest income was $2.2 billion, up 19%, driven by higher deposit and loan spreads, and loan growth. Noninterest revenue was $6.7 billion, down 7%, driven by weaker markets, lower performance fees and lower brokerage activity.
Noninterest expense was $6.3 billion, a decrease of 6%, due to lower legal expense as well as a reduction of expense related to the disposal of assets.

Selected metrics	As of or for the three months ended September 30,			As of or for the nine months ended September 30,		
(in millions, except ranking data, headcount and ratios)	2016	2015	Change	2016	2015	Change
% of JPM mutual fund assets rated as 4- or 5-star[(a)]	56 %	57 %		56 %	57 %	
% of JPM mutual fund assets ranked in 1st or 2nd quartile:[(b)]						
1 year	47	79		47	79	
3 years	75	82		75	82	
5 years	80	81		80	81	
Selected balance sheet data (period-end)						
Total assets	$137,295	$131,412	4 %	$137,295	$131,412	4 %
Loans[(c)]	116,043	110,314	5	116,043	110,314	5
Core loans	116,043	110,314	5	116,043	110,314	5
Deposits	157,274	140,121	12	157,274	140,121	12
Common equity	9,000	9,000	—	9,000	9,000	—
Selected balance sheet data (average)						
Total assets	$134,920	$131,100	3	$132,090	$129,326	2
Loans	114,201	108,741	5	112,142	106,446	5
Core loans	114,201	108,741	5	112,142	106,446	5
Deposits	153,121	141,896	8	151,656	150,840	1
Common equity	9,000	9,000	—	9,000	9,000	—
Headcount	21,142	20,651	2	21,142	20,651	2
Number of client advisors	2,560	2,796	(8)	2,560	2,796	(8)
Credit data and quality statistics						
Net charge-offs	$5	$2	150	$16	$4	300
Nonaccrual loans	372	229	62	372	229	62
Allowance for credit losses:						
Allowance for loan losses	285	258	10	285	258	10
Allowance for lending-related commitments	5	4	25	5	4	25
Total allowance for credit losses	290	262	11 %	290	262	11 %
Net charge-off rate	0.02 %	0.01 %		0.02 %	0.01 %	
Allowance for loan losses to period-end loans	0.25	0.23		0.25	0.23	
Allowance for loan losses to nonaccrual loans	77	113		77	113	
Nonaccrual loans to period-end loans	0.32	0.21		0.32	0.21	

(a) Represents the "overall star rating" derived from Morningstar for the U.S., the U.K., Luxembourg, Hong Kong and Taiwan domiciled funds; and Nomura "star rating" for Japan domiciled funds. Includes only Global Investment Management retail open ended mutual funds that have a rating. Excludes money market funds, Undiscovered Managers Fund, and Brazil and India domiciled funds.

(b) Quartile ranking sourced from: Lipper for the U.S. and Taiwan domiciled funds; Morningstar for the U.K., Luxembourg and Hong Kong domiciled funds; Nomura for Japan domiciled funds and Fund Doctor for South Korea domiciled funds. Includes only Global Investment Management retail open ended mutual funds that are ranked by the aforementioned sources. Excludes money market funds, Undiscovered Managers Fund, and Brazil and India domiciled funds.

(c)

Included $30.7 billion and $25.4 billion of prime mortgage loans reported in the Consumer, excluding credit card, loan portfolio at September 30, 2016 and 2015, respectively.

Client assets

Client assets of $2.4 trillion and assets under management of $1.8 trillion were up 5% and 4%, respectively, due to the effect of higher market levels and inflows into long-term products, partially offset by asset sales.

Client assets	September 30,		
(in billions)	2016	2015	Change
Assets by asset class			
Liquidity	$447	$463	(3)%
Fixed income	393	351	12
Equity	357	336	6
Multi-asset and alternatives	575	561	2
Total assets under management	1,772	1,711	4
Custody/brokerage/administration/deposits	675	612	10
Total client assets	$2,447	$2,323	5
Memo:			
Alternatives client assets[a]	$157	$172	(9)
Assets by client segment			
Private Banking	$433	$438	(1)
Institutional	862	816	6
Retail	477	457	4
Total assets under management	$1,772	$1,711	4
Private Banking	$1,089	$1,037	5
Institutional	879	823	7
Retail	479	463	3
Total client assets	$2,447	$2,323	5%

(a) Represents assets under management, as well as client balances in brokerage accounts.

Client assets (continued)	Three months ended September 30,		Nine months ended September 30,	
(in billions)	2016	2015	2016	2015
Assets under management rollforward				
Beginning balance	$1,693	$1,781	$1,723	$1,744
Net asset flows:				
Liquidity	22	(5)	(1)	—
Fixed income	5	(5)	26	—
Equity	(7)	(5)	(17)	(2)
Multi-asset and alternatives	21	6	25	27
Market/performance/other impacts	38	(61)	16	(58)
Ending balance, September 30	$1,772	$1,711	$1,772	$1,711
Client assets rollforward				
Beginning balance	$2,344	$2,423	$2,350	$2,387
Net asset flows	47	(7)	42	26
Market/performance/other impacts	56	(93)	55	(90)
Ending balance, September 30	$2,447	$2,323	$2,447	$2,323

International metrics	As of or for the three months ended September 30,			As of or for the nine months ended September 30,		
(in billions, except where otherwise noted)	2016	2015	Change	2016	2015	Change
Total net revenue (in millions)[a]						
Europe/Middle East/Africa	$475	$473	—	$1,369	$1,468	(7)%
Asia/Pacific	280	267	5	802	855	(6)
Latin America/Caribbean	181	182	(1)	539	590	(9)
Total international net revenue	936	922	2	2,710	2,913	(7)
North America	2,111	1,972	7	6,248	6,161	1
Total net revenue	$3,047	$2,894	5	$8,958	$9,074	(1)
Assets under management						
Europe/Middle East/Africa	$314	$292	8	$314	$292	8
Asia/Pacific	131	119	10	131	119	10
Latin America/Caribbean	45	44	2	45	44	2
Total international assets under management	490	455	8	490	455	8
North America	1,282	1,256	2	1,282	1,256	2
Total assets under management	$1,772	$1,711	4	$1,772	$1,711	4
Client assets						
Europe/Middle East/Africa	$364	$341	7	$364	$341	7
Asia/Pacific	186	168	11	186	168	11
Latin America/Caribbean	116	108	7	116	108	7
Total international client assets	666	617	8	666	617	8
North America	1,781	1,706	4	1,781	1,706	4
Total client assets	$2,447	$2,323	5 %	$2,447	$2,323	5 %

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

CORPORATE

For a discussion of Corporate, see pages 105–106 of JPMorgan Chase's 2015 Annual Report.

Selected income statement data

(in millions, except headcount)	As of or for the three months ended September 30, 2016	2015	Change	As of or for the nine months ended September 30, 2016	2015	Change
Revenue						
Principal transactions	$57	$(70)	NM	$183	$97	89 %
Securities gains	64	25	156	135	118	14
All other income/(loss)	76	118	(36)	319	(2)	NM
Noninterest revenue	197	73	170	637	213	199
Net interest income	(385)	(123)	(213)	(927)	(597)	(55)
Total net revenue[(a)]	(188)	(50)	(276)	(290)	(384)	24
Provision for credit losses	(1)	(4)	75	(4)	(8)	50
Noninterest expense[(b)]	143	172	(17)	23	368	(94)
Income/(loss) before income tax expense/(benefit)	(330)	(218)	(51)	(309)	(744)	58
Income tax expense/(benefit)	(165)	(1,935)	91	54	(2,959)	NM
Net income/(loss)	$(165)	$1,717	NM	$(363)	$2,215	NM
Total net revenue						
Treasury and CIO	(211)	(89)	(137)	(531)	(630)	16
Other Corporate	23	39	(41)	241	246	(2)
Total net revenue	$(188)	$(50)	(276)	$(290)	$(384)	24
Net income/(loss)						
Treasury and CIO	(208)	(40)	(420)	(518)	(373)	(39)
Other Corporate	43	1,757	(98)	155	2,588	(94)
Total net income/(loss)	$(165)	$1,717	NM	$(363)	$2,215	NM
Selected balance sheet data (period-end)						
Total assets	$824,336	$798,680	3	$824,336	$798,680	3
Loans	1,738	2,332	(25)	1,738	2,332	(25)
Core loans[(c)]	1,735	2,327	(25)	1,735	2,327	(25)
Headcount	31,572	29,307	8	31,572	29,307	8

(a) Included tax-equivalent adjustments, predominantly due to tax-exempt income from municipal bond investments of $218 million and $215 million for the three months ended September 30, 2016 and 2015, respectively, and $663 million and $620 million for the nine months ended September 30, 2016 and 2015, respectively.

(b) Included legal expense/(benefit) of $(85) million and $102 million for the three months ended September 30, 2016 and 2015, respectively, and $(550) million and $425 million for the nine months ended September 30, 2016 and 2015, respectively.

(c) Average core loans were $1.8 billion and $2.4 billion for the three months ended September 30, 2016 and 2015, respectively, and $1.9 billion and $2.6 billion for the nine months ended September 30, 2016 and 2015, respectively.

Quarterly results

Net loss was $165 million, compared with net income of $1.7 billion in the prior year, which was primarily driven by tax benefits of $1.9 billion related to the resolution of tax audits in the prior-year quarter. Net revenue was a loss of $188 million, compared to a loss of $50 million in the prior year. Noninterest expense was $143 million, down $29 million.

Year-to-date results

Net loss was $363 million, compared with net income of $2.2 billion in the prior year, which was primarily driven by tax benefits of $2.4 billion related to the resolution of tax audits in the prior year. Net revenue was a loss of $290 million, compared to a loss of $384 million in the prior year, which included a $173 million pre-tax loss in Treasury & Chief Investment Office ("CIO"), primarily related to the accelerated amortization of cash flow hedges associated with the exit of certain non-operational deposits. Noninterest expense was $23 million, a decrease of $345 million, due to a net legal benefit in the current year partially offset by higher compensation expense.

Treasury and CIO overview

For a discussion of Treasury and CIO, see page 106 of the Firm’s 2015 Annual Report.

At September 30, 2016, 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 ratings that correspond to ratings as defined by S&P and Moody’s). During the second quarter of 2016, the Firm transferred commercial MBS and obligations of U.S. states and municipalities with a fair value of $7.5 billion from available-for-sale (“AFS”) to held-to-maturity

(“HTM”). These securities were transferred at fair value. The transfers reflect the Firm’s intent to hold the securities to maturity in order to reduce the impact of price volatility on AOCI.

See Note 11 for further information on the Firm’s investment securities portfolio.

For further information on liquidity and funding risk, see Liquidity Risk Management on pages 74–78. For information on interest rate, foreign exchange and other risks, see Market Risk Management on pages 60–65.

Selected income statement and balance sheet data

	As of or for the three months ended September 30,			As of or for the nine months ended September 30,		
(in millions)	2016	2015	Change	2016	2015	Change
Securities gains	$64	$ 25	156 %	$135	$ 118	14 %
Investment securities portfolio (average)[(a)]	271,816	306,370	(11)	278,053	320,905	(13)
Investment securities portfolio (period-end)[(b)]	269,207	303,057	(11)	269,207	303,057	(11)
Mortgage loans (average)	1,722	2,400	(28)	1,861	2,595	(28)
Mortgage loans (period-end)	1,661	2,293	(28)	1,661	2,293	(28)

(a) Average investment securities included HTM balances of $52.8 billion and $50.7 billion for the three months ended September 30, 2016 and 2015, respectively, and $51.5 billion and $50.2 billion for the nine months ended September 30, 2016 and 2015, respectively.

(b) Period-end investment securities included HTM balances of $52.0 billion and $50.2 billion at September 30, 2016 and 2015, respectively.

Private equity portfolio information[(a)]

(in millions)	September 30, 2016	December 31, 2015	Change
Carrying value	$ 1,893	$ 2,103	(10)%
Cost	2,951	3,798	(22)

(a) For more information on the Firm’s methodologies regarding the valuation of the private equity portfolio, see Note 3 of JPMorgan Chase’s 2015 Annual Report.

ENTERPRISE-WIDE RISK MANAGEMENT

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

Firmwide Risk Management is overseen and managed on an enterprise-wide basis. The Firm's approach to risk management covers a broad spectrum of risk areas, such as credit, market, liquidity, model, structural interest rate, principal, country, operational, compliance, legal, capital, and reputation risk, with controls and governance established for each area, as appropriate.

The Firm believes that effective risk management requires:

- Acceptance of responsibility, including identification and escalation of risk issues, by all individuals within the Firm;
- Ownership of risk management within each of the lines of business and corporate functions; and
- Firmwide structures for risk governance.

The Firm's Operating Committee, which consists of the Firm's Chief Executive Officer ("CEO"), Chief Risk Officer ("CRO") and other senior executives, is responsible for developing and executing the Firm's risk management framework. The framework is intended to provide controls and ongoing management of key risks inherent in the Firm's business activities and create a culture of transparency, awareness and personal responsibility through reporting, collaboration, discussion, escalation and sharing of information. The Operating Committee is responsible and accountable to the Firm's Board of Directors.

The Firm strives for continual improvement through efforts to enhance controls, ongoing employee training and development, talent retention, and other measures. The Firm follows a disciplined and balanced compensation framework with strong internal governance and independent Board oversight. The impact of risk and control issues are carefully considered in the Firm's performance evaluation and incentive compensation processes. The Firm is also engaged in a number of activities focused on conduct risk and in regularly evaluating its culture with respect to its business principles.

Effective September 2016, the Firm has aligned the Compliance and Risk Management functions. As a result of this realignment, the Firm's Chief Compliance Officer now reports to the Firm's CRO. Together, Compliance and Risk provide the second line of defense for the Firm. For further information on Risk Governance and Compliance Risk Management, refer to pages 108 and 147, respectively, of JPMorgan Chase's 2015 Annual Report.

The following provides an index of key risk management disclosures. For further information on these disclosures, refer to the page references noted below in both this Form 10-Q and JPMorgan Chase’s 2015 Annual Report.

CREDIT RISK
MANAGEMENT

Credit risk is the risk of loss arising from the default of a customer, client or counterparty. The Firm provides credit to a variety of customers, ranging from large corporate and institutional clients to individual consumers and small businesses. For a further discussion of the Firm's Credit Risk Management framework and organization, and the identification, monitoring and management of credit risks, see Credit Risk Management on pages 112–132 of JPMorgan Chase's 2015 Annual Report.

In the following tables, reported loans include loans retained (i.e., held-for-investment); loans held-for-sale (which are carried at the lower of cost or fair value, with valuation changes recorded in noninterest revenue); and certain loans accounted for at fair value. In addition, the Firm records certain loans accounted for at fair value in trading assets. For further information regarding these loans, see Notes 3 and 4. For additional information on the Firm's loans, lending-related commitments and derivative receivables, including the Firm's accounting policies, see Notes 13, 21, and 5, respectively.

For further information regarding the credit risk inherent in the Firm's cash placed with banks, see Wholesale credit exposure – industry exposures on pages 52–54; for information regarding the credit risk inherent in the Firm's investment securities portfolio, see Note 11 of this Form 10-Q, and Note 12 of JPMorgan Chase's 2015 Annual Report; and for information regarding the credit risk inherent in the securities financing portfolio, see Note 12 of this Form 10-Q, and Note 13 of JPMorgan Chase's 2015 Annual Report.

Total credit portfolio

	Credit exposure		Nonperforming[b][c]	
(in millions)	Sep 30, 2016	Dec 31, 2015	Sep 30, 2016	Dec 31, 2015
Loans retained	$883,193	$832,792	$ 7,059	$ 6,303
Loans held-for-sale	2,950	1,646	72	101
Loans at fair value	1,911	2,861	7	25
Total loans – reported	888,054	837,299	7,138	6,429
Derivative receivables	65,579	59,677	232	204
Receivables from customers and other	19,163	13,497	—	—
Total credit-related assets	972,796	910,473	7,370	6,633
Assets acquired in loan satisfactions				
Real estate owned	NA	NA	354	347
Other	NA	NA	55	54
Total assets acquired in loan satisfactions	NA	NA	409	401
Total assets	972,796	910,473	7,779	7,034
Lending-related commitments	978,611	940,395	503	193
Total credit portfolio	$1,951,407	$1,850,868	$ 8,282	$ 7,227
Credit derivatives used in credit portfolio management activities[a]	$(23,430)	$(20,681)	$ —	$ (9)
Liquid securities and other cash collateral held against derivatives	(21,212)	(16,580)	NA	NA

(in millions, except ratios)	Three months ended September 30,		Nine months ended September 30,	
	2016	2015	2016	2015
Net charge-offs	$1,121	$963	$3,412	$3,022
Average retained loans				
Loans – reported	869,676	787,678	853,973	767,952
Loans – reported, excluding residential real estate PCI loans	831,956	744,692	814,923	723,475
Net charge-off rates				

Loans – reported	0.51 %	0.49 %	0.53 %	0.53 %
Loans – reported, excluding PCI	0.54	0.51	0.56	0.56

(a) Represents the net notional amount of protection purchased and sold through credit derivatives used to manage both performing and nonperforming wholesale credit exposures; these derivatives do not qualify for hedge accounting under U.S. GAAP. For additional information, see Credit derivatives on page 56 and Note 5.

(b) Excludes PCI loans. The Firm is recognizing interest income on each pool of PCI loans as they are all performing.

(c) At September 30, 2016, and December 31, 2015, nonperforming assets excluded: (1) mortgage loans insured by U.S. government agencies of $5.0 billion and $6.3 billion, respectively, that are 90 or more days past due; (2) student loans insured by U.S. government agencies under the FFELP of $259 million and $290 million, respectively, that are 90 or more days past due; and (3) real estate owned ("REO") insured by U.S. government agencies of $163 million and $343 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 issued by the Federal Financial Institutions Examination Council ("FFIEC").

43

CONSUMER CREDIT PORTFOLIO

The Firm’s consumer portfolio consists primarily of residential real estate loans, credit card loans, auto loans, business banking loans and student loans, and associated lending-related commitments. The Firm’s focus is on serving primarily the prime segment of the consumer credit market.

For further information on consumer loans, see Note 13 of this Form 10-Q and Consumer Credit Portfolio on pages 115–121 and Note 14 of JPMorgan Chase’s 2015 Annual Report. For further information on lending-related commitments, see note 21 of this Form 10-Q.

The following table presents consumer credit-related information with respect to the credit portfolio held by CCB, prime mortgage and home equity loans held by AM, and prime mortgage loans held by Corporate.

Consumer credit portfolio					Three months ended September 30,				Nine months ended September 30,			
(in millions, except ratios)	Credit exposure		Nonaccrual loans[h][i]		Net charge-offs/(recoveries)[j]		Average annual net charge-off/(recovery) rate[j][k]		Net charge-offs/(recoveries)[j]		Average annual net charge-off/(recovery) rate[j][k]	
	Sep 30, 2016	Dec 31, 2015	Sep 30, 2016	Dec 31, 2015	2016	2015	2016	2015	2016	2015	2016	2015
Consumer, excluding credit card												
Loans, excluding PCI loans and loans held-for-sale												
Home equity	$40,740	$45,559	$1,904	$2,191	$45	$83	0.43%	0.69%	$140	$245	0.43%	0.66%
Residential mortgage	189,558	166,239	2,295	2,503	7	(44)	0.01	(0.12)	10	(17)	0.01	(0.02)
Auto[a]	64,512	60,255	212	116	79	57	0.49	0.40	192	140	0.41	0.34
Business banking[b]	22,292	21,208	286	263	71	50	1.28	0.96	180	177	1.11	1.16
Student and other	9,251	10,096	211	242	34	56	1.44	2.12	101	147	1.40	1.84
Total loans, excluding PCI loans and loans held-for-sale	326,353	303,357	4,908	5,315	236	202	0.29	0.29	623	692	0.26	0.35
Loans – PCI												
Home equity	13,448	14,989	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Prime mortgage	7,919	8,893	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Subprime mortgage	3,021	3,263	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Option ARMs[c]	12,657	13,853	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total loans – PCI	37,045	40,998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total loans – retained	363,398	344,355	4,908	5,315	236	202	0.26	0.25	623	692	0.23	0.30
	398 [g]	466 [g]	53	98	—	—	—	—	—	—	—	—

Loans held-for-sale												
Total consumer, excluding credit card loans	363,796	344,821	4,961	5,413	236	202	0.26	0.25	623	692	0.23	0.30
Lending-related commitments[d]	59,990	58,478										
Receivables from customers[e]	125	125										
Total consumer exposure, excluding credit card	423,911	403,424										
Credit card												
Loans retained[f]	133,346	131,387	—	—	838	759	2.51	2.41	2,528	2,348	2.61	2.54
Loans held-for-sale	89	76	—	—	—	—	—	—	—	—	—	—
Total credit card loans	133,435	131,463	—	—	838	759	2.51	2.41	2,528	2,348	2.61	2.54
Lending-related commitments[d]	549,634	515,518										
Total credit card exposure	683,069	646,981										
Total consumer credit portfolio	$1,106,980	$1,050,405	$4,961	$5,413	$1,074	$961	0.86%	0.85 %	$3,151	$3,040	0.87%	0.93 %
Memo: Total consumer credit portfolio, excluding PCI	$1,069,935	$1,009,407	$4,961	$5,413	$1,074	$961	0.93%	0.94 %	$3,151	$3,040	0.94%	1.04 %

(a) At September 30, 2016, and December 31, 2015, excluded operating lease assets of $12.1 billion and $9.2 billion, respectively.

(b) Predominantly includes Business Banking loans as well as deposit overdrafts.

(c) At September 30, 2016, and December 31, 2015, approximately 66% and 64% of the PCI option adjustable rate mortgage ("ARMs") portfolio has been modified into fixed-rate, fully amortizing loans, respectively.

(d) Credit card and home equity lending-related commitments represent the total available lines of credit for these products. The Firm has not experienced, and does not anticipate, that all available lines of credit would be used at the same time. For credit card and home equity commitments (if certain conditions are met), 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.

(e) Receivables from customers represent margin loans to retail brokerage customers, and are included in accrued interest and accounts receivable on the Consolidated balance sheets.

(f) Includes accrued interest and fees net of an allowance for the uncollectible portion of accrued interest and fee income.

(g) Predominantly represents prime mortgage loans held-for-sale.

(h) At September 30, 2016, and December 31, 2015, nonaccrual loans excluded loans 90 or more days past due as follows: (1) mortgage loans insured by U.S. government agencies of $5.0 billion and $6.3 billion, respectively; and (2) student loans insured by U.S. government agencies under the FFELP of $259 million and $290 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 issued by the FFIEC.

(i) Excludes PCI loans. The Firm is recognizing interest income on each pool of PCI loans as they are all performing.

(j) Net charge-offs and the net charge-off rates excluded write-offs in the PCI portfolio of $36 million and $52 million for the three months ended September 30, 2016 and 2015 respectively, and $124 million and $162 million for the nine months ended September 30, 2016 and 2015, respectively. These write-offs decreased the allowance for loan losses for PCI loans. See Allowance for Credit Losses on pages 57–59 for further details.

(k) Average consumer loans held-for-sale were $337 million and $2.1 billion for the three months ended September 30, 2016 and 2015, respectively, and $372 million and $2.4 billion for the nine months ended September 30, 2016 and 2015, respectively. These amounts were excluded when calculating net charge-off rates.

Consumer, excluding credit card
Portfolio analysis
Consumer loan balances increased during the nine months ended September 30, 2016, predominantly due to originations of high-quality prime mortgage and auto loans that have been retained on the balance sheet, partially offset by paydowns and the charge-off or liquidation of delinquent loans. The credit environment remained favorable as the economy strengthened and home prices increased.
PCI loans are excluded from the following discussions of individual loan products and are addressed separately below. For further information about the Firm’s consumer portfolio, including information about delinquencies, loan modifications and other credit quality indicators, see
Note 13.
Home equity: The home equity portfolio declined from the 2015 year-end primarily reflecting loan paydowns and charge-offs. Both early-stage and late-stage delinquencies showed improvement from December 31, 2015. Nonaccrual loans decreased from December 31, 2015 primarily as a result of loss mitigation activities. Net charge-offs for the three and nine months ended September 30, 2016, declined when compared with the same periods of the prior year as a result of improvement in home prices and delinquencies.
At September 30, 2016, approximately 90% of the Firm’s home equity portfolio consists of home equity lines of credit (“HELOCs”) and the remainder consists of home equity loans (“HELOANs”). For further information on the Firm’s home equity portfolio, see Note 13 of this Form 10-Q and Consumer Credit Portfolio on pages 115–121 of JPMorgan Chase’s 2015 Annual Report.
The unpaid principal balance of HELOCs outstanding was $37 billion at September 30, 2016. Of such amounts, approximately:

- $14 billion have recast from interest-only to fully amortizing payments or have been modified,
- $16 billion are scheduled to recast from interest-only to fully amortizing payments in future periods, and
- $7 billion are interest-only balloon HELOCs, which primarily mature after 2030.

The following chart illustrates the payment recast composition of the approximately $23 billion of HELOCs scheduled to recast in the future, based upon their current contractual terms.
HELOCs scheduled to recast
(at September 30, 2016)
The Firm has considered this payment recast risk in its allowance for loan losses based upon the estimated amount of payment shock (i.e., the excess of the fully-amortizing payment over the interest-only payment in effect prior to recast) expected to occur at the payment recast date, along with the corresponding estimated probability of default ("PD") and loss severity assumptions. As part of its allowance estimate, the Firm also expects, based on observed activity in recent years, that approximately 30% of the unpaid principal balance of HELOCs scheduled to recast will voluntarily pre-pay prior to or after the recast. The HELOCs that have previously recast to fully amortizing payments generally have higher delinquency rates than the HELOCs within the revolving period, primarily as a result of the payment shock at the time of recast. Certain other factors, such as future developments in both unemployment rates and home prices, could also have a significant impact on the performance of these loans.
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 Firm will continue to evaluate both the near-term and longer-term recast risks inherent in its HELOC portfolio to ensure that changes in the Firm’s estimate of incurred losses are appropriately considered in the allowance for loan losses and that the Firm’s account management practices are appropriate given the portfolio’s risk profile.

Junior lien loans where the borrower has a senior lien loan that is either delinquent or has been modified are considered high-risk seconds. Such loans are considered to pose a higher risk of default than junior lien loans for which the senior lien is neither delinquent nor modified. At September 30, 2016, the Firm estimated that the unpaid principal balance of its home equity portfolio contained approximately $1.2 billion of current junior lien loans that were considered high risk seconds, compared with $1.4 billion at December 31, 2015. The Firm estimates the balance of its total exposure to high-risk seconds on a quarterly basis using internal data and loan level credit bureau data (which typically provides the delinquency status of the senior lien). The Firm considers the increased PD associated with these high-risk seconds in estimating the allowance for loan losses and classifies those loans that are subordinated to a first lien loan that is more than 90 days delinquent as nonaccrual loans. The estimated balance of these high-risk seconds may vary from quarter to quarter for reasons such as the movement of related senior liens into and out of the 30+ day delinquency bucket. The Firm continues to monitor the risks associated with these loans. For further information, see Note 13.

Residential mortgage: The residential mortgage portfolio predominantly consists of high-quality prime mortgage loans, with a small component (approximately 2%) of the residential mortgage portfolio in subprime mortgage loans. These subprime mortgage loans continue to run-off and are performing in line with expectations. The residential mortgage portfolio, including loans held-for-sale, increased from December 31, 2015 due to retained originations of primarily high-quality fixed rate prime mortgage loans partially offset by paydowns and the charge-off or liquidation of delinquent loans. Both early-stage and late-stage delinquencies showed improvement from December 31, 2015. Nonaccrual loans decreased from December 31, 2015 primarily as a result of loss mitigation activities. Net charge-offs for the three and nine months ended September 30, 2016 remain low, reflecting continued improvement in home prices and delinquencies.

At September 30, 2016, and December 31, 2015, the Firm’s residential mortgage portfolio, including loans held-for-sale, included $9.9 billion and $11.1 billion, respectively, of mortgage loans insured and/or guaranteed by U.S. government agencies, of which $7.0 billion and $8.4 billion, respectively, were 30 days or more past due (of these past due loans, $5.0 billion and $6.3 billion, respectively, were 90 days or more past due). The Firm monitors its exposure to any potential unrecoverable claim payments related to government insured loans and considers this exposure in estimating the allowance for loan losses. The financial impact related to exposure for future claims of government guaranteed loans is not expected to be significant.

At September 30, 2016, and December 31, 2015, the Firm’s residential mortgage portfolio included $18.3 billion and $17.8 billion, respectively, of interest-only loans. 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. To date, losses on this portfolio generally have been consistent with the broader residential mortgage portfolio and the Firm’s expectations. The Firm continues to monitor the risks associated with these loans.

Auto: Auto loans increased compared with December 31, 2015 due to growth in new originations. Nonaccrual loans increased compared with December 31, 2015. Net charge-offs for the three and nine months ended September 30, 2016 increased compared with the same periods of the prior year as a result of higher retail auto loan balances and a moderate increase in loss severity. The auto loan portfolio predominantly consists of prime-quality credits.

Business banking: Business banking loans increased compared with December 31, 2015 due to growth in loan originations. Nonaccrual loans increased compared with December 31, 2015. Net charge-offs for the three and nine months ended September 30, 2016 increased from prior year.

Student and other: Student and other loans decreased from December 31, 2015, due primarily to the run-off of the student loan portfolio as the Firm ceased originations of student loans during the fourth quarter of 2013. Nonaccrual loans declined from December 31, 2015 and net charge-offs for the three and nine months ended September 30, 2016 declined from prior year as a result of the run-off of the student loan portfolio.

Purchased credit-impaired loans: PCI loans decreased as the portfolio continues to run off. As of September 30, 2016, approximately 12% of the option ARM PCI loans were delinquent and approximately 66% of the portfolio has been modified into fixed-rate, fully amortizing loans. Substantially all of the remaining loans are making amortizing payments, although such payments are not necessarily fully amortizing. This latter group of loans is subject to the risk of payment shock due to future payment recast. Default rates generally increase on option ARM loans when payment recast results in a payment increase. The expected increase in default rates is considered in the Firm’s quarterly impairment assessment.

The following table provides a summary of lifetime principal loss estimates included in either the nonaccretable difference or the allowance for loan losses.

Summary of PCI loans lifetime principal loss estimates

	Lifetime loss estimates[(a)]		LTD liquidation losses[(b)]	
(in billions)	Sep 30, 2016	Dec 31, 2015	Sep 30, 2016	Dec 31, 2015
Home equity	$14.7	$ 14.5	$12.8	$ 12.7
Prime mortgage	4.0	4.0	3.7	3.7
Subprime mortgage	3.2	3.3	3.0	3.0
Option ARMs	10.0	10.0	9.7	9.5
Total	$31.9	$ 31.8	$29.2	$ 28.9

(a) Includes the original nonaccretable difference established in purchase accounting of $30.5 billion for principal losses plus additional principal losses recognized subsequent to acquisition through the provision and allowance for loan losses. The remaining nonaccretable difference for principal losses was $1.2 billion and $1.5 billion at September 30, 2016, and December 31, 2015, respectively.

(b) Life-to-date ("LTD") liquidation losses represent both realization of loss upon loan resolution and any principal forgiven upon modification.

Current estimated LTVs of residential real estate loans

The current estimated average loan-to-value ("LTV") ratio for residential real estate loans retained, excluding mortgage loans insured by U.S. government agencies and PCI loans, was 58% at September 30, 2016, compared with 59% at December 31, 2015. The current estimated average LTV ratio for residential real estate PCI loans, based on the unpaid principal balances, was 65% at September 30, 2016, compared with 69% at December 31, 2015.

Average LTV ratios have declined consistent with recent improvements in home prices. For further information on current estimated LTVs on residential real estate loans, see Note 13.

Geographic composition of residential real estate loans

For information on the geographic composition of the Firm's residential real estate loans, see Note 13.

Loan modification activities – residential real estate loans

The performance of modified loans generally differs by product type due to differences in both the credit quality and the types of modifications provided. The performance of modifications completed under both the U.S. Government's Home Affordable Modification Program ("HAMP") and the Firm's proprietary modification programs (primarily the Firm's modification program that was modeled after HAMP), as measured through cumulative redefault rates, was not materially different from December 31, 2015. For further information on the Firm's cumulative redefault rates see Consumer Credit Portfolio on pages 115–121 of JPMorgan Chase's 2015 Annual Report.

Certain loans that were modified under HAMP and the Firm's proprietary modification programs have interest rate reset provisions ("step-rate modifications"). Interest rates on these loans generally began to increase commencing in 2014 by 1% per year, and will continue to do so, until the rate reaches a specified cap, typically at a prevailing market interest rate for a fixed-rate loan as of the modification date. At September 30, 2016, the carrying value of non-PCI loans and the unpaid principal balance of PCI loans modified in step-rate modifications were $3 billion and $9 billion, respectively. The Firm continues to monitor this risk exposure and the impact of these potential interest rate increases is considered in the Firm's allowance for loan losses.

The following table presents information as of September 30, 2016, and December 31, 2015, relating to modified retained residential real estate loans for which concessions have been granted to borrowers experiencing financial difficulty. For further information on modifications for the three and nine months ended September 30, 2016 and 2015, see Note 13.

Modified residential real estate loans

	September 30, 2016	December 31, 2015

(in millions)	Retained loans	Non-accrual retained loans[(d)]	Retained loans	Non-accrual retained loans[(d)]
Modified residential real estate loans, excluding PCI loans[(a)(b)]				
Home equity	$2,253	$ 1,088	$2,358	$ 1,220
Residential mortgage	6,214	1,799	6,690	1,957
Total modified residential real estate loans, excluding PCI loans	$8,467	$ 2,887	$9,048	$ 3,177
Modified PCI loans[(c)]				
Home equity	$2,458	NA	$2,526	NA
Prime mortgage	5,209	NA	5,686	NA
Subprime mortgage	3,022	NA	3,242	NA
Option ARMs	9,593	NA	10,427	NA
Total modified PCI loans	$20,282	NA	$21,881	NA

(a) Amounts represent the carrying value of modified residential real estate loans.

(b) At September 30, 2016, and December 31, 2015, $3.6 billion and $3.8 billion, respectively, of loans modified subsequent to repurchase from Ginnie Mae in accordance with the standards of the appropriate government agency (i.e., Federal Housing Administration ("FHA"), U.S. Department of Veterans Affairs ("VA"), Rural Housing Service of the U.S. Department of Agriculture ("RHS")) are not included in the table above. When such loans perform subsequent to modification in accordance with Ginnie Mae guidelines, they are generally sold back into Ginnie Mae loan pools. Modified loans that do not re-perform become subject to foreclosure. For additional information about sales of loans in securitization transactions with Ginnie Mae, see Note 15.

(c) Amounts represent the unpaid principal balance of modified PCI loans.

(d) As of September 30, 2016, and December 31, 2015, nonaccrual loans included $2.3 billion and $2.5 billion, respectively, of troubled debt restructurings (“TDRs”) for which the borrowers were less than 90 days past due. For additional information about loans modified in a TDR that are on nonaccrual status, see Note 13.

Nonperforming assets

The following table presents information as of September 30, 2016, and December 31, 2015, about consumer, excluding credit card, nonperforming assets.

Nonperforming assets[(a)]

(in millions)	September 30, 2016	December 31, 2015
Nonaccrual loans[(b)]		
Residential real estate	$ 4,252	$ 4,792
Other consumer	709	621
Total nonaccrual loans	4,961	5,413
Assets acquired in loan satisfactions		
Real estate owned	279	277
Other	53	48
Total assets acquired in loan satisfactions	332	325
Total nonperforming assets	$ 5,293	$ 5,738

(a) At September 30, 2016, and December 31, 2015, nonperforming assets excluded: (1) mortgage loans insured by U.S. government agencies of $5.0 billion and $6.3 billion, respectively, that are 90 or more days past due; (2) student loans insured by U.S. government agencies under the FFELP of $259 million and $290 million, respectively, that are 90 or more days past due; and (3) REO insured by U.S. government agencies of $163 million and $343 million, respectively. These amounts have been excluded based upon the government guarantee.

(b) Excludes PCI loans which are accounted for on a pool basis. Since each pool is accounted for as a single asset with a single composite interest rate and an aggregate expectation of cash flows, the past-due status of the pools, or that of individual loans within the pools, is not meaningful. Because the Firm is recognizing interest income on each pool of loans, they are all considered to be performing.

Nonaccrual loans in the residential real estate portfolio decreased to $4.3 billion at September 30, 2016 from $4.8 billion at December 31, 2015, of which 29% and 31% were greater than 150 days past due, respectively. In the aggregate, the unpaid principal balance of residential real estate loans greater than 150 days past due was charged down by approximately 43% and 44% to the estimated net realizable value of the collateral at September 30, 2016, and December 31, 2015, respectively.

Active and suspended foreclosure: For information on loans that were in the process of active or suspended foreclosure, see Note 13.

Nonaccrual loans: The following table presents changes in consumer, excluding credit card, nonaccrual loans for the nine months ended September 30, 2016 and 2015.

Nonaccrual loans

Nine months ended September 30, (in millions)	2016	2015
Beginning balance	$5,413	$6,509
Additions	2,804	2,714
Reductions:		
Principal payments and other[(a)]	1,078	1,331
Charge-offs	572	614
Returned to performing status	1,215	1,323
Foreclosures and other liquidations	391	425
Total reductions	3,256	3,693
Net additions/(reductions)	(452)	(979)
Ending balance	$4,961	$5,530

(a) Other reductions includes loan sales.

Credit card

Total credit card loans increased from December 31, 2015 due to strong new account growth and higher sales volume. The September 30, 2016 30+ day delinquency rate increased to 1.53% from 1.43% at December 31, 2015, but remains near record lows. For the three months ended September 30, 2016 and 2015, the net charge-off rates were 2.51% and 2.41%, respectively. For the nine months ended September 30, 2016 and 2015, the net charge-off rates were 2.61% and 2.54%, respectively. The credit card portfolio continues to reflect a largely well-seasoned, rewards-based portfolio that has good U.S. geographic diversification. New originations continue to grow as a percentage of the total portfolio, in line with the Firm’s credit parameters; these originations are anticipated to generate loss rates higher than the more seasoned portion of the portfolio, given the higher mix of near-prime accounts being originated. These near-prime accounts have net revenue rates and returns on equity that are higher than the portfolio average. For information on the geographic and FICO composition of the Firm’s credit card loans, see Note 13.

Modifications of credit card loans

At September 30, 2016, and December 31, 2015, the Firm had $1.3 billion and $1.5 billion, respectively, of credit card loans outstanding that have been modified in TDRs. These balances included both credit card loans with modified payment terms and credit card loans that reverted back to their pre-modification payment terms because the cardholder did not comply with the modified payment terms. The decrease in modified credit card loans outstanding from December 31, 2015, was attributable to a reduction in new modifications as well as ongoing payments and charge-offs on previously modified credit card loans.

Consistent with the Firm’s policy, all credit card loans typically remain on accrual status until charged-off. However, the Firm establishes an allowance, which is offset against loans and charged to interest income, for the estimated uncollectible portion of accrued interest and fee income.

For additional information about loan modification programs to borrowers, see Note 13.

WHOLESALE
CREDIT
PORTFOLIO

The Firm's wholesale businesses are exposed to credit risk through 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. 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 it originates into the market as part of its syndicated loan business and to manage portfolio concentrations and credit risk.
The wholesale credit portfolio, excluding the Oil & Gas, Natural Gas Pipelines and Metals & Mining portfolios, continued to be generally stable for the nine months ended September 30, 2016, characterized by low levels of criticized exposure, nonaccrual loans and charge-offs. See industry discussion on pages 52–54 for further information. Growth in loans retained was driven by increased client activity, notably in Commercial Term Lending and Real Estate Banking within commercial real estate, as well as across multiple commercial and industrial industries. Discipline in underwriting across all areas of lending continues to remain a key point of focus. 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.

Wholesale credit portfolio

	Credit exposure		Nonperforming[c]	
(in millions)	Sep 30, 2016	Dec 31, 2015	Sep 30, 2016	Dec 31, 2015
Loans retained	$386,449	$357,050	$2,151	$988
Loans held-for-sale	2,463	1,104	19	3
Loans at fair value	1,911	2,861	7	25
Loans – reported	390,823	361,015	2,177	1,016
Derivative receivables	65,579	59,677	232	204
Receivables from customers and other[a]	19,038	13,372	—	—
Total wholesale credit-related assets	475,440	434,064	2,409	1,220
Lending-related commitments	368,987	366,399	503	193
Total wholesale credit exposure	$844,427	$800,463	$2,912	$1,413
Credit derivatives used in credit portfolio management activities[b]	$(23,430)	$(20,681)	$—	$(9)
Liquid securities and other cash collateral held against derivatives	(21,212)	(16,580)	NA	NA

(a) Receivables from customers and other include $19.0 billion and $13.3 billion of margin loans at September 30, 2016, and December 31, 2015, respectively, to prime brokerage customers; these are classified in accrued interest and accounts receivable on the Consolidated balance sheets.
(b) Represents the net notional amount of protection purchased and sold through credit derivatives used to manage both performing and nonperforming wholesale credit exposures; these derivatives do not qualify for hedge accounting under U.S. GAAP. For additional information, see Credit derivatives on page 56, and Note 5.
(c) Excludes assets acquired in loan satisfactions.

The following tables present the maturity and ratings profiles of the wholesale credit portfolio as of September 30, 2016, and December 31, 2015. The ratings scale is based on the Firm's internal risk ratings, which generally correspond to the ratings as defined by S&P and Moody's. For additional information on wholesale loan portfolio risk ratings, see Note 14 of JPMorgan Chase's 2015 Annual Report.

Wholesale credit exposure – maturity and ratings profile

	Maturity profile[e]				Ratings profile			
September 30, 2016					Investment-grade	Noninvestment-grade		
(in millions, except ratios)	Due in 1 year or less	Due after 1 year through 5 years	Due after 5 years	Total	AAA/Aaa to BBB-/Baa3	BB+/Ba1 & below	Total	Total % of IG
Loans retained	$122,318	$163,472	$100,659	$386,449	$290,785	$ 95,664	$386,449	75 %
Derivative receivables				65,579			65,579	
Less: Liquid securities and other cash collateral held against derivatives				(21,212)			(21,212)	
Total derivative receivables, net of all collateral	11,097	10,154	23,116	44,367	35,771	8,596	44,367	81
Lending-related commitments	86,554	274,770	7,663	368,987	270,272	98,715	368,987	73
Subtotal	219,969	448,396	131,438	799,803	596,828	202,975	799,803	75
Loans held-for-sale and loans at fair value[a]				4,374			4,374	
Receivables from customers and other				19,038			19,038	
Total exposure – net of liquid securities and other cash collateral held against derivatives				$823,215			$823,215	
Credit derivatives used in credit portfolio management activities by reference entity ratings profile[b][c][d]	$(1,332)	$(13,471)	$(8,627)	$(23,430)	$(19,727)	$ (3,703)	$(23,430)	84 %

	Maturity profile[e]				Ratings profile			
December 31, 2015					Investment-grade	Noninvestment-grade		
(in millions, except ratios)	Due in 1 year or less	Due after 1 year through 5 years	Due after 5 years	Total	AAA/Aaa to BBB-/Baa3	BB+/Ba1 & below	Total	Total % of IG
Loans retained	$110,348	$155,902	$90,800	$357,050	$267,736	$ 89,314	$357,050	75 %
Derivative receivables				59,677			59,677	
Less: Liquid securities and other cash collateral held against derivatives				(16,580)			(16,580)	
Total derivative receivables, net of all collateral	11,399	12,836	18,862	43,097	34,773	8,324	43,097	81
Lending-related commitments	105,514	251,042	9,843	366,399	267,922	98,477	366,399	73
Subtotal	227,261	419,780	119,505	766,546	570,431	196,115	766,546	74
Loans held-for-sale and loans at fair value[a]				3,965			3,965	
Receivables from customers and other				13,372			13,372	

Total exposure – net of liquid securities and other cash collateral held against derivatives				$783,883			$783,883	
Credit derivatives used in credit portfolio management activities by reference entity ratings profile(b)(c)(d)	$(808)	$(14,427)	$(5,446)	$(20,681)	$(17,754)	$(2,927)	$(20,681)	86%

(a) Represents loans held-for-sale, primarily related to syndicated loans and loans transferred from the retained portfolio, and loans at fair value.

(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.

(d) Predominantly all of the credit derivatives entered into by the Firm where it has purchased protection, including credit derivatives used in credit portfolio management activities, are executed with investment-grade counterparties.

(e) The maturity profile of retained loans, lending-related commitments and derivative receivables is based on the remaining contractual maturity. Derivative contracts that are in a receivable position at September 30, 2016, 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, paying 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. The total criticized component of the portfolio, excluding loans held-for-sale and loans at fair value, was $20.3 billion at September 30, 2016, compared with $14.6 billion at December 31, 2015, driven by downgrades within the Oil & Gas, Natural Gas Pipelines and Metals & Mining portfolios.

Below are summaries of the Firm's exposures as of September 30, 2016, and December 31, 2015. For additional information on industry concentrations, see Note 5 of JPMorgan Chase's 2015 Annual Report.

Wholesale credit exposure – industries[(a)]

As of or for the Nine months ended September 30, 2016 (in millions)	Credit exposure[(e)]	Investment-grade	Noninvestment-grade: Noncriticized	Noninvestment-grade: Criticized performing	Noninvestment-grade: Criticized nonperforming	Selected metrics: 30 days or more past due and accruing loans	Selected metrics: Net charge-offs/ (recoveries)	Selected metrics: Credit derivative hedges[(f)]	Selected metrics: Liquid securities and other cash collateral held against derivative receivables
Real Estate	$ 128,316	$ 100,634	$ 26,563	$ 913	$ 206	$ 24	$ (1)	$ (54)	$ (107)
Consumer & Retail	88,643	56,841	29,937	1,686	179	25	23	(582)	(61)
Technology, Media & Telecommunications	59,617	33,623	24,441	1,536	17	44	2	(901)	(67)
Healthcare	56,803	48,165	8,002	582	54	22	32	(246)	(303)
Industrials	56,059	35,340	19,545	1,081	93	135	3	(473)	(18)
Banks & Finance Cos	41,911	33,600	7,979	313	19	25	(1)	(1,356)	(5,007)
Oil & Gas	38,955	17,891	11,206	8,363	1,495	48	149	(1,460)	(24)
Utilities	30,764	25,280	4,819	534	131	2	—	(273)	(145)
State & Municipal Govt[(b)]	28,320	27,616	658	6	40	2	(1)	(130)	(135)
Asset Managers	28,302	24,324	3,978	—	—	24	—	—	(5,133)
Central Govt	23,754	23,351	358	45	—	3	—	(11,842)	(4,518)
Transportation	19,380	12,379	6,584	383	34	8	10	(94)	(205)
Chemicals & Plastics	17,508	12,095	5,226	157	30	5	—	(35)	(3)
Automotive	15,047	9,336	5,515	195	1	7	—	(464)	(6)
Metals & Mining	13,565	5,256	6,870	1,295	144	2	22	(639)	(5)
Insurance	11,085	9,463	1,504	—	118	28	—	(297)	(1,639)
Financial Markets Infrastructure	10,309	8,812	1,497	—	—	—	—	—	(1,646)
Securities Firms	4,762	1,420	3,342	—	—	—	—	(230)	(520)
All other[(c)]	147,915	130,683	16,625	282	325	1,007	23	(4,354)	(1,670)
Subtotal	$ 821,015	$ 616,109	$ 184,649	$ 17,371	$ 2,886	$ 1,411	$ 261	$ (23,430)	$ (21,212)
Loans held-for-sale and loans at fair value	4,374								
Receivables from customers and interests in purchased receivables	19,038								
Total[(d)]	$ 844,427								

As of or for the year ended December 31, 2015 (in millions)	Credit exposure(e)	Investment-grade	Noninvestment-grade Noncriticized	Noninvestment-grade Criticized performing	Noninvestment-grade Criticized nonperforming	Selected metrics: 30 days or more past due and accruing loans	Selected metrics: Net charge-offs/ (recoveries)	Selected metrics: Credit derivative hedges(f)	Selected metrics: Liquid securities and other cash collateral held against derivative receivables
Real Estate	$116,857	$88,076	$27,087	$1,463	$231	$208	$(14)	$(54)	$(47)
Consumer & Retail	85,460	53,647	29,659	1,947	207	18	13	(288)	(94)
Technology, Media & Telecommunications	57,382	29,205	26,925	1,208	44	5	(1)	(806)	(21)
Healthcare	46,053	37,858	7,755	394	46	129	(7)	(24)	(245)
Industrials	54,386	36,519	16,663	1,164	40	59	8	(386)	(39)
Banks & Finance Cos	43,398	35,071	7,654	610	63	17	(5)	(974)	(5,509)
Oil & Gas	42,077	24,379	13,158	4,263	277	22	13	(530)	(37)
Utilities	30,853	24,983	5,655	168	47	3	—	(190)	(289)
State & Municipal Govt(b)	29,114	28,307	745	7	55	55	(8)	(146)	(81)
Asset Managers	23,815	20,214	3,570	31	—	18	—	(6)	(4,453)
Central Govt	17,968	17,871	97	—	—	7	—	(9,359)	(2,393)
Transportation	19,227	13,258	5,801	167	1	15	3	(51)	(243)
Chemicals & Plastics	15,232	10,910	4,017	274	31	9	—	(17)	—
Automotive	13,864	9,182	4,580	101	1	4	(2)	(487)	(1)
Metals & Mining	14,049	6,522	6,434	1,008	85	1	—	(449)	(4)
Insurance	11,889	9,812	1,958	26	93	23	—	(157)	(1,410)
Financial Markets Infrastructure	7,973	7,304	669	—	—	—	—	—	(167)
Securities Firms	4,412	1,505	2,907	—	—	3	—	(102)	(256)
All other(c)	149,117	130,488	18,095	370	164	1,015	10	(6,655)	(1,291)
Subtotal	$783,126	$585,111	$183,429	$13,201	$1,385	$1,611	$10	$(20,681)	$(16,580)
Loans held-for-sale and loans at fair value	3,965								
Receivables from customers and interests in purchased receivables	13,372								
Total(d)	$800,463								

(a) The industry rankings presented in the table as of December 31, 2015, are based on the industry rankings of the corresponding exposures at September 30, 2016, not actual rankings of such exposures at December 31, 2015.

(b)

In addition to the credit risk exposure to states and municipal governments (both U.S. and non-U.S.) at September 30, 2016, and December 31, 2015, noted above, the Firm held: $8.3 billion and $7.6 billion, respectively, of trading securities; $31.4 billion and $33.6 billion, respectively, of AFS securities; and $14.5 billion and $12.8 billion, respectively, of HTM securities, issued by U.S. state and municipal governments. For further information, see Note 3 and Note 11.

(c) All other includes: individuals; SPEs; holding companies; and private education and civic organizations, representing approximately 55%, 37%, 4% and 4%, respectively, at September 30, 2016, and 54%, 37%, 5% and 4%, respectively, at December 31, 2015.

(d) Excludes cash placed with banks of $409.5 billion and $351.0 billion, at September 30, 2016, and December 31, 2015, respectively, which is predominantly placed with various central banks, primarily Federal Reserve Banks.

(e) 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.

(f) Represents the net notional amounts of protection purchased and sold through credit derivatives 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 a discussion of certain industries to which the Firm has significant exposures and which present actual or potential credit concerns.

Oil & Gas and Natural Gas Pipelines

The following table presents Oil & Gas and Natural Gas Pipeline exposures as of September 30, 2016, and December 31, 2015.

(in millions, except ratios)	September 30, 2016 Loans and Lending-related Commitments	Derivative Receivables	Credit exposure	% Investment-grade		% Drawn	
Exploration & Production ("E&P") and Oilfield Services[a]	$20,527	$ 618	$ 21,145	25	%	39	%
Other Oil & Gas[b]	17,190	620	17,810	70		34	
Total Oil & Gas	37,717	1,238	38,955	46		36	
Natural Gas Pipelines[c]	4,567	178	4,745	67		34	
Total Oil & Gas and Natural Gas Pipelines	$42,284	$ 1,416	$ 43,700	48		36	

(in millions, except ratios)	December 31, 2015 Loans and Lending-related Commitments	Derivative Receivables	Credit exposure	% Investment-grade		% Drawn	
E&P and Oilfield Services[a]	$23,055	$ 400	$ 23,455	44	%	36	%
Other Oil & Gas[b]	17,120	1,502	18,622	76		27	
Total Oil & Gas	40,175	1,902	42,077	58		32	
Natural Gas Pipelines[c]	4,093	158	4,251	64		21	
Total Oil & Gas and Natural Gas Pipelines	$44,268	$ 2,060	$ 46,328	59		31	

(a) Noninvestment-grade exposure to E&P and Oilfield Services is largely secured.
(b) Other Oil & Gas includes Integrated Oil & Gas companies, Midstream/Oil Pipeline companies and refineries.
(c) Natural Gas Pipelines is reported within the Utilities industry.

Exposure to the Oil & Gas and Natural Gas Pipelines portfolios was approximately 5.2% of the Firm's total wholesale exposure as of September 30, 2016 and 5.8% as of December 31, 2015. Exposure to these industries decreased by $2.6 billion during the nine months ended September 30, 2016 to $43.7 billion; of the $43.7 billion, approximately $15.8 billion was drawn. As of September 30, 2016, approximately $21.1 billion of the exposure was investment grade, of which $5.9 billion was drawn, and approximately $22.6 billion of the exposure was noninvestment-grade, of which $9.8 billion was drawn; 23% of the exposure to the Oil & Gas and Natural Gas Pipelines industries was criticized. Secured lending, of which approximately half is reserve-based lending to the E&P sub-sector of the Oil & Gas industry, was $14.1 billion as of September 30, 2016; 47% of the secured lending exposure was drawn. Exposure to commercial real estate, which is reported within the Real Estate industry, in certain areas of Texas, California and Colorado, that are deemed sensitive to the Oil & Gas industry, was approximately $4 billion as of September 30, 2016. While the overall trends and sentiment have been stabilizing, the Firm continues to actively monitor and manage its exposure to these portfolios. The Firm is also actively monitoring potential contagion effects to other related or dependent industries and geographies; however, to date, the Firm has not observed any material deterioration in these related or dependent industries and geographies in the wholesale portfolio.

Metals & Mining: Exposure to the Metals & Mining industry was approximately 1.6% and 1.8% of the Firm's total wholesale exposure as of September 30, 2016, and December 31, 2015, respectively. Exposure to the Metals & Mining industry decreased by $484 million during the nine months ended September 30, 2016 to $13.6 billion, of which $4.6 billion was drawn. The portfolio largely consisted of exposure in North America, and was concentrated in the Steel and Diversified Mining sub-sectors. Approximately 39% and 46% of the exposure in the Metals & Mining portfolio was investment-grade as of September 30, 2016, and December 31, 2015, respectively.

Loans

In the normal course of its wholesale business, the Firm provides loans to a variety of customers, ranging from large corporate and institutional clients to high-net-worth individuals. The Firm actively manages its wholesale credit exposure. One way of managing credit risk is through secondary market sales of loans and lending-related commitments. For further discussion on loans, including information on credit quality indicators and sales of loans, see Note 13.

The following table presents the change in the nonaccrual loan portfolio for the nine months ended September 30, 2016 and 2015. Wholesale nonaccrual loans increased primarily driven by downgrades in the Oil & Gas portfolio.

Wholesale nonaccrual loan activity[(a)]

Nine months ended September 30, (in millions)	2016	2015
Beginning balance	$1,016	$624
Additions	2,520	1,142
Reductions:		
Paydowns and other	701	352
Gross charge-offs	287	42
Returned to performing status	201	253
Sales	170	5
Total reductions	1,359	652
Net changes	1,161	490
Ending balance	$2,177	$1,114

(a) Loans are placed on nonaccrual status when management believes full payment of principal or interest is not expected, regardless of delinquency status, or when principal or interest have been in default for a period of 90 days or more, unless the loan is both well-secured and in the process of collection.

The following table presents net charge-offs/recoveries, which are defined as gross charge-offs less recoveries, for the three and nine months ended September 30, 2016 and 2015. The amounts in the table below do not include gains or losses from sales of nonaccrual loans.

Wholesale net charge-offs/(recoveries)

(in millions, except ratios)	Three months ended September 30, 2016	Three months ended September 30, 2015	Nine months ended September 30, 2016	Nine months ended September 30, 2015
Loans – reported				
Average loans retained	$374,593	$339,172	$368,225	$333,038
Gross charge-offs	63	13	291	46
Gross recoveries	(16)	(11)	(30)	(64)
Net charge-offs/(recoveries)	47	2	261	(18)
Net charge-off/(recovery) rate	0.05%	—%	0.09%	(0.01)%

Lending-related commitments

The Firm uses lending-related financial instruments, such as commitments (including revolving credit facilities) and guarantees, to meet the financing needs of its customers. The contractual amounts of these financial instruments represent the maximum possible credit risk should the counterparties draw down on these commitments or the Firm fulfills its obligations under these guarantees, and the counterparties subsequently fail to perform according to the terms of these contracts.

In the Firm's view, the total contractual amount of these wholesale lending-related commitments is not representative of the Firm's likely actual future credit exposure or funding requirements. In determining the amount of credit risk exposure the Firm has to wholesale lending-related commitments, which is used as the basis for allocating credit risk capital to these commitments, the Firm has established a "loan-equivalent" amount for each commitment; this amount represents the portion of the unused commitment or other contingent exposure that is expected, based on average portfolio historical experience, to become drawn upon in an event of a default by an obligor. The loan-equivalent amount of the Firm's wholesale lending-related commitments was $210.7 billion and $212.4 billion as of September 30, 2016, and December 31, 2015, respectively.

Derivative contracts

In the normal course of business, the Firm uses derivative instruments predominantly for market-making activities. Derivatives enable clients to manage exposures to fluctuations in interest rates, currencies and other markets. The Firm also uses derivative instruments to manage its own credit and other market risk exposure. For further discussion of derivative contracts, see Note 5.

The following table summarizes the net derivative receivables for the periods presented.

Derivative receivables

	Derivative receivables	
(in millions)	September 30, 2016	December 31, 2015
Interest rate	$34,599	$ 26,363
Credit derivatives	810	1,423
Foreign exchange	16,838	17,177
Equity	6,859	5,529
Commodity	6,473	9,185
Total, net of cash collateral	65,579	59,677
Liquid securities and other cash collateral held against derivative receivables[(a)]	(21,212)	(16,580)
Total, net of collateral	$44,367	$ 43,097

(a) Includes collateral related to derivative instruments where an appropriate legal opinion has not been either sought or obtained.

Derivative receivables reported on the Consolidated balance sheets were $65.6 billion and $59.7 billion at September 30, 2016, and December 31, 2015, respectively. These amounts represent the fair value of the derivative contracts after giving effect to legally enforceable master netting agreements and cash collateral held by the Firm. However, in management's view, the appropriate measure of current credit risk should also take into consideration additional liquid securities (primarily U.S. government and agency securities and other group of seven nations ("G7") government bonds) and other cash collateral held by the Firm aggregating $21.2 billion and $16.6 billion at September 30, 2016, and December 31, 2015, respectively, that may be used as security when the fair value of the client's exposure is in the Firm's favor. The increase in derivative receivables at September 30, 2016 from December 31, 2015, was predominantly related to client-driven market-making activities in CIB. The increase in derivative receivables reflected the impact of market movements, which increased interest rate receivables.

In addition to the collateral described in the preceding paragraph, 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 table above, it is available as security against potential exposure that could arise should the fair value of the client's derivative transactions move in the Firm's favor.

The derivative receivables fair value, net of all collateral, also does not include other credit enhancements, such as letters of credit. For additional information on the Firm's use of collateral agreements, see Note 5.

The following table summarizes the ratings profile by derivative counterparty of the Firm's derivative receivables, including credit derivatives, net of other liquid securities collateral, at the dates indicated. The ratings scale is based on the Firm's internal ratings, which generally correspond to the ratings as defined by S&P and Moody's.

Ratings profile of derivative receivables

Rating equivalent	September 30, 2016		December 31, 2015	
(in millions, except ratios)	Exposure net of collateral	% of exposure net of collateral	Exposure net of collateral	% of exposure net of collateral
AAA/Aaa to AA-/Aa3	$10,639	24 %	$10,371	24 %
A+/A1 to A-/A3	8,936	20	10,595	25
BBB+/Baa1 to BBB-/Baa3	16,196	37	13,807	32
BB+/Ba1 to B-/B3	7,635	17	7,500	17
CCC+/Caa1 and below	961	2	824	2
Total	$44,367	100 %	$43,097	100 %

As previously noted, the Firm uses collateral agreements to mitigate counterparty credit risk. The percentage of the Firm's derivatives transactions subject to collateral agreements — excluding foreign exchange spot trades, which are not typically covered by collateral agreements due to their short maturity — was 87% at both September 30, 2016 and December 31, 2015.

Credit derivatives

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 various exposures. For a detailed description of credit derivatives, see Credit derivatives in Note 5 of this Form
10-Q, and Note 6 of JPMorgan Chase's 2015 Annual Report.

Credit portfolio management activities

Included in the Firm's end-user activities are credit derivatives used to mitigate the credit risk associated with traditional lending activities (loans and unfunded commitments) and derivatives counterparty exposure in the Firm's wholesale businesses (collectively, “credit portfolio management” activities). Information on credit portfolio

management activities is provided in the table below. For further information on derivatives used in credit portfolio management activities, see Credit derivatives in Note 5 of this Form 10-Q, and Note 6 of JPMorgan Chase’s 2015 Annual Report.

Credit derivatives used in credit portfolio management activities

	Notional amount of protection purchased and sold [(a)]	
(in millions)	September 30, 2016	December 31, 2015
Credit derivatives used to manage:		
Loans and lending-related commitments	$2,809	$ 2,289
Derivative receivables	20,621	18,392
Credit derivatives used in credit portfolio management activities	$23,430	$ 20,681

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

ALLOWANCE FOR CREDIT LOSSES

JPMorgan Chase's allowance for loan losses covers both the consumer (primarily scored) portfolio and wholesale (risk-rated) portfolio. The allowance represents management's estimate of probable credit losses inherent in the Firm's loan portfolio. Management also determines an allowance for wholesale and certain consumer lending-related commitments.

For a further discussion of the components of the allowance for credit losses and related management judgments, see Critical Accounting Estimates Used by the Firm on pages 80–81 and Note 14 of this Form 10-Q, and Critical Accounting Estimates Used by the Firm on pages 165–169 and Note 15 of JPMorgan Chase's 2015 Annual Report.

At least quarterly, the allowance for credit losses is reviewed by the CRO, the Chief Financial Officer and the Controller of the Firm, and discussed with the Board of Directors Risk Policy Committee and the Audit Committee of the Board of Directors. As of September 30, 2016, JPMorgan Chase deemed the allowance for credit losses to be appropriate and sufficient to absorb probable credit losses inherent in the portfolio.

The consumer allowance for loan losses increased from December 31, 2015, reflecting loan growth in the credit card portfolio, including newer vintages which, as anticipated, have higher loss rates compared to the overall portfolio, as well as loan growth in the auto loan portfolio; these were partially offset by reductions in the allowance for loan losses in the residential real estate portfolio due to continued improvement in home prices and delinquencies, as well as runoff in the student loan portfolio. For additional information about delinquencies and nonaccrual loans in the consumer, excluding credit card, loan portfolio, see Consumer Credit Portfolio on pages 44–49 and Note 13.

The wholesale allowance for credit losses increased from December 31, 2015, reflecting the impact of downgrades in the Oil & Gas, Natural Gas Pipelines, and Metals & Mining portfolios. Excluding these portfolios, the wholesale portfolio continued to experience generally stable credit quality trends and low charge-off rates.

Summary of changes in the allowance for credit losses

Nine months ended September 30, (in millions, except ratios)	2016 Consumer, excluding credit card	Credit card	Wholesale	Total	2015 Consumer, excluding credit card	Credit card	Wholesale	Total
Allowance for loan losses								
Beginning balance at January 1,	$5,806	$3,434	$4,315	$13,555	$7,050	$3,439	$3,696	$14,185
Gross charge-offs	1,071	2,803	291	4,165	1,269	2,626	46	3,941
Gross recoveries	(448)	(275)	(30)	(753)	(577)	(278)	(64)	(919)
Net charge-offs/(recoveries)	623	2,528	261	3,412	692	2,348	(18)	3,022
Write-offs of PCI loans[(a)]	124	—	—	124	162	—	—	162
Provision for loan losses	578	2,978	628	4,184	(346)	2,348	461	2,463
Other	—	—	1	1	(1)	(5)	8	2
Ending balance at September 30,	$5,637	$3,884	$4,683	$14,204	$5,849	$3,434	$4,183	$13,466
Impairment methodology								
Asset-specific[(b)]	$352	$363	$490	$1,205	$359	$485	$281	$1,125
Formula-based	2,667	3,521	4,193	10,381	2,702	2,949	3,902	9,553
PCI	2,618	—	—	2,618	2,788	—	—	2,788
Total allowance for loan losses	$5,637	$3,884	$4,683	$14,204	$5,849	$3,434	$4,183	$13,466
Allowance for lending-related commitments								
Beginning balance at January 1,	$14	$—	$772	$786	$13	$—	$609	$622
Provision for lending-related commitments	—	—	313	313	1	—	112	113
Other	—	—	1	1	—	—	—	—
Ending balance at September 30,	$14	$—	$1,086	$1,100	$14	$—	$721	$735
Impairment methodology								
Asset-specific	$—	$—	$162	$162	$—	$—	$69	$69
Formula-based	14	—	924	938	14	—	652	666
Total allowance for lending-related commitments[(c)]	$14	$—	$1,086	$1,100	$14	$—	$721	$735
Total allowance for credit losses	$5,651	$3,884	$5,769	$15,304	$5,863	$3,434	$4,904	$14,201
Memo:								
Retained loans, end of period	$363,398	$133,346	$386,449	$883,193	$331,732	$125,634	$346,927	$804,293

Retained loans, average	356,347	129,401	368,225	853,973	311,527	123,387	333,038	767,952
PCI loans, end of period	37,045	—	3	37,048	42,236	—	4	42,240
Credit ratios								
Allowance for loan losses to retained loans	1.55 %	2.91 %	1.21 %	1.61 %	1.76 %	2.73 %	1.21 %	1.67 %
Allowance for loan losses to retained nonaccrual loans(d)	115	NM	218	201	106	NM	385	204
Allowance for loan losses to retained nonaccrual loans excluding credit card	115	NM	218	146	106	NM	385	152
Net charge-off/(recovery) rates	0.23	2.61	0.09	0.53	0.30	2.54	(0.01)	0.53
Credit ratios, excluding residential real estate PCI loans								
Allowance for loan losses to retained loans	0.93	2.91	1.21	1.37	1.06	2.73	1.21	1.40
Allowance for loan losses to retained nonaccrual loans(d)	62	NM	218	164	55	NM	385	161
Allowance for loan losses to retained nonaccrual loans excluding credit card	62	NM	218	109	55	NM	385	109
Net charge-off/(recovery) rates	0.26 %	2.61 %	0.09 %	0.56 %	0.35 %	2.54 %	(0.01)%	0.56 %

Note: In the table above, the financial measures which exclude the impact of PCI loans are non-GAAP financial measures.

(a) Write-offs of PCI loans are recorded against the allowance for loan losses when actual losses for a pool exceed estimated losses that were recorded as purchase accounting adjustments at the time of acquisition. A write-off of a PCI loan is recognized when the underlying loan is removed from a pool (e.g., upon liquidation).

(b) Includes risk-rated loans that have been placed on nonaccrual status and loans that have been modified in a TDR. The asset-specific credit card allowance for loan losses modified in a TDR is calculated based on the loans' original contractual interest rates and does not consider any incremental penalty rates.

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

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

58

Provision for credit losses

For the three and nine months ended September 30, 2016, the provision for credit losses was $1.3 billion and $4.5 billion, respectively, compared with $682 million and $2.6 billion, respectively, in the prior year periods.

The total consumer provision for credit losses for the three and nine months ended September 30, 2016 increased when compared with the prior year, as the prior year provision for credit losses included a reduction in the allowance for loan losses, primarily in the residential real estate portfolio, due to improvement in home prices and delinquencies, and increased granularity in the impairment estimates. The current year consumer provision for credit losses included an increase in the allowance for loan losses. The increase in the allowance for loan losses for the three months ended September 30, 2016 reflected loan growth in the credit card portfolio, including newer vintages which, as anticipated, have higher loss rates compared to the overall portfolio, as well as loan growth in the auto loan portfolio. The increase in the allowance for loan losses for the nine months ended September 30, 2016 reflected loan growth in the credit card portfolio, including newer vintages

which, as anticipated, have higher loss rates compared to the overall portfolio, as well as loan growth in the auto loan portfolio; these were partially offset by reductions in the allowance for loan losses in the residential real estate portfolio, due to continued improvement in home prices and delinquencies, as well as runoff in the student loan portfolio.

The wholesale provision for credit losses for the three months ended September 30, 2016 reflected a benefit, primarily driven by a net allowance reduction of approximately $50 million in the Oil & Gas portfolio as a result of paydowns, loan sales, and select upgrades partially offset by select downgrades. The prior year included a net allowance increase reflecting the impact of select downgrades, including within the Oil & Gas portfolio. The wholesale provision for credit losses for the nine months ended September 30, 2016 increased as a result of additions to the wholesale allowance for credit losses, reflecting the impact of downgrades in the Oil & Gas, Natural Gas Pipelines, and Metals & Mining portfolios.

	Three months ended September 30,						Nine months ended September 30,					
	Provision for loan losses		Provision for lending-related commitments		Total provision for credit losses		Provision for loan losses		Provision for lending-related commitments		Total provision for credit losses	
(in millions)	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
Consumer, excluding credit card	$262	$(388)	$—	$(1)	$262	$(389)	$578	$(346)	$—	$1	$578	$(345)
Credit card	1,038	759	—	—	1,038	759	2,978	2,348	—	—	2,978	2,348
Total consumer	1,300	371	—	(1)	1,300	370	3,556	2,002	—	1	3,556	2,003
Wholesale	(168)	196	139	116	(29)	312	628	461	313	112	941	573
Total	$1,132	$567	$139	$115	$1,271	$682	$4,184	$2,463	$313	$113	$4,497	$2,576

MARKET RISK MANAGEMENT

Market risk is the potential for adverse changes in the value of the Firm's assets and liabilities resulting from changes in market variables such as interest rates, foreign exchange rates, equity prices, commodity prices, implied volatilities or credit spreads. For a discussion of the Firm's market risk management organization, risk identification and classification, tools used to measure risk, and risk monitoring and control, see Market Risk Management on pages 133–139 of JPMorgan Chase's 2015 Annual Report.

The following table summarizes by line of business the predominant business activities that give rise to market risk, and the market risk management tools utilized to manage those risks. As part of the Firm's continuous evaluation and periodic enhancement of its market risk measures, during the third quarter of 2016 the Firm refined the scope of positions included in risk management VaR. In particular, certain private equity positions in the CIB, exposure arising from non-U.S. dollar denominated funding activities in Corporate, as well as seed capital investments in AM were removed from the VaR calculation. Commencing with the third quarter of 2016, exposure arising from these positions is captured using other sensitivity-based measures, such as a 10% decline in market value or a 1 basis point parallel shift in spreads, as appropriate. The Firm believes this refinement to its reported VaR measures more appropriately captures the risk of its market risk sensitive instruments. This change did not impact Regulatory VaR as these positions are not included in the calculation of Regulatory VaR. Regulatory VaR is used to derive the Firm's regulatory VaR-based capital requirements under Basel III. The table below updates the table previously disclosed on page 134 of JPMorgan Chase's 2015 Annual Report.

Risk identification and classification by line of business

Line of Business	Predominant business activities and related market risks	Positions included in Risk Management VaR	Positions included in Earnings at Risk	Positions included in Other Sensitivity-Based Measures
CIB	• Makes markets and services clients across fixed income, foreign exchange, equities and commodities • Market risk arising from changes in market prices (e.g. rates and credit spreads) resulting in a potential decline in net income	Market risk related to: • Trading assets/liabilities – debt and marketable equity instruments, and derivatives, including hedges of the retained loan portfolio • Certain securities purchased, loaned or sold under resale agreements and securities borrowed • Fair value option elected liabilities • Derivative CVA and associated hedges	• Retained loan portfolio • Deposits	• Private equity investments measured at fair value • Derivatives DVA/FVA and fair value option elected liabilities DVA
CCB	• Service Mortgage loans • Complex, non-linear interest rate and basis risk • Non-linear risk arises primarily from prepayment options embedded in mortgages and changes in the probability of newly originated mortgage commitments	• Mortgage pipeline loans, classified as derivatives • Warehouse loans, classified as trading assets – debt instruments • MSRs • Hedges of pipeline loans, warehouse loans and MSRs, classified as derivatives • Interest-only securities, classified as trading assets, and related hedges,	• Retained loan portfolio • Deposits	

	actually closing • Basis risk results from differences in the relative movements of the rate indices underlying mortgage exposure and other interest rates • Originates loans and takes deposits	classified as derivatives • Marketable equity investments measured at fair value through earnings		
Corporate	• Manages the Firm's liquidity, funding, structural interest rate and foreign exchange risks arising from activities undertaken by the Firm's four major reportable business segments.	• Derivative positions measured at fair value through non-interest revenue in earnings • Marketable equity investments measured at fair value through earnings	• Investment securities portfolio and related interest rate hedges • Deposits • Long-term debt and related interest rate hedges	• Private equity investments measured at fair value • Foreign exchange exposure related to Firm-issued non-USD long term debt ("LTD") and related hedges
AM	• Market risk arising from the Firm's initial capital investments in products, such as mutual funds, managed by AM	• Debt securities held in advance of distribution to clients, classified as trading assets – debt and equity instruments	• Retained loan portfolio • Deposits	• Initial seed capital investments and related hedges, classified as derivatives • Capital invested alongside third-party investors, typically in privately distributed collective vehicles managed by AM (i.e. co-investments)
CB	• Engages in traditional wholesale banking activities which include extension of loans and credit facilities and taking deposits. • Risk arises from changes in interest rates and prepayment risk with potential for adverse impact on net interest income and interest-rate sensitive fees.		• Retained loan portfolio • Deposits	

60

Value-at-risk

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

Since VaR is based on historical data, it is an imperfect measure of market risk exposure and potential losses, and it is not used to estimate the impact of stressed market conditions or to manage any impact from potential stress events. In addition, based on their reliance on available historical data, limited time horizons, and other factors, VaR measures are inherently limited in their ability to measure certain risks and to predict losses, particularly those associated with market illiquidity and sudden or severe shifts in market conditions. The Firm therefore considers other measures in addition to VaR, such as stress testing, to capture and manage its market risk positions.

In addition, for certain products, specific risk parameters are not captured in VaR due to the lack of inherent liquidity and availability of appropriate historical data. The Firm uses proxies to estimate the VaR for these and other products when daily time series are not available. It is likely that using an actual price-based time series for these products, if available, would affect the VaR results presented.

The Firm uses alternative methods to capture and measure those risk parameters that are not otherwise captured in VaR, including economic-value stress testing and nonstatistical measures. For further information, see Market Risk Management on pages 133–139 of the 2015 Annual Report.

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 to current VaR results. For information regarding model reviews and approvals, see Model Risk Management on page 142 of the 2015 Annual Report.

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 stable measure of VaR that closely aligns to the day-to-day risk management decisions made by the lines of business, and provides the necessary and appropriate information to respond to risk events on a daily basis. 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. For further information regarding the key differences between Risk Management VaR and Regulatory VaR, see page 135 of the 2015 Annual Report. 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), see JPMorgan Chase's Pillar 3 Regulatory Capital Disclosures reports, which are available on the Firm's website at: (http://investor.shareholder.com/jpmorganchase/basel.cfm).

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

Total VaR	Three months ended September 30,								Nine months ended September 30,	
	2016			2015			At September 30,		Average	
(in millions)	Avg.	Min	Max	Avg.	Min	Max	2016	2015	2016	2015
CIB trading VaR by risk type										
Fixed income	$49	$38	$65	$50	$43	$60	$38	$60	$47	$42
Foreign exchange	16	10	27	9	6	14	12	12	13	9
Equities	8	5	10	20	14	25	10	22	15	18
Commodities and other	9	7	11	10	8	12	8	10	9	9
Diversification benefit to CIB trading VaR	(42)[a]	NM[b]	NM[b]	(35)[a]	NM[b]	NM[b]	(34)[a]	(36)[a]	(38)[a]	(36)[a]
CIB trading VaR	40	34	50	54	44	68	34	68	46	42
Credit portfolio VaR	13	11	16	13	12	14	15	14	12	15
Diversification benefit to CIB VaR	(10)[a]	NM[b]	NM[b]	(10)[a]	NM[b]	NM[b]	(10)[a]	(11)[a]	(10)[a]	(9)[a]
CIB VaR	43	37	51	57	48	71	39	71	48	48
Consumer & Community Banking VaR	3	2	4	4	2	7	3	3	3	4
Corporate VaR	3	3	5	4	4	5	5	5	4	4
Asset Management VaR	—	—	—	3	3	4	—	3	2	3
Diversification benefit to other VaR	(1)[a]	NM[b]	NM[b]	(3)[a]	NM[b]	NM[b]	(2)[a]	(3)[a]	— [a]	(4)[a]
Other VaR	5	4	6	8	6	9	6	8	9	7
Diversification benefit to CIB and other VaR	(5)[a]	NM[b]	NM[b]	(11)[a]	NM[b]	NM[b]	(5)[a]	(12)[a]	(10)[a]	(8)[a]
Total VaR	$43	$37	$49	$54	$45	$67	$40	$67	$47	$47

(a) Average portfolio VaR and period-end portfolio VaR were less than the sum of the VaR of the components described above, which is due to portfolio diversification. The diversification effect reflects the fact that the risks are not perfectly correlated.

(b) Designated as NM, because the minimum and maximum may occur on different days for different risk components, and hence it is not meaningful to compute a portfolio-diversification effect.

As discussed on page 60, during the third quarter of 2016 the Firm refined the scope of positions included in risk management VaR. In the absence of these refinements, the average VaR, without diversification, for each of the following reported components would have been higher by the following amounts for the three months ended September 30, 2016: CIB Equities VaR by $5 million,
CIB trading VaR by $4 million, CIB VaR by $6 million, CCB VaR by $1 million, Corporate VaR by $8 million, AM VaR
by $4 million, Other VaR by $8 million and Total VaR by
$7 million.

As presented in the table above, average Total VaR decreased $11 million for the three months ended September 30, 2016 as compared with the respective prior year period. The reduction is primarily due to a lower risk profile in Equities risk type, as well as the aforementioned scope changes. This reduction was partially offset by changes in the risk profile of the Foreign exchange risk type.

Average total VaR for the nine months ended September 30, 2016 would have been $2 million higher absent the aforementioned scope changes. The modification to scope was not a material component of the change in CIB trading VaR as the $4 million increase was predominantly due to changes in the risk profile of Foreign exchange and Fixed

Income risk types, offset by a lower risk profile in Equities risk type. Credit portfolio VaR declined as a result of lower exposures arising from select positions.

The Firm's average total VaR diversification benefit was
$5 million, or 12% of the sum, for the three months ended September 30, 2016 compared with $11 million, or 20% of the sum, for the comparable 2015 period.
The Firm continues to enhance its VaR model calculations and the time series inputs related to certain asset-backed products.
VaR exposure can vary significantly as positions change, market volatility fluctuates and diversification benefits change.

VaR back-testing
The Firm evaluates the effectiveness of its VaR methodology by back-testing, which compares the daily Risk Management VaR results with the daily gains and losses recognized on market-risk related revenue.
The Firm's definition of market risk-related gains and losses is consistent with the definition used by the banking regulators under Basel III. Under this definition market risk-related gains and losses are defined as: gains and losses on the positions included in the Firm's Risk Management VaR excluding fees, commissions, certain valuation adjustments (e.g., liquidity and DVA), net interest income, and gains and losses arising from intraday trading.
The following chart compares the daily market risk-related gains and losses with the Firm's Risk Management VaR for the nine months ended September 30, 2016. As the chart presents market risk-related gains and losses related to those positions included in the Firm's Risk Management VaR, the results in the table below differ from the results of back-testing 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 covered positions. The chart shows that for the nine months ended September 30, 2016, the Firm observed 3 VaR back-testing exceptions and posted gains on 129 of the 195 days. The Firm observed no VaR back-testing exceptions and posted gains on 47 of the 66 days for the three months ended September 30, 2016.
Daily Market Risk-Related Gains and Losses
vs. Risk Management VaR (1-day, 95% Confidence level)
Nine months ended September 30, 2016

Market Risk-Related Gains and Losses

Risk Management VaR
First Quarter 2016 Second Quarter 2016 Third Quarter 2016
For the three months ended June 30, 2016 there were 2 back-testing exceptions. These exceptions occurred towards the end of June 2016 subsequent to the U.K. referendum on membership in the European Union and reflect the elevated market volatility observed across multiple asset classes following the outcome of the vote.

Earnings-at-risk
The VaR and sensitivity measures described above illustrate the economic sensitivity of the Firm's Consolidated balance sheets to changes in market variables. The effect of interest rate exposure on the Firm's reported net income is also 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 and issuing debt. The Firm evaluates its structural interest rate risk exposure through earnings-at-risk, which measures the extent to which changes in interest rates will affect the Firm's net interest income and interest rate-sensitive fees. Earnings-at-risk excludes the impact of CIB's markets-based activities and CCB's MSRs, as these risks are captured under VaR or other sensitivity-based measures.
The Firm generates a net interest income baseline, excluding CIB's markets-based activities and MSRs, and then conducts simulations of changes for interest rate-sensitive assets and liabilities denominated in U.S. dollars and other currencies ("non-U.S. dollar" currencies). Earnings-at-risk scenarios estimate the potential change in this net interest income baseline, over the following 12 months utilizing multiple assumptions. These scenarios consider the impact on exposures as a result of changes in interest rates from baseline rates, as well as the pricing sensitivities of deposits, optionality and changes in product mix. The scenarios include forecasted balance sheet changes, as well as modeled prepayment and reinvestment behavior, but do not include assumptions about actions that could be taken by the Firm in response to any such instantaneous rate changes. Mortgage prepayment assumptions are based on scenario interest rates compared with underlying contractual rates, the time since origination, and other factors which are updated periodically based on historical experience. 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.

The Firm's U.S. dollar sensitivities are presented in the table below. The non-U.S. dollar sensitivities are not material to the Firm's earnings-at-risk at September 30, 2016.
JPMorgan Chase's 12-month pre-tax net interest income sensitivity profiles
(Excludes the impact of CIB's markets-based activities and MSRs)

(in billions)	Instantaneous change in rates			
September 30, 2016	+200bps	+100bps	-100bps	-200bps
U.S. dollar	$4.5	$ 2.8	NM [(a)]	NM [(a)]

(a) Given the current level of market interest rates, downward parallel 100 and 200 basis point earnings-at-risk scenarios are not considered to be meaningful.

The Firm's benefit to rising rates on U.S. dollar assets and liabilities is largely a result of reinvesting at higher yields and assets re-pricing at a faster pace than deposits. The Firm's U.S. dollar sensitivity profile at September 30, 2016 was not materially different than at December 31, 2015.
Separately, another U.S. dollar interest rate scenario used by the Firm — involving a steeper yield curve with long-term rates rising by 100 basis points and short-term rates staying at current levels — results in a 12-month pre-tax benefit to net interest income, excluding CIB's markets-based activities and MSRs, of approximately $700 million. The increase in net interest income under this scenario reflects the Firm reinvesting at the higher long-term rates, with funding costs remaining unchanged. The result of the comparable non-U.S. dollar analysis was not material to the Firm.

Other sensitivity-based measures

The Firm quantifies the market risk of certain investment and funding activities by assessing the potential impact on net revenue and OCI due to changes in relevant market

variables. For additional information on the positions captured in other sensitivity-based measures, please refer to the Risk identification and classification table on page 60.

The table below represents the potential impact to net revenue or OCI for market risk sensitive instruments that are not included in VaR or earnings-at-risk. Where appropriate, instruments used for hedging purposes are reported along with the positions being hedged. The sensitivities disclosed in the table below may not be representative of the actual gain or loss that would have been realized at September 30, 2016, as the movement in market parameters across maturities may vary and are not intended to imply management's expectation of future deterioration in these sensitivities.

(in millions)
September 30, 2016

Activity	Description	Sensitivity measure	Gain/(Loss)
Investment Activities			
Investment management activities	Consists of seed capital and related hedges; and fund co-investments	10% decline in market value	$ (141)
Other investments	Consists of private equity and other investments held at fair value	10% decline in market value	(384)
Funding Activities			
Non-USD LTD Cross-currency basis	Represents the basis risk on derivatives used to hedge the foreign exchange risk on the non-USD LTD	1 basis point parallel tightening of cross currency basis	(8)
Non-USD LTD hedges Foreign Exchange ("FX") exposure	Primarily represents the foreign exchange revaluation on the fair value of the derivative hedges	10% depreciation of currency	(28)
Funding Spread Risk - Derivatives	Impact of changes in the spread related to derivatives DVA/FVA	1 basis point parallel increase in spread	(5)
Funding Spread Risk - Fair value option elected liabilities[(a)]	Impact of changes in the spread related to fair value option elected liabilities DVA	1 basis point parallel increase in spread	17

(a) Impact recognized through OCI.

COUNTRY RISK MANAGEMENT

Country risk is the risk that a sovereign event or action alters the value or terms of contractual obligations of obligors, counterparties and issuers or adversely affects markets related to a particular country. The Firm has a comprehensive country risk management framework for assessing country risks, determining risk tolerance, and measuring and monitoring direct country exposures in the Firm. The Country Risk Management group is responsible for developing guidelines and policies for managing country risk in both emerging and developed countries. The Country Risk Management group actively monitors the various portfolios giving rise to country risk to ensure the Firm’s country risk exposures are diversified and that exposure levels are appropriate given the Firm’s strategy and risk tolerance relative to a country.

For a discussion of the Firm’s Country Risk Management organization, and country risk identification, measurement, monitoring and control, see pages 140–141 of JPMorgan Chase’s 2015 Annual Report.

The following table presents the Firm’s top 20 exposures by country (excluding the U.S.) as of September 30, 2016. The selection of countries is based solely on the Firm’s largest total exposures by country, based on the Firm’s internal country risk management approach, and does not represent the Firm’s view of any actual or potentially adverse credit conditions. Country exposures may fluctuate from period to period due to client activity and market flows.

The $30.7 billion increase in exposure to Germany over the past nine months largely reflects higher Euro balances primarily placed with the German central bank driven by changing client positions due to prevailing market and liquidity conditions, and to increased customer deposits and client-related lending activity.

Top 20 country exposures

	September 30, 2016			
(in billions)	Lending[(a)]	Trading and investing[(b)(c)]	Other[(d)]	Total exposure
Germany	$48.0	$ 13.1	$ 0.3	$ 61.4
United Kingdom[(e)]	22.8	16.1	1.0	39.9
Japan	24.0	4.3	0.3	28.6
France	15.5	9.4	0.2	25.1
China	9.9	6.1	0.7	16.7
Canada	11.1	2.1	0.1	13.3
Australia	7.3	5.6	—	12.9
Switzerland	6.7	0.1	5.7	12.5
Brazil	5.2	5.1	—	10.3
Netherlands	6.7	2.3	1.1	10.1
Luxembourg	8.8	0.4	—	9.2
India	3.9	4.3	0.3	8.5
Korea	4.5	2.9	0.8	8.2
Italy	3.9	3.7	0.1	7.7
Hong Kong	2.5	2.3	2.4	7.2
Mexico	2.8	2.3	—	5.1
Singapore	2.0	1.2	1.5	4.7
Saudi Arabia	3.5	0.8	—	4.3
United Arab Emirates	2.8	1.0	—	3.8
Norway	1.2	2.2	—	3.4

(a) Lending includes loans and accrued interest receivable (net of collateral and the allowance for loan losses), deposits with banks, acceptances, other monetary assets, issued letters of credit net of participations, and unused commitments to extend credit. Excludes intra-day and operating exposures, such as from settlement and clearing activities.

(b) Includes market-making inventory, AFS securities, counterparty exposure on derivative and securities financings net of collateral and hedging.

(c) Includes single reference entity ("single-name"), index and tranched credit derivatives for which one or more of the underlying reference entities is in a country listed in the above table.

(d) Includes capital invested in local entities and physical commodity inventory.

(e) The Firm's lending related UK exposure as of June 30, 2016 was revised from $34.5 billion to $25.5 billion, with the corresponding total UK exposure at such date revised from $54.7 billion to $45.7 billion. Accordingly, total UK exposure decreased by $5.8 billion during the third quarter of 2016 due to normal business activity.

CAPITAL
MANAGEMENT

Capital risk is the risk the Firm has an insufficient level and composition of capital to support the Firm's business activities and associated risks during both normal economic environments and under stressed conditions. For a discussion on the Firm's Capital Management see pages 149–158 of JPMorgan Chase's 2015 Annual Report.

A strong capital position is essential to the Firm's business strategy and competitive position. Maintaining a strong balance sheet to manage through economic volatility is considered a strategic imperative by the Firm's Board of Directors, CEO and Operating Committee. The Firm's capital management strategy focuses on maintaining long-term stability to enable the Firm to build and invest in market-

leading businesses, even in a highly stressed environment. The Firm executes its capital management strategy through the establishment of minimum capital targets and a strong capital governance framework. The Firm's minimum capital targets are set based on the most binding of three pillars: an internal assessment of the Firm's capital needs; an estimate of required capital under the CCAR and Dodd Frank Act stress testing requirements; and current regulatory minimums. The capital governance framework includes regular monitoring of the Firm's capital positions, stress testing and defining escalation protocols, both at the Firm and line of business level.

The following tables present the Firm's Transitional and Fully Phased-In risk-based and leverage-based capital metrics under both the Basel III Standardized and Advanced Approaches. The Firm's Basel III CET1 ratios exceed the regulatory minimum as of September 30, 2016, and December 31, 2015.

	Transitional			Fully Phased-In		
September 30, 2016 (in millions, except ratios)	Standardized	Advanced	Minimum capital ratios[c]	Standardized	Advanced	Minimum capital ratios[d]
Risk-based capital metrics:						
CET1 capital	$181,606	$181,606		$180,932	$180,932	
Tier 1 capital	206,430	206,430		206,709	206,709	
Total capital	241,004	229,324		238,897	227,217	
Risk-weighted assets	1,480,291	1,515,177		1,487,841	1,523,183	
CET1 capital ratio	12.3 %	12.0 %	0.06 %	12.2 %	11.9 %	10.5 %
Tier 1 capital ratio	13.9	13.6	.08	13.9	13.6	12.0
Total capital ratio	16.3	15.1	0.10	16.1	14.9	14.0
Leverage-based capital metrics						
Adjusted average assets	2,427,423	2,427,423		2,429,463	2,429,463	
Tier 1 leverage ratio[a]	8.5 %	8.5 %	4.0	8.5 %	8.5 %	4.0
SLR leverage exposure	NA	$3,140,733		NA	$3,142,772	
SLR [b]	NA	6.6 %	NA	NA	6.6 %	5.0 [e]

	Transitional			Fully Phased-In		
December 31, 2015 (in millions, except ratios)	Standardized	Advanced	Minimum capital ratios[c]	Standardized	Advanced	Minimum capital ratios[d]
Risk-based capital metrics:						
CET1 capital	$175,398	$175,398		$173,189	$173,189	
Tier 1 capital	200,482	200,482		199,047	199,047	
Total capital	234,413	224,616		229,976	220,179	
Risk-weighted assets	1,465,262	1,485,336		1,474,870	1,495,520	
CET1 capital ratio	12.0 %	11.8 %	4.5%	11.7 %	11.6 %	10.5 %
Tier 1 capital ratio	13.7	13.5	6.0	13.5	13.3	12.0
Total capital ratio	16.0	15.1	8.0	15.6	14.7	14.0

Leverage-based capital metrics						
Adjusted average assets	2,358,471	2,358,471		2,360,499	2,360,499	
Tier 1 leverage ratio[a]	8.5 %	8.5 %	4.0	8.4 %	8.4 %	4.0
SLR leverage exposure	NA	$3,079,797		NA	$3,079,119	
SLR[b]	NA	6.5	NA	NA	6.5 %	5.0 [e]

Note: As of September 30, 2016, and December 31, 2015, the lower of the Standardized or Advanced capital ratios under each of the Transitional and Fully Phased-In approaches in the table above represents the Firm's Collins Floor.

(a) The Tier 1 leverage ratio is not a risk-based measure of capital. This ratio is calculated by dividing Tier 1 capital by adjusted average assets.

(b) The SLR leverage ratio is not a risk-based measure of capital. The ratio is calculated by dividing Tier 1 capital by SLR Leverage exposure.

(c) Represents the transitional minimum capital ratios applicable to the Firm under Basel III as of September 30, 2016, and December 31, 2015. At September 30, 2016, the CET1 minimum capital ratio includes 0.625% resulting from the phase in of the Firm's 2.5% capital conservation buffer and 1.125%, resulting from the phase in of the Firm's estimated 4.5% globally systemically important banks ("GSIB") surcharge, as of December 31, 2014, published by the Federal Reserve on July 20, 2015.

(d) Represents the minimum capital ratios applicable to the Firm on a fully phased-in Basel III basis. At September 30, 2016, and December 31, 2015, the ratios include the Firm's estimate of its Fully Phased-In U.S. GSIB surcharge of 3.5%, based on the final U.S. GSIB rule published by the Federal Reserve on July 20, 2015. The minimum capital ratios will be fully phased-in effective January 1, 2019. For additional information on the GSIB surcharge, see page 69.

(e) In the case of the SLR, the fully phased-in minimum ratio is effective beginning January 1, 2018.

Basel III overview
Basel III capital rules, for large and internationally active U.S. bank holding companies and banks, including the Firm and its insured depository institution (“IDI”) subsidiaries, revised, among other things, the definition of capital and introduced a new CET1 capital requirement. Basel III presents two comprehensive methodologies for calculating RWA. A general (Standardized) approach (“Basel III Standardized”), and an advanced approach (“Basel III Advanced”); and sets out minimum capital ratios and overall capital adequacy standards. Certain of the requirements of Basel III are subject to phase-in periods that began on January 1, 2014 and continue through the end of 2018 (“transitional period”).
The capital adequacy of the Firm and its national bank subsidiaries is evaluated against the Basel III approach (Standardized or Advanced) which results in the lower ratio (the “Collins Floor”), as required by the Collins Amendment of the Dodd-Frank Act.
Basel III establishes capital requirements for calculating credit risk and market risk RWA, and in the case of Basel III Advanced, operational risk RWA. 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. In addition to the RWA calculated under these methodologies, the Firm may supplement such amounts to incorporate management judgment and feedback from its bank regulators.
Basel III also includes a requirement for Advanced Approach banking organizations, including the Firm, to calculate SLR. For additional information on SLR, see
page 71.
Basel III Fully Phased-In
Basel III capital rules will become fully phased-in on January 1, 2019, at which point the Firm will continue to calculate its capital ratios under both the Basel III Standardized and Advanced Approaches. While the Firm has imposed Basel III Standardized Fully Phased-In RWA limits on its lines of business, the Firm continues to manage each of the businesses (including line of business equity allocations), as well as the corporate functions, primarily on a Basel III Advanced Fully Phased-In basis.

For additional information on the Firm’s capital, RWA and capital ratios under the Basel III Standardized and Advanced Fully Phased-In rules and the Firm’s, JPMorgan Chase Bank, N.A.’s and Chase Bank USA, N.A.’s SLRs calculated under the Basel III Advanced Fully Phased-In rules, which are considered key regulatory capital measures, see Explanation and Reconciliation of the Firm’s Use of Non-GAAP Financial Measures and Key Performance Measures on pages 16–17.
The Firm’s estimates of its Basel III Standardized and Advanced Fully Phased-In capital, RWA and capital ratios and of the Firm’s, JPMorgan Chase Bank, N.A.’s, and Chase Bank USA, N.A.’s SLRs reflect management’s current understanding of the U.S. Basel III rules based on the current published rules and on the application of such rules to the Firm’s businesses as currently conducted. The actual impact on the Firm’s capital ratios and SLR as of the effective date of the rules may differ from the Firm’s current estimates depending on changes the Firm may make to its businesses in the future, further implementation guidance from the regulators, and regulatory approval of certain of the Firm’s internal risk models (or, alternatively, regulatory disapproval of the Firm’s internal risk models that have previously been conditionally approved).
Risk-based capital regulatory minimums
The Basel III rules include minimum capital ratio requirements that are subject to phase-in periods through the end of 2018. The capital adequacy of the Firm and its national bank subsidiaries, both during the transitional period and upon full phase-in, is evaluated against the Basel III approach (Standardized or Advanced) which results for each quarter in the lower ratio, the Collins Floor.
Certain banking organizations, including the Firm, will be required to hold additional amounts of capital to serve as a “capital conservation buffer.” The capital conservation buffer is intended to be used to absorb potential losses in times of financial or economic stress. If not maintained, the Firm could be limited in the amount of capital that may be

distributed, including dividends and common equity repurchases. The capital conservation buffer is to be phased-in over time, beginning January 1, 2016 through January 1, 2019.

Further, the Firm will be required to hold additional levels of capital in the form of a GSIB surcharge and, as an expansion of the capital conservation buffer, any countercyclical capital buffer requirement that may be imposed.
On July 20, 2015, the Federal Reserve issued a final rule requiring GSIBs to calculate their GSIB surcharge, on an annual basis, under two separately prescribed methods, and to be subject to the higher of the two. The first method ("Method 1") reflects the GSIB surcharge as prescribed by Basel rules, and is calculated across five criteria: size, cross-jurisdictional activity, interconnectedness, complexity and substitutability. The second method ("Method 2") modifies the requirements to include a measure of short-term wholesale funding in place of substitutability, and introduces a GSIB score "multiplication factor."
On July 20, 2015, the date of the last published estimate, the Federal Reserve had estimated the Firm's GSIB surcharge to be 2.5% under Method 1 and 4.5% under Method 2 as of December 31, 2014. Accordingly, the Firm's minimum capital ratios applicable in 2016 include 1.125%, resulting from the phase-in of the 4.5% GSIB surcharge estimated at the date. Based upon data as of December 31, 2015, the Firm estimates its fully phased-in GSIB surcharge would be 2.5% of CET1 capital under Method 1 and 3.5% under Method 2. The reduction in the estimated GSIB surcharge to 3.5% is expected to be phased into the Firm's minimum CET1 capital ratio commencing January 1, 2017.
The countercyclical capital buffer takes into account the macro financial environment in which large, internationally active banks function. As of October 24, 2016 the Federal Reserve reaffirmed setting the U.S. countercyclical capital buffer at 0%, and stated that it will review the amount at least annually. The countercyclical capital buffer can be increased if the Federal Reserve, FDIC and OCC determine that credit growth in the economy has become excessive and can be set at up to an additional 2.5% of RWA subject to a 12-month implementation period.
Based on the Firm's most recent estimate of its GSIB surcharge and the countercyclical buffer currently being set at 0%, the Firm estimates its fully phased-in CET1capital requirement would be 10.5% (reflecting the 4.5% CET1 capital requirement, the fully phased in 2.5% capital conservation buffer and the GSIB surcharge of 3.5%).
As well as meeting the capital ratio requirements of Basel III, the Firm must, in order to be "well-capitalized", maintain a minimum 6% Tier 1 and 10% Total capital requirement. Each of the Firm's IDI subsidiaries must maintain a minimum 5% Tier 1 leverage, 6.5% CET1, 8% Tier 1 and 10% Total capital requirement to meet the definition of "well-capitalized" under the Prompt Correction Action ("PCA") requirements of the FDIC Improvement Act for IDI subsidiaries. The PCA standards for IDI subsidiaries were effective January 1, 2015.

Capital
A reconciliation of total stockholders' equity to Basel III Fully Phased-In CET1 capital, Tier 1 capital and Basel III Advanced and Standardized Fully Phased-In Total capital is presented in the table below.
For additional information on the components of regulatory capital, see Note 20.
Capital components

(in millions)	September 30, 2016
Total stockholders' equity	$ 254,331
Less: Preferred stock	26,068
Common stockholders' equity	228,263
Less:	
Goodwill	47,302
Other intangible assets	887
Add:	
Deferred tax liabilities[(a)]	3,232
Less: Other CET1 capital adjustments	2,374
Standardized/Advanced CET1 capital	180,932
Preferred stock	26,068
Less:	
Other Tier 1 adjustments[(b)]	291
Standardized/Advanced Tier 1 capital	$ 206,709

Long-term debt and other instruments qualifying as Tier 2 capital	$ 16,947
Qualifying allowance for credit losses	15,304
Other	(63)
Standardized Fully Phased-In Tier 2 capital	$ 32,188
Standardized Fully Phased-in Total capital	$ 238,897
Adjustment in qualifying allowance for credit losses for Advanced Tier 2 capital	(11,680)
Advanced Fully Phased-In Tier 2 capital	$ 20,508
Advanced Fully Phased-In Total capital	$ 227,217

(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.

(b) Includes the deduction associated with the permissible holdings of covered funds (as defined by the Volcker Rule) acquired after December 31, 2013. The deduction was not material as of September 30, 2016.

The following table presents a reconciliation of the Firm's Basel III Transitional CET1 capital to the Firm's estimated Basel III Fully Phased-In CET1 capital as of September 30, 2016.

(in millions)	September 30, 2016
Transitional CET1 capital	$181,606
AOCI phase-in[(a)]	772
CET1 capital deduction phase-in[(b)]	(1,067)
Intangibles deduction phase-in[(c)]	(319)
Other adjustments to CET1 capital[(d)]	(60)
Fully Phased-In CET1 capital	$180,932

(a) Includes the remaining balance of AOCI related to AFS debt securities and defined benefit pension and other postretirement employee benefit ("OPEB") plans that will qualify as Basel III CET1 capital upon full phase-in.
(b) Predominantly includes regulatory adjustments related to changes in DVA, as well as CET1 deductions for defined benefit pension plan assets and deferred tax assets related to net operating loss ("NOL") and tax credit carryforwards.
(c) Relates to intangible assets, other than goodwill and MSRs, that are required to be deducted from CET1 capital upon full phase-in.
(d) Includes minority interest and the Firm's investments in its own CET1 capital instruments.

Capital rollforward

The following table presents the changes in Basel III Fully Phased-In CET1 capital, Tier 1 capital and Tier 2 capital for the nine months ended September 30, 2016.

Nine months ended September 30, (in millions)	2016
Standardized/Advanced CET1 capital at December 31, 2015	$173,189
Net income applicable to common equity	16,771
Dividends declared on common stock	(5,167)
Net purchase of treasury stock	(5,577)
Changes in additional paid-in capital	(397)
Changes related to AOCI[(a)]	1,366
Adjustment related to DVA[(a)]	574
Other	173
Increase in Standardized/Advanced CET1 capital	7,743
Standardized/Advanced CET1 capital at September 30, 2016	$180,932
Standardized/Advanced Tier 1 capital at December 31, 2015	$199,047
Change in CET1 capital	7,743
Net issuance of noncumulative perpetual preferred stock	—
Other	(81)
Increase in Standardized/Advanced Tier 1 capital	7,662
Standardized/Advanced Tier 1 capital at September 30, 2016	$206,709
Standardized Tier 2 capital at December 31, 2015	$30,929
Change in long-term debt and other instruments qualifying as Tier 2	268
Change in qualifying allowance for credit losses	963
Other	28
Increase in Standardized Tier 2 capital	1,259
Standardized Tier 2 capital at September 30, 2016	$32,188
Standardized Total capital at September 30, 2016	$238,897
Advanced Tier 2 capital at December 31, 2015	$21,132

Change in long-term debt and other instruments qualifying as Tier 2	268
Change in qualifying allowance for credit losses	(919)
Other	27
Increase in Advanced Tier 2 capital	(624)
Advanced Tier 2 capital at September 30, 2016	$20,508
Advanced Total capital at September 30, 2016	$227,217

(a) Effective January 1, 2016, the adjustment reflects the impact of the adoption of DVA through OCI. For further discussion of the accounting change refer to Note 19.

RWA rollforward

The following table presents changes in the components of RWA under Basel III Standardized and Advanced Fully Phased-In for the nine months ended September 30, 2016. The amounts in the rollforward categories are estimates, based on the predominant driver of the change.

	Standardized			Advanced			
Nine months ended September 30, 2016 (in billions)	Credit risk RWA	Market risk RWA	Total RWA	Credit risk RWA	Market risk RWA	Operational risk RWA	Total RWA
At December 31, 2015	$1,333	$142	$1,475	$954	$142	$ 400	$1,496
Model & data changes[(a)]	3	(14)	(11)	12	(14)	—	(2)
Portfolio runoff[(b)]	(10)	(2)	(12)	(11)	(2)	—	(13)
Movement in portfolio levels[(c)]	21	15	36	27	15	—	42
Changes in RWA	14	(1)	13	28	(1)	—	27
September 30, 2016	$1,347	$141	$1,488	$982	$141	$ 400	$1,523

(a) Model & data changes refer to movements in levels of RWA as a result of revised methodologies and/or treatment per regulatory guidance (exclusive of rule changes).

(b) Portfolio runoff for credit risk RWA primarily reflects reduced risk from position rolloffs in legacy portfolios in Mortgage Banking (under both the Standardized and Advanced framework); and for market risk RWA reflects reduced risk from position rolloffs in legacy portfolios in the wholesale businesses.

(c) Movement in portfolio levels for credit risk RWA refers to changes in book size, composition, credit quality, and market movements; and for market risk RWA refers to changes in position and market movements.

Supplementary leverage ratio

For additional information on the SLR, see Capital Management on pages 149–158 of JPMorgan Chase's 2015 Annual Report.

The following table presents the components of the Firm's Fully Phased-In SLR as of September 30, 2016.

(in millions, except ratio)	September 30, 2016
Tier 1 Capital	$206,709
Total average assets	2,476,962
Less: amounts deducted from Tier 1 capital	47,499
Total adjusted average assets[(a)]	2,429,463
Off-balance sheet exposures[(b)]	713,309
SLR leverage exposure	$3,142,772
SLR	6.6 %

(a) Adjusted average assets, for purposes of calculating the SLR, includes total quarterly average assets adjusted for on-balance sheet assets that are subject to deduction from Tier 1 capital predominantly goodwill and other intangible assets.

(b) Off-balance sheet exposures are calculated as the average of the three month-end spot balances in the reporting quarter.

As of September 30, 2016, the Firm estimates that JPMorgan Chase Bank, N.A.'s and Chase Bank USA, N.A.'s Fully Phased-In SLRs are approximately 6.6% and 9.5%, respectively.

Line of business equity

The Firm's framework for allocating capital to its business segments (line of business equity) is based on the following objectives:

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

Each business segment is allocated capital by taking into consideration stand-alone peer comparisons, regulatory capital requirements (as estimated under Basel III Advanced Fully Phased-In) and economic risk. Capital is also allocated to each line of business for, among other things, goodwill and other intangibles associated with acquisitions effected by the line of business. ROE is measured and internal targets for expected returns are established as key measures of a business segment's performance.

Line of business common equity

	September 30,	December 31,
(in billions)	2016	2015
Consumer & Community Banking	$51.0	$ 51.0
Corporate & Investment Bank	64.0	62.0
Commercial Banking	16.0	14.0
Asset Management	9.0	9.0
Corporate	88.3	85.5
Total common stockholders' equity	$228.3	$ 221.5

On at least an annual basis, the Firm assesses the level of capital required for each line of business as well as the assumptions and methodologies used to allocate capital. The line of business equity allocations are updated as refinements are implemented. The table below reflects the Firm's assessed level of capital required for each line of business as of the dates indicated.

Line of business common equity	Quarterly average		
(in billions)	3Q16	4Q15	3Q15
Consumer & Community Banking	$51.0	$51.0	$51.0
Corporate & Investment Bank	64.0	62.0	62.0
Commercial Banking	16.0	14.0	14.0
Asset Management	9.0	9.0	9.0
Corporate	86.1	83.5	81.0
Total common stockholders' equity	$226.1	$219.5	$217.0

Planning and stress testing

CCAR

The Federal Reserve requires large bank holding companies, including the Firm, to submit a capital plan on an annual basis. Through the CCAR, the Federal Reserve evaluates each bank holding company's ("BHC") capital adequacy and internal capital adequacy assessment processes, as well as its plans to make capital distributions, such as dividend payments or stock repurchases.

On June 29, 2016, the Federal Reserve informed the Firm that it did not object, on either a quantitative or qualitative basis, to the Firm's 2016 capital plan.

Capital actions

Dividends

The Firm's common stock dividend policy reflects JPMorgan Chase's earnings outlook, desired dividend payout ratio, capital objectives, and alternative investment opportunities. On May 17, 2016, the Firm announced that its Board of Directors had increased the quarterly common stock dividend to $0.48 per share, effective with the dividend paid on July 31, 2016. The Firm's dividends will be subject to the Board of Directors' approval at the customary times those dividends are to be declared.

Common equity

On March 17, 2016, the Firm announced that its Board of Directors had authorized the repurchase of up to an additional $1.9 billion of common equity (common stock and warrants) through June 30, 2016 under its equity repurchase program. This amount is in addition to the $6.4 billion of common equity that was previously authorized for repurchase between April 1, 2015 and June 30, 2016.

Following receipt in June, 2016 of the Federal Reserve's non-objection to the Firm's 2016 capital plan, the Firm's Board of Directors authorized the repurchase of up to $10.6 billion of common equity (common stock and warrants) between July 1, 2016 and June 30, 2017. This authorization includes shares repurchased to offset issuances under the Firm's equity-based compensation plans.

The following table sets forth the Firm's repurchases of common equity for the three and nine months ended September 30, 2016 and 2015. There were no warrants repurchased during the three and nine months ended September 30, 2016 and 2015.

	Three months ended September 30,		Nine months ended September 30,	
(in millions)	2016	2015	2016	2015
Total shares of common stock repurchased	35.6	19.1	110.6	70.8
Aggregate common stock repurchases	$2,295	$1,248	$6,831	$4,397

There were 45.7 million warrants outstanding at September 30, 2016 compared with 47.4 million outstanding at December 31, 2015.

The Firm may, from time to time, enter into written trading plans under Rule 10b5-1 of the Securities Exchange Act of 1934 to facilitate repurchases in accordance with the common equity repurchase program. A Rule 10b5-1 repurchase plan allows the Firm to repurchase its equity during periods when it would not otherwise be repurchasing common equity — for example, during internal trading blackout periods. All purchases under a Rule 10b5-1 plan must be made according to a predefined plan established when the Firm is not aware of material nonpublic information.

The authorization to repurchase common equity will be utilized at management's discretion, and the timing of purchases and the exact amount of common equity that may be repurchased is subject to various factors, including market conditions; legal and regulatory considerations affecting the amount and timing of repurchase activity; the Firm's capital position (taking into account goodwill and intangibles); internal capital generation; and alternative investment opportunities. The repurchase program does not include specific price targets or timetables; may be executed through open market purchases or privately negotiated transactions, or utilizing Rule 10b5-1 programs; and may be suspended at any time.

For additional information regarding repurchases of the Firm's equity securities, see Part II, Item 5: Market for registrant's common equity, related stockholder matters and issuer purchases of equity securities on page 20 of

JPMorgan Chase’s 2015 Form 10-K.
Preferred Stock
Preferred stock dividends declared were $412 million and $1,235 million for the three and nine months ended September 30, 2016.
For additional information on the Firm’s preferred stock, see Note 22 of JPMorgan Chase’s 2015 Annual Report.
Other capital requirements
TLAC
In November 2015, the Financial Stability Board (“FSB”) finalized the Total Loss Absorbing Capacity (“TLAC”) standard for GSIBs, which establishes the criteria for TLAC eligible debt and capital instruments and defines the minimum requirements for amounts of loss absorbing and recapitalization capacity. This amount and type of debt and capital instruments is intended to effectively absorb losses, as necessary, upon the failure of a GSIB, without imposing such losses on taxpayers of the relevant jurisdiction or causing severe systemic disruptions, and thereby ensuring the continuity of the GSIB’s critical functions. The final standard will require GSIBs to meet a common minimum TLAC requirement beginning January 1, 2019.
On October 30, 2015, the Federal Reserve issued proposed rules that would require the top-tier holding companies of eight U.S. global systemically important bank holding companies, including the Firm, among other things, to maintain minimum levels of eligible TLAC and long-term debt satisfying certain eligibility criteria (“eligible LTD”) commencing January 1, 2019. These proposed TLAC rules

would disqualify from eligible LTD, among other instruments, senior debt securities that permit acceleration for reasons other than insolvency or payment default, as well as structured notes and debt securities not governed by U.S. law. The Firm is awaiting the publication of the final rules to determine the full impact on the amount of eligible LTD the Firm will need to issue to be compliant.

For additional information on TLAC, see Capital Management on page 156 of JPMorgan Chase's 2015 Annual Report.

Broker-dealer regulatory capital

At September 30, 2016, JPMorgan Chase's principal U.S. broker-dealer subsidiaries were JPMorgan Securities and J.P. Morgan Clearing Corp. ("JPMorgan Clearing"). JPMorgan Clearing is a subsidiary of JPMorgan Securities and provides clearing and settlement services. JPMorgan Securities and JPMorgan Clearing are each subject to Rule 15c3-1 under the Securities Exchange Act of 1934 (the "Net Capital Rule"). JPMorgan Securities and JPMorgan Clearing are also each registered as futures commission merchants and subject to Rule 1.17 of the CFTC.

JPMorgan Securities and JPMorgan Clearing have elected to compute their minimum net capital requirements in accordance with the "Alternative Net Capital Requirements" of the Net Capital Rule. At September 30, 2016, JPMorgan Securities' net capital, as defined by the Net Capital Rule, was $12.5 billion, exceeding the minimum requirement by $9.8 billion, and JPMorgan Clearing's net capital was $6.9 billion, exceeding the minimum requirement by $5.2 billion.

In addition to its minimum net capital requirement, JPMorgan Securities is required to hold tentative net capital in excess of $1.0 billion and is also required to notify the SEC in the event that tentative net capital is less than $5.0 billion, in accordance with the market and credit risk standards of Appendix E of the Net Capital Rule. As of September 30, 2016, JPMorgan Securities had tentative net capital in excess of the minimum and notification requirements.

Effective October 1, 2016, JPMorgan Securities merged with JPMorgan Clearing. JPMorgan Securities is the surviving entity in the merger, and its name will remain unchanged.

J.P. Morgan Securities plc is a wholly-owned subsidiary of JPMorgan Chase Bank, N.A. and is the Firm's principal operating subsidiary in the U.K. It has authority to engage in banking, investment banking and broker-dealer activities. J.P. Morgan Securities plc is jointly regulated by the U.K. Prudential Regulation Authority ("PRA") and Financial Conduct Authority ("FCA"). J.P. Morgan Securities plc is subject to the European Union Capital Requirements Regulation and U.K. PRA capital rules, which implement Basel III.

At September 30, 2016, J.P. Morgan Securities plc had estimated total capital of $34.4 billion, its estimated CET1 capital ratio was 13.7% and its estimated Total capital ratio was 17.3%. Both capital ratios exceeded the minimum standards of 4.5% and 8.0%, respectively, under the transitional requirements of the European Union's Basel III Capital Requirements Directive and Regulation, as well as the additional capital requirements specified by the PRA.

LIQUIDITY RISK MANAGEMENT

Liquidity risk is the risk that the Firm will be unable to meet its contractual and contingent obligations or that it does not have the appropriate amount, composition and tenor of funding and liquidity to support its assets. The following discussion of JPMorgan Chase's Liquidity Risk Management should be read in conjunction with pages 159–164 of JPMorgan Chase's 2015 Annual Report.

LCR and NSFR

The U.S. LCR rule requires the Firm to measure the amount of HQLA held by the Firm in relation to estimated net cash outflows within a 30-day period during an acute stress event. The LCR was required to be 90% at January 1, 2016, increasing to a minimum of 100% on January 1, 2017 onward. At September 30, 2016, the Firm was compliant with the fully phased-in U.S. LCR.

The Basel Committee final standard for the net stable funding ratio ("Basel NSFR") is intended to measure the "available" amount of stable funding over a one-year horizon. Basel NSFR will become a minimum standard by January 1, 2018 and requires that this ratio be equal to at least 100% on an ongoing basis.

On April 26, 2016, the U.S. NSFR proposal was released for large banks and bank holding companies and was largely consistent with Basel NSFR. The proposed requirement would apply beginning on January 1, 2018, consistent with the Basel NSFR timeline.

The Firm estimates it was compliant with the proposed U.S. NSFR based on data as of June 30, 2016, and on its current understanding of the proposed rule.

HQLA

HQLA is the amount of assets that qualify for inclusion in the U.S. LCR. HQLA primarily consists of cash and certain unencumbered high quality liquid assets as defined in the final rule.

On April 1, 2016, the Federal Reserve published a final rule permitting investment-grade, U.S. general obligation state and municipal securities that meet certain criteria to be included in HQLA for purposes of the U.S. LCR, subject to certain limits. The final rule became effective beginning July 1, 2016, and did not have a material effect on the Firm's HQLA or LCR.

As of September 30, 2016, the Firm's HQLA was $539 billion, compared with $496 billion as of December 31, 2015. The increase in HQLA primarily reflects deposit growth in excess of loan growth as well as an increase in long-term debt. Certain of these actions resulted in increased excess liquidity at JPMorgan Chase Bank, N.A. and Chase Bank USA, N.A. which is excluded from the Firm's HQLA as required under the U.S. LCR rules. The Firm's HQLA may fluctuate from period to period primarily due to normal flows from client activity.

The following table presents HQLA included in the LCR, broken out by HQLA-eligible cash and securities as of September 30, 2016.

(in billions)	September 30, 2016
HQLA	
Eligible cash[(a)]	$ 351
Eligible securities[(b)]	188
Total HQLA[(c)]	$ 539

(a) Cash on deposit at central banks.

(b) Predominantly includes U.S. agency MBS, U.S. Treasuries, and sovereign bonds net of applicable haircuts under U.S. LCR rules.

(c) Excludes excess HQLA at JPMorgan Chase Bank, N.A. and Chase Bank USA, N.A.

As of September 30, 2016, in addition to HQLA reported above, the Firm has approximately $255 billion of unencumbered marketable securities, such as equity securities and fixed income debt securities, available to raise liquidity, if required. This includes HQLA-eligible securities forming part of the excess liquidity at JPMorgan Chase Bank, N.A. Furthermore, the Firm maintains borrowing capacity at various Federal Home Loan Banks ("FHLBs"), the Federal Reserve Bank discount window and various other central banks as a result of collateral pledged by the Firm to such banks. Although available, the Firm does not view the borrowing capacity at the Federal Reserve Bank discount window and the various other central banks as a primary source of liquidity. As of September 30, 2016, the Firm’s remaining borrowing capacity at various FHLBs and the Federal Reserve Bank discount window was approximately $203 billion. This remaining borrowing capacity excludes the benefit of securities included above in HQLA or other unencumbered securities currently held at the Federal Reserve Bank discount window for which the Firm has not drawn liquidity.

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.

The Firm funds its global balance sheet through diverse sources of funding including a stable deposit franchise as well as secured and unsecured funding in the capital markets. The Firm’s loan portfolio ($888.1 billion at September 30, 2016), is funded with a portion of the Firm’s deposits ($1,376.1 billion at September 30, 2016), and through securitizations and, with respect to a portion of the Firm’s real estate-related loans, with secured borrowings from the FHLBs. Deposits in excess of the amount utilized to fund loans are primarily invested 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. Securities borrowed or purchased under resale agreements and trading assets- debt and equity instruments are primarily funded by the Firm’s securities loaned or sold under agreements to repurchase, trading liabilities–debt and equity instruments, and a portion of the Firm’s long-term debt and stockholders’ equity. In addition to funding securities borrowed or purchased under resale agreements and trading assets-debt and equity instruments, proceeds from the Firm’s debt and equity issuances are used to fund certain loans and other financial and non-financial assets, or may be invested in the Firm’s investment securities portfolio. See the discussion below for additional information relating to Deposits, Short-term funding, and Long-term funding and issuance.

Deposits

The table below summarizes, by line of business, the deposit balances as of September 30, 2016, and December 31, 2015, and the average deposit balances for the three and nine months ended September 30, 2016 and 2015, respectively.

Deposits	September 30, 2016	December 31, 2015	Three months ended September 30, Average		Nine months ended September 30, Average	
(in millions)			2016	2015	2016	2015
Consumer & Community Banking	$ 605,117	$ 557,645	$593,671	$535,987	$579,741	$525,951
Corporate & Investment Bank	432,384	395,228	413,698	400,690	404,501	419,562
Commercial Banking	175,839	172,470	172,204	176,619	170,810	186,625
Asset Management	157,274	146,766	153,121	141,896	151,656	150,840
Corporate	5,524	7,606	5,281	15,769	5,788	18,988
Total Firm	$ 1,376,138	$ 1,279,715	$1,337,975	$1,270,961	$1,312,496	$1,301,966

A key strength of the Firm is its diversified deposit franchise, through each of its lines of business, which provides a stable source of funding and limits reliance on the wholesale funding markets. A significant portion of the Firm’s deposits are consumer deposits which are considered a stable source of liquidity. Additionally, the majority of the Firm’s wholesale operating deposits are also considered to be relatively stable sources of liquidity because they are generated from customers that maintain operating service relationships with the Firm.

The Firm’s loans-to-deposits ratio was 65% at both September 30, 2016 and December 31, 2015.

Total deposits for the Firm were $1,376.1 billion as of September 30, 2016, compared with $1,279.7 billion at December 31, 2015 (61% of total liabilities at both September 30, 2016 and December 31, 2015). The increase was attributable to higher wholesale and consumer deposits. The increase in wholesale deposits was mainly driven by growth in client activity in CIB’s Treasury Services business, and inflows in AM partly related to the new rules governing money market funds. The increase in consumer deposits reflected continuing strong growth from existing and new customers, and the impact of low attrition rates.

The Firm has typically experienced higher customer deposit inflows at quarter-ends. Therefore, the Firm believes average deposit balances are generally more representative of deposit trends. The increase in the average deposits for the three months ended September 30, 2016, compared with the three months ended September 30, 2015, was predominantly driven by an increase in consumer deposits. The increase in the average deposits for the nine months ended September 30, 2016, compared with the nine months ended September 30, 2015, was driven by an increase in consumer deposits largely offset by a decrease in wholesale deposits reflecting the Firm’s actions in 2015 to reduce non-operating deposits. For further discussions of deposit and liability balance trends, see the discussion of the Firm’s Business Segment Results and the Consolidated Balance Sheets Analysis on pages 18–40 and pages 12–13, respectively.

The following table summarizes short-term and long-term funding, excluding deposits, as of September 30, 2016, and December 31, 2015, and average balances for the three and nine months ended September 30, 2016 and 2015, respectively. For additional information, see the Consolidated Balance Sheets Analysis on pages 12–13 and Note 12.

Sources of funds (excluding deposits) (in millions)	September 30, 2016	December 31, 2015	Three months ended September 30, Average 2016	2015	Nine months ended September 30, Average 2016	2015
Commercial paper:						
Wholesale funding	$ 12,258	$ 15,562	$13,798	$19,580	$16,257	$19,808
Client cash management[g]	—	—	—	6,587	—	25,135
Total commercial paper	$ 12,258	$ 15,562	$13,798	$26,167	$16,257	$44,943
Obligations of Firm-administered multi-seller conduits[a]	$ 3,659	$ 8,724	$5,872	$13,275	$5,900	$12,237
Other borrowed funds	$ 24,479	$ 21,105	$19,818	$28,466	$20,051	$30,516
Securities loaned or sold under agreements to repurchase:						
Securities sold under agreements to repurchase	$ 148,041	$ 129,598	$163,530	$165,099	$156,378	$171,280
Securities loaned	15,626	18,174	12,129	17,897	14,528	20,353
Total securities loaned or sold under agreements to repurchase[b][c]	$ 163,667	$ 147,772	$175,659	$182,996	$170,906	$191,633
Senior notes	$ 161,374	$ 149,964	$157,318	$148,946	$152,894	$146,558
Trust preferred securities	3,963	3,969	3,965	3,966	3,968	4,465
Subordinated debt	23,152	25,027	23,779	26,982	24,769	27,828
Structured notes	38,301	32,813	37,323	31,159	35,499	30,916
Total long-term unsecured funding	$ 226,790	$ 211,773	$222,385	$211,053	$217,130	$209,767
Credit card securitization[a]	$ 33,424	$ 27,906	$31,074	$30,779	$28,604	$31,106
Other securitizations[d]	1,583	1,760	1,639	1,878	1,698	1,941
FHLB advances	79,523	71,581	72,687	73,006	71,158	69,132
Other long-term secured funding[e]	3,105	5,297	5,223	4,354	5,130	4,308
Total long-term secured funding	$ 117,635	$ 106,544	$110,623	$110,017	$106,590	$106,487
Preferred stock[f]	$ 26,068	$ 26,068	$26,068	$25,718	$26,068	$23,357
Common stockholders' equity[f]	$ 228,263	$ 221,505	$226,089	$217,023	$224,034	$214,389

(a) Included in beneficial interests issued by consolidated VIEs on the Firm's Consolidated balance sheets.

(b) Excludes federal funds purchased.

(c) Excluded long-term structured repurchase agreements of $3.8 billion and $4.2 billion as of September 30, 2016, and December 31, 2015, respectively, and average balances of $3.5 billion and $3.9 billion for the three months ended September 30, 2016 and 2015, respectively, and $4.3 billion and $3.5 billion for the nine months ended September 30, 2016 and 2015, respectively.

(d) Other securitizations include securitizations of student loans. The Firm's wholesale businesses also securitize loans for client-driven transactions, which are not considered to be a source of funding for the Firm and are not included in the table.

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

(f) For additional information on preferred stock and common stockholders' equity see Capital Management on pages 67–73 and the Consolidated statements of changes in stockholders' equity on page 88; and Note 22 and Note 23 of

JPMorgan Chase's 2015 Annual Report.

(g) During the third quarter of 2015 the Firm completed the discontinuation of its commercial paper customer sweep cash management program.

Short-term funding

The Firm's sources of short-term secured funding primarily consist of securities loaned or sold under agreements to repurchase. Securities loaned or sold under agreements to repurchase are secured predominantly by high-quality securities collateral, including government-issued debt and agency MBS, and constitute a significant portion of the federal funds purchased and securities loaned or sold under repurchase agreements on the Consolidated balance sheets. The increase at September 30, 2016, from December 31, 2015, was predominantly due to higher client-driven market-making activities in CIB. The decrease in the average balance of securities loaned or sold under agreements to repurchase for the three and nine months ended

September 30, 2016, compared with September 30, 2015, was largely due to lower secured financing of trading assets-debt and equity instruments in the CIB related to client-driven market-making activities. The balances associated with securities loaned or sold under agreements to repurchase fluctuate over time due to customers' investment and financing activities; the Firm's demand for financing; the 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.

Long-term funding and issuance

Long-term funding provides additional sources of stable funding and liquidity for the Firm. The Firm's long-term funding plan is driven by expected client activity, liquidity considerations, and regulatory requirements. 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 maximum flexibility in support of both bank and nonbank subsidiary funding. The following table summarizes long-term unsecured issuance and maturities or redemptions for the three and nine months ended September 30, 2016 and 2015. For additional information, see Note 21 of JPMorgan Chase's 2015 Annual Report.

Long-term unsecured funding	Three months ended September 30,		Nine months ended September 30,	
(in millions)	2016	2015	2016	2015
Issuance				
Senior notes issued in the U.S. market	$8,467	$2,639	$21,654	$16,225
Senior notes issued in non-U.S. markets	2,172	1,261	7,063	8,545
Total senior notes	10,639	3,900	28,717	24,770
Subordinated debt	—	1,488	—	3,210
Structured notes	4,643	5,514	18,254	18,123
Total long-term unsecured funding – issuance	$15,282	$10,902	$46,971	$46,103
Maturities/redemptions				
Senior notes	$6,229	$1,370	$22,539	$14,089
Trust preferred securities	—	—	—	1,500
Subordinated debt	521	573	2,523	3,605
Structured notes	3,233	4,040	11,774	14,364
Total long-term unsecured funding – maturities/redemptions	$9,983	$5,983	$36,836	$33,558

The Firm raises secured long-term funding primarily through securitization of consumer credit card loans and advances from the FHLBs. The following table summarizes the securitization issuance and FHLB advances and their respective maturities or redemptions for the three and nine months ended September 30, 2016 and 2015, respectively.

Long-term secured funding	Three months ended September 30, Issuance		Maturities/Redemptions		Nine months ended September 30, Issuance		Maturities/Redemptions	
(in millions)	2016	2015	2016	2015	2016	2015	2016	2015
Credit card securitization	$4,463	$700	$ —	$ 1,850	$8,277	$6,826	$ 2,775	$ 7,980
Other securitizations[(a)]	—	—	58	63	—	—	177	191
FHLB advances	15,900	4,000	5,902	3,003	15,900	16,550	7,956	8,006
Other long-term secured funding[(b)]	89	31	2,546	141	415	294	2,635	350
Total long-term secured funding	$20,452	$4,731	$ 8,506	$ 5,057	$24,592	$23,670	$ 13,543	$ 16,527

(a) Other securitizations includes securitizations of student loans.

(b) Includes long-term structured notes which 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. For further description of the client-driven loan securitizations, see Note 16 of JPMorgan Chase's 2015 Annual Report.

Credit ratings

The cost and availability of financing are influenced by credit ratings. Reductions in these ratings could have an adverse effect on the Firm's access to liquidity sources, increase the cost of funds, trigger additional collateral or funding requirements and decrease the number of investors and counterparties willing to lend to the Firm.

Additionally, the Firm's funding requirements for VIEs and other third party commitments may be adversely affected by a decline in credit ratings. For additional information on the impact of a credit ratings downgrade on the funding requirements for VIEs, and on derivatives and collateral agreements, see SPEs on page 14, and credit risk, liquidity risk and credit-related contingent features in Note 5.

The credit ratings of the Parent Company and the Firm's principal bank and nonbank subsidiaries as of September 30, 2016, were as follows.

	JPMorgan Chase & Co.			JPMorgan Chase Bank, N.A. Chase Bank USA, N.A.			J.P. Morgan Securities LLC		
September 30, 2016	Long-term issuer	Short-term issuer	Outlook	Long-term issuer	Short-term issuer	Outlook	Long-term issuer	Short-term issuer	Outlook
Moody's	A3	P-2	Stable	Aa3	P-1	Stable	Aa3	P-1	Stable
Standard & Poor's	A-	A-2	Stable	A+	A-1	Stable	A+	A-1	Stable
Fitch Ratings	A+	F1	Stable	AA-	F1+	Stable	AA-	F1+	Stable

Downgrades of the Firm's long-term ratings by one or two notches could result in an increase in its cost of funds, and access to certain funding markets could be reduced as noted above. 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.

JPMorgan Chase's unsecured debt does not contain requirements that would call for an acceleration of payments, maturities or changes in the structure of the existing debt, provide any limitations on future borrowings or require additional collateral, based on unfavorable changes in the Firm's credit ratings, financial ratios, earnings, or stock price.

Critical factors in maintaining high credit ratings include a stable and diverse earnings stream, strong capital ratios, strong credit quality and risk management controls, diverse funding sources, and disciplined liquidity monitoring procedures. Rating agencies continue to evaluate economic and geopolitical trends, regulatory developments, future profitability, risk management practices, and litigation matters, as well as their broader ratings methodologies. Changes in any of these factors could lead to changes in the Firm's credit ratings.

Although the Firm closely monitors and endeavors to manage, to the extent it is able, factors influencing its credit ratings, there is no assurance that its credit ratings will not be changed in the future.

SUPERVISION AND REGULATION

For further information on Supervision and Regulation, see the Supervision and regulation section on pages 1–8 of JPMorgan Chase's 2015 Form 10-K.

For more information about the applicable requirements relating to risk-based capital and leverage in the U.S. under Basel III, including GSIB requirements, TLAC standards, the Firm's CCAR, the net capital of J.P. Morgan Securities LLC and J.P. Morgan Clearing Corp., and the applicable requirements relating to risk-based capital for J.P. Morgan Securities plc, see Capital Management on pages 67–73 and Note 20.

Under Basel III, bank holding companies and banks are required to measure their liquidity against two specific liquidity tests: the LCR and the NSFR. For additional information on these ratios, see Liquidity Risk Management on pages 74–78.

For further information on Resolution and Recovery, see Executive Overview Regulatory and Business Developments section on pages 6–7.

Dividends

At September 30, 2016, JPMorgan Chase estimated that its banking subsidiaries could pay, in the aggregate, approximately $31 billion in dividends to their respective bank holding companies without the prior approval of their relevant banking regulators.

CRITICAL ACCOUNTING ESTIMATES USED BY THE FIRM

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

Allowance for credit losses

JPMorgan Chase's allowance for credit losses covers the retained consumer and wholesale loan portfolios, as well as the Firm's wholesale and certain consumer lending-related commitments. The allowance for loan losses is intended to adjust the carrying value of the Firm's loan assets to reflect probable credit losses inherent in the loan portfolio as of the balance sheet date. Similarly, the allowance for lending-related commitments is established to cover probable credit losses inherent in the lending-related commitments portfolio as of the balance sheet date. For further discussion of the methodologies used in establishing the Firm's allowance for credit losses and the significant judgments involved, see Allowance for credit losses on pages 130–132, 165–167 and Note 15 of JPMorgan Chase's 2015 Annual Report; for amounts recorded as of September 30, 2016 and 2015, see Allowance for credit losses on pages 57–59 and Note 14 of this Form 10-Q.

As noted in the discussion on pages 165–167 of JPMorgan Chase's 2015 Annual Report, the Firm's allowance for credit losses is sensitive to numerous factors, which may differ depending on the portfolio. Changes in economic conditions or in the Firm's assumptions and estimates could affect its estimate of probable credit losses inherent in the portfolio at the balance sheet date. The Firm uses its best judgment to assess these economic conditions and loss data in estimating the allowance for credit losses and these estimates are subject to periodic refinement based on any changes to underlying external and Firm-specific historical data. In many cases, the use of alternate estimates (for example, the effect of home prices and unemployment rates on consumer delinquency, or the calibration between the Firm's wholesale loan risk ratings and external credit ratings) or data sources (for example, external PD and loss given default ("LGD") factors that incorporate industry-wide information, versus Firm-specific history) would result in a different estimated allowance for credit losses. To illustrate the potential magnitude of certain alternate judgments, the

Firm estimates that changes in the following inputs would have the following effects on the Firm's modeled credit loss estimates as of September 30, 2016, without consideration of any offsetting or correlated effects of other inputs in the Firm's allowance for loan losses:

- For PCI loans, a combined 5% decline in housing prices and a 1% increase in unemployment rates from current levels could imply an increase to modeled credit loss estimates of approximately $600 million.
- For the residential real estate portfolio, excluding PCI loans, a combined 5% decline in housing prices and a 1% increase in unemployment rates from current levels could imply an increase to modeled annual loss estimates of approximately $125 million.
- A 50 basis point deterioration in forecasted credit card loss rates could imply an increase to modeled annualized credit card loan loss estimates of approximately $700 million.
- An increase in PD factors consistent with a one-notch downgrade in the Firm's internal risk ratings for its entire wholesale loan portfolio could imply an increase in the Firm's modeled credit loss estimates of approximately $2.0 billion.
-

A 100 basis point increase in estimated LGD for the Firm’s entire wholesale loan portfolio could imply an increase in the Firm’s modeled credit loss estimates of approximately $175 million.

The purpose of these sensitivity analyses is to provide an indication of the isolated impacts of hypothetical alternative assumptions on modeled loss estimates. The changes in the inputs presented above are not intended to imply management’s expectation of future deterioration of those risk factors. In addition, these analyses are not intended to estimate changes in the overall allowance for loan losses, which would also be influenced by the judgment management applies to the modeled loss estimates to reflect the uncertainty and imprecision of these modeled loss estimates based on then-current circumstances and conditions.

It is difficult to estimate how potential changes in specific factors might affect the overall allowance for credit losses because management considers a variety of factors and inputs in estimating the allowance for credit losses. Changes in these factors and inputs may not occur at the same rate and may not be consistent across all geographies or product types, and changes in factors may be directionally inconsistent, such that improvement in one factor may offset deterioration in other factors. In addition, it is difficult to predict how changes in specific economic conditions or assumptions could affect borrower behavior or other factors considered by management in estimating the allowance for credit losses. Given the process the Firm follows and the judgments made in evaluating the risk factors related to its loss estimates, management believes that its current estimate of the allowance for credit losses is appropriate.

Fair value of financial instruments, MSRs and commodities inventory

Assets measured at fair value

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

September 30, 2016 (in billions, except ratio data)	Total assets at fair value	Total level 3 assets
Trading debt and equity instruments	$309.2	$7.9
Derivative receivables[(a)]	65.6	6.2
Trading assets	374.8	14.1
AFS securities	220.4	0.8
Loans	1.9	0.8
MSRs	4.9	4.9
Private equity investments[(b)]	1.8	1.7
Other	27.8	0.7
Total assets measured at fair value on a recurring basis	$631.6	$23.0
Total assets measured at fair value on a nonrecurring basis	1.1	0.8
Total assets measured at fair value	$632.7	$23.8
Total Firm assets	$2,521.0	
Level 3 assets as a percentage of total Firm assets[(a)]		0.9 %
Level 3 assets as a percentage of total Firm assets at fair value[(a)]		3.8 %

(a) For purposes of table above, the derivative receivables total reflects the impact of netting adjustments; however, the $6.2 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. However, if the Firm were to net such balances within level 3, the reduction in the level 3 derivative receivables balance would be $1.9 billion at September 30, 2016; this is exclusive of the netting benefit associated with cash collateral, which would further reduce the level 3 balances.

(b) Private equity instruments represent investments within Corporate.

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 models that use significant unobservable inputs and are therefore classified within level 3 of the valuation 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 model to use. Second, the lack of observability of certain significant inputs requires management to assess all relevant empirical data in deriving valuation inputs — including, for example, transaction details, yield curves, interest rates, prepayment rates, default rates, volatilities, correlations, equity or debt prices, valuations of comparable instruments, foreign exchange rates and credit curves. For further discussion of the valuation of level 3 instruments, including unobservable inputs used, see
Note 3.

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 credit-worthiness, 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. For further discussion of valuation adjustments applied by the Firm, see Note 3.

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. For a detailed discussion of the Firm's valuation process and hierarchy, and its determination of fair value for individual financial instruments, see Note 3.

Goodwill impairment

Management applies significant judgment when testing goodwill for impairment. For a description of the significant valuation judgments associated with goodwill impairment, see Goodwill impairment on page 168 of JPMorgan Chase's 2015 Annual Report.

For the three months ended September 30, 2016, the Firm reviewed current conditions (including the estimated effects of regulatory and legislative changes and the current estimated market cost of equity) and prior projections of business performance for all its businesses. Based upon such reviews, the Firm concluded that the goodwill allocated to its reporting units was not impaired as of September 30, 2016.

Declines in business performance, increases in credit losses, increases in equity capital requirements, as well as deterioration in economic or market conditions, adverse estimates of the impact of 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 or their associated goodwill 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.

For additional information on goodwill, see Note 16.

Income taxes

For a description of the significant assumptions, judgments and interpretations associated with the accounting for income taxes, see Income taxes on page 169 of JPMorgan Chase's 2015 Annual Report.

Litigation reserves

For a description of the significant estimates and judgments associated with establishing litigation reserves, see Note 23 of this Form 10-Q, and Note 31 of JPMorgan Chase's 2015 Annual Report.

ACCOUNTING AND REPORTING DEVELOPMENTS

Financial Accounting Standards Board ("FASB") Standards Adopted since January 1, 2016

Standard	Summary of guidance	Effects on financial statements
Amendments to the consolidation analysis	• Eliminates the deferral issued by the FASB in February 2010 of VIE-related accounting requirements for certain investment funds, including mutual funds, private equity funds and hedge funds. • Amends the evaluation of fees paid to a decision-maker or a service provider, and exempts certain money market funds from consolidation.	• Adopted January 1, 2016. • There was no material impact on the Firm's Consolidated Financial Statements. • For further information, see Note 1.
Improvements to employee share-based payment accounting	• Requires that all excess tax benefits and tax deficiencies that pertain to employee stock-based incentive payments be recognized within income tax expense in the Consolidated statements of income, rather than within additional paid-in capital.	• Adopted January 1, 2016. • There was no material impact on the Firm's Consolidated Financial Statements.
Measuring the financial assets and financial liabilities of a consolidated collateralized financing entity	• Provides an alternative for consolidated financing VIEs to elect: (1) to measure their financial assets and liabilities separately under existing U.S. GAAP for fair value measurement with any differences in such fair values reflected in earnings; or (2) to measure both their financial assets and liabilities using the more observable of the fair value of the financial assets or the fair value of the financial liabilities.	• Adopted January 1, 2016. • There was no material impact on the Firm's Consolidated Financial Statements as the Firm has historically measured the financial assets and liabilities using the more observable fair value.
Recognition and measurement of financial assets and financial liabilities – DVA to OCI	• For financial liabilities where the fair value option has been elected, the portion of the total change in fair value caused by changes in the Firm's own credit risk (i.e., DVA) is required to be presented separately in OCI. • Requires a cumulative-effect adjustment to retained earnings as of the beginning of the period of adoption.	• Adopted January 1, 2016. • There was no material impact on the Firm's Consolidated Financial Statements. • For additional information about the impact of the adoption of the new accounting guidance, see Notes 3, 4 and 19.

FASB Standards Issued but not yet Adopted

Standard	Summary of guidance	Effects on financial statements
Revenue recognition – revenue from contracts with customers Issued May 2014	• Requires that revenue from contracts with customers be recognized upon transfer of control of a good or service in the amount of consideration expected to be received. • Changes the accounting for certain contract costs, including whether they may be offset against revenue in the statements of income, and requires additional disclosures about revenue and contract costs.	• Required effective date: January 1, 2018.[a] • Because the guidance does not apply to revenue associated with financial instruments, including loans and securities that are accounted for under other U.S. GAAP, the Firm does not expect the new revenue recognition guidance to have a material impact on the elements of its Consolidated results of operations most closely associated with financial instruments, including securities gains, interest income and interest expense. • The Firm plans to adopt the revenue recognition guidance in the first quarter of 2018. The Firm's implementation

	• May be adopted using a full retrospective approach or a modified, cumulative effect approach wherein the guidance is applied only to existing contracts as of the date of initial application, and to new contracts transacted after that date.	efforts include the identification of revenue within the scope of the guidance, as well as the evaluation of revenue contracts. While the Firm has not yet identified any material changes in the timing of revenue recognition, the Firm's review is ongoing, and it continues to evaluate the presentation of certain contract costs (whether presented gross or offset against revenue).
Recognition and measurement of financial assets and financial liabilities Issued January 2016	• Requires that certain equity instruments be measured at fair value, with changes in fair value recognized in earnings. • Generally requires a cumulative-effect adjustment to retained earnings as of the beginning of the reporting period of adoption.	• Required effective date: January 1, 2018. • The Firm is currently evaluating the potential impact on the Consolidated Financial Statements.

FASB Standards Issued but not yet Adopted (continued)

Standard	Summary of guidance	Effects on financial statements
Leases Issued February 2016	• Requires lessees to recognize all leases longer than twelve months on the Consolidated balance sheets as lease liabilities with corresponding right-of-use assets. • Requires lessees and lessors to classify most leases using principles similar to existing lease accounting, but eliminates the “bright line” classification tests. • Expands qualitative and quantitative disclosures regarding leasing arrangements. • Requires adoption using a modified cumulative effect approach wherein the guidance is applied to all periods presented.	• Required effective date: January 1, 2019.[a] • The Firm is currently evaluating the potential impact on the Consolidated Financial Statements by reviewing its existing lease contracts and service contracts that may include embedded leases. The Firm expects a gross-up of its Consolidated balance sheets as a result of recognizing lease liabilities and right of use assets; the extent of such gross-up is under evaluation. The Firm does not expect material changes to the recognition of operating lease expense in its Consolidated results of operations.
Financial instruments - credit losses Issued June 2016	• Replaces existing incurred loss impairment guidance and establishes a single allowance framework for financial assets carried at amortized cost (including HTM securities), which will reflect management’s estimate of credit losses over the full remaining expected life of the financial assets. • Eliminates existing guidance for PCI loans, and requires recognition of an allowance for expected credit losses on financial assets purchased with more than insignificant credit deterioration since origination. • Amends existing impairment guidance for AFS securities to incorporate an allowance, which will allow for reversals of impairment losses in the event that the credit of an issuer improves. • Requires a cumulative-effect adjustment to retained earnings as of the beginning of the reporting period of adoption.	• Required effective date: January 1, 2020.[b] • The Firm has begun its implementation efforts by establishing a firmwide, cross-discipline governance structure. The Firm is currently identifying key interpretive issues, and is assessing existing credit loss forecasting models and processes against the new guidance to determine what modifications may be required. • The Firm expects that the new guidance will result in an increase in its allowance for credit losses due to several factors, including: 1. The allowance related to the Firm’s loans and commitments will increase to cover credit losses over the full remaining expected life of the portfolio, and will consider expected future changes in macroeconomic conditions 2. The nonaccretable difference on PCI loans will be recognized as an allowance, offset by an increase in the carrying value of the related loans 3. An allowance will be established for estimated credit losses on HTM securities • The extent of the increase is under evaluation, but will depend upon the nature and characteristics of the Firm’s portfolio at the adoption date, and the macroeconomic conditions and forecasts at that date.
Classification of certain cash	• Provides targeted amendments to the classification of certain cash flows,	• Required effective date: January 1, 2018.[a]

receipts and cash payments in the statement of cash flows Issued August 2016	including treatment of cash payments for settlement of zero-coupon debt instruments and distributions received from equity method investments. • Requires retrospective application to all periods presented.	• The Firm is currently evaluating the potential impact on the Consolidated Financial Statements.

(a) Early adoption is permitted.
(b) Early adoption is permitted on January 1, 2019.

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;
- Changes in laws 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 income tax laws and regulations;
- Securities and capital markets behavior, including changes in market liquidity and volatility;
- Changes in investor sentiment or consumer spending or savings behavior;
- Ability of the Firm to manage effectively its capital and liquidity, including approval of its capital plans by banking regulators;
- Changes in credit ratings assigned to the Firm or its subsidiaries;
- Damage to the Firm’s reputation;
- Ability of the Firm to deal effectively with an economic slowdown or other economic or market disruption;
- Technology changes instituted by the Firm, its counterparties or competitors;
- The success of the Firm’s business simplification initiatives and the effectiveness of its control agenda;
- Ability of the Firm to develop new products and services, and the extent to which products or services previously sold by the Firm (including but not limited to mortgages and asset-backed securities) 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 employees;
- Ability of the Firm to control expense;
- Competitive pressures;
- Changes in the credit quality of the Firm’s customers and counterparties;
- Adequacy of the Firm’s risk management framework, disclosure controls and procedures and internal control over financial reporting;
- Adverse judicial or regulatory proceedings;
- Changes in applicable accounting policies;
- Ability of the Firm to determine accurate values of certain assets and liabilities;
- Occurrence of natural or man-made disasters or calamities or conflicts and the Firm’s ability to deal effectively with disruptions caused by the foregoing;
-

Ability of the Firm to maintain the security and integrity of its financial, accounting, technology, data processing and other operating systems and facilities;

- Ability of the Firm to effectively defend itself against cyberattacks and other attempts by unauthorized parties to access the Firm's information or disrupt its systems; and
- The other risks and uncertainties detailed in Part I,

Item 1A: Risk Factors in the Firm's Annual Report on Form 10-K for the year ended December 31, 2015.

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

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

(in millions, except per share data)	Three months ended September 30, 2016	Three months ended September 30, 2015	Nine months ended September 30, 2016	Nine months ended September 30, 2015
Revenue				
Investment banking fees	$1,866	$1,604		