JPMORGAN CHASE & CO
Form 10-Q
November 01, 2017

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, 2017	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, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. 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, 2017: 3,469,725,577

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JPMorgan Chase & Co.
Consolidated financial highlights
(unaudited)

As of or for the period ended, (in millions, except per share, ratio, headcount data and where otherwise noted)						Nine months ended Sept. 30,	
	3Q17	2Q17	1Q17	4Q16	3Q16	2017	2016
Selected income statement data							
Total net revenue	$25,326	$25,470	$24,675	$23,376	$24,673	$75,471	$72,292
Total noninterest expense	14,318	14,506	15,019	13,833	14,463	43,843	41,938
Pre-provision profit	11,008	10,964	9,656	9,543	10,210	31,628	30,354
Provision for credit losses	1,452	1,215	1,315	864	1,271	3,982	4,497
Income before income tax expense	9,556	9,749	8,341	8,679	8,939	27,646	25,857
Income tax expense	2,824	2,720	1,893	1,952	2,653	7,437	7,851
Net income	$6,732	$7,029	$6,448	$6,727	$6,286	$20,209	$18,006

Earnings per share data							
Net income: Basic	$1.77	$1.83	$1.66	$1.73	$1.60	$5.26	$4.51
Diluted	1.76	1.82	1.65	1.71	1.58	5.22	4.48
Average shares: Basic	3,534.7	3,574.1	3,601.7	3,611.3	3,637.7	3,570.9	3,674.6
Diluted	3,559.6	3,599.0	3,630.4	3,646.6	3,669.8	3,597.0	3,704.5
Market and per common share data							
Market capitalization	331,393	321,633	312,078	307,295	238,277	331,393	238,277
Common shares at period-end	3,469.7	3,519.0	3,552.8	3,561.2	3,578.3	3,469.7	3,578.3
Share price:[a]							
High	$95.88	$92.65	$93.98	$87.39	$67.90	$95.88	$67.90
Low	88.08	81.64	83.03	66.10	58.76	81.64	52.50
Close	95.51	91.40	87.84	86.29	66.59	95.51	66.59
Book value per share	66.95	66.05	64.68	64.06	63.79	66.95	63.79
Tangible book value per share (“TBVPS”)[b]	54.03	53.29	52.04	51.44	51.23	54.03	51.23
Cash dividends declared per share	0.56	0.50	0.50	0.48	0.48	1.56	1.40
Selected ratios and metrics							
Return on common equity	11%	12%	11%	11%	10%	11%	10%

(“ROE”)							
Return on tangible common equity (“ROTCE”)[b]	13	14	13	14	13	14	13
Return on assets	1.04	1.10	1.03	1.06	1.01	1.06	0.99
Overhead ratio	57	57	61	59	59	58	58
Loans-to-deposits ratio	63	63	63	65	65	63	65
High quality liquid assets (“HQLA”) (in billions)[c]	$568	$541	$528	$524	$539	NA	$539
Liquidity coverage ratio (“LCR”) (average)	120%	115%	NA%	NA%	NA%	NA%	NA%
Common equity Tier 1 (“CET1”) capital ratio[d]	12.6	12.6	12.5	12.4	12.0	12.6	12.0
Tier 1 capital ratio[d]	14.3	14.4	14.3	14.1	13.6	14.3	13.6
Total capital ratio[d]	16.1	16.0	15.6	15.5	15.1	16.1	15.1
Tier 1 leverage ratio[d]	8.4	8.5	8.4	8.4	8.5	8.4	8.5
Selected balance sheet data (period-end)							
Trading assets	$420,418	$407,064	$402,513	$372,130	$374,837	$420,418	$374,837

Securities	263,288	263,458	281,850	289,059	272,401	263,288	272,401
Loans	913,761	908,767	895,974	894,765	888,054	913,761	888,054
Core loans	843,432	834,935	812,119	806,152	795,077	843,432	795,077
Average core loans	837,522	824,583	805,382	799,698	779,383	822,611	759,207
Total assets	2,563,074	2,563,174	2,546,290	2,490,972	2,521,029	2,563,074	2,521,029
Deposits	1,439,027	1,439,473	1,422,999	1,375,179	1,376,138	1,439,027	1,376,138
Long-term debt[e]	288,582	292,973	289,492	295,245	309,418	288,582	309,418
Common stockholders' equity	232,314	232,415	229,795	228,122	228,263	232,314	228,263
Total stockholders' equity	258,382	258,483	255,863	254,190	254,331	258,382	254,331
Headcount	251,503	249,257	246,345	243,355	242,315	251,503	242,315
Credit quality metrics							
Allowance for credit losses	$14,648	$14,480	$14,490	$14,854	$15,304	$14,648	$15,304
Allowance for loan losses to total retained loans	1.49 %	1.49 %	1.52 %	1.55 %	1.61 %	1.49 %	1.61 %
Allowance for loan losses to retained loans excluding purchased credit-impaired loans[f]	1.29	1.28	1.31	1.34	1.37	1.29	1.37
Nonperforming assets	$6,154	$6,432	$6,826	$7,535	$7,779	$6,154	$7,779
Net charge-offs[g]	1,265	1,204	1,654	1,280	1,121	4,123	3,412
Net charge-off	0.56 %	0.54 %	0.76 %	0.58 %	0.51 %	0.62 %	0.53 %

rate(g)

(a) Share prices are from the New York Stock Exchange.

(b) TBVPS and ROTCE are non-GAAP financial 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 15–17.

(c) HQLA represents the amount of assets that qualify for inclusion in the LCR. The amounts represent quarterly average balances for September 30, 2017 and June 30, 2017, and period-end balances for the remaining periods. For additional information, see HQLA on page 68.

(d) Ratios presented are calculated under the Basel III Transitional capital rules and for the capital ratios represent the lower of the Standardized or Advanced approach as required by the Collins Amendment of the Dodd-Frank Act (the "Collins Floor"). See Capital Risk Management on pages 42–48 for additional information on Basel III and the Collins Floor.

(e) Included unsecured long-term debt of $221.7 billion, $221.0 billion, $212.0 billion, $212.6 billion and $226.8 billion at September 30, 2017, June 30, 2017, March 31, 2017, December 31, 2016 and September 30, 2016 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 15–17. For further discussion, see Allowance for credit losses on pages 64–66.

(g) Excluding net charge-offs of $467 million related to the student loan portfolio transfer, the net charge-off rates for the three months ended March 31, 2017 and nine months ended September 30, 2017 would have been 0.54% and 0.55%, respectively.

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 2017.

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, 2016, filed with the U.S. Securities and Exchange Commission ("2016 Annual Report" or 2016 "Form 10-K"), to which reference is hereby made. See the Glossary of terms and acronyms on pages 168–175 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 82 of this Form 10-Q and Part I, Item 1A, Risk Factors, on pages 8–21 of JPMorgan Chase's 2016 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 $2.6 trillion in assets and $258.4 billion in stockholders' equity as of September 30, 2017. 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. The Firm's principal operating subsidiary 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 & Wealth Management ("AWM"). 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 2016 Annual Report.

EXECUTIVE OVERVIEW

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

Financial performance of JPMorgan Chase (unaudited) As of or for the period ended, (in millions, except per share data and ratios)	Three months ended September 30,			Nine months ended September 30,		
	2017	2016	Change	2017	2016	Change
Selected income statement data						
Total net revenue	$25,326	$24,673	3 %	$75,471	$72,292	4 %
Total noninterest expense	14,318	14,463	(1)	43,843	41,938	5
Pre-provision profit	11,008	10,210	8	31,628	30,354	4
Provision for credit losses	1,452	1,271	14	3,982	4,497	(11)
Net income	6,732	6,286	7	20,209	18,006	12
Diluted earnings per share	$1.76	$1.58	11	$5.22	$4.48	17
Selected ratios and metrics						
Return on common equity	11 %	10 %		11 %	10 %	
Return on tangible common equity	13	13		14	13	
Book value per share	$66.95	$63.79	5	$66.95	$63.79	5
Tangible book value per share	54.03	51.23	5	54.03	51.23	5
Capital ratios[(a)]						
CET1	12.6 %	12.0 %		12.6 %	12.0 %	
Tier 1 capital	14.3	13.6		14.3	13.6	
Total capital	16.1	15.1		16.1	15.1	

(a) Ratios presented are calculated under the Basel III Transitional capital rules and represent the Collins Floor. See Capital Risk Management on pages 42–48 for additional information on Basel III.

Comparisons noted in the sections below are calculated for the third quarter of 2017 versus the prior-year third quarter, unless otherwise specified.

Firmwide overview

JPMorgan Chase reported strong results in the third quarter of 2017 with net income of $6.7 billion, or $1.76 per share, on net revenue of $25.3 billion. The Firm reported ROE of 11% and ROTCE of 13%.

- Net income increased 7%, reflecting higher net revenue, partially offset by a higher provision for credit losses.
- Total net revenue increased 3%. Net interest income was $12.8 billion, up 10%, primarily driven by the net impact of higher interest rates and loan growth, partially offset by declines in Markets net interest income. Noninterest revenue was $12.5 billion, down 4%, driven by lower Markets revenue in the CIB.
- Noninterest expense was $14.3 billion, down 1%. The prior year included two items in Consumer & Community Banking totaling $175 million related to liabilities from a merchant in bankruptcy and mortgage servicing reserves.
- The provision for credit losses was $1.5 billion, an increase from $1.3 billion in the prior year. The increase reflected a net addition to the allowance for credit losses in the Consumer portfolio of $303 million, driven by Card, and higher net charge-offs of $148 million (including $63 million of incremental charge-offs recorded in accordance with regulatory guidance), partially offset by a net reduction to the allowance for credit losses in the

Wholesale portfolio of $116 million, primarily driven by Oil & Gas and Real Estate.

- The total allowance for credit losses was $14.6 billion at September 30, 2017, and the Firm had a loan loss coverage ratio, excluding the PCI portfolio, of 1.29%, compared with 1.37% in the prior year. The Firm's nonperforming assets totaled $6.2 billion at September 30, 2017, a decrease from $7.8 billion in the prior year.
- Firmwide average core loans increased 7%.

Selected capital-related metrics

- The Firm’s Basel III Fully Phased-In CET1 capital was $187 billion, and the Standardized and Advanced CET1 ratios were 12.5% and 12.9%, respectively.
- The Fully Phased-In supplementary leverage ratio (“SLR”) was 6.6% for the Firm.
- The Firm continued to grow tangible book value per share (“TBVPS”), ending the third quarter of 2017 at $54.03, up 5%.

ROTCE and TBVPS are considered non-GAAP financial measures. Core loans and each of the Fully Phased-In capital and leverage measures are considered key performance measures. For a further discussion of each of these measures, see Explanation and Reconciliation of the Firm’s Use of Non-GAAP Financial Measures and Key Performance Measures on pages 15–17, and Capital Risk Management on pages 42–48.

Lines of business highlights

Selected business metrics for each of the Firm's four lines of business are presented below for the third quarter of 2017.

CCB ROE 19%	• Average core loans up 8%; average deposits of $646 billion, up 9% • 29.3 million active mobile customers, up 12% • Credit card sales volume and merchant processing volume each up 13%
CIB ROE 13%	• Maintained #1 ranking for Global Investment Banking fees with 8.2% wallet share YTD • Banking revenue up 5%; Markets revenue down 21%
CB ROE 17%	• Record revenue of $2.1 billion, up 15%; net income of $881 million, up 13% • Average loan balances of $200 billion, up 10%
AWM ROE 29%	• Record net income of $674 million, up 21%; revenue of $3.2 billion, up 6% • Average loan balances of $125 billion, up 10% • Record assets under management ("AUM") of $1.9 trillion, up 10%; 81% of mutual fund AUM ranked in the 1st or 2nd quartile over 5 years

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

Credit provided and capital raised

JPMorgan Chase continues to support consumers, businesses and communities around the globe. The Firm provided credit and raised capital of $1.7 trillion for wholesale and consumer clients during the first nine months of 2017:

- $197 billion of credit for consumers
- $17 billion of credit for U.S. small businesses
- $601 billion of credit for corporations
- $820 billion of capital raised for corporate clients and non-U.S. government entities
- $65 billion of credit and capital raised for U.S. government and nonprofit entities, including states, municipalities, hospitals and universities.

Recent events

During the second half of 2017, natural disasters caused significant disruptions to individuals and businesses, and damage to homes and communities in several regions where the Firm conducts business. The Firm continues to provide assistance to customers, clients, communities and employees who have been affected by these disasters. These events did not have a material impact on the Firm's third quarter 2017 financial results.

2017 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 82 of this Form 10-Q and Risk Factors on pages 8–21 of JPMorgan Chase's 2016 Annual Report. There is no assurance that actual results for the full year of 2017 will be in line with the outlook set forth below, and the Firm does not undertake to update any 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 2017 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, regulatory, business and economic environments in which it operates.

Firmwide

- Management expects 2017 net interest income to increase by approximately $4 billion compared with the prior year, depending on market conditions.
- The Firm continues to take a disciplined approach to managing its expenses, while investing in growth and innovation. As a result, Firmwide adjusted expense in 2017 is expected to be approximately $58 billion (excluding Firmwide legal expense).
- The Firm continues to experience charge-off rates at or near historically low levels, reflecting favorable credit conditions across the consumer and wholesale portfolios. Management expects total net charge-offs of approximately $5 billion in 2017, excluding net charge-offs of $467 million related to the write-down of the student loan portfolio in the first quarter of 2017.
- Management expects average core loan growth of approximately 8% in 2017.

CCB

- Management expects Card, Commerce Solutions & Auto ("CCSA") revenue for the fourth quarter of 2017 to be approximately flat compared to the third quarter of 2017.
- In Card, management expects the portfolio average net charge-off rate in 2017 to remain below 3% for the year, reflecting continued loan growth and the seasoning of newer vintages, with quarterly net charge-off rates reflecting normal seasonal trends.

CIB

- Management expects Markets revenue in the fourth quarter of 2017 to be lower compared to a strong prior-year period.

CB

- Management expects expense in the fourth quarter of 2017 to be approximately flat compared to the third quarter of 2017.

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, 2017 and 2016, 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 78–79 of this Form 10-Q and pages 132–134 of JPMorgan Chase's 2016 Annual Report.

Revenue

	Three months ended September 30,			Nine months ended September 30,		
(in millions)	2017	2016	Change	2017	2016	Change
Investment banking fees	$1,843	$1,866	(1)%	$5,470	$4,843	13 %
Principal transactions	2,721	3,451	(21)	9,440	9,106	4
Lending- and deposit-related fees	1,497	1,484	1	4,427	4,290	3
Asset management, administration and commissions	3,846	3,597	7	11,347	10,902	4
Securities gains/(losses)	(1)	64	NM	(38)	136	NM
Mortgage fees and related income	429	624	(31)	1,239	1,980	(37)
Card income	1,242	1,202	3	3,323	3,861	(14)
Other income[(a)]	951	782	22	3,193	2,844	12
Noninterest revenue	12,528	13,070	(4)	38,401	37,962	1
Net interest income	12,798	11,603	10	37,070	34,330	8
Total net revenue	$25,326	$24,673	3 %	$75,471	$72,292	4 %

(a) Included operating lease income of $928 million and $708 million for the three months ended September 30, 2017 and 2016, respectively and $2.6 billion and $2.0 billion for the nine months ended September 30, 2017 and 2016, respectively.

Quarterly results

Investment banking fees remained relatively flat, as declines in equity underwriting fees driven by a lower share of fees, and debt underwriting fees driven by lower industry-wide fees were offset by higher advisory fees driven by a higher number of completed transactions in CIB. For additional information, see CIB segment results on pages 25–30 and Note 5.

Principal transactions revenue decreased compared with a strong prior year in CIB's Markets business, primarily reflecting:

- lower Fixed Income-related revenue across products driven by sustained low volatility and tighter credit spreads partially offset by
- higher Equity-related revenue primarily in Prime Services.

The decrease also reflected lower gains on private equity investments in several businesses. For additional information, see CIB, Corporate and CCB segment results
on pages 25–30 , page 39 and pages 20–24 , respectively, and Note 5.

Asset management, administration and commissions revenue increased as a result of higher asset management fees in AWM and CCB, and higher asset-based fees in CIB, both driven by higher market levels, as well as higher brokerage commissions driven by higher volumes. For additional information, see AWM, CCB and CIB segment results on pages 35–38, pages 20–24 and pages 25–30, respectively, and Note 5.

Mortgage fees and related income decreased driven by lower net production revenue on lower margins and volumes, lower mortgage servicing rights ("MSR") risk management results, and lower servicing revenue on lower average third-party loans serviced. For further information, see CCB segment results on pages 20–24 and Note 14.

Card income increased predominantly driven by higher credit card-related fees, largely annual fees, predominantly offset by higher credit card new account origination costs. For further information, see CCB segment results on pages 20–24.

Other income increased primarily driven by higher operating lease income reflecting growth in auto operating lease volume in CCB.

For further information, see Note 5.

Net interest income increased primarily driven by the net impact of higher rates and loan growth, partially offset by declines in Markets net interest income in CIB. The Firm’s average interest-earning assets were $2.2 trillion, and the net interest yield on these assets, on a fully taxable-equivalent (“FTE”) basis, was 2.37%, an increase of 13 basis points from the prior year.

For additional information on lending- and deposit-related fees, see the segment results for CCB on pages 20–24, CIB on pages 25–30, and CB on pages 31–34 and Note 5; and on securities gains, see the Corporate segment discussion on page 39.

Year-to-date results

Investment banking fees increased reflecting higher debt and equity underwriting fees in CIB. The increase in debt underwriting fees was driven by a higher share of fees and an overall increase in industry-wide fees; and the increase in equity underwriting fees was driven by growth in industry-wide issuance, including a stronger IPO market.

Principal transactions revenue increased primarily as a result of higher client-driven market-making revenue in CIB, primarily reflecting:

- higher Equity-related revenue primarily in Prime Services, and
- higher Lending-related revenue reflecting lower fair value losses on hedges of accrual loans

partially offset by

- lower Fixed Income-related revenue driven by sustained low volatility and tighter credit spreads.

Asset management, administration and commissions revenue increased as a result of higher asset management fees in AWM and CCB, and higher asset-based fees in CIB, both driven by higher market levels, as well as higher brokerage commissions driven by higher volumes in CIB and AWM.

Mortgage fees and related income decreased driven by lower MSR risk management results, lower net production revenue on lower margins and volumes, and lower servicing revenue on lower average third-party loans serviced.

Card income decreased predominantly driven by higher credit card new account origination costs, partially offset by higher credit card-related fees, largely annual fees.

Other income increased primarily due to the following:

- higher operating lease income reflecting growth in auto operating lease volume in CCB
- a legal benefit of $645 million recorded in the second quarter of 2017 in Corporate related to a settlement with the FDIC receivership for Washington Mutual and with Deutsche Bank as trustee to certain Washington Mutual trusts

partially offset by

- the absence in the current year of both gains on the sale of Visa Europe interests in CCB, as well as on the disposal of an asset in AWM, and
- lower other income in CIB.

Net interest income increased primarily driven by the net impact of higher rates and loan growth across the businesses, partially offset by declines in Markets net interest income in CIB. The Firm’s average interest-earning assets were $2.2 trillion, and the net interest yield on these assets, on a FTE basis, was 2.34%, an increase of 8 basis points from the prior year.

Provision for credit losses

(in millions)	Three months ended September 30,			Nine months ended September 30,		
	2017	2016	Change	2017	2016	Change
Consumer, excluding credit card	$206	$262	(21)%	$660	$578	14%
Credit card	1,319	1,038	27	3,699	2,978	24
Total consumer	1,525	1,300	17	4,359	3,556	23
Wholesale	(73)	(29)	(152)	(377)	941	NM
Total provision for credit losses	$1,452	$1,271	14%	$3,982	$4,497	(11)%

Quarterly results

The provision for credit losses increased as a result of:

- a higher consumer provision driven by:
  - $148 million of higher net charge-offs, primarily in the credit card portfolio due to seasoning of newer vintages in line with expectations, partially offset by a decrease in net charge-offs in the residential real estate portfolio reflecting continued improvement in home prices and delinquencies. The higher net charge-offs included $63 million of incremental charge-offs recorded in accordance with regulatory guidance, and
  - a $300 million addition to the allowance for credit losses in the credit card portfolio, due to higher loss rates and loan growth, compared to a $200 million addition in the prior year

the increase was partially offset by

- a higher net benefit of $44 million due to a net reduction of $116 million in the wholesale allowance for credit losses, primarily driven by paydowns and loan sales in the Oil & Gas portfolio, and improvements in the overall quality of the Real Estate portfolio.

For a more detailed discussion of the credit portfolio and the allowance for credit losses, see the segment discussions of CCB on pages 20–24, CIB on pages 25–30, CB on pages 31–34, the Allowance for Credit Losses on pages 64–66 and Note 12.

Year-to-date results

The provision for credit losses decreased as a result of:

- a net $450 million reduction in the wholesale allowance for credit losses, reflecting credit quality improvements in Oil & Gas, Natural Gas Pipelines and Metals & Mining portfolios, compared with an addition of $680 million in the prior year driven by downgrades in the same portfolios

the decrease was partially offset by

- a higher consumer provision driven by:
  - $432 million of higher net charge-offs, primarily in the credit card portfolio due to seasoning of newer vintages in line with expectations, partially offset by a decrease

in net charge-offs in the residential real estate portfolio reflecting continued improvement in home prices and delinquencies,

- a $218 million impact related to the transfer of the student loan portfolio to held-for-sale, and
- a $153 million higher addition to the allowance for credit losses, which included current year additions to the allowance in the credit card, business banking and auto portfolios, partially offset by a reduction in the allowance in the residential real estate portfolio.

For a more detailed discussion of the student loan sale, see CCB segment results on pages 20–24.

Noninterest expense

(in millions)	Three months ended September 30, 2017	2016	Change	Nine months ended September 30, 2017	2016	Change
Compensation expense	$7,646	$7,669	—	$23,553	$23,107	2 %
Noncompensation expense:						
Occupancy	930	899	3	2,803	2,681	5
Technology, communications and equipment	1,972	1,741	13	5,670	5,024	13
Professional and outside services	1,705	1,665	2	4,892	4,913	—
Marketing	710	825	(14)	2,179	2,200	(1)
Other expense[(a)(b)]	1,355	1,664	(19)	4,746	4,013	18
Total noncompensation expense	6,672	6,794	(2)	20,290	18,831	8
Total noninterest expense	$14,318	$14,463	(1)%	$43,843	$41,938	5 %

(a) Included Firmwide legal expense/(benefit) of $(107) million and $(71) million for the three months ended September 30, 2017 and 2016, respectively and $172 million and $(547) million for the nine months ended September 30, 2017 and 2016, respectively.

(b) Included FDIC-related expense of $353 million and $360 million for the three months ended September 30, 2017 and 2016, respectively and $1.1 billion and $912 million for the nine months ended September 30, 2017 and 2016, respectively.

Quarterly results

Compensation expense decreased predominantly driven by lower performance-based compensation expense in CIB, partially offset by investments in certain businesses, including bankers and support staff.

Noncompensation expense decreased as a result of:

- two items totaling $175 million included in the prior year in CCB related to liabilities from a merchant in bankruptcy and mortgage servicing reserves, and
- lower marketing expense in CCB

partially offset by

- higher depreciation expense from growth in auto operating lease volume in CCB.

For a discussion of legal expense, see Note 21.

Year-to-date results

Compensation expense increased predominantly driven by investments in certain businesses, including bankers and support staff, partially offset by lower performance-based compensation expense particularly in CIB.

Noncompensation expense increased as a result of:

- higher legal expense as the prior year was a legal benefit
- higher depreciation expense from growth in auto operating lease volume in CCB
- higher FDIC-related expenses and
- contributions to the Firm’s Foundation,

partially offset by

- two items totaling $175 million included in the prior year in CCB related to liabilities from a merchant in bankruptcy and mortgage servicing reserves.

Income tax expense

(in millions)	Three months ended September 30,			Nine months ended September 30,		
	2017	2016	Change	2017	2016	Change
Income before income tax expense	$9,556	$8,939	7 %	$27,646	$25,857	7 %
Income tax expense	2,824	2,653	6	7,437	7,851	(5)
Effective tax rate	29.6 %	29.7 %		26.9 %	30.4 %	

Quarterly results
The effective tax rate was relatively flat compared to the prior period.

Year-to-date results
The effective tax rate decreased predominantly due to larger tax benefits resulting from the vesting of employee-based stock awards and the release of a valuation allowance. The tax benefits resulting from employee-based stock awards were related to the appreciation of the Firm’s stock price upon vesting of these awards above their original grant price.

CONSOLIDATED
BALANCE
SHEETS
ANALYSIS

Consolidated balance sheets overview

The following is a discussion of the significant changes between September 30, 2017, and December 31, 2016.

Selected Consolidated balance sheets data

(in millions)	Sep 30, 2017	Dec 31, 2016	Change
Assets			
Cash and due from banks	$21,994	$23,873	(8)%
Deposits with banks	435,810	365,762	19
Federal funds sold and securities purchased under resale agreements	185,454	229,967	(19)
Securities borrowed	101,680	96,409	5
Trading assets:			
Debt and equity instruments	362,158	308,052	18
Derivative receivables	58,260	64,078	(9)
Securities	263,288	289,059	(9)
Loans	913,761	894,765	2
Allowance for loan losses	(13,539)	(13,776)	(2)
Loans, net of allowance for loan losses	900,222	880,989	2
Accrued interest and accounts receivable	61,757	52,330	18
Premises and equipment	14,218	14,131	1
Goodwill	47,309	47,288	—
Mortgage servicing rights	5,738	6,096	(6)
Other intangible assets	808	862	(6)
Other assets	104,378	112,076	(7)
Total assets	$2,563,074	$2,490,972	3%

Cash and due from banks and deposits with banks increased primarily driven by deposit growth and a shift in the deployment of excess cash from securities purchased under resale agreements and investment securities into deposits with banks. The Firm’s excess cash is placed with various central banks, predominantly Federal Reserve Banks.

Federal funds sold and securities purchased under resale agreements decreased primarily due to the shift in the deployment of excess cash to deposits with banks. For additional information on the Firm’s Liquidity Risk Management, see pages 68–72.

Trading assets and trading liabilities–debt and equity instruments increased predominantly related to client-driven market-making activities in CIB.

- The increase in trading assets was driven by higher debt and equity instruments in Prime Services reflecting client demand, and in Rates reflecting higher levels of client activity when compared to lower levels at year-end
- The increase in trading liabilities was driven by higher levels of client-driven short positions in equity instruments in Prime Services, partially offset by reductions in debt instruments in Securitized products.

For additional information, refer to Note 2.

Trading assets and trading liabilities–derivative receivables and payables decreased predominantly related to client-driven market-making activities in CIB Markets, reflecting lower foreign exchange and interest rate derivative receivables and payables, driven by maturities and market movements. The decrease in derivative receivables was partially offset by higher equity derivative receivables driven by higher market levels. For additional information, refer to Derivative contracts on pages 62–63, and Notes 2 and 4.

Securities decreased primarily reflecting net sales of U.S. Treasuries. For information on Securities, see Notes 2 and 9.

Loans increased reflecting the following:

- higher wholesale loans driven by new originations in CB and higher loans to Private Banking clients in AWM, partially offset by paydowns in CIB
- higher consumer loans as a result of higher retention of originated high-quality prime mortgages in CCB and AWM, largely offset by the sale of the student loan portfolio, lower home equity loans and the run-off of PCI loans.

The allowance for loan losses decreased reflecting the following:

- a net reduction in the wholesale allowance, reflecting credit quality improvements in the Oil & Gas, Natural Gas Pipelines and Metals & Mining portfolios

partially offset by

- an increase in the consumer allowance, reflecting additions to the allowance for the credit card, business banking and auto portfolios, predominantly driven by

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higher loss rates and loan growth in credit card, largely offset by the utilization of the allowance in connection with the transfer of the student loan portfolio to held-for-sale, and a reduction in the allowance for the residential real estate portfolio predominantly driven by continued improvement in home prices and delinquencies.
For detailed discussion of loans and the allowance for loan losses, refer to Credit Risk Management on pages 49–66, and Notes 2, 3, 11 and 12.

Accrued interest and accounts receivable increased reflecting higher client receivables related to client-driven market-making activities in CIB.
Other assets decreased as a result of a shift in the collateral pledged by CIB from cash to securities (which are classified within trading assets).
For information on MSRs, see Note 14.
Selected Consolidated balance sheets data (continued)

(in millions)	Sep 30, 2017	Dec 31, 2016	Change
Liabilities			
Deposits	$1,439,027	$1,375,179	5 %
Federal funds purchased and securities loaned or sold under repurchase agreements	169,393	165,666	2
Commercial paper	24,248	11,738	107
Other borrowed funds	29,719	22,705	31
Trading liabilities:			
Debt and equity instruments	89,089	87,428	2
Derivative payables	39,446	49,231	(20)
Accounts payable and other liabilities	196,764	190,543	3
Beneficial interests issued by consolidated variable interest entities (“VIEs”)	28,424	39,047	(27)
Long-term debt	288,582	295,245	(2)
Total liabilities	2,304,692	2,236,782	3
Stockholders’ equity	258,382	254,190	2
Total liabilities and stockholders’ equity	$2,563,074	$2,490,972	3 %

Deposits increased due to the following:

- higher consumer deposits reflecting the continuation of strong growth from new and existing customers, and low attrition rates
- higher wholesale deposits driven by growth in client cash management activity in CIB’s Securities Services and Treasury Services businesses, partially offset by lower balances in AWM reflecting balance migration into investment-related products (retained predominantly within the Firm), and the impact of seasonality in both CB and AWM.

For more information on deposits, refer to the Liquidity Risk Management discussion on pages 68–72; and Notes 2 and 15.
Federal funds purchased and securities loaned or sold under repurchase agreements increased reflecting on-going client activity in CIB, partially offset by a change in the mix of funding to commercial paper and other borrowed funds.
Commercial paper increased due to higher issuance in the wholesale market, reflecting a change in the mix of funding from securities sold under repurchase agreements for CIB Markets activities. For additional information, see Liquidity Risk Management on pages 68–72.

Other borrowed funds increased driven by a change in the mix of funding from securities sold under repurchase agreements in CIB.
Beneficial interests issued by consolidated VIEs decreased due to net maturities of credit card securitizations and the deconsolidation of the student loan securitization entities. For further information on Firm-sponsored VIEs and loan securitization trusts, see Off-Balance Sheet Arrangements on page 14 and Notes 13 and 19; and for a more detailed discussion of the student loan sale, see CCB segment results on pages 20–24 and Note 23.

For information on the Firm’s long-term debt activities, see Liquidity Risk Management on pages 68–72; on changes in stockholders’ equity, see page 86, and on the Firm’s capital actions, see Capital actions on page 47.

CONSOLIDATED CASH FLOWS ANALYSIS

Consolidated cash flows overview

The following is a discussion of cash flow activities during the nine months ended September 30, 2017 and 2016.

(in millions)	Nine months ended September 30, 2017	2016
Net cash provided by/(used in)		
Operating activities	$(16,038)	$(18,715)
Investing activities	(22,342)	(112,102)
Financing activities	36,405	131,699
Effect of exchange rate changes on cash	96	18
Net increase/(decrease) in cash and due from banks	$(1,879)	$900

Operating activities

Cash used in operating activities for the nine month period ending September 30, 2017 resulted from:

Client-driven market-making activities in CIB

- an increase in trading assets was driven by higher debt and equity instruments in Prime Services reflecting client demand, and in Rates reflecting higher levels of client activity when compared to lower levels at year-end
- a decrease in trading liabilities predominantly reflecting lower foreign exchange and interest rate derivative payables
- an increase in accrued interest and accounts receivable due to higher client receivables.

Partially offsetting these outflows was a decrease in other assets as a result of a shift in the collateral pledged in CIB from cash to securities.

Cash used in operating activities for the nine month period ending September 30, 2016 resulted from:

Client-driven market-making activities in CIB

- an increase in trading assets, which was largely offset by an increase in trading liabilities
- an increase in accrued interest and accounts receivable driven by higher client receivables
- an increase in securities borrowed driven by higher demand for securities to cover short positions.

Investing activities

Cash used in investing activities during 2017 resulted from:

- an increase in deposits with banks, primarily driven by growth in deposits and a shift in the deployment of excess cash from securities purchased under resale agreements and investment securities into deposits with banks
- higher wholesale loans driven by new originations in CB and higher loans to Private Banking clients in AWM, partially offset by paydowns in CIB
- higher consumer loans as a result of higher retention of originated high-quality prime mortgages in CCB and AWM, largely offset by the sale of the student loan portfolio, lower home equity loans and the run-off of PCI loans

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
- 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.

For both periods, partially offsetting these cash outflows were net proceeds from paydowns, maturities, sales and purchases of investment securities.

Financing activities

Cash provided by financing activities in 2017 resulted from:

- higher wholesale deposits driven by growth in client cash management activity in CIB’s Securities Services and Treasury Services businesses, partially offset by lower balances in AWM reflecting balance migration predominantly into the Firm’s investment-related products, and the impact of seasonality in both CB and AWM

- higher consumer deposits reflecting the continuation of strong growth from new and existing customers, and low attrition rates
- an increase in commercial paper due to higher issuance in the wholesale market, reflecting a change in the mix of funding from securities sold under repurchase agreements for CIB Markets activities

Partially offsetting these inflows were net payments of long-term borrowings.

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
- higher net proceeds from long-term borrowings consistent with Treasury's long-term funding plans.

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 11–12, Capital Risk Management on pages 42–48, and Liquidity Risk Management on pages 68–72 of this Form 10-Q, and pages 110–115 of JPMorgan Chase's 2016 Annual Report.

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 19 of this Form 10-Q and Off–Balance Sheet Arrangements and Contractual Cash Obligations on pages 45–46 and Note 29 of JPMorgan Chase's 2016 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 13 of this Form 10-Q, and Note 1 and Note 16 of JPMorgan Chase's 2016 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 Investors 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, 2017, and December 31, 2016, was $2.9 billion and $2.7 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 $7.3 billion and $7.4 billion at September 30, 2017, and December 31, 2016, 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 13.

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 13 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 upon or a default occurring. As a result, the total contractual amount of these instruments is not, in the Firm's view, representative of its expected future credit exposure or funding requirements. 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 62 and Note 19. For a discussion of liabilities associated with loan sales and securitization-related indemnifications, see Note 19.

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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 83–87. 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 Firmwide results, including the overhead ratio, on a "managed" basis; these Firmwide managed basis results are considered non-GAAP financial measures. The Firm also reviews the results of the lines of business on a managed basis. The Firm's definition of managed basis starts, in each case, 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 a 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. These financial measures allow 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 Firm and business-segment level, because these other non-GAAP financial measures provide information to investors about the underlying operational performance and trends of the Firm or of the particular business segment, as the case may be, and, therefore, facilitate a comparison of the Firm or the business segment with the performance of its relevant 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 49–66.

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,					
	2017			2016		
(in millions, except ratios)	Reported results	Fully taxable-equivalent adjustments[(a)]	Managed basis	Reported results	Fully taxable-equivalent adjustments[(a)]	Managed basis
Other income	$951	$ 555	$1,506	$782	$ 540	$1,322
Total noninterest revenue	12,528	555	13,083	13,070	540	13,610
Net interest income	12,798	319	13,117	11,603	299	11,902
Total net revenue	25,326	874	26,200	24,673	839	25,512
Pre-provision profit	11,008	874	11,882	10,210	839	11,049
Income before income tax expense	9,556	874	10,430	8,939	839	9,778
Income tax expense	$2,824	$ 874	$3,698	$2,653	$ 839	$3,492
Overhead ratio	57 %	NM	55 %	59 %	NM	57 %

	Nine months ended September 30,					
	2017			2016		
(in millions, except ratios)	Reported results	Fully taxable-equivalent adjustments[(a)]	Managed basis	Reported results	Fully taxable-equivalent adjustments[(a)]	Managed basis
Other income	$3,193	$ 1,733	$4,926	$2,844	$ 1,620	$4,464
Total noninterest revenue	38,401	1,733	40,134	37,962	1,620	39,582

Net interest income	37,070	987	38,057	34,330	897	35,227
Total net revenue	75,471	2,720	78,191	72,292	2,517	74,809
Pre-provision profit	31,628	2,720	34,348	30,354	2,517	32,871
Income before income tax expense	27,646	2,720	30,366	25,857	2,517	28,374
Income tax expense	$7,437	$ 2,720	$10,157	$7,851	$ 2,517	$10,368
Overhead ratio	58 %	NM	56 %	58 %	NM	56 %

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

Net interest income excluding CIB's Markets businesses

In addition to reviewing net interest income on a managed basis, management also reviews net interest income excluding net interest income arising from CIB's Markets businesses to assess the performance of the Firm's lending, investing (including asset-liability management) and deposit-raising activities. This net interest income is referred to as non-markets related net interest income. CIB's Markets businesses represent both Fixed Income Markets and Equity Markets. Management believes that disclosure of non-markets related net interest income

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.

The data presented below are non-GAAP financial measures due to the exclusion of markets-related net interest income arising from CIB.

	Three months ended September 30,			Nine months ended September 30,		
(in millions, except rates)	2017	2016	Change	2017	2016	Change
Net interest income – managed basis[(a)(b)]	$13,117	$11,902	10 %	$38,057	$35,227	8 %
Less: CIB Markets net interest income[(c)]	1,070	1,625	(34)	3,509	4,703	(25)
Net interest income excluding CIB Markets[(a)]	$12,047	$10,277	17	$34,548	$30,524	13
Average interest-earning assets	$2,194,174	$2,116,493	4	$2,177,520	$2,080,133	5
Less: Average CIB Markets interest-earning assets[(c)]	544,867	518,862	5	535,044	518,989	3
Average interest-earning assets excluding CIB Markets	$1,649,307	$1,597,631	3 %	$1,642,476	$1,561,144	5 %
Net interest yield on average interest-earning assets – managed basis	2.37 %	2.24 %		2.34 %	2.26 %	
Net interest yield on average CIB Markets interest-earning assets[(c)]	0.78	1.25		0.88	1.21	
Net interest yield on average interest-earning assets excluding CIB Markets	2.90 %	2.56 %		2.81 %	2.61 %	

(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 15.

(c) The amounts in this table differ from the prior-period to align with CIB's Markets businesses. For further information on CIB's Markets businesses, see page 29.

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Tangible common equity, ROTCE and TBVPS

Tangible common equity (“TCE”), ROTCE and TBVPS are each non-GAAP financial 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 utilized by 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.

(in millions, except per share and ratio data)	Period-end Sep 30, 2017	Period-end Dec 31, 2016	Average Three months ended September 30, 2017	Average Three months ended September 30, 2016	Average Nine months ended September 30, 2017	Average Nine months ended September 30, 2016
Common stockholders’ equity	$232,314	$228,122	$231,861	$226,089	$229,937	$224,034
Less: Goodwill	47,309	47,288	47,309	47,302	47,297	47,314
Less: Certain identifiable intangible assets	808	862	818	903	836	938
Add: Deferred tax liabilities[a]	3,271	3,230	3,262	3,226	3,243	3,205
Tangible common equity	$187,468	$183,202	$186,996	$181,110	$185,047	$178,987
Return on tangible common equity	NA	NA	13 %	13 %	14 %	13 %
Tangible book value per share	$54.03	$51.44	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.

Key performance measures

The Firm considers the following to be key regulatory capital measures:

- Capital, risk-weighted assets (“RWA”), and capital and leverage ratios presented under Basel III Standardized and Advanced Fully Phased-In rules and
- SLR calculated under Basel III Advanced Fully Phased-In rules.

The Firm, as well as banking regulators, investors and analysts use these measures 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 Risk Management on pages 42–48.

Core loans are also considered a key performance measure. Core loans represent 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 is a measure utilized by 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 & Wealth Management. In addition, there is a Corporate segment.

The business segments are determined based on the products and services provided, or the type of customer served, and they reflect the manner in which financial information is currently evaluated by 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 15–17.

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. For further information about line of business capital, see Line of business equity on page 46.

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

Business segment capital allocation changes

Effective January 1, 2017, the Firm's methodology used to allocate capital to the business segments was updated. Under the new methodology, capital is no longer allocated to each line of business for goodwill and other intangibles associated with acquisitions effected by the line of business. In addition, the new methodology incorporates Basel III Standardized Fully Phased-In RWA (as well as Basel III Advanced Fully Phased-In RWA), leverage, the global systemically important banks ("GSIB") surcharge, and a simulation of capital in a severe stress environment. The methodology will continue to be weighted towards Basel III Advanced Fully Phased-In RWA because the Firm believes it to be the best proxy for economic risk.

For a further discussion of those methodologies, see Business Segment Results – Description of business segment reporting methodology on pages 51–52 of JPMorgan Chase's 2016 Annual Report.

The following discussions of the business segment results are based on a comparison of the three and nine months ended September 30, 2017 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)	2017	2016	Change	2017	2016	Change	2017	2016	Change
Consumer & Community Banking	$12,033	$11,328	6 %	$6,495	$6,510	—	$5,538	$4,818	15 %
Corporate & Investment Bank	8,590	9,455	(9)	4,768	4,934	(3)	3,822	4,521	(15)
Commercial Banking	2,146	1,870	15	800	746	7	1,346	1,124	20
Asset & Wealth Management	3,245	3,047	6	2,181	2,130	2	1,064	917	16
Corporate	186	(188)	NM	74	143	(48)	112	(331)	NM
Total	$26,200	$25,512	3 %	$14,318	$14,463	(1)%	$11,882	$11,049	8 %

Three months ended September 30,	Provision for credit losses			Net income/(loss)			Return on equity	
(in millions, except ratios)	2017	2016	Change	2017	2016	Change	2017	2016
Consumer & Community Banking	$1,517	$1,294	17 %	$2,553	$2,204	16 %	19 %	16 %
Corporate & Investment Bank	(26)	67	NM	2,546	2,912	(13)	13	17
Commercial Banking	(47)	(121)	61	881	778	13	17	18
Asset & Wealth Management	8	32	(75)	674	557	21	29	24
Corporate	—	(1)	100	78	(165)	NM	NM	NM
Total	$1,452	$1,271	14 %	$6,732	$6,286	7 %	11 %	10 %

Nine months ended September 30,	Total net revenue			Total noninterest expense			Pre-provision profit/(loss)		
(in millions)	2017	2016	Change	2017	2016	Change	2017	2016	Change
Consumer & Community Banking	$34,415	$33,896	2	$19,390	$18,602	4 %	$15,025	$15,294	(2)%
Corporate & Investment Bank	27,015	26,755	1	14,730	14,820	(1)	12,285	11,935	3
Commercial Banking	6,252	5,490	14	2,415	2,190	10	3,837	3,300	16
Asset & Wealth Management	9,544	8,958	7	6,953	6,303	10	2,591	2,655	(2)
Corporate	965	(290)	NM	355	23	NM	610	(313)	NM
Total	$78,191	$74,809	5	$43,843	$41,938	5 %	$34,348	$32,871	4 %

Nine months ended September 30,	Provision for credit losses			Net income/(loss)			Return on equity	
(in millions, except ratios)	2017	2016	Change	2017	2016	Change	2017	2016
Consumer & Community Banking	$4,341	$3,545	22 %	$6,764	$7,350	(8)%	17 %	18 %
Corporate & Investment Bank	(175)	761	NM	8,497	7,384	15	15	14
Commercial Banking	(214)	158	NM	2,582	1,970	31	16	15
Asset & Wealth Management	30	37	(19)	1,683	1,665	1	24	24
Corporate	—	(4)	100	683	(363)	NM	NM	NM
Total	$3,982	$4,497	(11)%	$20,209	$18,006	12 %	11 %	10 %

CONSUMER &
COMMUNITY
BANKING

For a discussion of the business profile of CCB, see pages 53–57 of JPMorgan Chase's 2016 Annual Report and Line of Business Metrics on page 173.

Selected income statement data

	Three months ended September 30,			Nine months ended September 30,		
(in millions, except ratios)	2017	2016	Change	2017	2016	Change
Revenue						
Lending- and deposit-related fees	$885	$841	5 %	$2,547	$2,390	7 %
Asset management, administration and commissions	543	531	2	1,644	1,596	3
Mortgage fees and related income	428	624	(31)	1,235	1,980	(38)
Card income	1,141	1,099	4	3,019	3,543	(15)
All other income	901	773	17	2,454	2,303	7
Noninterest revenue	3,898	3,868	1	10,899	11,812	(8)
Net interest income	8,135	7,460	9	23,516	22,084	6
Total net revenue	12,033	11,328	6	34,415	33,896	2
Provision for credit losses	1,517	1,294	17	4,341	3,545	22
Noninterest expense						
Compensation expense	2,554	2,453	4	7,598	7,255	5
Noncompensation expense[(a)]	3,941	4,057	(3)	11,792	11,347	4
Total noninterest expense	6,495	6,510	—	19,390	18,602	4
Income before income tax expense	4,021	3,524	14	10,684	11,749	(9)
Income tax expense	1,468	1,320	11	3,920	4,399	(11)
Net income	$2,553	$2,204	16 %	$6,764	$7,350	(8)%
Revenue by line of business						
Consumer & Business Banking	$5,408	$4,719	15	$15,547	$13,885	12
Mortgage Banking	1,558	1,874	(17)	4,513	5,671	(20)
Card, Commerce Solutions & Auto	5,067	4,735	7	14,355	14,340	—
Mortgage fees and related income details:						
Net production revenue	158	247	(36)	451	670	(33)
Net mortgage servicing revenue[(b)]	270	377	(28)	784	1,310	(40)
Mortgage fees and related income	$428	$624	(31)%	$1,235	$1,980	(38)%
Financial ratios						
Return on equity	19 %	16 %		17 %	18 %	
Overhead ratio	54	57		56	55	

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 $688 million and $504 million for the three months ended September 30, 2017 and 2016, respectively, and $1.9 billion and $1.4 billion for the nine months ended September 30, 2017 and 2016, respectively.

(b) Included MSR risk management of $(23) million and $38 million for the three months ended September 30, 2017 and 2016, respectively, and $(132) million and $240 million for the nine months ended September 30, 2017 and

2016, respectively.

Quarterly results
Net income was $2.6 billion, an increase of 16%, driven by higher net revenue, partially offset by a higher provision for credit losses.
Net revenue was $12.0 billion, an increase of 6%.
Net interest income was $8.1 billion, up 9%, driven by deposit margin expansion, higher deposit balances and higher loan balances in Card, partially offset by loan spread compression from higher rates, including the impact of higher funding costs, in Mortgage Banking and Auto.
Noninterest revenue was $3.9 billion, up 1%, driven by higher auto lease volume and higher card- and deposit-related fees, predominantly offset by higher new account origination costs in Card, lower net production revenue reflecting lower mortgage production margins and volumes, lower MSR risk management results and lower mortgage servicing revenue as a result of a lower level of third-party loans serviced. See Note 14 for further information regarding changes in value of the MSR asset and related hedges, and mortgage fees and related income.
Noninterest expense was $6.5 billion, flat compared to prior year, as a result of:

- two items totaling $175 million included in the prior year related to liabilities from a merchant in bankruptcy and mortgage servicing reserves, and
- lower marketing expense

offset by

- higher auto lease depreciation, and
- continued business growth.

The provision for credit losses was $1.5 billion, an increase of 17% from the prior year, driven by:

- $148 million of higher net charge-offs, primarily in the credit card portfolio due to seasoning of newer vintages in line with expectations, partially offset by a decrease in net charge-offs in the residential real estate portfolio reflecting continued improvement in home prices and delinquencies. The higher net charge-offs included $63 million of incremental charge-offs recorded in accordance with regulatory guidance regarding the timing of loss recognition for certain auto and residential real estate loans in bankruptcy and auto loans where assets were acquired in loan satisfaction, and
- a $75 million higher addition to the allowance for credit losses, primarily related to the credit card portfolio.

Year-to-date results
Net income was $6.8 billion, a decrease of 8%, driven by a higher provision for credit losses and noninterest expense, partially offset by higher net revenue.
Net revenue was $34.4 billion, an increase of 2%.
Net interest income was $23.5 billion, up 6%, driven by higher deposit balances, higher loan balances in Card and deposit margin expansion, partially offset by loan spread compression from higher rates, including the impact of higher funding costs, in Mortgage Banking and Auto, the impact of the student loan portfolio sale and an adjustment for capitalized interest on modified loans in Mortgage Banking.
Noninterest revenue was $10.9 billion, down 8%, driven by higher new account origination costs in Card, lower MSR risk management results, the absence in the current year of a gain on the sale of Visa Europe interests and lower net production revenue reflecting lower mortgage production margins and volumes, largely offset by higher auto lease volume and higher card- and deposit-related fees.
Noninterest expense was $19.4 billion, an increase of 4%, driven by:

- higher auto lease depreciation, and
- continued business growth

partially offset by

- two items totaling $175 million included in the prior year related to liabilities from a merchant in bankruptcy and mortgage servicing reserves.

The provision for credit losses was $4.3 billion, an increase of 22% from the prior year, reflecting:

- $428 million of higher net charge-offs, primarily in the credit card portfolio due to seasoning of newer vintages in line with expectations, partially offset by a decrease in net charge-offs in the residential real estate portfolio reflecting

continued improvement in home prices and delinquencies,

- a $218 million impact related to the transfer of the student loan portfolio to held-for-sale, and
- a $150 million higher addition to the allowance for credit losses.

See the Allowance for credit losses section on page 64 of this Form 10-Q for additional information regarding the consumer portfolio.

The Firm transferred the student loan portfolio to held-for-sale in the first quarter of 2017. The Firm sold substantially all of the portfolio in the second quarter of 2017, and such sale did not have a material impact on the Firm's Consolidated Financial Statements.

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)	2017	2016	Change	2017	2016	Change
Selected balance sheet data (period-end)						
Total assets	$537,459	$521,276	3 %	$537,459	$521,276	3 %
Loans:						
Consumer & Business Banking	25,275	23,846	6	25,275	23,846	6
Home equity	44,542	52,445	(15)	44,542	52,445	(15)
Residential mortgage	195,134	181,564	7	195,134	181,564	7
Mortgage Banking	239,676	234,009	2	239,676	234,009	2
Card	141,313	133,435	6	141,313	133,435	6
Auto	65,102	64,512	1	65,102	64,512	1
Student	47	7,354	(99)	47	7,354	(99)
Total loans	471,413	463,156	2	471,413	463,156	2
Core loans	401,648	371,060	8	401,648	371,060	8
Deposits	653,460	605,117	8	653,460	605,117	8
Equity	51,000	51,000	—	51,000	51,000	—
Selected balance sheet data (average)						
Total assets	$531,959	$521,882	2	$530,884	$512,550	4
Loans:						
Consumer & Business Banking	25,166	23,678	6	24,753	23,227	7
Home equity	45,424	53,501	(15)	47,333	55,604	(15)
Residential mortgage	192,805	180,669	7	187,954	175,059	7
Mortgage Banking	238,229	234,170	2	235,287	230,663	2
Card	141,172	132,713	6	138,852	129,481	7
Auto	65,175	64,068	2	65,321	62,998	4
Student	58	7,490	(99)	3,847	7,759	(50)
Total loans	469,800	462,119	2	468,060	454,128	3
Core loans	398,319	367,999	8	389,103	356,072	9
Deposits	645,732	593,671	9	636,257	579,741	10
Equity	51,000	51,000	—	51,000	51,000	—
Headcount	134,553	132,092	2 %	134,553	132,092	2 %

Selected metrics

(in millions, except ratio data)	As of or for the three months ended September 30, 2017	2016	Change	As of or for the nine months ended September 30, 2017		2016	Change
Credit data and quality statistics							
Nonaccrual loans[a][b]	$4,068	$4,853	(16)%	$4,068		$4,853	(16)%
Net charge-offs/(recoveries)[c][d]							
Consumer & Business Banking	$71	$71	—	$184		$180	2
Home equity	13	42	(69)	67		136	(51)
Residential mortgage	(2)	7	NM	(3)		11	NM
Mortgage Banking	11	49	(78)	64		147	(56)
Card	1,019	838	22	3,049		2,528	21
Auto	116	79	47	245		192	28
Student	—	32	NM	498	(i)	98	408
Total net charge-offs/(recoveries)	$1,217	$1,069	14	$4,040	(i)	$3,145	28
Net charge-off/(recovery) rate[c][d]							
Consumer & Business Banking	1.12 %	1.19 %		0.99 %		1.04 %	
Home equity[e]	0.15	0.42		0.25		0.44	
Residential mortgage[e]	—	0.02		—		0.01	
Mortgage Banking[e]	0.02	0.10		0.04		0.10	
Card	2.87	2.51		2.94		2.61	
Auto	0.71	0.49		0.50		0.41	
Student	—	1.70		NM		1.69	
Total net charge-off/(recovery) rate[e]	1.10	1.00		1.25	(i)	1.01	
30+ day delinquency rate							
Mortgage Banking[f][g]	1.03 %	1.27 %		1.03 %		1.27 %	
Card	1.76	1.53		1.76		1.53	
Auto	0.93	1.08		0.93		1.08	
Student[h]	—	1.81		—		1.81	
90+ day delinquency rate — Card	0.86	0.75		0.86		0.75	
Allowance for loan losses							
Consumer & Business Banking	$796	$703	13	$796		$703	13
Mortgage Banking, excluding PCI loans	1,153	1,488	(23)	1,153		1,488	(23)
Mortgage Banking — PCI loans[d]	2,245	2,618	(14)	2,245		2,618	(14)
Card	4,684	3,884	21	4,684		3,884	21
Auto	499	474	5	499		474	5
Student	—	274	NM	—		274	NM
Total allowance for loan losses[d]	$9,377	$9,441	(1)%	$9,377		$9,441	(1)%

(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, 2017 and 2016, nonaccrual loans excluded loans 90 or more days past due as follows: (1) mortgage loans insured by U.S. government agencies of $4.0 billion and $5.0 billion, respectively; and (2) student loans insured by U.S. government agencies under the Federal Family Education Loan Program ("FFELP") of zero and $259 million, respectively. These amounts have been excluded based upon the government guarantee.

(c) Net charge-offs and net charge-off rates for the three and nine months ended September 30, 2017 included $63 million of incremental charge-offs recorded in accordance with regulatory guidance regarding the timing of loss recognition for certain auto and residential real estate loans in bankruptcy and auto loans where assets were acquired in loan satisfaction.

(d) Net charge-offs/(recoveries) and the net charge-off/(recovery) rates for the three months ended September 30, 2017 and 2016, excluded $20 million and $36 million, respectively, and for nine months ended September 30, 2017 and 2016, excluded $66 million and $124 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 65.

(e) Excludes the impact of PCI loans. For the three months ended September 30, 2017 and 2016, the net charge-off/(recovery) rates including the impact of PCI loans were as follows: (1) home equity of 0.11% and 0.31%, respectively; (2) residential mortgage of -% and 0.02%, respectively; (3) Mortgage Banking of 0.02% and 0.08%, respectively; and (4) total CCB of 1.03% and 0.92%, respectively. For the nine months ended September 30, 2017 and 2016, the net charge-off/(recovery) rates including the impact of PCI loans were as follows: (1) home equity of 0.19% and 0.33%, respectively; (2) residential mortgage of -% and 0.01%,respectively; (3) Mortgage Banking of 0.04% and 0.09%, respectively; and (4) total CCB of 1.16% and 0.93%, respectively.

(f) At September 30, 2017 and 2016, excluded mortgage loans insured by U.S. government agencies of $5.9 billion and $7.0 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 9.30% and 10.01% at September 30, 2017 and 2016, respectively.

(h) Excluded student loans insured by U.S. government agencies under FFELP of $461 million at September 30, 2016, that are 30 or more days past due. This amount has been excluded based upon the government guarantee.
(i) Excluding net charge-offs of $467 million related to the student loan portfolio transfer in the first quarter of 2017, the total net charge-off rate for the nine months ended September 30, 2017 would have been 1.10%.

Selected metrics

	As of or for the three months ended September 30,			As of or for the nine months ended September 30,		
(in billions, except ratios and where otherwise noted)	2017	2016	Change	2017	2016	Change
Business Metrics						
CCB households (in millions)[(a)]	61.2	60.0	2 %	61.2	60.0	2 %
Number of branches	5,174	5,310	(3)	5,174	5,310	(3)
Active digital customers (in thousands)[(b)]	46,349	43,657	6	46,349	43,657	6
Active mobile customers (in thousands)[(c)]	29,273	26,047	12	29,273	26,047	12
Debit and credit card sales volume[(a)]	$231.1	$207.9	11	$671.8	$601.6	12
Consumer & Business Banking						
Average deposits	$630.4	$576.6	9	$621.7	$564.2	10
Deposit margin	2.02 %	1.79 %		1.95 %	1.82 %	
Business banking origination volume	$1.7	$1.8	(8)	$5.6	$5.7	(2)
Client investment assets	262.5	231.6	13	262.5	231.6	13
Mortgage Banking						
Mortgage origination volume by channel						
Retail	$10.6	$11.7	(9)	$29.3	$31.6	(7)
Correspondent	16.3	15.4	6	43.9	42.9	2
Total mortgage origination volume[(d)]	$26.9	$27.1	(1)	$73.2	$74.5	(2)
Total loans serviced (period-end)	$821.6	$863.3	(5)	$821.6	$863.3	(5)
Third-party mortgage loans serviced (period-end)	556.9	609.2	(9)	556.9	609.2	(9)
MSR carrying value (period-end)	5.7	4.9	16	5.7	4.9	16
Ratio of MSR carrying value (period-end) to third-party mortgage loans serviced (period-end)	1.02 %	0.80 %		1.02 %	0.80 %	
MSR revenue multiple[(e)]	2.91 x	2.29 x		2.91 x	2.29 x	
Card, excluding Commercial Card						
Credit card sales volume	$157.7	$139.2	13	$454.2	$396.9	14
New accounts opened (in millions)	1.9	2.7	(30)	6.5	7.7	(16)
Card Services						
Net revenue rate	10.95 %	11.04 %		10.55 %	11.70 %	
Commerce Solutions						
Merchant processing volume	$301.6	$267.2	13	$870.3	$778.5	12
Auto						
Loan and lease origination volume	$8.8	$9.3	(5)	$25.1	$27.4	(8)

Average Auto operating lease assets	15.6	11.4	37	%	14.7	10.5	40	%

(a) The prior period amounts have been revised to conform with the current period presentation.
(b) Users of all web and/or mobile platforms who have logged in within the past 90 days.
(c) Users of all mobile platforms who have logged in within the past 90 days.
(d) Firmwide mortgage origination volume was $29.2 billion and $30.9 billion for the three months ended September 30, 2017 and 2016, respectively, and $81.0 billion and $83.9 billion for the nine months ended September 30, 2017 and 2016, respectively.
(e) Represents the ratio of MSR carrying value (period-end) to third-party mortgage loans serviced (period-end) divided by the ratio of annualized loan servicing-related revenue to third-party mortgage loans serviced (average).

CORPORATE
&
INVESTMENT
BANK

For a discussion of the business profile of CIB, see pages 58–62 of JPMorgan Chase's 2016 Annual Report and Line of Business Metrics on page 173.

Selected income statement data

(in millions, except ratios)	Three months ended September 30, 2017	2016	Change	Nine months ended September 30, 2017	2016	Change
Revenue						
Investment banking fees	$1,819	$1,855	(2)%	$5,434	$4,812	13 %
Principal transactions	2,673	3,282	(19)	9,108	8,717	4
Lending- and deposit-related fees	374	402	(7)	1,149	1,181	(3)
Asset management, administration and commissions	1,041	968	8	3,161	3,062	3
All other income	187	183	2	622	927	(33)
Noninterest revenue	6,094	6,690	(9)	19,474	18,699	4
Net interest income	2,496	2,765	(10)	7,541	8,056	(6)
Total net revenue[(a)]	8,590	9,455	(9)	27,015	26,755	1
Provision for credit losses	(26)	67	NM	(175)	761	NM
Noninterest expense						
Compensation expense	2,286	2,513	(9)	7,537	7,850	(4)
Noncompensation expense	2,482	2,421	3	7,193	6,970	3
Total noninterest expense	4,768	4,934	(3)	14,730	14,820	(1)
Income before income tax expense	3,848	4,454	(14)	12,460	11,174	12
Income tax expense	1,302	1,542	(16)	3,963	3,790	5
Net income	$2,546	$2,912	(13)%	$8,497	$7,384	15 %
Financial ratios						
Return on equity	13 %	17 %		15 %	14 %	
Overhead ratio	56	52		55	55	
Compensation to revenue ratio	27	27		28	29	

(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; and tax-exempt income from municipal bonds of $505 million and $483 million for the three months ended September 30, 2017 and 2016, respectively, and $1.6 billion and $1.5 billion for the nine months ended September 30, 2017 and 2016, respectively.

Selected income statement data

(in millions)	Three months ended September 30, 2017	2016	Change	Nine months ended September 30, 2017	2016	Change
Revenue by business						
Investment Banking	$1,705	$1,740	(2)%	$5,051	$4,463	13 %
Treasury Services	1,058	917	15	3,094	2,693	15
Lending	331	283	17	1,093	862	27
Total Banking	3,094	2,940	5	9,238	8,018	15
Fixed Income Markets	3,164	4,334	(27)	10,595	11,890	(11)
Equity Markets	1,363	1,414	(4)	4,555	4,590	(1)
Securities Services	1,007	916	10	2,905	2,704	7

Credit Adjustments & Other[a]	(38)	(149)	74	(278)	(447)	38
Total Markets & Investor Services	5,496	6,515	(16)	17,777	18,737	(5)
Total net revenue	$8,590	$9,455	(9)%	$27,015	$26,755	1%

(a) Consists primarily of credit valuation adjustments ("CVA") managed centrally within CIB, funding valuation adjustments ("FVA") and debit valuation adjustments ("DVA") on derivatives. Results are primarily reported in principal transactions revenue. Results are presented net of associated hedging activities and net of CVA and FVA amounts allocated to Fixed Income Markets and Equity Markets. For additional information, see Accounting and Reporting Developments on pages 80–81, and Notes 2, 3 and 17.

Quarterly results

Net income was $2.5 billion, down 13%, reflecting lower net revenue, partially offset by lower noninterest expense and a lower provision for credit losses.

Net revenue was $8.6 billion, down 9%.

Banking revenue was $3.1 billion, up 5%. Investment banking revenue was $1.7 billion, down 2%, driven by lower equity and debt underwriting fees, largely offset by higher advisory fees. The Firm maintained its #1 ranking for Global Investment Banking fees, according to Dealogic. Equity underwriting fees were $293 million, down 21%, driven by a lower share of fees compared to a strong prior year. Debt underwriting fees were $906 million, down 4% compared to a strong prior year, primarily driven by declines in industry-wide fees. Advisory fees were $620 million, up 14%, driven by a higher number of completed transactions. Treasury Services revenue was $1.1 billion, up 15%, driven by the impact of higher interest rates and growth in operating deposits. Lending revenue was $331 million, up 17%, reflecting lower fair value losses on hedges of accrual loans.

Markets & Investor Services revenue was $5.5 billion, down 16%. Fixed Income Markets revenue was $3.2 billion, down 27%, as lower revenue across products was driven by sustained low volatility and tighter credit spreads, against a very strong prior year. Equity Markets revenue was $1.4 billion, down 4% compared to a strong prior year, driven by lower revenue in derivatives predominantly due to low volatility offset by higher revenue in Prime Services and Cash Equities. Securities Services revenue was $1.0 billion, up 10%, driven by the impact of higher interest rates and deposit growth, as well as higher asset-based fees driven by higher market levels.

The provision for credit losses was a benefit of $26 million. The prior year was an expense of $67 million, which included an addition to the allowance for credit losses driven by the Oil & Gas portfolio.

Noninterest expense was $4.8 billion, down 3%, driven by lower performance-based compensation expense.

Year-to-date results

Net income was $8.5 billion, up 15%, reflecting a lower provision for credit losses, higher net revenue and a tax benefit resulting from the vesting of employee-based stock awards.

Net revenue was $27.0 billion, relatively flat.

Banking revenue was $9.2 billion, up 15%. Investment banking revenue was $5.1 billion, up 13%, primarily driven by higher debt and equity underwriting fees. The Firm maintained its #1 ranking for Global Investment Banking fees, according to Dealogic. Debt underwriting fees were $2.8 billion, up 17%, driven by a higher share of fees and an overall increase in industry-wide fees. Equity underwriting fees were $1.1 billion, up 23%, driven by growth in industry-wide issuance including a strong IPO market. Advisory fees were $1.6 billion, up 2%. Treasury Services revenue was $3.1 billion, up 15%, driven by the impact of higher interest rates and growth in operating deposits. Lending revenue was $1.1 billion, up 27%, reflecting lower fair value losses on hedges of accrual loans.

Markets & Investor Services revenue was $17.8 billion, down 5%. Fixed Income Markets revenue was $10.6 billion, down 11%, as lower revenue across products was driven by sustained low volatility and tighter credit spreads, against a strong prior year. Equity Markets revenue was $4.6 billion, down 1%, driven by lower revenue in derivatives offset by higher revenue in Prime Services and Cash Equities. Securities Services revenue was $2.9 billion, up 7%, driven by the impact of higher interest rates and deposit growth, as well as higher asset-based fees driven by higher market levels. Credit Adjustments & Other was a loss of $278 million, largely driven by valuation adjustments.

The provision for credit losses was a benefit of $175 million, which included a net reduction in the allowance for credit losses driven by the Oil & Gas and Metals & Mining portfolios. The prior year was an expense of $761 million, which included an addition to the allowance for credit losses driven by the Oil & Gas and Metals & Mining portfolios.

Noninterest expense was $14.7 billion, down 1%.

Selected metrics

(in millions, except headcount)	As of or for the three months ended September 30, 2017	2016	Change	As of or for the nine months ended September 30, 2017	2016	Change
Selected balance sheet data (period-end)						
Assets	$851,808	$825,933	3 %	$851,808	$825,933	3 %
Loans:						
Loans retained[(a)]	106,955	117,133	(9)	106,955	117,133	(9)
Loans held-for-sale and loans at fair value	3,514	4,184	(16)	3,514	4,184	(16)
Total loans	110,469	121,317	(9)	110,469	121,317	(9)
Core loans	110,133	120,885	(9)	110,133	120,885	(9)
Equity	70,000	64,000	9	70,000	64,000	9
Selected balance sheet data (average)						
Assets	$858,912	$811,217	6	$853,948	$808,228	6
Trading assets-debt and equity instruments	349,448	306,431	14	343,232	299,350	15
Trading assets-derivative receivables	55,875	63,829	(12)	56,575	62,619	(10)
Loans:						
Loans retained[(a)]	$107,829	$110,941	(3)	$108,741	$110,442	(2)
Loans held-for-sale and loans at fair value	4,674	3,864	21	5,254	3,414	54
Total loans	$112,503	$114,805	(2)	$113,995	$113,856	—
Core loans	112,168	114,380	(2)	113,631	113,410	—
Equity	70,000	64,000	9	70,000	64,000	9
Headcount	50,641	49,176	3 %	50,641	49,176	3 %

(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

(in millions, except ratios)	As of or for the three months ended September 30, 2017	2016	Change	As of or for the nine months ended September 30, 2017	2016	Change
Credit data and quality statistics						
Net charge-offs/(recoveries)	$20	$3	NM	$49	$139	(65)%
Nonperforming assets:						
Nonaccrual loans:						
Nonaccrual loans retained[(a)]	$437	$614	(29)%	$437	$614	(29)
Nonaccrual loans held-for-sale and loans at fair value	2	26	(92)	2	26	(92)
Total nonaccrual loans	439	640	(31)	439	640	(31)
Derivative receivables	164	232	(29)	164	232	(29)
Assets acquired in loan satisfactions	92	75	23	92	75	23
Total nonperforming assets	$695	$947	(27)	$695	$947	(27)
Allowance for credit losses:						
Allowance for loan losses	$1,253	$1,611	(22)	$1,253	$1,611	(22)
Allowance for lending-related commitments	745	837	(11)	745	837	(11)
Total allowance for credit losses	$1,998	$2,448	(18)%	$1,998	$2,448	(18)%
Net charge-off/(recovery) rate[(b)]	0.07 %	0.01 %		0.06 %	0.17 %	
Allowance for loan losses to period-end loans retained	1.17	1.38		1.17	1.38	
Allowance for loan losses to period-end loans retained, excluding trade finance and conduits[(c)]	1.79	2.02		1.79	2.02	
Allowance for loan losses to nonaccrual loans retained[(a)]	287	262		287	262	
Nonaccrual loans to total period-end loans	0.40 %	0.53 %		0.40 %	0.53 %	

(a) Allowance for loan losses of $177 million and $202 million were held against these nonaccrual loans at September 30, 2017 and 2016, respectively.

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

(c) Management uses allowance for loan losses to period-end loans retained, excluding trade finance and conduits, a non-GAAP financial measure, to provide a more meaningful assessment of CIB's allowance coverage ratio.

Investment banking fees

	Three months ended September 30,			Nine months ended September 30,		
(in millions)	2017	2016	Change	2017	2016	Change
Advisory	$620	$542	14 %	$1,624	$1,593	2 %
Equity underwriting	293	370	(21)	1,054	860	23
Debt underwriting[(a)]	906	943	(4)	2,756	2,359	17
Total investment banking fees	$1,819	$1,855	(2)%	$5,434	$4,812	13 %

(a) Includes loans syndication.

League table results – wallet share

	Nine months ended September 30, 2017		Full-year 2016	
	Rank	Share	Rank	Share
Based on fees[(a)]				
Debt, equity and equity-related				
Global	# 1	7.5	# 1	7.1
U.S.	1	11.0	1	11.9
Long-term debt[(b)]				
Global	1	7.6	1	6.8
U.S.	2	10.8	2	11.1
Equity and equity-related[(c)]				
Global	1	7.4	1	7.6
U.S.	1	11.4	1	13.3
M&A[(d)]				
Global	2	8.7	2	8.3
U.S.	2	9.0	2	9.8
Loan syndications				
Global	1	9.4	1	9.4
U.S.	1	11.0	2	11.9
Global investment banking fees[(e)]	# 1	8.2	# 1	8.0

(a) Source: Dealogic as of October 1, 2017. 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 mortgage-backed securities (“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 reflect 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.

Markets revenue

The following table summarizes select income statement data for the Markets businesses. Markets includes both Fixed Income Markets and Equity Markets. Markets revenue comprises principal transactions, fees, commissions and other income, as well as net interest income. The Firm assesses its Markets business performance on a total revenue basis, as offsets may occur across revenue line items. For example, securities that generate net interest income may be risk-managed by derivatives that are recorded in principal transactions. For a description of the composition of these income statement line items, see Notes 5 and 6.

Principal transactions reflects revenue on financial instruments and commodities transactions that arise from client-driven market making activity. Principal transactions revenue includes amounts recognized upon executing new transactions with market participants, as well as "inventory-related revenue", which is revenue recognized from gains and losses on derivatives and other instruments that the

Firm has been holding in anticipation of, or in response to, client demand, and changes in the fair value of instruments used by the Firm to actively manage the risk exposure arising from such inventory. Principal transactions revenue recognized upon executing new transactions with market participants is driven by many factors including the level of client activity, the bid-offer spread (which is the difference between the price at which a market participant is willing to sell an instrument to the Firm and the price at which another market participant is willing to buy it from the Firm, and vice versa), market liquidity and volatility. These factors are interrelated and sensitive to the same factors that drive inventory-related revenue, which include general market conditions, such as interest rates, foreign exchange rates, credit spreads, and equity and commodity prices, as well as other macroeconomic conditions. For the periods presented below, the predominant source of principal transactions revenue was the amount recognized upon executing new transactions.

	Three months ended September 30, 2017			Three months ended September 30, 2016		
(in millions)	Fixed Income Markets	Equity Markets	Total Markets	Fixed Income Markets	Equity Markets	Total Markets
Principal transactions	$1,837	$ 948	$ 2,785	$2,622	$ 843	$ 3,465
Lending- and deposit-related fees	47	2	49	55	—	55
Asset management, administration and commissions	93	397	490	95	347	442
All other income	121	12	133	184	(23)	161
Noninterest revenue	2,098	1,359	3,457	2,956	1,167	4,123
Net interest income[(a)]	1,066	4	1,070	1,378	247	1,625
Total net revenue	$3,164	$ 1,363	$ 4,527	$4,334	$ 1,414	$ 5,748

	Nine months ended September 30, 2017			Nine months ended September 30, 2016		
(in millions)	Fixed Income Markets	Equity Markets	Total Markets	Fixed Income Markets	Equity Markets	Total Markets
Principal transactions	$6,389	$ 3,066	$9,455	$6,699	$2,651	$9,350
Lending- and deposit-related fees	144	4	148	164	1	165
Asset management, administration and commissions	300	1,230	1,530	299	1,160	1,459
All other income	505	3	508	805	(2)	803
Noninterest revenue	7,338	4,303	11,641	7,967	3,810	11,777
Net interest income[(a)]	3,257	252	3,509	3,923	780	4,703
Total net revenue	$10,595	$ 4,555	$15,150	$11,890	$4,590	$16,480

Selected metrics

(in millions, except where otherwise noted)	As of or for the three months ended September 30, 2017	2016	Change	As of or for the nine months ended September 30, 2017	2016	Change
Assets under custody ("AUC") by asset class (period-end) (in billions):						
Fixed Income	$12,878	$12,857	—	$12,878	$12,857	—
Equity	7,439	6,440	16	7,439	6,440	16
Other[(b)]	2,421	1,927	26	2,421	1,927	26
Total AUC	$22,738	$21,224	7	$22,738	$21,224	7
Client deposits and other third party liabilities (average)[(c)]	$421,588	$381,542	10	$406,184	$371,417	9
Trade finance loans (period-end)	17,171	16,957	1	17,171	16,957	1

(a) Declines in Markets net interest income were driven by higher funding costs.

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

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

International metrics

(in millions, except where otherwise noted)	As of or for the three months ended September 30, 2017	2016	Change	As of or for the nine months ended September 30, 2017	2016	Change
Total net revenue[a]						
Europe/Middle East/Africa	$2,751	$2,798	(2)%	$8,974	$8,078	11 %
Asia/Pacific	1,169	1,281	(9)	3,442	3,793	(9)
Latin America/Caribbean	329	307	7	914	1,031	(11)
Total international net revenue	4,249	4,386	(3)	13,330	12,902	3
North America	4,341	5,069	(14)	13,685	13,853	(1)
Total net revenue	$8,590	$9,455	(9)	$27,015	$26,755	1
Loans retained (period-end)[a]						
Europe/Middle East/Africa	$25,677	$32,016	(20)	$25,677	$32,016	(20)
Asia/Pacific	13,398	15,262	(12)	13,398	15,262	(12)
Latin America/Caribbean	6,737	8,896	(24)	6,737	8,896	(24)
Total international loans	45,812	56,174	(18)	45,812	56,174	(18)
North America	61,143	60,959	—	61,143	60,959	—
Total loans retained	$106,955	$117,133	(9)	$106,955	$117,133	(9)
Client deposits and other third-party liabilities (average)[a][b]						
Europe/Middle East/Africa	$160,778	$138,628	16	$154,259	$135,201	14
Asia/Pacific	78,334	70,301	11	75,284	67,158	12
Latin America/Caribbean	25,236	22,802	11	25,126	22,555	11
Total international	$264,348	$231,731	14	$254,669	$224,914	13
North America	157,240	149,811	5	151,515	146,503	3
Total client deposits and other third-party liabilities	$421,588	$381,542	10	$406,184	$371,417	9
AUC (period-end)[a] (in billions)						
North America	$13,574	$12,685	7	$13,574	$12,685	7
All other regions	9,164	8,539	7	9,164	8,539	7
Total AUC	$22,738	$21,224	7 %	$22,738	$21,224	7 %

(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 63–65 of JPMorgan Chase's 2016 Annual Report and Line of Business Metrics on page 174.

Selected income statement data

	Three months ended September 30,			Nine months ended September 30,		
(in millions)	2017	2016	Change	2017	2016	Change
Revenue						
Lending- and deposit-related fees	$223	$228	(2)%	$690	$687	— %
Asset management, administration and commissions	16	14	14	50	54	(7)
All other income[(a)]	353	336	5	1,034	979	6
Noninterest revenue	592	578	2	1,774	1,720	3
Net interest income	1,554	1,292	20	4,478	3,770	19
Total net revenue[(b)]	2,146	1,870	15	6,252	5,490	14
Provision for credit losses	(47)	(121)	61	(214)	158	NM
Noninterest expense						
Compensation expense	370	343	8	1,106	999	11
Noncompensation expense	430	403	7	1,309	1,191	10
Total noninterest expense	800	746	7	2,415	2,190	10
Income before income tax expense	1,393	1,245	12	4,051	3,142	29
Income tax expense	512	467	10	1,469	1,172	25
Net income	$881	$778	13 %	$2,582	$1,970	31 %

(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 activities of $143 million and $127 million for the three months ended September 30, 2017 and 2016, respectively, and $395 million and $371 million for the nine months ended September 30, 2017 and 2016, respectively.

Quarterly results

Net income was $881 million, an increase of 13%, driven by higher net revenue, partially offset by a lower net benefit for credit losses and higher noninterest expense.

Net revenue was $2.1 billion, an increase of 15%. Net interest income was $1.6 billion, an increase of 20%, driven by higher deposit spreads and loan growth.

Noninterest expense was $800 million, an increase of 7%, largely driven by hiring of bankers and business-related support staff, and investments in technology.

The provision for credit losses was a benefit of $47 million, driven by net reductions in the allowance for credit losses, largely in the Real Estate portfolio. The prior year provision for credit losses was a benefit of $121 million driven by net reductions in the allowance for credit losses largely in the Oil & Gas portfolio.

Year-to-date results

Net income was $2.6 billion, an increase of 31%, driven by higher net revenue and a lower provision for credit losses, partially offset by higher noninterest expense.

Net revenue was $6.3 billion, up 14%. Net interest income was $4.5 billion, up 19%, driven by higher deposit spreads and loan growth. Noninterest revenue was $1.8 billion, up 3%, driven by higher investment banking revenue from loan syndications and equity underwriting.

Noninterest expense was $2.4 billion, up 10%, largely driven by hiring of bankers and business-related support staff, and investments in technology.
The provision for credit losses was a benefit of $214 million, driven by net reductions in the allowance for credit losses, including in the Oil & Gas, Natural Gas Pipelines and Metals & Mining portfolios. The prior year provision for credit losses was $158 million reflecting net additions to the allowance for credit losses for downgrades in the Oil & Gas and Natural Gas Pipeline portfolios.

Selected income statement data (continued)

(in millions, except ratios)	Three months ended September 30, 2017	2016	Change	Nine months ended September 30, 2017	2016	Change
Revenue by product						
Lending	$1,030	$956	8 %	$3,045	$2,801	9 %
Treasury services	873	693	26	2,523	2,067	22
Investment banking[a]	196	203	(3)	601	565	6
Other	47	18	161	83	57	46
Total Commercial Banking net revenue	$2,146	$1,870	15	$6,252	$5,490	14
Investment banking revenue, gross[b]	$570	$600	(5)	$1,740	$1,678	4
Revenue by client segment						
Middle Market Banking[c]	$848	$706	20	$2,471	$2,095	18
Corporate Client Banking[c]	688	622	11	2,016	1,784	13
Commercial Term Lending	367	350	5	1,098	1,053	4
Real Estate Banking	157	117	34	438	328	34
Other	86	75	15	229	230	—
Total Commercial Banking net revenue	$2,146	$1,870	15 %	$6,252	$5,490	14 %
Financial ratios						
Return on equity	17 %	18 %		16 %	15 %	
Overhead ratio	37	40		39	40	

(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 in the second quarter of 2017. The prior period amounts have been revised to conform with the current period presentation.

Selected metrics

(in millions, except headcount)	As of or for the three months ended September 30, 2017	2016	Change	As of or for the nine months ended September 30, 2017	2016	Change
Selected balance sheet data (period-end)						
Total assets	$220,064	$212,189	4 %	$220,064	$212,189	4 %
Loans:						
Loans retained	201,463	185,609	9	201,463	185,609	9
Loans held-for-sale and loans at fair value	764	191	300	764	191	300
Total loans	$202,227	$185,800	9	$202,227	$185,800	9
Core loans	201,999	185,354	9	201,999	185,354	9
Equity	20,000	16,000	25	20,000	16,000	25
Period-end loans by client segment						
Middle Market Banking[(a)]	$56,192	$53,581	5	$56,192	$53,581	5
Corporate Client Banking[(a)]	47,682	43,517	10	47,682	43,517	10
Commercial Term Lending	74,349	69,133	8	74,349	69,133	8
Real Estate Banking	17,127	13,905	23	17,127	13,905	23
Other	6,877	5,664	21	6,877	5,664	21
Total Commercial Banking loans	$202,227	$185,800	9	$202,227	$185,800	9
Selected balance sheet data (average)						
Total assets	$218,196	$208,765	5	$216,574	$205,748	5
Loans:						
Loans retained	199,487	180,962	10	195,604	175,695	11
Loans held-for-sale and loans at fair value	675	517	31	931	516	80
Total loans	$200,162	$181,479	10	$196,535	$176,211	12
Core loans	199,920	181,016	10	196,254	175,651	12
Average loans by client segment						
Middle Market Banking[(a)]	$55,782	$52,646	6	$55,239	$51,716	7
Corporate Client Banking[(a)]	46,451	42,141	10	45,516	40,872	11
Commercial Term Lending	74,136	67,696	10	73,041	65,486	12
Real Estate Banking	16,936	13,382	27	16,205	12,597	29
Other	6,857	5,614	22	6,534	5,540	18
Total Commercial Banking loans	$200,162	$181,479	10	$196,535	$176,211	12
Client deposits and other third-party liabilities	$176,218	$173,696	1	$175,402	$172,502	2
Equity	20,000	16,000	25	20,000	16,000	25
Headcount	8,965	8,333	8 %	8,965	8,333	8 %

(a) Certain clients were transferred from Middle Market Banking to Corporate Client Banking in the second quarter of 2017. The prior period amounts have been 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)	2017	2016	Change	2017	2016	Change
Credit data and quality statistics						
Net charge-offs/(recoveries)	$19	$44	(57)%	$17	$110	(85)%
Nonperforming assets						
Nonaccrual loans:						
Nonaccrual loans retained[(a)]	$744	$1,212	(39)%	$744	$1,212	(39)%
Nonaccrual loans held-for-sale and loans at fair value	—	—	—	—	—	—
Total nonaccrual loans	$744	$1,212	(39)	$744	$1,212	(39)
Assets acquired in loan satisfactions	3	1	200	3	1	200
Total nonperforming assets	$747	$1,213	(38)	$747	$1,213	(38)
Allowance for credit losses:						
Allowance for loan losses	$2,620	$2,858	(8)	$2,620	$2,858	(8)
Allowance for lending-related commitments	323	244	32	323	244	32
Total allowance for credit losses	$2,943	$3,102	(5)%	$2,943	$3,102	(5)%
Net charge-off/(recovery) rate[(b)]	0.04 %	0.10 %		0.01 %	0.08 %	
Allowance for loan losses to period-end loans retained	1.30	1.54		1.30	1.54	
Allowance for loan losses to nonaccrual loans retained[(a)]	352	236		352	236	
Nonaccrual loans to period-end total loans	0.37	0.65		0.37	0.65	

(a) Allowance for loan losses of $128 million and $221 million was held against nonaccrual loans retained at September 30, 2017 and 2016, respectively.

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

ASSET &
WEALTH
MANAGEMENT

For a discussion of the business profile of AWM, see pages 66–68 of JPMorgan Chase’s 2016 Annual Report and Line of Business Metrics on pages 174–175.

Selected income statement data

(in millions, except ratios)	Three months ended September 30, 2017	2016	Change	Nine months ended September 30, 2017	2016	Change
Revenue						
Asset management, administration and commissions	$2,240	$2,087	7 %	$6,556	$6,205	6 %
All other income	150	190	(21)	468	509	(8)
Noninterest revenue	2,390	2,277	5	7,024	6,714	5
Net interest income	855	770	11	2,520	2,244	12
Total net revenue	3,245	3,047	6	9,544	8,958	7
Provision for credit losses	8	32	(75)	30	37	(19)
Noninterest expense						
Compensation expense	1,319	1,279	3	3,928	3,769	4
Noncompensation expense	862	851	1	3,025	2,534	19
Total noninterest expense	2,181	2,130	2	6,953	6,303	10
Income before income tax expense	1,056	885	19	2,561	2,618	(2)
Income tax expense	382	328	16	878	953	(8)
Net income	$674	$557	21	$1,683	$1,665	1
Revenue by line of business						
Asset Management	$1,587	$1,497	6	$4,635	$4,420	5
Wealth Management	1,658	1,550	7	4,909	4,538	8
Total net revenue	$3,245	$3,047	6 %	$9,544	$8,958	7 %
Financial ratios						
Return on equity	29 %	24 %		24 %	24 %	
Overhead ratio	67	70		73	70	
Pre-tax margin ratio:						
Asset Management	34	31		22	31	
Wealth Management	32	27		31	27	
Asset & Wealth Management	33	29		27	29	

Quarterly results

Net income was $674 million, an increase of 21%, reflecting higher net revenue partially offset by higher noninterest expense.

Net revenue was $3.2 billion, an increase of 6%. Net interest income was $855 million, up 11%, predominantly driven by higher deposit spreads. Noninterest revenue was $2.4 billion, up 5%, predominantly reflecting higher market levels.

Noninterest expense was $2.2 billion, an increase of 2%, driven by a combination of higher compensation expense and higher external fees.

Year-to-date results

Net income was $1.7 billion, an increase of 1%, reflecting higher revenue and a tax benefit resulting from the vesting of employee-based stock awards, offset by higher noninterest expense.

Net revenue was $9.5 billion, an increase of 7%. Net interest income was $2.5 billion, up 12%, driven by higher deposit spreads. Noninterest revenue was $7.0 billion, up 5%, driven by higher market levels and brokerage revenue, partially offset by the absence of a gain in the prior year on the disposal of an asset.

Noninterest expense was $7.0 billion, an increase of 10%, driven by higher legal expense and compensation expense on higher revenue.

Selected metrics

(in millions, except ranking data, headcount and ratios)	As of or for the three months ended September 30, 2017	2016	Change	As of or for the nine months ended September 30, 2017	2016	Change
% of JPM mutual fund assets rated as 4- or 5-star[a][b]	65%	54%		65%	54%	
% of JPM mutual fund assets ranked in 1st or 2nd quartile:[c]						
1 year[b]	61	46		61	46	
3 years[b]	82	74		82	74	
5 years[b]	81	78		81	78	
Selected balance sheet data (period-end)						
Total assets	$149,170	$137,295	9%	$149,170	$137,295	9%
Loans	128,038	116,043	10	128,038	116,043	10
Core loans	128,038	116,043	10	128,038	116,043	10
Deposits	141,409	157,274	(10)	141,409	157,274	(10)
Equity	9,000	9,000	—	9,000	9,000	—
Selected balance sheet data (average)						
Total assets	$146,388	$134,920	8	$142,541	$132,090	8
Loans	125,445	114,201	10	122,002	112,142	9
Core loans	125,445	114,201	10	122,002	112,142	9
Deposits	144,496	153,121	(6)	151,311	151,656	—
Equity	9,000	9,000	—	9,000	9,000	—
Headcount	22,685	21,142	7	22,685	21,142	7
Number of Wealth Management client advisors	2,581	2,560	1	2,581	2,560	1
Credit data and quality statistics						
Net charge-offs	$5	$5	—	$10	$16	(38)
Nonaccrual loans	337	372	(9)	337	372	(9)
Allowance for credit losses:						
Allowance for loan losses	$285	$285	—	$285	$285	—
Allowance for lending-related commitments	10	5	100	10	5	100
Total allowance for credit losses	$295	$290	2%	$295	$290	2%
Net charge-off rate	0.02%	0.02%		0.01%	0.02%	
Allowance for loan losses to period-end loans	0.22	0.25		0.22	0.25	
Allowance for loan losses to nonaccrual loans	85	77		85	77	
Nonaccrual loans to period-end loans	0.26	0.32		0.26	0.32	

(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 Asset Management retail open-ended mutual funds that have a rating. Excludes money market funds, Undiscovered Managers Fund, and Brazil and India domiciled funds.

(b) The prior period amounts have been revised to conform with current period presentation.

(c) 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 Asset 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.

Client assets

Client assets of $2.7 trillion and assets under management of $1.9 trillion were up 9% and 10%, respectively, reflecting higher market levels, and net inflows into liquidity and long-term products.

Client assets

	September 30,		
(in billions)	2017	2016	Change
Assets by asset class			
Liquidity	$441	$403	9 %
Fixed income	461	437	5
Equity	405	357	13
Multi-asset and alternatives	638	575	11
Total assets under management	1,945	1,772	10
Custody/brokerage/administration/deposits	733	675	9
Total client assets	$2,678	$2,447	9
Memo:			
Alternatives client assets [(a)]	$161	$157	3
Assets by client segment			
Private Banking	$507	$433	17
Institutional	921	862	7
Retail	517	477	8
Total assets under management	$1,945	$1,772	10
Private Banking	$1,217	$1,089	12
Institutional	941	879	7
Retail	520	479	9
Total client assets	$2,678	$2,447	9 %

(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)	2017	2016	2017	2016
Assets under management rollforward				
Beginning balance	$1,876	$1,693	$1,771	$1,723
Net asset flows:				
Liquidity	5	18	(1)	(11)
Fixed income	17	9	24	36
Equity	(5)	(7)	(12)	(17)
Multi-asset and alternatives	9	21	26	25
Market/performance/other impacts	43	38	137	16
Ending balance, September 30	$1,945	$1,772	$1,945	$1,772
Client assets rollforward				
Beginning balance	$2,598	$2,344	$2,453	$2,350
Net asset flows	25	47	37	42
Market/performance/other impacts	55	56	188	55
Ending balance, September 30	$2,678	$2,447	$2,678	$2,447

International metrics

(in millions)	As of or for the three months ended September 30, 2017	2016	Change		As of or for the nine months ended September 30, 2017	2016	Change	
Total net revenue [(a)]								
Europe/Middle East/Africa	$526	$475	11	%	$1,482	$1,369	8	%
Asia/Pacific	302	280	8		858	802	7	
Latin America/Caribbean	227	181	25		628	539	17	
Total international net revenue	1,055	936	13		2,968	2,710	10	
North America	2,190	2,111	4		6,576	6,248	5	
Total net revenue	$3,245	$3,047	6	%	$9,544	$8,958	7	%

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

(in billions)	As of or for the three months ended September 30, 2017	2016	Change		As of or for the nine months ended September 30, 2017	2016	Change	
Assets under management								
Europe/Middle East/Africa	$357	$314	14	%	$357	$314	14	%
Asia/Pacific	144	131	10		144	131	10	
Latin America/Caribbean	59	45	31		59	45	31	
Total international assets under management	560	490	14		560	490	14	
North America	1,385	1,282	8		1,385	1,282	8	
Total assets under management	$1,945	$1,772	10		$1,945	$1,772	10	
Client assets								
Europe/Middle East/Africa	$411	$364	13		$411	$364	13	
Asia/Pacific	206	186	11		206	186	11	
Latin America/Caribbean	157	116	35		157	116	35	
Total international client assets	774	666	16		774	666	16	
North America	1,904	1,781	7		1,904	1,781	7	
Total client assets	$2,678	$2,447	9	%	$2,678	$2,447	9	%

CORPORATE

For a discussion of Corporate, see pages 69–70 of JPMorgan Chase's 2016 Annual Report.

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, except headcount)	2017	2016	Change	2017	2016	Change
Revenue						
Principal transactions	$(2)	$57	NM	$161	$183	(12)%
Securities gains/(losses)	—	64	(100)%	(37)	135	NM
All other income/(loss)[a]	111	76	46	839	319	163
Noninterest revenue	109	197	(45)	963	637	51
Net interest income	77	(385)	NM	2	(927)	NM
Total net revenue[b]	186	(188)	NM	965	(290)	NM
Provision for credit losses	—	(1)	100	—	(4)	100
Noninterest expense[c]	74	143	(48)	355	23	NM
Income/(loss) before income tax expense/(benefit)	112	(330)	NM	610	(309)	NM
Income tax expense/(benefit)	34	(165)	NM	(73)	54	NM
Net income/(loss)	$78	$(165)	NM	$683	$(363)	NM
Total net revenue						
Treasury and CIO	$265	$(211)	NM	$344	$(531)	NM
Other Corporate	(79)	23	NM	621	241	158
Total net revenue	$186	$(188)	NM	$965	$(290)	NM
Net income/(loss)						
Treasury and CIO	$75	$(208)	NM	$(6)	$(518)	99
Other Corporate	3	43	(93)	689	155	345
Total net income/(loss)	$78	$(165)	NM	$683	$(363)	NM
Total assets (period-end)	$804,573	$824,336	(2)	$804,573	$824,336	(2)
Loans (period-end)	1,614	1,738	(7)	1,614	1,738	(7)
Core loans[d]	1,614	1,735	(7)	1,614	1,735	(7)
Headcount	34,659	31,572	10%	34,659	31,572	10%

(a) Included revenue related to a legal settlement of $645 million for the nine months ended September 30, 2017.

(b) Included tax-equivalent adjustments, predominantly due to tax-exempt income from municipal bond investments of $216 million and $218 million for the three months ended September 30, 2017 and 2016, respectively, and $681 million and $663 million for the nine months ended September 30, 2017 and 2016, respectively.

(c) Included legal expense/(benefit) of $(148) million and $(85) million for the three months ended September 30, 2017 and 2016, respectively, and $(360) million and $(550) million for the nine months ended September 30, 2017 and 2016, respectively.

(d) Average core loans were $1.7 billion and $1.8 billion for the three months ended September 30, 2017 and 2016, respectively, and $1.6 billion and $1.9 billion for the nine months ended September 30, 2017 and 2016, respectively.

Quarterly results

Net income was $78 million, compared with a net loss of $165 million in the prior-year quarter. Net revenue was $186 million, compared with a loss of $188 million in the prior year, primarily due to the benefit of higher rates.

Year-to-date results

Net income was $683 million, compared with a net loss of $363 million in the prior year. Net revenue was $965 million, compared with a loss of $290 million in the prior-year. Current period net revenue was driven by a $645 million benefit from a legal settlement with the FDIC receivership for Washington Mutual and with Deutsche Bank as trustee to certain Washington Mutual trusts; and by the net impact of higher rates. Noninterest expense was $355 million, up $332 million from prior year, driven by a lower legal benefit and higher compensation expense.

Treasury and CIO overview

At September 30, 2017, 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). See Note 9 for further information on the Firm's investment securities portfolio.

For further information on liquidity and funding risk, see Liquidity Risk Management on pages 68–72. For information on interest rate, foreign exchange and other risks, see Market Risk Management on pages 73–77.

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)	2017	2016	Change	2017	2016	Change
Securities gains/(losses)	$—	$64	(100)%	$(49)	$135	NM
AFS investment securities (average)	$212,633	$219,042	(3)	$224,094	$226,533	(1)%
HTM investment securities (average)	47,034	52,774	(11)	48,201	51,518	(6)
Investment securities portfolio (average)	$259,667	$271,816	(4)	$272,295	$278,051	(2)
AFS investment securities (period-end)	$214,257	$217,196	(1)	$214,257	$217,196	(1)
HTM investment securities (period-end)	47,079	52,011	(9)	47,079	52,011	(9)
Investment securities portfolio (period-end)	$261,336	$269,207	(3)%	$261,336	$269,207	(3)%

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 economic and other core risk areas, such as credit, market, liquidity, model, principal, country, operational, compliance, conduct, 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 identification, assessment, data and management by 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"), Chief Financial Officer ("CFO") and other senior executives, is the ultimate management escalation point in the Firm and may refer matters to the Firm's Board of Directors. The Operating Committee is responsible and accountable to the Firm's Board of Directors.

In June 2017, the Firm announced the departure of its Chief Operating Officer. As a result, his responsibilities have transitioned to other members of the Operating Committee. The Chief Investment Officer/Treasurer now reports to the Firm's CFO, and will continue to chair the Firmwide Asset Liability Committee ("ALCO"). For further discussion on the Firm's ALCO, see page 75 of JPMorgan Chase's 2016 Annual Report.

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 following provides an index of where in this Form 10-Q and in JPMorgan Chase's 2016 Annual Report information about the Firm's management of its key risks can be found.

Risk disclosure	Form 10-Q page reference	Annual Report page reference
Enterprise-Wide Risk Management	41–77	71–131
I. Economic risks		
Capital Risk Management	42–48	76–85
Credit Risk Management	49–66	86–107
Country Risk Management	67	108–109
Liquidity Risk Management	68–72	110–115
Market Risk Management	73–77	116–123
Principal Risk Management		124
II. Other core risks		
Compliance Risk Management		125
Conduct Risk Management		126
Legal Risk Management		127
Model Risk Management		128
Operational Risk Management		129–130
Reputation Risk Management		131

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CAPITAL RISK 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 normal economic environments and under stressed conditions. For a discussion of the Firm’s Capital Risk Management, see pages 76–85 of JPMorgan Chase’s 2016 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 of the Firm’s Board of Directors, CEO and Operating Committee. The Firm’s balance sheet philosophy focuses on risk-adjusted returns, strong capital and robust liquidity. The Firm’s capital risk management strategy focuses on maintaining long-term stability to enable it to build and invest in market-leading businesses, even in a highly stressed environment. Prior to making any decisions on future business activities, senior management considers the implications on the Firm’s capital. In addition to considering the Firm’s earnings outlook, senior management evaluates all sources and uses of capital with a view to preserving the Firm’s capital strength.

The Firm’s capital risk management objectives are achieved through the establishment of minimum capital targets and a strong capital governance framework. Capital risk management is intended to be flexible in order to react to a range of potential events. The Firm’s minimum capital targets are based on the most binding of three pillars: an internal assessment of the Firm’s capital needs; an estimate of required capital under the Comprehensive Capital Analysis and Review (“CCAR”) and Dodd-Frank Act stress testing requirements; and Basel III Fully Phased-In regulatory minimums. Where necessary, each pillar may include a management-established buffer. The capital governance framework requires regular monitoring of the Firm’s capital positions, stress testing and escalation protocols, both at the Firm and material legal entity levels.

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 ratios exceed both the Transitional and Fully Phased-In regulatory minimums as of September 30, 2017, and December 31, 2016. For further discussion of these capital metrics, including regulatory minimums, and the Standardized and Advanced Approaches, refer to Strategy and Governance on pages 78–82 of JPMorgan Chase's 2016 Annual Report.

	Transitional						Fully Phased-In						
September 30, 2017 (in millions, except ratios)	Standardized		Advanced		Minimum capital ratios		Standardized		Advanced		Minimum capital ratios		
Risk-based capital metrics:													
CET1 capital	$187,061		$187,061				$186,831		$186,831				
Tier 1 capital	212,297		212,297				212,196		212,196				
Total capital	242,949		232,794				241,668		231,513				
Risk-weighted assets	1,482,267		1,443,019				1,491,954		1,453,287				
CET1 capital ratio	12.6	%	13.0	%	7.5	%	12.5	%	12.9	%	10.5	%	
Tier 1 capital ratio	14.3		14.7		9.0		14.2		14.6		12.0		
Total capital ratio	16.4		16.1		11.0		16.2		15.9		14.0		
Leverage-based capital metrics													
Adjusted average assets[(a)]	$2,521,889		$2,521,889				$2,522,504		$2,522,504				
Tier 1 leverage ratio[(b)]	8.4	%	8.4	%	4.0	%	8.4	%	8.4	%	4.0	%	
Total leverage exposure	NA		$3,211,053				NA		$3,211,667				
SLR[(c)]	NA		6.6	%	NA		NA		6.6	%	5.0	%	(d)

	Transitional						Fully Phased-In						
December 31, 2016 (in millions, except ratios)	Standardized		Advanced		Minimum capital ratios		Standardized		Advanced		Minimum capital ratios		
Risk-based capital metrics:													
CET1 capital	$182,967		$182,967				$181,734		$181,734				
Tier 1 capital	208,112		208,112				207,474		207,474				
Total capital	239,553		228,592				237,487		226,526				
Risk-weighted assets	1,464,981		1,476,915				1,474,665		1,487,180				
CET1 capital ratio	12.5	%	12.4	%	6.25	%	12.3	%	12.2	%	10.5	%	
Tier 1 capital ratio	14.2		14.1		7.75		14.1		14.0		12.0		
Total capital ratio	16.4		15.5		9.75		16.1		15.2		14.0		
Leverage-based capital metrics													
Adjusted average assets[(a)]	$2,484,631		$2,484,631				$2,485,480		$2,485,480				
Tier 1 leverage ratio[(b)]	8.4	%	8.4	%	4.0	%	8.3	%	8.3	%	4.0	%	
Total leverage exposure	NA		$3,191,990				NA		$3,192,839				
SLR[(c)]	NA		6.5	%	NA		NA		6.5	%	5.0	%	(d)

Note: As of September 30, 2017, and December 31, 2016, 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, as discussed in Risk-based capital regulatory minimums on page 44.

(a) Adjusted average assets, for purposes of calculating the Tier 1 leverage ratio, includes total quarterly average assets adjusted for unrealized gains/(losses) on available-for-sale ("AFS") securities, less deductions for goodwill and other intangible assets, defined benefit pension plan assets, and deferred tax assets related to net operating loss ("NOL") and tax credit carryforwards.

(b) The Tier 1 leverage ratio is calculated by dividing Tier 1 capital by adjusted average assets.

(c) The SLR leverage ratio is calculated by dividing Tier 1 capital by total leverage exposure. For additional information on total leverage exposure, see SLR on page 46.

(d) In the case of the SLR, the Fully Phased-In minimum ratio is effective January 1, 2018.

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Basel III overview

Capital rules under Basel III establish minimum capital ratios and overall capital adequacy standards for large and internationally active U.S. bank holding companies and banks, including the Firm and its insured depository institution ("IDI") subsidiaries. Basel III sets forth two comprehensive approaches for calculating RWA: a standardized approach ("Basel III Standardized"), and an advanced approach ("Basel III Advanced"). 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").

Basel III establishes capital requirements for calculating credit risk and market risk RWA, and in the case of Basel III Advanced, operational risk RWA. 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. For additional information on Basel III methodology refer to Basel III Overview on pages 78-80 of JPMorgan Chase's 2016 Annual Report.

Basel III also includes a requirement for Advanced Approach banking organizations, including the Firm, to calculate the SLR. For additional information on the SLR, see page 46.

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. In the case of the SLR, the Fully Phased-In well-capitalized ratio is effective January 1, 2018. The Firm manages each of the businesses, as well as the corporate functions, primarily on a Basel III Fully Phased-In basis.

For additional information on the Firm, JPMorgan Chase Bank, N.A. and Chase Bank USA, N.A.'s capital, RWA and capital ratios under the Basel III Standardized and Advanced Fully Phased-In rules and SLRs calculated under the Basel III Advanced Fully Phased-In rules, all of 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 15–17.

The Basel III Standardized and Advanced Fully Phased-In capital, RWA and capital ratios, and SLRs for the Firm, JPMorgan Chase Bank, N.A. and Chase Bank USA, N.A. are based on the current published U.S. Basel III rules.

Risk-based capital regulatory minimums

The capital adequacy of the Firm and its IDI subsidiaries, both during the transitional period and upon full phase-in, is evaluated against the lower of the two ratios as calculated under the Basel III approaches (Standardized or Advanced) as required by the Collins Amendment of the Dodd-Frank Act (the "Collins Floor"). The Basel III Standardized Fully Phased-In CET1 ratio is the Firm's current binding constraint, and the Firm expects that this will remain its binding constraint for the foreseeable future.

The Basel III rules include minimum capital ratio requirements that are subject to phase-in periods through the end of 2018. In addition to having to maintain the CET1 minimum capital ratio of 4.5%, the Firm is also required to hold additional amounts of capital to serve as a "capital conservation buffer." As an expansion of the capital conservation buffer, the Firm is also required to hold additional levels of capital in the form of a GSIB surcharge and a countercyclical capital buffer. For additional information on minimum capital ratios, the capital conservation buffer, the countercyclical buffer, and the GSIB surcharge, refer to Risk-based capital regulatory minimums on pages 79-80

of JPMorgan Chase's 2016 Annual Report.

The Firm believes that it will operate with a Basel III CET1 capital ratio between 11% and 12.5% over time. It is the Firm's intention that the Firm's capital ratios will continue to meet regulatory minimums as they are fully implemented in 2019 and thereafter.

The following table represents the ratios the Firm and its IDI subsidiaries must maintain to meet the definition of "well-capitalized" under the regulations issued by the Federal Reserve and the Prompt Corrective Action ("PCA") requirements of the FDIC Improvement Act ("FDICIA"), respectively.

	Well-capitalized ratios	
	BHC	IDI
Capital ratios		
CET1	—%	6.5%
Tier 1 capital	6.0	8.0
Total capital	10.0	10.0
Tier 1 leverage	—	5.0
SLR[(a)]	5.0	6.0

(a) In the case of the SLR, the Fully Phased-In well-capitalized ratio is effective January 1, 2018.

Additional information regarding the Firm's capital ratios, as well as the U.S. federal regulatory capital standards to which the Firm is subject, is presented in Note 18.

For further information on the Firm's Basel III measures, see the Firm's Pillar 3 Regulatory Capital Disclosures reports, which are available on the Firm's website (http://investor.shareholder.com/jpmorganchase/basel.cfm).

Capital

The following table presents reconciliations 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 as of September 30, 2017 and December 31, 2016.

For additional information on the components of regulatory capital, see Note 18.

Capital components

(in millions)	September 30, 2017	December 31, 2016
Total stockholders' equity	$ 258,382	$ 254,190
Less: Preferred stock	26,068	26,068
Common stockholders' equity	232,314	228,122
Less:		
Goodwill	47,309	47,288
Other intangible assets	808	862
Add:		
Deferred tax liabilities[(a)]	3,271	3,230
Less: Other CET1 capital adjustments	637	1,468
Standardized/Advanced Fully Phased-In CET1 capital	186,831	181,734
Preferred stock	26,068	26,068
Less:		
Other Tier 1 adjustments[(b)]	703	328
Standardized/Advanced Fully Phased-In Tier 1 capital	$ 212,196	$ 207,474
Long-term debt and other instruments qualifying as Tier 2 capital	$ 14,929	$ 15,253
Qualifying allowance for credit losses	14,648	14,854
Other	(105)	(94)
Standardized Fully Phased-In Tier 2 capital	$ 29,472	$ 30,013
Standardized Fully Phased-In Total capital	$ 241,668	$ 237,487
Adjustment in qualifying allowance for credit losses for Advanced Tier 2 capital	(10,155)	(10,961)
Advanced Fully Phased-In Tier 2 capital	$ 19,317	$ 19,052
Advanced Fully Phased-In Total capital	$ 231,513	$ 226,526

(a) Represents deferred tax liabilities related to tax-deductible goodwill and 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, 2017 and December 31, 2016.

The following table presents reconciliations of the Firm's Basel III Transitional CET1 capital to the Firm's Basel III Fully Phased-In CET1 capital as of September 30, 2017 and December 31, 2016.

(in millions)	September 30, 2017	December 31, 2016
Transitional CET1 capital	$ 187,061	$ 182,967
AOCI phase-in[(a)]	106	(156)
CET1 capital deduction phase-in[(b)]	(183)	(695)
Intangibles deduction phase-in[(c)]	(148)	(312)
Other adjustments to CET1 capital[(d)]	(5)	(70)
Fully Phased-In CET1 capital	$ 186,831	$ 181,734

(a)

Includes the remaining balance of accumulated other comprehensive income ("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 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, 2017.

Nine months ended September 30, (in millions)	2017
Standardized/Advanced CET1 capital at December 31, 2016	$181,734
Net income applicable to common equity	18,974
Dividends declared on common stock	(5,587)
Net purchase of treasury stock	(9,131)
Changes in additional paid-in capital	(930)
Changes related to AOCI	748
Adjustment related to DVA[a]	402
Other	621
Increase in Standardized/Advanced CET1 capital	5,097
Standardized/Advanced CET1 capital at September 30, 2017	$186,831
Standardized/Advanced Tier 1 capital at December 31, 2016	$207,474
Change in CET1 capital	5,097
Net issuance of noncumulative perpetual preferred stock	—
Other	(375)
Increase in Standardized/Advanced Tier 1 capital	4,722
Standardized/Advanced Tier 1 capital at September 30, 2017	$212,196
Standardized Tier 2 capital at December 31, 2016	$30,013
Change in long-term debt and other instruments qualifying as Tier 2	(324)
Change in qualifying allowance for credit losses	(206)
Other	(11)
Decrease in Standardized Tier 2 capital	(541)
Standardized Tier 2 capital at September 30, 2017	$29,472
Standardized Total capital at September 30, 2017	$241,668
Advanced Tier 2 capital at December 31, 2016	$19,052
Change in long-term debt and other instruments qualifying as Tier 2	(324)
Change in qualifying allowance for credit losses	600
Other	(11)
Increase in Advanced Tier 2 capital	265
Advanced Tier 2 capital at September 30, 2017	$19,317
Advanced Total capital at September 30, 2017	$231,513

(a) Includes DVA recorded in other comprehensive income ("OCI").

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, 2017. The amounts in the rollforward categories are estimates, based on the predominant driver of the change.

	Standardized			Advanced			
Nine months ended September 30, 2017 (in millions)	Credit risk RWA	Market risk RWA	Total RWA	Credit risk RWA	Market risk RWA	Operational risk RWA	Total RWA
At December 31, 2016	$1,346,986	$127,679	$1,474,665	$959,523	$127,657	$400,000	$1,487,180
Model & data changes[a]	(5,379)	4,539	(840)	(6,081)	4,539	—	(1,542)
Portfolio runoff[b]	(11,600)	—	(11,600)	(14,300)	—	—	(14,300)
Movement in portfolio levels[c]	32,220	(2,491)	29,729	(15,622)	(2,429)	—	(18,051)
Changes in RWA	15,241	2,048	17,289	(36,003)	2,110	—	(33,893)
September 30, 2017	$1,362,227	$129,727	$1,491,954	$923,520	$129,767	$400,000	$1,453,287

(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 (under both the Standardized and Advanced approaches) reduced risk from position rolloffs in legacy portfolios in Mortgage Banking , the sale of substantially all of the student loan portfolio during the second quarter of 2017, and the sale of reverse mortgages during the third quarter of 2017.

(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

The SLR is defined as Tier 1 capital under Basel III divided by the Firm's total leverage exposure. For additional information on SLR, see Capital Risk Management on page 82 of JPMorgan Chase's 2016 Annual Report.

The following table presents the components of the Firm's Fully Phased-In SLR as of September 30, 2017 and December 31, 2016.

(in millions, except ratio)	September 30, 2017	December 31, 2016
Tier 1 capital	$212,196	$207,474
Total average assets	2,569,231	2,532,457
Less: Adjustments for deductions from Tier 1 capital	46,727	46,977
Total adjusted average assets[a]	2,522,504	2,485,480
Off-balance sheet exposures[b]	689,163	707,359
Total leverage exposure	$3,211,667	$3,192,839
SLR	6.6%	6.5%

(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 during the quarter.

As of September 30, 2017, JPMorgan Chase Bank, N.A.'s and Chase Bank USA, N.A.'s Fully Phased-In SLRs are approximately 6.8% and 11.1%, 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 risk 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 and regulatory capital requirements. ROE is measured and internal targets for expected returns are established as key measures of a business segment's performance.

Line of business equity

(in billions)	September 30, 2017	December 31, 2016
Consumer & Community Banking	$ 51.0	$ 51.0
Corporate & Investment Bank	70.0	64.0
Commercial Banking	20.0	16.0
Asset & Wealth Management	9.0	9.0
Corporate	82.3	88.1
Total common stockholders' equity	$ 232.3	$ 228.1

Effective January 1, 2017, the Firm's methodology used to allocate capital to the business segments was updated. For additional information on the new methodology, see Business Segment Results on pages 18–40.

Planning and stress testing

Comprehensive Capital Analysis and Review

The Federal Reserve requires large bank holding companies, including the Firm, to submit a capital plan on an annual basis. Through the CCAR process, 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 28, 2017, the Federal Reserve informed the Firm that it did not object, on either a quantitative or qualitative basis, to the Firm's 2017 capital plan.

Capital actions

Preferred stock

Preferred stock dividends declared were $412 million and $1.2 billion for the three and nine months ended September 30, 2017.

On October 20, 2017, the Firm issued $1.3 billion of fixed-to-floating rate non-cumulative preferred stock, Series CC, with an initial dividend rate of 4.625%. On October 31, 2017, the Firm announced that it will redeem all $1.3 billion of its outstanding 5.50% non-cumulative preferred stock, Series O, on December 1, 2017. For additional information on the Firm's preferred stock, see Note 22 of JPMorgan Chase's 2016 Annual Report.

Common stock dividends

On September 19, 2017, the Firm announced that its Board of Directors had declared a quarterly common stock dividend of $0.56 per share, effective with the dividend paid on October 31, 2017. The Firm's dividends are subject to the Board of Directors' approval on a quarterly basis.

Common equity

Effective as of June 28, 2017, the Firm's Board of Directors authorized the repurchase of up to $19.4 billion of common equity (common stock and warrants) between July 1, 2017 and June 30, 2018, as part of its annual capital plan.

There were 16.5 million and 24.9 million warrants outstanding at September 30, 2017 and December 31,

2016, respectively.

The following table sets forth the Firm's repurchases of common equity for the three and nine months ended September 30, 2017 and 2016. There were no repurchases of warrants during the three and nine months ended September 30, 2017 and 2016.

	Three months ended September 30,		Nine months ended September 30,	
(in millions)	2017	2016	2017	2016
Total shares of common stock repurchased	51.7	35.6	118.8	110.6
Aggregate common stock repurchases	$4,763	$2,295	$10,602	$6,831

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 Rule 10b5-1 plans must be made according to predefined plans 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 22 of

JPMorgan Chase’s 2016 Form 10-K.

Other capital requirements

TLAC

On December 15, 2016, the Federal Reserve issued its final Total Loss Absorbing Capacity ("TLAC") rule which requires the top-tier holding companies of eight U.S. global systemically important bank holding companies, including the Firm, to maintain minimum levels of external TLAC and external long-term debt that satisfies certain eligibility criteria ("eligible LTD") effective January 1, 2019.

The minimum external TLAC and the minimum level of eligible long-term debt requirements are shown below:

(a) RWA is the greater of Standardized and Advanced.

The final TLAC rule permanently grandfathered all long-term debt issued before December 31, 2016, to the extent these debt securities would be ineligible because they contained impermissible acceleration rights or were governed by non-U.S. law. As of September 30, 2017, the Firm is compliant with the requirements under the current rule to which it will be subject on January 1, 2019.

Broker-dealer regulatory capital

JPMorgan Securities

JPMorgan Chase's principal U.S. broker-dealer subsidiary is JPMorgan Securities. JPMorgan Securities is subject to Rule 15c3-1 under the Securities Exchange Act of 1934 (the "Net Capital Rule"). JPMorgan Securities is also registered as futures commission merchants and subject to Rule 1.17 of the Commodity Futures Trading Commission ("CFTC"). JPMorgan Securities has elected to compute its minimum net capital requirements in accordance with the "Alternative Net Capital Requirements" of the Net Capital Rule.

In accordance with the market and credit risk standards of Appendix E of the Net Capital Rule, JPMorgan Securities is eligible to use the alternative method of computing net capital if, in addition to meeting its minimum net capital requirement, it maintains tentative net capital of at least $1.0 billion and is also required to notify the Securities and Exchange Commission ("SEC") in the event that tentative net capital is less than $5.0 billion. As of September 30, 2017, JPMorgan Securities maintained tentative net capital in excess of the minimum and notification requirements.

The following table presents JPMorgan Securities' net capital information:

September 30, 2017	Net Capital	
(in billions)	Actual	Minimum
JPMorgan Securities	$ 15.6	$ 2.8

J.P. Morgan Securities plc

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 Regulatory Authority ("PRA") and the Financial Conduct Authority ("FCA"). J.P. Morgan Securities plc is subject to the European Union Capital Requirements Regulation and the U.K. PRA capital rules, each of which implemented Basel III and thereby subject J.P. Morgan Securities plc to its requirements.

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

September 30, 2017	Total capital	CET1 ratio		Total capital ratio	
(in billions, except ratios)	Estimated	Estimated	Minimum	Estimated	Minimum
J.P. Morgan Securities plc	$ 39.6	15.9	4.5	15.9	8.0

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 86–107 of JPMorgan Chase's 2016 Annual Report.

In the following tables, total loans include loans retained (i.e., held-for-investment); loans held-for-sale; and certain loans accounted for at fair value. The following tables do not include certain loans the Firm accounts for at fair value and classifies as trading assets. For further information regarding these loans, see Notes 2 and 3. For additional information on the Firm's loans, lending-related commitments and derivative receivables, including the Firm's accounting policies, see Notes 11, 19, and 4, 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 58–60; for information regarding the credit risk inherent in the Firm's investment securities portfolio, see Note 9 of this Form 10-Q, and Note 12 of JPMorgan Chase's 2016 Annual Report; and for information regarding the credit risk inherent in the securities financing portfolio, see Note 10 of this Form 10-Q, and Note 13 of JPMorgan Chase's 2016 Annual Report.

Total credit portfolio

	Credit exposure		Nonperforming[b][c]	
(in millions)	Sep 30, 2017	Dec 31, 2016	Sep 30, 2017	Dec 31, 2016
Loans retained	$909,182	$889,907	$ 5,628	$ 6,721
Loans held-for-sale	2,833	2,628	5	162
Loans at fair value	1,746	2,230	—	—
Total loans	913,761	894,765	5,633	6,883
Derivative receivables	58,260	64,078	164	223
Receivables from customers and other	19,350	17,560	—	—
Total credit-related assets	991,371	976,403	5,797	7,106
Assets acquired in loan satisfactions				
Real estate owned	NA	NA	322	370
Other	NA	NA	35	59
Total assets acquired in loan satisfactions	NA	NA	357	429
Total assets	991,371	976,403	6,154	7,535
Lending-related commitments	1,002,092	976,702	764	506
Total credit portfolio	$1,993,463	$1,953,105	$ 6,918	$ 8,041
Credit derivatives used in credit portfolio management activities[a]	$(20,181)	$(22,114)	$ —	$ —
Liquid securities and other cash collateral held against derivatives	(21,353)	(22,705)	NA	NA

(in millions, except ratios)	Three months ended September 30,		Nine months ended September 30,	
	2017	2016	2017	2016
Net charge-offs[d]	$1,265	$1,121	$4,123	$3,412
Average retained loans				
Loans	903,892	869,676	894,170	853,973
Loans – excluding residential real estate PCI loans	871,465	831,956	860,443	814,923
Net charge-off rates[d]				

Loans	0.56 %	0.51 %	0.62 %	0.53 %
Loans – excluding PCI	0.58	0.54	0.64	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 63 and Note 4.

(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, 2017, and December 31, 2016, nonperforming assets excluded: (1) mortgage loans insured by U.S. government agencies of $4.0 billion and $5.0 billion, respectively, that are 90 or more days past due; (2) student loans insured by U.S. government agencies under the FFELP of zero and $263 million, respectively, that are 90 or more days past due; and (3) real estate owned (“REO”) insured by U.S. government agencies of $99 million and $142 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”).

(d) For the nine months ended September 30, 2017, excluding net charge-offs of $467 million related to the student loan portfolio transfer, the net charge-off rate for loans would have been 0.55% and for loans – excluding PCI would have been 0.57%. For additional information refer to CCB segment results on page 21.

CONSUMER CREDIT PORTFOLIO

The Firm’s retained consumer portfolio consists primarily of residential real estate loans, credit card loans, auto loans, and business banking 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 11 of this Form 10-Q and Consumer Credit Portfolio on pages 89–95 and Note 14 of JPMorgan Chase’s 2016 Annual Report. For further information on lending-related commitments, see Note 19 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 AWM, 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[k][l]		Net charge-offs[m][n]		Average annual net charge-off rate[m][n][o]		Net charge-offs[e][m][n]		Average annual net charge-off rate[e][m][n][o]	
	Sep 30, 2017	Dec 31, 2016	Sep 30, 2017	Dec 31, 2016	2017	2016	2017	2016	2017	2016	2017	2016
Consumer, excluding credit card												
Loans, excluding PCI loans and loans held-for-sale												
Home equity	$34,657	$39,063	$1,601	$1,845	$13	$45	0.15 %	0.43 %	$71	$140	0.26 %	0.43 %
Residential mortgage[a]	212,558	192,486	2,095	2,256	3	9	0.01	0.02	3	13	—	0.01
Auto[b][c]	65,102	65,814	188	214	116	79	0.71	0.49	245	192	0.50	0.41
Consumer & Business Banking[a][c][d]	25,275	24,307	274	287	71	71	1.12	1.19	184	180	0.99	1.04
Student[a][e]	—	7,057	—	165	—	32	—	1.70	498	98	NM	1.69
Total loans, excluding PCI loans and loans held-for-sale	337,592	328,727	4,158	4,767	203	236	0.24	0.29	1,001	623	0.40	0.26
Loans – PCI												
Home equity	11,321	12,902	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Prime mortgage	6,747	7,602	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Subprime mortgage	2,691	2,941	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Option ARMs[f]	11,062	12,234	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total loans – PCI	31,821	35,679	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total loans – retained	369,413	364,406	4,158	4,767	203	236	0.22	0.26	1,001	623	0.37	0.23
	188 [j]	238 [j]	3	53	—	—	—	—	—	—	—	—

Loans held-for-sale												
Total consumer, excluding credit card loans	369,601	364,644	4,161	4,820	203	236	0.22	0.26	1,001	623	0.37	0.23
Lending-related commitments[g]	55,071	54,797										
Receivables from customers[h]	132	120										
Total consumer exposure, excluding credit card	424,804	419,561										
Credit card												
Loans retained[i]	141,200	141,711	—	—	1,019	838	2.87	2.51	3,049	2,528	2.94	2.61
Loans held-for-sale	113	105	—	—	—	—	—	—	—	—	—	—
Total credit card loans	141,313	141,816	—	—	1,019	838	2.87	2.51	3,049	2,528	2.94	2.61
Lending-related commitments[g]	574,641	553,891										
Total credit card exposure	715,954	695,707										
Total consumer credit portfolio	$1,140,758	$1,115,268	$4,161	$4,820	$1,222	$1,074	0.95 %	0.86 %	$4,050	$3,151	1.07 %	0.87 %
Memo: Total consumer credit portfolio, excluding PCI	$1,108,937	$1,079,589	$4,161	$4,820	$1,222	$1,074	1.02 %	0.93 %	$4,050	$3,151	1.15 %	0.94 %

(a) Certain loan portfolios have been reclassified. The prior period amounts have been revised to conform with the current period presentation.

(b) At September 30, 2017, and December 31, 2016, excluded operating lease assets of $16.2 billion and $13.2 billion, respectively. These operating lease assets are included in other assets on the Firm's Consolidated balance sheets.

(c) Includes certain business banking and auto dealer risk-rated loans that apply the wholesale methodology for determining the allowance for loan losses; these loans are managed by CCB, and therefore, for consistency in presentation, are included within the consumer portfolio.

(d) Predominantly includes Business Banking loans.

(e) For the nine months ended September 30, 2017, excluding net charge-offs of $467 million related to the student loan portfolio transfer, the net charge-off rate for Total consumer, excluding credit card and PCI loans and loans held-for-sale would have been 0.22%; Total consumer– retained excluding credit card loans would have been 0.20%; Total consumer credit portfolio would have been 0.95%; and Total consumer credit portfolio, excluding PCI loans would have been 1.02%. For additional information refer to CCB segment results on page 21.

(f) At September 30, 2017, and December 31, 2016, approximately 68% and 66%, respectively, of the PCI option adjustable rate mortgage ("ARM") portfolio has been modified into fixed-rate, fully amortizing loans.

(g) 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.

(h) Receivables from customers represent margin loans to brokerage customers that are collateralized through assets maintained in the clients' brokerage accounts, as such no allowance is held against these receivables. These receivables are reported within accrued interest and accounts receivable on the Firm's Consolidated balance sheets.

(i) Includes billed interest and fees net of an allowance for uncollectible interest and fees.

(j) Includes residential mortgage loans held-for-sale at both September 30, 2017 and December 31, 2016. Also includes student loans held-for-sale at September 30, 2017.

(k) At September 30, 2017 and December 31, 2016, nonaccrual loans excluded loans 90 or more days past due as follows: (1) mortgage loans insured by U.S. government agencies of $4.0 billion and $5.0 billion, respectively; and (2) student loans insured by U.S. government agencies under the FFELP of zero and $263 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.

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

(m) Net charge-offs and the net charge-off rates excluded write-offs in the PCI portfolio of $20 million and $36 million for the three months ended September 30, 2017 and 2016, respectively, and $66 million and $124 million for the nine months ended September 30, 2017 and 2016, respectively. These write-offs decreased the allowance for loan losses for PCI loans. See Allowance for Credit Losses on pages 64–66 for further details.

(n) Net charge-offs and net charge-off rates for the three and nine months ended September 30, 2017 included $63 million of incremental charge-offs recorded in accordance with regulatory guidance regarding the timing of loss recognition for certain auto and residential real estate loans in bankruptcy and auto loans where assets were acquired in loan satisfaction.

(o) Average consumer loans held-for-sale were $339 million and $337 million for the three months ended September 30, 2017 and 2016, respectively, and $1.9 billion and $372 million for the nine months ended September 30, 2017 and 2016, respectively. These amounts were excluded when calculating net charge-off rates.

Consumer, excluding credit card

Portfolio analysis

Consumer loan balances increased from December 31, 2016 predominantly due to originations of high-quality prime mortgage loans that have been retained on the balance sheet, partially offset by the sale of the student loan portfolio as well as paydowns and the charge-off or liquidation of delinquent loans. The credit environment remained favorable as a result of low unemployment levels and increases in home prices.

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 11 of this Form 10-Q.

Home equity: The home equity portfolio declined from December 31, 2016 primarily reflecting loan paydowns and charge-offs. Both early-stage and late-stage delinquencies showed improvement from December 31, 2016. Nonaccrual loans decreased from December 31, 2016 primarily as a result of loss mitigation activities. Net charge-offs for the three and nine months ended September 30, 2017 declined when compared with the same periods of the prior year, partially as a result of lower loan balances.

At September 30, 2017, 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 11 of this Form 10-Q and Consumer Credit Portfolio on pages 89–95 of JPMorgan Chase's 2016 Annual Report.

The carrying value of HELOCs outstanding was $31 billion at September 30, 2017. Of such amounts, $14 billion have recast from interest-only to fully amortizing payments or have been modified. Of the remaining $17 billion, approximately:

- $12 billion are scheduled to recast from interest-only to fully amortizing payments in future periods, and
- $5 billion are interest-only balloon HELOCs, which primarily mature after 2030.

The following chart illustrates the payment recast composition of the approximately $17 billion of HELOCs scheduled to recast in the future, based upon their current contractual terms.
HELOCs scheduled to recast
(at September 30, 2017)
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) resulting from the increase in the monthly payment 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 25% of the carrying value 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, 2017, the Firm estimated that the carrying value of its home equity portfolio contained approximately $0.8 billion of current junior lien loans that were considered high risk seconds, compared with $1.1 billion at December 31, 2016. 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 11.

Residential mortgage: The residential mortgage portfolio predominantly consists of high-quality prime mortgage loans, with a small component (approximately 1%) of the residential mortgage portfolio consisting of 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, 2016 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, 2016. Nonaccrual loans decreased from December 31, 2016 primarily as a result of loss mitigation activities. Net charge-offs for the three and nine months ended September 30, 2017 remain low, reflecting continued improvement in home prices and delinquencies.

At September 30, 2017, and December 31, 2016, the Firm's residential mortgage portfolio, including loans held-for-sale, included $8.4 billion and $9.5 billion, respectively, of mortgage loans insured and/or guaranteed by U.S. government agencies, of which $5.9 billion and $7.0 billion, respectively, were 30 days or more past due (of these past due loans, $4.0 billion and $5.0 billion, respectively, were

90 days or more past due). The Firm monitors its exposure to certain potential unrecoverable claim payments related to government-insured loans and considers this exposure in estimating the allowance for loan losses.

At September 30, 2017, and December 31, 2016, the Firm's residential mortgage portfolio included $19.8 billion and $19.1 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 were relatively flat compared with December 31, 2016, as paydowns and the charge-off or liquidation of delinquent loans were largely offset by new originations. Nonaccrual loans decreased compared with December 31, 2016. Net charge-offs for the three and nine months ended September 30, 2017 increased compared with the same period in the prior year, primarily as a result of an incremental $49 million recorded in accordance with regulatory guidance regarding the timing of loss recognition for certain loans in bankruptcy and loans where assets were acquired in loan satisfaction. The auto portfolio predominantly consists of prime-quality loans.

Consumer & Business Banking: Consumer & Business Banking loans increased compared with December 31, 2016, as growth in loan originations was partially offset by paydowns and the charge-off or liquidation of delinquent loans. Nonaccrual loans decreased compared with December 31, 2016. Net charge-offs for the three and nine months ended September 30, 2017 were relatively flat compared to the prior year.

Student: The Firm transferred the student loan portfolio to held-for-sale in the first quarter of 2017 and sold substantially all of the portfolio in the second quarter of 2017. Net charge-offs for the nine months ended September 30, 2017 increased as a result of the write-down of the portfolio at the time of the transfer.

Purchased credit-impaired loans: PCI loans decreased as the portfolio continues to run off. As of September 30, 2017, approximately 11% of the option ARM PCI loans were delinquent and approximately 68% of the portfolio had 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

(in billions)	Lifetime loss estimates[a]		Life-to-date liquidation losses[b]	
	Sep 30, 2017	Dec 31, 2016	Sep 30, 2017	Dec 31, 2016
Home equity	$14.2	$ 14.4	$12.9	$ 12.8
Prime mortgage	4.0	4.0	3.8	3.7
Subprime mortgage	3.3	3.2	3.1	3.1
Option ARMs	10.0	10.0	9.7	9.7
Total	$31.5	$ 31.6	$29.5	$ 29.3

(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 $900 million and $1.1 billion at September 30, 2017, and December 31, 2016, respectively.

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

Current estimated loan-to-value ratio of residential real estate loans

The current estimated average loan-to-value (“LTV”) ratio for residential real estate loans retained, excluding mortgage loans guaranteed and/or insured by U.S. government agencies and PCI loans, was 57% at September 30, 2017, compared with 58% at December 31, 2016. The current estimated average LTV ratio for residential real estate PCI loans, based on the unpaid principal balances, was 61% at September 30, 2017, compared with 64% at December 31, 2016.

Average LTV ratios have declined consistent with recent improvements in home prices, customer pay downs, and charge-offs or liquidations of higher LTV loans. For further information on current estimated LTVs on residential real estate loans, see Note 11.

Geographic composition of residential real estate loans

For information on the geographic composition of the Firm’s residential real estate loans, see Note 11.

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, 2016. For further information on the Firm’s cumulative redefault rates see Consumer Credit Portfolio on pages 89–95 of JPMorgan Chase’s 2016 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. The cap on these loans is typically at a prevailing market interest rate for a fixed-rate mortgage loan as of the modification date. At September 30, 2017, the carrying value of non-PCI loans and the unpaid principal balance of PCI loans modified in step-rate modifications, which have not yet met their specified caps, were $3 billion and $8 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, 2017, and December 31, 2016, 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, 2017 and

2016, see Note 11.

Modified residential real estate loans

(in millions)	September 30, 2017		December 31, 2016	
	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	$2,134	$ 1,021	$2,264	$ 1,116
Residential mortgage	5,667	1,656	6,032	1,755
Total modified residential real estate loans, excluding PCI loans	$7,801	$ 2,677	$8,296	$ 2,871
Modified PCI loans[c]				
Home equity	$2,315	NA	$2,447	NA
Prime mortgage	4,624	NA	5,052	NA
Subprime mortgage	2,747	NA	2,951	NA
Option ARMs	8,523	NA	9,295	NA
Total modified PCI loans	$18,209	NA	$19,745	NA

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

(b) At September 30, 2017, and December 31, 2016, $3.7 billion and $3.4 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 13.

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

(d) At September 30, 2017, and December 31, 2016, nonaccrual loans included $2.2 billion and $2.3 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 11.

Nonperforming assets

The following table presents information as of September 30, 2017, and December 31, 2016, about consumer, excluding credit card, nonperforming assets.

Nonperforming assets[a]

(in millions)	September 30, 2017	December 31, 2016
Nonaccrual loans[b]		
Residential real estate[c]	$ 3,696	$ 4,154
Other consumer[c]	465	666
Total nonaccrual loans	4,161	4,820
Assets acquired in loan satisfactions		
Real estate owned	229	292
Other	33	57
Total assets acquired in loan satisfactions	262	349
Total nonperforming assets	$ 4,423	$ 5,169

(a) At September 30, 2017, and December 31, 2016, nonperforming assets excluded: (1) mortgage loans insured by U.S. government agencies of $4.0 billion and $5.0 billion, respectively, that are 90 or more days past due; (2) student loans insured by U.S. government agencies under the FFELP of zero and $263 million, respectively, that are 90 or more days past due; and (3) REO insured by U.S. government agencies of $99 million and $142 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. The Firm is recognizing interest income on each pool of loans as they are all performing.

(c) Certain loan portfolios have been reclassified. The prior period amounts have been revised to conform with the current period presentation.

Nonaccrual loans in the residential real estate portfolio decreased to $3.7 billion at September 30, 2017 from $4.2 billion at December 31, 2016, of which 26% and 29%, respectively, were greater than 150 days past due. In the aggregate, the unpaid principal balance of residential real estate loans greater than 150 days past due was charged down by approximately 42% and 43%, respectively, to the estimated net realizable value of the collateral at September 30, 2017, and December 31, 2016.

Active and suspended foreclosure: For information on loans that were in the process of active or suspended foreclosure, see Note 11.

Nonaccrual loans: The following table presents changes in consumer, excluding credit card, nonaccrual loans for the nine months ended September 30, 2017 and 2016.

Nonaccrual loan activity

Nine months ended September 30, (in millions)	2017	2016
Beginning balance	$4,820	$5,413
Additions	2,553	2,804
Reductions:		
Principal payments and other[a]	1,245	1,078
Charge-offs	561	572
Returned to performing status	1,121	1,215
Foreclosures and other liquidations	285	391
Total reductions	3,212	3,256
Net changes	(659)	(452)
Ending balance	$4,161	$4,961

(a) Other reductions includes loan sales.

Credit card

Total credit card loans decreased from December 31, 2016 due to seasonality. The September 30, 2017 30+ day delinquency rate increased to 1.76% from 1.61% at December 31, 2016, but remains near record lows. Net charge-offs increased for the three and nine months ended September 30, 2017 primarily due to seasoning of newer vintages in line with expectations. The credit card portfolio continues to reflect a largely well-seasoned portfolio that has good U.S. geographic diversification. The higher mix of near-prime accounts in recent credit card originations have generated higher loss rates than the more seasoned portion of the portfolio; however, they are in line with the Firm's credit parameters and once seasoned, these 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 11.

Modifications of credit card loans

At both September 30, 2017 and December 31, 2016, the Firm had $1.2 billion 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.

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 and billed interest and fee income.

For additional information about loan modification programs to borrowers, see Note 11.

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 continued to be generally stable for the nine months ended September 30, 2017, characterized by low levels of criticized exposure, nonaccrual loans and charge-offs. See industry discussion on pages 58–60 for further information. The increase in retained loans was driven by new originations in CB and higher loans to Private Banking clients in AWM, which was partially offset by paydowns in CIB. 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, as well as reviews of industry, product and client concentrations.

In the following tables, the Firm’s wholesale credit portfolio includes exposure held in CIB, CB, AWM and Corporate, and excludes all exposure managed by CCB.

Wholesale credit portfolio

	Credit exposure		Nonperforming[c]	
(in millions)	Sep 30, 2017	Dec 31, 2016	Sep 30, 2017	Dec 31, 2016
Loans retained	$398,569	$383,790	$ 1,470	$ 1,954
Loans held-for-sale	2,532	2,285	2	109
Loans at fair value	1,746	2,230	—	—
Loans	402,847	388,305	1,472	2,063
Derivative receivables	58,260	64,078	164	223
Receivables from customers and other[a]	19,218	17,440	—	—
Total wholesale credit-related assets	480,325	469,823	1,636	2,286
Lending-related commitments	372,380	368,014	764	506
Total wholesale credit exposure	$852,705	$837,837	$ 2,400	$ 2,792
Credit derivatives used in credit portfolio management activities[b]	$(20,181)	$(22,114)	$ —	$ —
Liquid securities and other cash collateral held against derivatives	(21,353)	(22,705)	NA	NA

(a) Receivables from customers and other include $19.1 billion and $17.3 billion of margin loans at September 30, 2017, and December 31, 2016, 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 63, and Note 4.

(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, 2017, and December 31, 2016. The ratings scale is based on the Firm's internal risk ratings, which generally correspond to the ratings assigned by S&P and Moody's. For additional information on wholesale loan portfolio risk ratings, see Note 14 of JPMorgan Chase's 2016 Annual Report.

Wholesale credit exposure – maturity and ratings profile

	Maturity profile[d]				Ratings profile			
					Investment-grade	Noninvestment-grade		
September 30, 2017 (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	$118,523	$176,895	$103,151	$398,569	$307,194	$ 91,375	$398,569	77%
Derivative receivables				58,260			58,260	
Less: Liquid securities and other cash collateral held against derivatives				(21,353)			(21,353)	
Total derivative receivables, net of all collateral	19,998	8,126	8,783	36,907	29,893	7,014	36,907	81
Lending-related commitments	93,737	265,830	12,813	372,380	277,432	94,948	372,380	75
Subtotal	232,258	450,851	124,747	807,856	614,519	193,337	807,856	76
Loans held-for-sale and loans at fair value[a]				4,278			4,278	
Receivables from customers and other				19,218			19,218	
Total exposure – net of liquid securities and other cash collateral held against derivatives				$831,352			$831,352	
Credit derivatives used in credit portfolio management activities[b][c]	$(1,301)	$(11,306)	$(7,574)	$(20,181)	$(17,226)	$ (2,955)	$(20,181)	85%

	Maturity profile[d]				Ratings profile			
					Investment-grade	Noninvestment-grade		
December 31, 2016 (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	$117,238	$167,235	$99,317	$383,790	$289,923	$ 93,867	$383,790	76%
Derivative receivables				64,078			64,078	
Less: Liquid securities and other cash collateral held against derivatives				(22,705)			(22,705)	
Total derivative receivables, net of all collateral	14,019	8,510	18,844	41,373	33,081	8,292	41,373	80
Lending-related commitments	88,399	271,825	7,790	368,014	269,820	98,194	368,014	73
Subtotal	219,656	447,570	125,951	793,177	592,824	200,353	793,177	75
Loans held-for-sale and loans at fair value[a]				4,515			4,515	
Receivables from customers and other				17,440			17,440	
				$815,132			$815,132	

Total exposure – net of liquid securities and other cash collateral held against derivatives								
Credit derivatives used in credit portfolio management activities[b][c]	$(1,354)	$(16,537)	$(4,223)	$(22,114)	$(18,710)	$ (3,404)	$(22,114)	85 %

(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. 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.

(d) 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, 2017, may become payable prior to maturity based on their cash flow profile or changes in market conditions.

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Wholesale credit exposure – industry exposures
The Firm focuses on the management and diversification of its industry exposures, and pays particular attention to industries with actual or potential credit concerns. Exposures deemed criticized align with the U.S. banking regulators' definition of criticized exposures, which consist of the special mention, substandard and doubtful

categories. The total criticized component of the portfolio, excluding loans held-for-sale and loans at fair value, was $16.7 billion at September 30, 2017, compared with $19.8 billion at December 31, 2016, driven by a 36% decrease in Oil & Gas.
Effective in the first quarter of 2017, the Firm revised its methodology for the assignment of industry classifications, to better monitor and manage concentrations. This largely resulted in the re-assignment of holding companies from All other to the industry of risk category based on the primary business activity of the holding company's underlying entities. In the tables and industry discussions below, the prior period amounts have been revised to conform with the current period presentation.
Below are summaries of the Firm's exposures as of September 30, 2017, and December 31, 2016. For additional information on industry concentrations, see Note 5 of JPMorgan Chase's 2016 Annual Report.
Wholesale credit exposure – industries[(a)]

As of or for the nine months ended September 30, 2017 (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	$138,425	$113,944	$23,472	$849	$160	$101	$(3)	$—	$(6)
Consumer & Retail	87,022	56,213	28,820	1,807	182	37	16	(256)	(29)
Industrials	63,375	44,835	17,400	996	144	124	(1)	(193)	(45)
Technology, Media & Telecommunications	58,282	35,466	20,256	2,485	75	19	(15)	(465)	(66)
Banks & Finance Cos	49,557	35,827	13,253	471	6	58	6	(1,382)	(4,958)
Healthcare	48,658	37,034	10,812	771	41	12	(1)	—	(278)
Oil & Gas	38,692	19,092	13,530	4,968	1,102	17	55	(908)	(24)
Asset Managers	35,252	30,034	5,200	18	—	12	—	—	(6,456)
Utilities	29,872	24,549	4,978	124	221	—	11	(196)	(106)
State & Municipal Govt[(b)]	28,274	27,662	582	1	29	62	—	(130)	(569)
Central Govt	18,466	18,074	343	49	—	2	—	(10,822)	(2,977)
Chemicals & Plastics	16,632	11,069	5,500	63	—	1	—	(10)	(6)
Transportation	16,383	10,173	5,486	615	109	16	16	(32)	(164)
Automotive	16,259	10,636	5,526	97	—	2	1	(346)	(9)
Metals & Mining	13,370	6,409	6,249	712	—	2	(13)	(362)	(56)
Insurance	11,975	9,896	1,988	—	91	8	—	(182)	(2,350)
Financial Markets Infrastructure	9,921	8,762	1,159	—	—	—	—	—	(947)
Securities Firms	4,476	3,012	1,456	8	—	—	—	(274)	(577)
All other[(c)]	144,318	131,042	12,758	280	238	857	1	(4,623)	(1,730)
Subtotal	$829,209	$633,729	$178,768	$14,314	$2,398	$1,330	$73	$(20,181)	$(21,353)
Loans held-for-sale and loans at fair value	4,278								

Receivables from customers and other	19,218
Total[d]	$ 852,705

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(continued from previous page)

As of or for the year ended December 31, 2016 (in millions)			Noninvestment-grade			Selected metrics			
	Credit exposure[e]	Investment-grade	Noncriticized	Criticized performing	Criticized nonperforming	30 days or more past due and accruing loans	Net charge-offs/ (recoveries)	Credit derivative hedges[f]	Liquid securities and other cash collateral held against derivative receivables
Real Estate	$ 134,287	$ 104,869	$ 28,281	$ 937	$ 200	$ 206	$ (7)	$ (54)	$ (11)
Consumer & Retail	84,804	54,730	28,255	1,571	248	75	24	(424)	(69)
Industrials	55,733	36,710	17,854	1,033	136	128	3	(434)	(40)
Technology, Media & Telecommunications	63,324	39,998	21,751	1,559	16	9	2	(589)	(30)
Banks & Finance Cos	48,393	35,385	12,560	438	10	21	(2)	(1,336)	(7,337)
Healthcare	49,445	39,244	9,279	882	40	86	37	(286)	(246)
Oil & Gas	40,367	18,629	12,274	8,069	1,395	31	233	(1,532)	(18)
Asset Managers	33,201	29,194	4,006	1	—	17	—	—	(5,737)
Utilities	29,672	24,203	4,959	424	86	8	—	(306)	39
State & Municipal Govt[b]	28,263	27,603	624	6	30	107	(1)	(130)	398
Central Govt	20,408	20,123	276	9	—	4	—	(11,691)	(4,183)
Chemicals & Plastics	15,043	10,405	4,452	156	30	3	—	(35)	(3)
Transportation	19,096	12,178	6,421	444	53	9	10	(93)	(188)
Automotive	16,736	9,235	7,299	201	1	7	—	(401)	(14)
Metals & Mining	13,419	5,523	6,744	1,133	19	—	36	(621)	(62)
Insurance	13,510	10,918	2,459	—	133	9	—	(275)	(2,538)
Financial Markets Infrastructure	8,732	7,980	752	—	—	—	—	—	(390)
Securities Firms	4,211	1,812	2,399	—	—	—	—	(273)	(491)
All other[c]	137,238	124,661	11,988	303	286	598	6	(3,634)	(1,785)
Subtotal	$ 815,882	$ 613,400	$ 182,633	$ 17,166	$ 2,683	$ 1,318	$ 341	$ (22,114)	$ (22,705)
Loans held-for-sale and loans at fair value	4,515								
Receivables from customers and other	17,440								
Total[d]	$ 837,837								

(a)

The industry rankings presented in the table as of December 31, 2016, are based on the industry rankings of the corresponding exposures at September 30, 2017, not actual rankings of such exposures at December 31, 2016.

(b) In addition to the credit risk exposure to states and municipal governments (both U.S. and non-U.S.) at September 30, 2017, and December 31, 2016, noted above, the Firm held: $7.5 billion and $9.1 billion, respectively, of trading securities; $32.1 billion and $31.6 billion, respectively, of AFS securities; and $14.4 billion and $14.5 billion, respectively, of held-to-maturity ("HTM") securities, issued by U.S. state and municipal governments. For further information, see Note 2 and Note 9.

(c) All other includes: individuals; SPEs; and private education and civic organizations; representing approximately 60%, 36%, and 4%, respectively, at September 30, 2017, and 59%, 37%, and 4%, respectively, at December 31, 2016.

(d) Excludes cash placed with banks of $450.1 billion and $380.2 billion, at September 30, 2017, and December 31, 2016, 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/or which present actual or potential credit concerns.

Real Estate

Exposure to the Real Estate industry increased $4.1 billion during the nine months ended September 30, 2017, to $138.4 billion, predominantly driven by multifamily lending within CB. During the nine months ended September 30, 2017, the credit quality of the total Real Estate exposure has improved, with the investment-grade percentage increasing from 78% to 82%. For further information on Real Estate loans, see Note 11.

(in millions, except ratios)	September 30, 2017 Loans and Lending-related Commitments	Derivative Receivables	Credit exposure	% Investment-grade	% Drawn[c]
Multifamily[a]	$83,972	$ 31	$ 84,003	87 %	91 %
Other	54,266	156	54,422	74	65
Total Real Estate Exposure[b]	138,238	187	138,425	82	81

(in millions, except ratios)	December 31, 2016 Loans and Lending-related Commitments	Derivative Receivables	Credit exposure	% Investment-grade	% Drawn[c]
Multifamily[a]	$80,280	$ 34	$ 80,314	82 %	90 %
Other	53,801	172	53,973	72	62
Total Real Estate Exposure[b]	134,081	207	134,287	78	79

(a) Multifamily exposure is largely in California.
(b) Real Estate exposure is predominantly secured; unsecured exposure is largely investment-grade.
(c) Represents drawn exposure as a percentage of credit exposure.

Oil & Gas and Natural Gas Pipelines

Exposure to the Oil & Gas and Natural Gas Pipelines portfolios decreased by $0.9 billion during the nine months ended September 30, 2017 to $43.8 billion. During the nine months ended September 30, 2017, the credit quality of this exposure has improved, with the investment-grade percentage increasing from 48% to 50% and criticized exposure decreasing $3.4 billion.

(in millions, except ratios)	September 30, 2017 Loans and Lending-related Commitments	Derivative Receivables	Credit exposure	% Investment-grade	% Drawn[d]
Exploration & Production (“E&P”) and Oilfield Services	$20,129	$ 494	$ 20,623	32 %	33 %
Other Oil & Gas[a]	17,590	479	18,069	69	30
Total Oil & Gas	37,719	973	38,692	49	31
Natural Gas Pipelines[b]	5,090	61	5,151	54	12
Total Oil & Gas and Natural Gas Pipelines[c]	$42,809	$ 1,034	$ 43,843	50	29

(in millions, except ratios)	December 31, 2016 Loans and Lending-related Commitments	Derivative Receivables	Credit exposure	% Investment-grade	% Drawn[d]
E&P and Oilfield Services	$20,971	$ 1,256	$ 22,227	27 %	35 %
Other Oil & Gas[a]	17,518	622	18,140	70	31

Total Oil & Gas	38,489	1,878	40,367	46	33
Natural Gas Pipelines[b]	4,253	106	4,359	66	30
Total Oil & Gas and Natural Gas Pipelines[c]	$42,742	$ 1,984	$ 44,726	48	33

(a) Other Oil & Gas includes Integrated Oil & Gas companies, Midstream/Oil Pipeline companies and refineries.
(b) Natural Gas Pipelines is reported within the Utilities industry.
(c) Secured lending is $14.6 billion and $14.3 billion, at September 30, 2017 and December 31, 2016, respectively, approximately half of which is reserve-based lending to the Exploration & Production sub-sector; unsecured exposure is largely investment-grade.
(d) Represents drawn exposure as a percentage of credit exposure.

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. For further discussion on loans, including information on credit quality indicators and sales of loans, see Note 11.

The following table presents the change in the nonaccrual loan portfolio for the nine months ended September 30, 2017 and 2016.

Wholesale nonaccrual loan activity[(a)]

Nine months ended September 30, (in millions)	2017	2016
Beginning balance	$2,063	$1,016
Additions	993	2,520
Reductions:		
Paydowns and other	997	701
Gross charge-offs	155	287
Returned to performing status	184	201
Sales	248	170
Total reductions	1,584	1,359
Net changes	(591)	1,161
Ending balance	$1,472	$2,177

(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, 2017 and 2016. 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,		Nine months ended September 30,	
	2017	2016	2017	2016
Loans – reported				
Average loans retained	$395,420	$374,593	$390,062	$368,225
Gross charge-offs	55	63	154	291
Gross recoveries	(12)	(16)	(81)	(30)
Net charge-offs/(recoveries)	43	47	73	261
Net charge-off/(recovery) rate	0.04%	0.05%	0.03%	0.09%

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. Most of these commitments and guarantees are refinanced, extended, cancelled, or expire without being drawn upon or a default occurring. In the Firm's view, the total contractual amount of these wholesale lending-related commitments is not representative of the Firm's expected future credit exposure or funding requirements. For further information on wholesale lending-related commitments, see Note 19.

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 4.

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

Derivative receivables

(in millions)	Derivative receivables	
	September 30, 2017	December 31, 2016
Interest rate	$25,701	$ 28,302
Credit derivatives	915	1,294
Foreign exchange	17,077	23,271
Equity	8,831	4,939
Commodity	5,736	6,272
Total, net of cash collateral	58,260	64,078
Liquid securities and other cash collateral held against derivative receivables[(a)]	(21,353)	(22,705)
Total, net of collateral	$36,907	$ 41,373

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

The fair value of derivative receivables reported on the Consolidated balance sheets were $58.3 billion and $64.1 billion at September 30, 2017, and December 31, 2016, 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 securities) and other cash collateral held by the Firm aggregating $21.4 billion and $22.7 billion at September 30, 2017, and December 31, 2016, respectively, that may be used as security when the fair value of the client's exposure is in the Firm's favor. The decrease in derivative receivables at September 30, 2017 from December 31, 2016 is predominantly related to client-driven market-making activities in CIB Markets, reflecting lower foreign exchange and interest rate derivative receivables, driven by maturities and market movements, partially offset by higher equity derivative receivables driven by higher market levels.

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 4.

The following table summarizes the ratings profile by derivative counterparty of the Firm's derivative receivables, including credit derivatives, net of all 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 (in millions, except ratios)	September 30, 2017		December 31, 2016	
	Exposure net of collateral	% of exposure net of collateral	Exposure net of collateral	% of exposure net of collateral
AAA/Aaa to AA-/Aa3	$9,856	27 %	$11,449	28 %
A+/A1 to A-/A3	7,262	20	8,505	20
BBB+/Baa1 to BBB-/Baa3	12,775	35	13,127	32
BB+/Ba1 to B-/B3	6,473	17	7,308	18
CCC+/Caa1 and below	541	1	984	2
Total	$36,907	100 %	$41,373	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 91% and 90% at September 30, 2017 and December 31, 2016, respectively.

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.

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.

Credit derivatives used in credit portfolio management activities

(in millions)	Notional amount of protection purchased and sold[(a)]	
	September 30, 2017	December 31, 2016
Credit derivatives used to manage:		
Loans and lending-related commitments	$1,559	$ 2,430
Derivative receivables	18,622	19,684
Credit derivatives used in credit portfolio management activities	$20,181	$ 22,114

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

For further information on credit derivatives and derivatives used in credit portfolio management activities, see Credit derivatives in Note 4 of this Form 10-Q, and Note 6 of JPMorgan Chase's 2016 Annual Report.

ALLOWANCE FOR CREDIT LOSSES

JPMorgan Chase's allowance for loan losses covers both the consumer (primarily scored) portfolio and wholesale (risk-rated) 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 78–79 and Note 12 of this Form 10-Q, and Critical Accounting Estimates Used by the Firm on pages 132–134 and Note 15 of JPMorgan Chase's 2016 Annual Report.

At least quarterly, the allowance for credit losses is reviewed by the CRO, the CFO and the Controller of the Firm, and discussed with the Board of Directors' Risk Policy Committee ("DRPC") and Audit Committee. As of September 30, 2017, JPMorgan Chase deemed the allowance for credit losses to be appropriate and sufficient to absorb probable credit losses inherent in the portfolio.

Overall, the consumer allowance for credit losses increased from December 31, 2016. Changes to the allowance for credit losses included:

- additions to the allowance for loan losses in the credit card, business banking and auto portfolios, predominantly driven by higher loss rates and loan growth in credit card,

largely offset by

- the utilization of the allowance for loan losses in connection with the transfer of the student loan portfolio to held-for-sale; and
- a reduction in the residential real estate portfolio, predominantly reflecting continued improvements in home prices and delinquencies.

The wholesale allowance for credit losses decreased from December 31, 2016, reflecting credit quality improvements in the Oil & Gas, Natural Gas Pipelines, and Metals & Mining portfolios.

For additional information on the consumer portfolio, see Consumer Credit Portfolio on pages 50–55 and Note 11.
For additional information on the wholesale portfolio, see Wholesale Credit Portfolio on pages 56–63 and Note 11.

Summary of changes in the allowance for credit losses

	2017				2016			
Nine months ended September 30, (in millions, except ratios)	Consumer, excluding credit card	Credit card	Wholesale	Total	Consumer, excluding credit card	Credit card	Wholesale	Total
Allowance for loan losses								
Beginning balance at January 1,	$5,198	$4,034	$4,544	$13,776	$5,806	$3,434	$4,315	$13,555
Gross charge-offs	1,479	3,344	154	4,977	1,071	2,803	291	4,165
Gross recoveries	(478)	(295)	(81)	(854)	(448)	(275)	(30)	(753)
Net charge-offs[a]	1,001	3,049	73	4,123	623	2,528	261	3,412
Write-offs of PCI loans[b]	66	—	—	66	124	—	—	124
Provision for loan losses	653	3,699	(401)	3,951	578	2,978	628	4,184
Other	(2)	—	3	1	—	—	1	1
Ending balance at September 30,	$4,782	$4,684	$4,073	$13,539	$5,637	$3,884	$4,683	$14,204
Impairment methodology								
Asset-specific[c]	$271	$376	$363	$1,010	$352	$363	$490	$1,205
Formula-based	2,266	4,308	3,710	10,284	2,667	3,521	4,193	10,381
PCI	2,245	—	—	2,245	2,618	—	—	2,618
Total allowance for loan losses	$4,782	$4,684	$4,073	$13,539	$5,637	$3,884	$4,683	$14,204
Allowance for lending-related commitments								
Beginning balance at January 1,	$26	$—	$1,052	$1,078	$14	$—	$772	$786
Provision for lending-related commitments	7	—	24	31	—	—	313	313
Other	—	—	—	—	—	—	1	1
Ending balance at September 30,	$33	$—	$1,076	$1,109	$14	$—	$1,086	$1,100
Impairment methodology								
Asset-specific	$—	$—	$220	$220	$—	$—	$162	$162
Formula-based	33	—	856	889	14	—	924	938
Total allowance for lending-related commitments[d]	$33	$—	$1,076	$1,109	$14	$—	$1,086	$1,100
Total allowance for credit losses	$4,815	$4,684	$5,149	$14,648	$5,651	$3,884	$5,769	$15,304
Memo:								
Retained loans, end of period	$369,413	$141,200	$398,569	$909,182	$363,398	$133,346	$386,449	$883,193

Retained loans, average	365,359	138,749	390,062	894,170	356,347	129,401	368,225	853,973
PCI loans, end of period	31,821	—	3	31,824	37,045	—	3	37,048
Credit ratios								
Allowance for loan losses to retained loans	1.29 %	3.32 %	1.02 %	1.49 %	1.55 %	2.91 %	1.21 %	1.61 %
Allowance for loan losses to retained nonaccrual loans[e]	115	NM	277	241	115	NM	218	201
Allowance for loan losses to retained nonaccrual loans excluding credit card	115	NM	277	157	115	NM	218	146
Net charge-off rates[a]	0.37	2.94	0.03	0.62	0.23	2.61	0.09	0.53
Credit ratios, excluding residential real estate PCI loans								
Allowance for loan losses to retained loans	0.75	3.32	1.02	1.29	0.93	2.91	1.21	1.37
Allowance for loan losses to retained nonaccrual loans[e]	61	NM	277	201	62	NM	218	164
Allowance for loan losses to retained nonaccrual loans excluding credit card	61	NM	277	117	62	NM	218	109
Net charge-off rates[a]	0.40 %	2.94 %	0.03 %	0.64 %	0.26 %	2.61 %	0.09 %	0.56 %

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

(a) For the nine months ended September 30, 2017, excluding net charge-offs of $467 million related to the student loan portfolio transfer, the net charge-off rate for Consumer, excluding credit card would have been 0.20%; total Firm would have been 0.55%; Consumer, excluding credit card and PCI loans would have been 0.22%; and total Firm, excluding PCI would have been 0.57%. For additional information refer to CCB segment results on page 21.

(b) 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).

(c) 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.

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

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

Provision for credit losses

The following table presents the components of the Firm's provision for credit losses:

	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)	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016
Consumer, excluding credit card	$205	$262	$ 1	$ —	$206	$262	$653	$578	$ 7	$ —	$660	$578
Credit card	1,319	1,038	—	—	1,319	1,038	3,699	2,978	—	—	3,699	2,978
Total consumer	1,524	1,300	1	—	1,525	1,300	4,352	3,556	7	—	4,359	3,556
Wholesale	(64)	(168)	(9)	139	(73)	(29)	(401)	628	24	313	(377)	941
Total	$1,460	$1,132	$ (8)	$ 139	$1,452	$1,271	$3,951	$4,184	$ 31	$ 313	$3,982	$4,497

Quarterly discussion

The provision for credit losses increased as a result of:

- a higher consumer provision driven by:
  - $148 million of higher net charge-offs, primarily in the credit card portfolio due to seasoning of newer vintages in line with expectations, partially offset by a decrease in net charge-offs in the residential real estate portfolio reflecting continued improvement in home prices and delinquencies. The higher net charge-offs included $63 million of incremental charge-offs recorded in accordance with regulatory guidance regarding the timing of loss recognition for certain auto and residential real estate loans in bankruptcy and auto loans where assets were acquired in loan satisfaction, and
  - a $300 million addition to the allowance for credit losses in the credit card portfolio, due to higher loss rates and loan growth, compared to a $200 million addition in the prior year

the increase was partially offset by

- a higher net benefit of $44 million due to a net reduction of $116 million in the wholesale allowance for credit losses, primarily driven by paydowns and loan sales in the Oil & Gas portfolio, and improvements in the overall quality of the Real Estate portfolio.

Year-to-date discussion

The provision for credit losses decreased as a result of:

- a net $450 million reduction in the wholesale allowance for credit losses, reflecting credit quality improvements in the Oil & Gas, Natural Gas Pipelines and Metals & Mining portfolios, compared with an addition of $680 million in the prior year driven by downgrades in the same portfolios.

the decrease was partially offset by

- a higher consumer provision driven by:
  - $432 million of higher net charge-offs, primarily in the credit card portfolio due to seasoning of newer vintages in line with expectations, partially offset by a decrease in net charge-offs in the residential real estate portfolio reflecting continued improvement in home prices and delinquencies,
  - a $218 million impact related to the transfer of the student loan portfolio to held-for-sale, and
  - a $153 million higher addition to the allowance for credit losses.

Current year additions to the consumer allowance for credit losses included:

- a $650 million addition to the allowance for credit losses in the credit card portfolio, due to higher loss rates and loan growth, compared to a $450 million addition in the prior year;
- a $50 million addition to the allowance for credit losses in the business banking portfolio; and
- a $25 million addition to the allowance for credit losses in the auto portfolio, compared to a $75 million addition in the prior year;

the additions were partially offset by

- a $167 million net reduction in the allowance for credit losses in the residential real estate portfolio, reflecting continued improvement in home prices and delinquencies, compared to a $95 million net reduction in the prior year.

For additional information on the Firm’s student loan portfolio, which was transferred to held-for-sale in the first quarter of 2017, see Note 23.

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 country risk management framework for assessing country risks, determining risk tolerance, and measuring and monitoring its direct country exposures. 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.

Country Risk Management periodically defines and runs stress scenarios for individual countries or groups of countries in response to specific or potential market events, sector performance concerns and geopolitical risks.

For a discussion of the Firm's Country Risk Management organization; identification and measurement; stress testing; monitoring and control; and reporting, see pages 108–109 of JPMorgan Chase's 2016 Annual Report.

The following table presents the Firm's top 20 exposures by country (excluding the U.S.) as of September 30, 2017. 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.

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

	September 30, 2017			
(in billions)	Lending and deposits[a]	Trading and investing[b][c]	Other[d]	Total exposure
Germany	$43.9	$ 13.9	$ 0.2	$ 58.0
United Kingdom	34.0	14.3	0.9	49.2
Japan	16.4	7.5	0.2	24.1
France	12.4	8.7	0.3	21.4
China	8.7	6.2	0.9	15.8
Switzerland	8.1	1.3	5.6	15.0
Canada	11.7	3.0	0.2	14.9
India	4.6	5.7	1.1	11.4
Australia	6.0	5.2	—	11.2
Netherlands	7.3	1.9	0.7	9.9
Luxembourg	7.5	1.4	—	8.9
South Korea	5.4	2.0	0.3	7.7
Brazil	3.4	3.2	—	6.6
Italy	3.7	1.8	0.2	5.7
Spain	3.4	2.1	—	5.5
Singapore	2.8	1.3	1.1	5.2
Hong Kong	2.3	1.2	1.6	5.1
Saudi Arabia	3.8	0.8	—	4.6
Mexico	3.2	1.3	—	4.5
Ireland	1.1	0.7	1.2	3.0

(a) Lending and deposits includes loans and accrued interest receivable (net of collateral and the allowance for loan losses), deposits with banks (including central 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.

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 or tenor of funding and liquidity to support its assets and liabilities. The following discussion of JPMorgan Chase's Liquidity Risk Management should be read together with pages 110–115 of JPMorgan Chase's 2016 Annual Report.

LCR and HQLA

The LCR rule requires the Firm to maintain an amount of unencumbered HQLA that is sufficient to meet its estimated total net cash outflows over a prospective 30 calendar-day period of significant stress. HQLA is the amount of liquid assets that qualify for inclusion in the LCR. HQLA primarily consist of unencumbered cash and certain high quality liquid securities as defined in the LCR rule.

Under the LCR rule, the amount of HQLA held by JPMorgan Chase Bank N.A. and Chase Bank USA, N.A that are in excess of each entity's standalone 100% minimum LCR requirement, and that are not transferable to non-bank affiliates, must be excluded from the Firm's reported HQLA. Commencing January 1, 2017, the LCR is required to be a minimum of 100%.

On December 19, 2016, the Federal Reserve published final LCR public disclosure requirements for certain bank holding companies and nonbank financial companies. Beginning with the second quarter of 2017, the Firm disclosed its average LCR for the quarter and the key quantitative components of the average LCR, along with a qualitative discussion of material drivers of the ratio. The Firm will continue to make available its U.S. LCR Disclosure report on a quarterly basis on the Firm's website at: (https://investor.shareholder.com/jpmorganchase/basel.cfm)

The following table summarizes the Firm's average LCR for the three months ended September 30, 2017 based on the Firm's current interpretation of the finalized LCR framework.

Average amount (in millions)	Three months ended September 30, 2017
HQLA	
Eligible cash[(a)]	$389,516
Eligible securities[(b)(c)]	178,803
Total HQLA[(d)]	$568,319
Net cash outflows	$475,229
LCR	120 %
Net excess HQLA [(d)]	$93,090

(a) Represents cash on deposit at central banks, primarily Federal Reserve Banks.

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

(c) HQLA eligible securities may be reported in securities borrowed or purchased under resale agreements, trading assets, or securities on the Firm's Consolidated balance sheets.

(d) Excludes average excess HQLA at JPMorgan Chase Bank, N.A. and Chase Bank USA, N.A. that are not transferable to non-bank affiliates.

For the three months ended September 30, 2017, the Firm's average LCR was 120%, compared with an average of 115% for the three months ended June 30, 2017 as reported in the Firm's U.S. LCR Public Disclosure. The increase in the ratio was largely attributable to an increase in average HQLA, driven by an increase in the amount of cash and securities held by JPMorgan Chase Bank, N.A. and Chase Bank USA, N.A that became available to transfer to non-bank affiliates. The Firm's average LCR may fluctuate from period to period, due to changes in its HQLA and estimated net cash outflows under the LCR as a result of ongoing business activity. The Firm's HQLA are expected to be available to meet its liquidity needs in a time of stress.

Other liquidity sources

As of September 30, 2017, in addition to assets reported in the Firm's HQLA under the LCR rule, the Firm had approximately $234 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 included as part of the excess liquidity at JPMorgan Chase Bank, N.A. that are not transferable to non-bank affiliates.

As of September 30, 2017, the Firm also had approximately $273 billion of available 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. This remaining borrowing capacity excludes the benefit of securities reported in the Firm's HQLA or other unencumbered securities that are currently pledged at the Federal Reserve Bank discount window, but for which the Firm has not drawn liquidity. 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.

NSFR

The Net Stable Funding Ratio ("NSFR") is intended to measure the adequacy of "available" and "required" amounts of stable funding over a one-year horizon. On April 26, 2016, the U.S. NSFR proposal was released for large banks and bank holding companies and was largely consistent with the Basel Committee's final standard.

While the final U.S. NSFR has yet to be released, the Firm estimates it was compliant with the proposed 100% minimum NSFR based on data as of June 30, 2017, and on its current understanding of the proposed rule.

Funding

Sources of funds

Management believes that the Firm's secured and unsecured 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 is funded with a portion of the Firm's deposits, 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, 2017, and December 31, 2016, and the average deposit balances for the three and nine months ended September 30, 2017 and 2016, respectively.

Deposits	September 30, 2017	December 31, 2016	Three months ended September 30, Average		Nine months ended September 30, Average	
(in millions)			2017	2016	2017	2016
Consumer & Community Banking	$ 653,460	$ 618,337	$645,732	$593,671	$636,257	$579,741
Corporate & Investment Bank	466,323	412,434	461,961	413,698	444,064	404,501
Commercial Banking	176,452	179,532	176,095	172,204	175,265	170,810
Asset & Wealth Management	141,409	161,577	144,496	153,121	151,311	151,656
Corporate	1,383	3,299	2,739	5,281	4,152	5,788
Total Firm	$ 1,439,027	$ 1,375,179	$1,431,023	$1,337,975	$1,411,049	$1,312,496

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 and wholesale operating deposits, which are both considered to be stable sources of liquidity. Wholesale operating deposits are considered a stable source of liquidity because they are generated from customers that maintain operating service relationships with the Firm.

The table below shows the loan and deposit balances, the loans-to-deposits ratios, and deposits as a percentage of total liabilities, as of September 30, 2017 and December 31, 2016.

(in billions except ratios)	September 30, 2017	December 31, 2016
Deposits	$ 1,439.0	$ 1,375.2
Deposits as a % of total liabilities	62 %	61 %
Loans	913.8	894.8
Loans-to-deposits ratio	63 %	65 %

Deposits increased due to both higher wholesale and consumer deposits. The higher wholesale deposits were driven by growth in client cash management activity in CIB's Securities Services and Treasury Services businesses, partially offset by lower balances in AWM reflecting balance migration into investment-related products (retained

predominantly within the Firm), and the impact of seasonality in both CB and AWM. The higher consumer deposits reflected the continuation of strong growth from new and existing customers, and low attrition rates.

The Firm believes average deposit balances are generally more representative of deposit trends than period-end deposit balances. The increase in average deposits for the three and nine months ended September 30, 2017, compared with the three and nine months ended September 30, 2016, was driven by an increase in both consumer and wholesale 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 11–12, respectively.

The following table summarizes short-term and long-term funding, excluding deposits, as of September 30, 2017, and December 31, 2016, and average balances for the three and nine months ended September 30, 2017 and 2016, respectively. For additional information, see the Consolidated Balance Sheets Analysis on pages 11–12 and Note 10.

Sources of funds (excluding deposits) (in millions)	September 30, 2017	December 31, 2016	Three months ended September 30, Average 2017	2016	Nine months ended September 30, Average 2017	2016
Commercial paper	$ 24,248	$ 11,738	$23,022	$13,798	$18,653	$16,257
Obligations of Firm-administered multi-seller conduits[(a)]	$ 2,923	$ 2,719	$2,947	$5,872	$3,351	$5,900
Other borrowed funds	$ 29,719	$ 22,705	$29,936	$19,818	$25,620	$20,051
Securities loaned or sold under agreements to repurchase:						
Securities sold under agreements to repurchase[(b)(c)]	$ 154,463	$ 149,826	$167,652	$165,120	$173,334	$157,808
Securities loaned[(c)(d)]	9,867	12,137	9,637	10,946	12,094	13,270
Total securities loaned or sold under agreements to repurchase[(c)(e)]	$ 164,330	$ 161,963	$177,289	$176,066	$185,428	$171,078
Senior notes	$ 157,495	$ 151,042	$159,270	$157,318	$154,148	$152,894
Trust preferred securities	2,334	2,345	2,336	3,965	2,340	3,968
Subordinated debt	18,079	21,940	18,399	23,779	20,029	24,769
Structured notes	43,760	37,292	44,157	37,323	42,025	35,499
Total long-term unsecured funding	$ 221,668	$ 212,619	$224,162	$222,385	$218,542	$217,130
Credit card securitization[(a)]	$ 23,473	$ 31,181	$24,709	$31,074	$27,041	$28,604
Other securitizations[(a)(f)]	—	1,527	—	1,639	837	1,698
Federal Home Loan Bank ("FHLB") advances	63,769	79,519	67,288	72,687	72,504	71,158
Other long-term secured funding[(g)]	3,145	3,107	3,176	5,223	3,202	5,130
Total long-term secured funding	$ 90,387	$ 115,334	$95,173	$110,623	$103,584	$106,590
Preferred stock[(h)]	$ 26,068	$ 26,068	$26,068	$26,068	$26,068	$26,068
Common stockholders' equity[(h)]	$ 232,314	$ 228,122	$231,861	$226,089	$229,937	$224,034

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

(b) Excluded long-term structured repurchase agreements of $2.0 billion and $1.8 billion as of September 30, 2017, and December 31, 2016, respectively, average balances of $2.0 billion and $1.9 billion for the three months ended September 30, 2017 and 2016, respectively, and $1.4 billion and $2.9 billion for the nine months ended September 30, 2017 and 2016, respectively.

(c) The prior period amounts have been revised to conform with the current period presentation.

(d) Excludes long-term securities loaned of $1.3 billion and $1.2 billion as of September 30, 2017, and December 31, 2016, respectively, average balances of $1.3 billion and $1.2 billion for the three months ended September 30, 2017 and 2016, respectively, and $1.3 billion for both the nine months ended September 30, 2017 and 2016.

(e) Excludes federal funds purchased.

(f) Other securitizations include securitizations of student loans. The Firm deconsolidated the student loan securitization entities in the second quarter of 2017 as it no longer had a controlling financial interest in these entities as a result of the sale of the student loan portfolio. For additional information about the sale of the student

loan portfolio, see CCB Business Segment Results on pages 20–24. 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.

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

(h) For additional information on preferred stock and common stockholders' equity see Capital Risk Management on pages 42–48 and the Consolidated statements of changes in stockholders' equity on page 86; and Note 22 and Note 23 of JPMorgan Chase's 2016 Annual Report.

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 in the average balance of securities loaned or sold under agreements to repurchase for the three and nine months ended September 30, 2017, compared with September 30, 2016, was largely due to higher 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.

The Firm's sources of short-term unsecured funding primarily consist of issuance of wholesale commercial paper. The increase in commercial paper as of September 30, 2017, compared to December 31, 2016, was due to a change in the mix of funding from securities sold under repurchase agreements.

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 primarily by expected client activity, liquidity considerations, and regulatory requirements, including TLAC. Long-term funding objectives include maintaining diversification, maximizing market access and optimizing funding costs. The Firm evaluates various funding markets, tenors and currencies in creating its optimal long-term funding plan.

The significant majority of the Firm's long-term unsecured funding is issued by the Parent Company to provide maximum flexibility in support of both bank and nonbank subsidiary funding needs. The Parent Company advances substantially all net funding proceeds to its subsidiary, the Intermediate Holding Company ("IHC"). The IHC does not issue debt to external counterparties. The following table summarizes long-term unsecured issuance and maturities or redemptions for the three and nine months ended September 30, 2017 and 2016. For additional information on long-term debt and the IHC, see Note 21 and Executive Overview of JPMorgan Chase's 2016 Annual Report.

Long-term unsecured funding

	Three months ended September 30,		Nine months ended September 30,	
(in millions)	2017	2016	2017	2016
Issuance				
Senior notes issued in the U.S. market	$3,967	$8,467	$18,646	$21,654
Senior notes issued in non-U.S. markets	—	2,172	2,210	7,063
Total senior notes	3,967	10,639	20,856	28,717
Subordinated debt	—	—	—	—
Structured notes	6,587	4,643	23,181	18,254
Total long-term unsecured funding – issuance	$10,554	$15,282	$44,037	$46,971
Maturities/redemptions				
Senior notes	$4,152	$6,229	$18,194	$22,539
Trust preferred securities	—	—	—	—
Subordinated debt	895	521	3,901	2,523
Structured notes	5,657	3,233	18,030	11,774
Total long-term unsecured funding – maturities/redemptions	$10,704	$9,983	$40,125	$36,836

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, 2017 and 2016, respectively.

Long-term secured funding

	Three months ended September 30,				Nine months ended September 30,			
	Issuance		Maturities/Redemptions		Issuance		Maturities/Redemptions	
(in millions)	2017	2016	2017	2016	2017	2016	2017	2016
Credit card securitization	$—	$4,463	$ 2,264	$ —	$1,545	$8,277	$ 9,270	$ 2,775
Other securitizations[(a)]	—	—	—	58	—	—	55	177
FHLB advances	—	15,900	4,694	5,902	—	15,900	15,748	7,956
Other long-term secured funding[(b)]	186	89	516	2,546	727	415	640	2,635
Total long-term secured funding	$186	$20,452	$ 7,474	$ 8,506	$2,272	$24,592	$ 25,713	$ 13,543

(a) Other securitizations includes securitizations of student loans. The Firm deconsolidated the student loan securitization entities in the second quarter of 2017 as it no longer had a controlling financial interest in these entities as a result of the sale of the student loan portfolio. For additional information about the sale of the student loan portfolio, see CCB Business Segment Results on pages 20–24.

(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 2016 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 Liquidity risk and credit-related contingent features in Note 4.

The credit ratings of the Parent Company and the Firm's principal bank and nonbank subsidiaries as of September 30, 2017, were as follows.

	JPMorgan Chase & Co.			JPMorgan Chase Bank, N.A. Chase Bank USA, N.A.			J.P. Morgan Securities LLC J.P. Morgan Securities plc		
September 30, 2017	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	A1	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

On June 1, 2017, JPMorgan Chase Bank, N.A. terminated its guarantee of the payment of all obligations of J.P. Morgan Securities plc arising after such termination. J.P. Morgan Securities plc, whose credit ratings previously reflected the benefit of this guarantee, is now rated on a stand-alone, non-guaranteed basis.

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

MARKET RISK MANAGEMENT

Market risk is the risk of loss arising from potential 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, tools used to measure risk, risk monitoring and control and risk identification and classification, see Market Risk Management on pages 116–123 of JPMorgan Chase's 2016 Annual Report.

Value-at-risk

JPMorgan Chase utilizes value-at-risk ("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.

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 therefore considers other measures such as stress testing and nonstatistical measures, in addition to VaR, to capture and manage its market risk positions. For further information, see Other risk measures on pages 121–123 of JPMorgan Chase's 2016 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 of VaR results. For information regarding model reviews and approvals, see Model Risk Management on page 128 of JPMorgan Chase's 2016 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 118 of JPMorgan Chase's 2016 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 Basel III 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, 2017			June 30, 2017			September 30, 2016		
(in millions)	Avg.	Min	Max	Avg.	Min	Max	Avg.	Min	Max
CIB trading VaR by risk type									
Fixed income	$28	$24	$31	$28	$25	$31	$49	$38	$65
Foreign exchange	13	6	20	8	5	12	16	10	27
Equities	12	11	14	12	9	16	8	5	10
Commodities and other	6	4	8	8	6	10	9	7	11
Diversification benefit to CIB trading VaR	(31)[a]	NM[b]	NM[b]	(30)[a]	NM[b]	NM[b]	(42)[a]	NM[b]	NM [b]
CIB trading VaR	28	24	32	26	20	31	40	34	50
Credit portfolio VaR	5	5	6	9	6	10	13	11	16
Diversification benefit to CIB VaR	(3)[a]	NM[b]	NM[b]	(8)[a]	NM[b]	NM[b]	(10)[a]	NM[b]	NM [b]
CIB VaR	30	25	33	27	22	32	43	37	51
CCB VaR	2	1	3	2	2	3	3	2	4
Corporate VaR	3	1	3	3	2	3	3	3	5
Diversification benefit to other VaR	(1)[a]	NM[b]	NM[b]	(2)[a]	NM[b]	NM[b]	(1)[a]	NM[b]	NM [b]
Other VaR	4	3	5	3	3	4	5	4	6
Diversification benefit to CIB and other VaR	(4)[a]	NM[b]	NM[b]	(3)[a]	NM[b]	NM[b]	(5)[a]	NM[b]	NM [b]
Total VaR	$30	$26	$34	$27	$22	$33	$43	$37	$49

(a) Average portfolio VaR is 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.

Quarter over Quarter results

Average total VaR increased by $3 million for the three months ended September 30, 2017 as compared with the prior quarter, reflecting a change in exposure profile for the Foreign exchange risk type, partially offset by reduced volatility in the one-year historical look-back period.

Year over Year results

Average total VaR decreased by $13 million for the three months ended September 30, 2017, compared with the same period in the prior year. The decrease in average total VaR is primarily in the Fixed income risk type. The reduction reflects enhancements to VaR models to more appropriately reflect risk exposure for certain asset backed products and reduced volatility in the one-year historical look-back period.

The Firm refined the historical proxy time series inputs to certain VaR models during the first quarter of 2017. In the absence of this refinement, the average Total VaR for the three months ended September 30, 2017 would have been higher by $4 million and each of the components would have been higher by the amounts reported in the following table:

(in millions)	Amount by which reported VaR would have been higher for the three months

	ended September 30, 2017
CIB fixed income VaR	$ 4
CIB trading VaR	5
CIB VaR	