JPMORGAN CHASE & CO
Form 10-Q
August 02, 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 June 30, 2017	Commission file number 1-5805

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

Delaware	13-2624428
(State or other jurisdiction of incorporation or organization)	(I.R.S. employer identification no.)
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 June 30, 2017: 3,518,964,410

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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)						Six months ended June 30,	
	2Q17	1Q17	4Q16	3Q16	2Q16	2017	2016
Selected income statement data							
Total net revenue	$25,470	$24,675	$23,376	$24,673	$24,380	$50,145	$47,619
Total noninterest expense	14,506	15,019	13,833	14,463	13,638	29,525	27,475
Pre-provision profit	10,964	9,656	9,543	10,210	10,742	20,620	20,144
Provision for credit losses	1,215	1,315	864	1,271	1,402	2,530	3,226
Income before income tax expense	9,749	8,341	8,679	8,939	9,340	18,090	16,918
Income tax expense	2,720	1,893	1,952	2,653	3,140	4,613	5,198
Net income	$7,029	$6,448	$6,727	$6,286	$6,200	$13,477	$11,720

Earnings per share data							
Net income: Basic	$1.83	$1.66	$1.73	$1.60	$1.56	$3.49	$2.92
Diluted	1.82	1.65	1.71	1.58	1.55	3.47	2.89
Average shares: Basic	3,574.1	3,601.7	3,611.3	3,637.7	3,675.5	3,587.9	3,693.0
Diluted	3,599.0	3,630.4	3,646.6	3,669.8	3,706.2	3,614.7	3,721.9
Market and per common share data							
Market capitalization	321,633	312,078	307,295	238,277	224,449	321,633	224,449
Common shares at period-end	3,519.0	3,552.8	3,561.2	3,578.3	3,612.0	3,519.0	3,612.0
Share price:[a]							
High	$92.65	$93.98	$87.39	$67.90	$66.20	$93.98	$66.20
Low	81.64	83.03	66.10	58.76	57.05	81.64	52.50
Close	91.40	87.84	86.29	66.59	62.14	91.40	62.14
Book value per share	66.05	64.68	64.06	63.79	62.67	66.05	62.67
Tangible book value per share (“TBVPS”)[b]	53.29	52.04	51.44	51.23	50.21	53.29	50.21
Cash dividends declared per share	0.50	0.50	0.48	0.48	0.48	1.00	0.92
Selected ratios and metrics							
Return on common equity	12 %	11 %	11 %	10 %	10 %	11 %	10 %

("ROE")							
Return on tangible common equity ("ROTCE")[b]	14	13	14	13	13	14	12
Return on assets	1.10	1.03	1.06	1.01	1.02	1.07	0.97
Overhead ratio	57	61	59	59	56	59	58
Loans-to-deposits ratio	63	63	65	65	66	63	66
High quality liquid assets ("HQLA") (in billions)[c]	$577	$528	$524	$539	$516	$577	$516
Common equity Tier 1 ("CET1") capital ratio[d]	12.6%	12.5%	12.4%	12.0%	12.0%	12.6%	12.0%
Tier 1 capital ratio[d]	14.4	14.3	14.1	13.6	13.6	14.4	13.6
Total capital ratio[d]	16.0	15.6	15.5	15.1	15.2	16.0	15.2
Tier 1 leverage ratio[d]	8.5	8.4	8.4	8.5	8.5	8.5	8.5
Selected balance sheet data (period-end)							
Trading assets	$407,064	$402,513	$372,130	$374,837	$380,793	$407,064	$380,793
Securities	263,458	281,850	289,059	272,401	278,610	263,458	278,610
Loans	908,767	895,974	894,765	888,054	872,804	908,767	872,804
Core loans	834,935	812,119	806,152	795,077	775,813	834,935	775,813
	824,583	805,382	799,698	779,383	760,721	815,034	749,009

Average core loans							
Total assets	2,563,174	2,546,290	2,490,972	2,521,029	2,466,096	2,563,174	2,466,096
Deposits	1,439,473	1,422,999	1,375,179	1,376,138	1,330,958	1,439,473	1,330,958
Long-term debt(e)	292,973	289,492	295,245	309,418	295,627	292,973	295,627
Common stockholders' equity	232,415	229,795	228,122	228,263	226,355	232,415	226,355
Total stockholders' equity	258,483	255,863	254,190	254,331	252,423	258,483	252,423
Headcount	249,257	246,345	243,355	242,315	240,046	249,257	240,046
Credit quality metrics							
Allowance for credit losses	$14,480	$14,490	$14,854	$15,304	$15,187	$14,480	$15,187
Allowance for loan losses to total retained loans	1.49%	1.52%	1.55%	1.61%	1.64%	1.49%	1.64%
Allowance for loan losses to retained loans excluding purchased credit-impaired loans(f)	1.28	1.31	1.34	1.37	1.40	1.28	1.40
Nonperforming assets	$6,432	$6,826	$7,535	$7,779	$7,757	$6,432	$7,757
Net charge-offs(g)	1,204	1,654	1,280	1,121	1,181	2,858	2,291
Net charge-off rate(g)	0.54%	0.76%	0.58%	0.51%	0.56%	0.65%	0.54%

(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 liquidity coverage ratio (“LCR”). For additional information, see HQLA on page 67.

(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 $221.0 billion, $212.0 billion, $212.6 billion, $226.8 billion and $220.6 billion at June 30, 2017, March 31, 2017, December 31, 2016, September 30, 2016 and June 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 63–65.

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

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 second 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 $258.5 billion in stockholders' equity as of June 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. One of the Firm's principal operating subsidiaries in the United Kingdom ("U.K.") is J.P. Morgan Securities plc, a subsidiary of JPMorgan Chase Bank, N.A.

For management reporting purposes, the Firm's activities are organized into four major reportable business segments, as well as a Corporate segment. The Firm's consumer business is the Consumer & Community Banking ("CCB") segment. The Firm's wholesale business segments are Corporate & Investment Bank ("CIB"), Commercial Banking ("CB"), and Asset & 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 various lines of business, this Form 10-Q should be read in its entirety.

Financial performance of JPMorgan Chase (unaudited)	Three months ended June 30,			Six months ended June 30,		
As of or for the period ended, (in millions, except per share data and ratios)	2017	2016	Change	2017	2016	Change
Selected income statement data						
Total net revenue	$25,470	$24,380	4 %	$50,145	$47,619	5%
Total noninterest expense	14,506	13,638	6	29,525	27,475	7
Pre-provision profit	10,964	10,742	2	20,620	20,144	2
Provision for credit losses	1,215	1,402	(13)	2,530	3,226	(22)
Net income	7,029	6,200	13	13,477	11,720	15
Diluted earnings per share	$1.82	$1.55	17	$3.47	$2.89	20
Selected ratios and metrics						
Return on common equity	12 %	10 %		11 %	10 %	
Return on tangible common equity	14	13		14	12	
Book value per share	$66.05	$62.67	5	$66.05	$62.67	5
Tangible book value per share	53.29	50.21	6	53.29	50.21	6
Capital ratios[(a)]						
CET1	12.6%	12.0 %		12.6 %	12.0 %	
Tier 1 capital	14.4	13.6		14.4	13.6	
Total capital	16.0	15.2		16.0	15.2	

(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 second quarter of 2017 versus the prior-year second quarter, unless otherwise specified.

Firmwide overview

JPMorgan Chase reported strong results in the second quarter of 2017 with record net income of $7.0 billion, or $1.82 per share, on net revenue of $25.5 billion. The Firm reported ROE of 12% and ROTCE of 14%.

- Net income increased 13%, reflecting higher net revenue, lower income tax expense, and lower provision for credit losses, largely offset by higher noninterest expense.
- Total net revenue increased 4%. Net interest income was $12.2 billion, up 8%, 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 $13.3 billion, up 2%, driven by a legal benefit in Corporate related to a settlement with the Federal Deposit Insurance Corporation ("FDIC") receivership for Washington Mutual and with Deutsche Bank as trustee to certain Washington Mutual trusts, higher Banking revenue in the CIB, higher auto lease income, and higher revenue in AWM. These increases were predominantly offset by higher Card new account origination costs, lower Mortgage Banking revenue and lower Markets revenue in the CIB.
- Noninterest expense was $14.5 billion, up 6%, reflecting the absence of a legal benefit recorded in the prior-year quarter, as well as higher auto lease depreciation and FDIC-related expenses.
- The provision for credit losses was $1.2 billion, a decrease from $1.4 billion. This quarter included a net reduction in the allowance for credit losses in the wholesale portfolio of $241 million driven by Oil & Gas, Natural Gas Pipelines and Metals & Mining, offset by a net addition to the allowance for credit losses in the consumer portfolio of $252 million driven by Card.

- The total allowance for credit losses was $14.5 billion at June 30, 2017, and the Firm had a loan loss coverage ratio, excluding the PCI portfolio, of 1.28%, compared with 1.40%. The Firm's nonperforming assets totaled $6.4 billion at June 30, 2017, a decrease from $7.8 billion.
- Firmwide average core loans increased 8%.

Selected capital-related metrics

- The Firm added to its capital, ending the second quarter of 2017 with a TBVPS of $53.29, up 6%.
- The Firm's Basel III Fully Phased-In CET1 capital was $187 billion, and the Standardized and Advanced CET1 ratios were 12.5% and 12.7%, respectively.
- The Fully Phased-In supplementary leverage ratio ("SLR") was 6.6% for the Firm and 6.7% for JPMorgan Chase Bank, N.A. at June 30, 2017.

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 second quarter of 2017.

CCB ROE 17%	• Average core loans up 9%; average deposits of $640 billion, up 10% • 28.4 million active mobile customers, up 14% • Credit card sales volume up 15% and merchant processing volume up 12%
CIB ROE 15%	• Maintained #1 ranking for Global Investment Banking fees with 8.3% wallet share YTD • Banking revenue up 17%; Markets revenue down 14%
CB ROE 17%	• Record revenue and net income of $2.1 billion (up 15%), and $902 million (up 30%), respectively • Average loan balances of $198 billion, up 12%
AWM ROE 27%	• Record net income of $624 million, up 20%; revenue of $3.2 billion, up 9% • Average loan balances of $122 billion, up 9% • Assets under management (“AUM”) of $1.9 trillion, up 11%; 77% 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 $1.2 trillion for wholesale and consumer clients during the first six months of 2017:

- $131 billion of credit for consumers
- $11 billion of credit for U.S. small businesses
- $413 billion of credit for corporations
- $605 billion of capital raised for corporate clients and non-U.S. government entities
- $38 billion of credit and capital raised for U.S. government and nonprofit entities, including states, municipalities, hospitals and universities

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 of these forward-looking statements to reflect the impact of circumstances or events that arise after the date hereof.

JPMorgan Chase's outlook for the remainder of 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 and regulatory, as well as business and economic, environment 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

- In Card, management expects the portfolio average net charge-off rate to increase in 2017, but 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 Investment Banking fees in the second half of 2017 to be lower compared to a strong prior-year period.

CONSOLIDATED RESULTS OF OPERATIONS

This section provides a comparative discussion of JPMorgan Chase's Consolidated Results of Operations on a reported basis for the three and six months ended June 30, 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 77–79 of this Form 10-Q and pages 132–134 of JPMorgan Chase's 2016 Annual Report.

Revenue

	Three months ended June 30,			Six months ended June 30,		
(in millions)	2017	2016	Change	2017	2016	Change
Investment banking fees	$1,810	$1,644	10 %	$3,627	$2,977	22 %
Principal transactions	3,137	2,976	5	6,719	5,655	19
Lending- and deposit-related fees	1,482	1,403	6	2,930	2,806	4
Asset management, administration and commissions	3,824	3,681	4	7,501	7,305	3
Securities gains/(losses)	(34)	21	NM	(37)	72	NM
Mortgage fees and related income	404	689	(41)	810	1,356	(40)
Card income	1,167	1,358	(14)	2,081	2,659	(22)
Other income[(a)]	1,472	1,261	17	2,242	2,062	9
Noninterest revenue	13,262	13,033	2	25,873	24,892	4
Net interest income	12,208	11,347	8	24,272	22,727	7
Total net revenue	$25,470	$24,380	4%	$50,145	$47,619	5%

(a) Included operating lease income of $873 million and $651 million for the three months ended June 30, 2017 and 2016, respectively and $1.7 billion and $1.3 billion for the six months ended June 30, 2017 and 2016, respectively.

Quarterly results

Investment banking fees increased, with strong performance across products. Higher equity underwriting fees were driven by growth in industry-wide issuance, including a strong IPO market; higher debt underwriting fees were driven by a higher share of fees; and higher advisory fees were driven by a higher level of completed transactions. For additional information, see CIB segment results on pages 25–30 and Note 5.

Principal transactions revenue increased reflecting higher gains on private equity investments held in Corporate, and the absence of fair value losses recorded in the prior year on the investment in Square, Inc. in CCB, partially offset by lower Markets revenue in CIB. For additional information, see CIB, Corporate and CCB segment results on pages 25–30 , page 39 and pages 20–24 , respectively, and Note 5.

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

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

Other income increased primarily reflecting the following:

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

the increases were partially offset by

- the absence of a gain in the prior year on the sale of Visa Europe interests in CCB, and
- lower other income in CIB.

For further information on other income, see Note 5.

Net interest income increased primarily driven by the net impact of higher rates and loan growth across the businesses, partially offset by the declines in Markets net interest income in CIB driven by a shift in asset mix in Currencies & Emerging Markets and Equity Markets, and an adjustment for capitalized interest on modified loans in Mortgage Banking. 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 2.31%, an increase of 6 basis points from the prior year.

For additional information on asset management, administration and commissions income, see the segment discussions of CIB and AWM on pages 25–30 and pages 35–38, respectively, and Note 5; 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. The higher debt underwriting fees were driven by a higher share of fees and an overall increase in industry-wide fee levels; and the higher equity underwriting fees were 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, reflecting:

- Higher Fixed Income-related revenue primarily from Securitized Products driven by strong demand in the first quarter
- Higher Equity-related revenue primarily from corporate derivatives and Prime Services, partially offset by lower revenue in other derivatives related to market-making activities, and
- Higher Lending-related revenue reflecting lower fair value losses on hedges of accrual loans and higher gains on securities received from restructurings.

Asset management, administration and commissions revenue increased in AWM and CCB reflecting higher market levels.

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

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

For further information, see CCB segment results on pages 20–24.

Other income increased primarily reflecting the following:

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

the increases were partially offset by

- the absence of gains in the prior year on the sale of Visa Europe interests in CCB, as well as on the disposal of assets 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 the declines in Markets net interest income in CIB driven by a shift in asset mix in Currencies & Emerging Markets and Equity Markets.

The Firm’s average interest-earning assets were $2.2 trillion, and the net interest yield on these assets, on a FTE basis, was 2.32%, an increase of 4 basis points from the prior year.

Provision for credit losses

(in millions)	Three months ended June 30,			Six months ended June 30,		
	2017	2016	Change	2017	2016	Change
Consumer, excluding credit card	$12	$95	(87)%	$454	$316	44 %
Credit card	1,387	1,110	25	2,380	1,940	23 %
Total consumer	1,399	1,205	16	2,834	2,256	26 %
Wholesale	(184)	197	NM	(304)	970	NM
Total provision for credit losses	$1,215	$1,402	(13)%	$2,530	$3,226	(22)%

Quarterly results

The provision for credit losses decreased as a result of:

- a decline in the wholesale provision predominantly due to a $241 million reduction in the allowance for credit losses compared with an addition in the prior year; actions for both periods related to Oil & Gas, Natural Gas Pipelines and Metals & Mining

the decline was partially offset by

- an increase in the consumer provision primarily driven by $120 million of higher net charge-offs, predominantly in the credit card portfolio, and a $74 million higher addition to the allowance for credit losses, which included current quarter additions in the credit card, business banking and auto portfolios, partially offset by a reduction in the residential 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 63–65 and Note 12.

Year-to-date results

The provision for credit losses decreased as a result of:

- a decline in the wholesale provision predominantly due to a $334 million reduction in the allowance for credit losses compared with an addition in the prior year; actions for both periods related to Oil & Gas, Natural Gas Pipelines and Metals & Mining

the decline was partially offset by

- an increase in the consumer provision primarily driven by $284 million of higher net charge-offs, predominantly in the credit card portfolio, $218 million related to the transfer of the student loan portfolio to held-for-sale, and a $76 million higher addition to the allowance for credit losses, which included current year additions in the credit card, business banking and auto portfolios, partially offset by a reduction 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 June 30,			Six months ended June 30,		
	2017	2016	Change	2017	2016	Change
Compensation expense	$7,706	$7,778	(1)%	$15,907	$15,438	3%
Noncompensation expense:						
Occupancy	912	899	1	1,873	1,782	5
Technology, communications and equipment	1,870	1,665	12	3,698	3,283	13
Professional and outside services	1,644	1,700	(3)	3,187	3,248	(2)
Marketing	756	672	13	1,469	1,375	7
Other expense[(a)(b)]	1,618	924	75	3,391	2,349	44
Total noncompensation expense	6,800	5,860	16	13,618	12,037	13
Total noninterest expense	$14,506	$13,638	6%	$29,525	$27,475	7%

(a) Included Firmwide legal expense of $61 million and $(430) million for the three months ended June 30, 2017 and 2016, respectively and $279 million and $(476) million for the six months ended June 30, 2017 and 2016, respectively.

(b) Included FDIC-related expense of $376 million and $283 million for the three months ended June 30, 2017 and 2016, respectively and $757 million and $552 million for the six months ended June 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 headcount, including bankers and support staff in certain businesses.

Noncompensation expense increased as a result of:

- the absence of a legal benefit recorded in the prior year in Corporate
- higher depreciation expense from growth in auto operating lease volume in CCB
- higher FDIC-related expense
- higher marketing expense in CCB, and
- contributions to the Firm’s Foundation.

For a further discussion of legal expense, see Note 21.

Year-to-date results

Compensation expense increased predominantly driven by investments in headcount, including bankers and support staff in certain businesses, as well as higher performance-based compensation expense particularly in AWM.

Noncompensation expense increased as a result of:

- higher legal expense driven by the combined impact of an increase in legal expense in AWM and a lower legal benefit in Corporate
- higher depreciation expense from growth in auto operating leased assets in CCB
- higher FDIC-related expense
- contributions to the Firm's Foundation, and
- higher marketing expense in CCB.

Income tax expense

(in millions)	Three months ended June 30, 2017	2016	Change	Six months ended June 30, 2017	2016	Change
Income before income tax expense	$9,749	$9,340	4 %	$18,090	$16,918	7 %
Income tax expense	2,720	3,140	(13)	4,613	5,198	(11)
Effective tax rate	27.9 %	33.6 %		25.5 %	30.7 %	

Quarterly results

The effective tax rate decreased predominantly due to the release of a valuation allowance and the write-off of certain deferred tax liabilities, as well as due to the change in the mix of income and expenses subject to U.S. federal and state and local taxes.

Year-to-date results

The effective tax rate 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 June 30, 2017, and December 31, 2016.

Selected Consolidated balance sheets data

(in millions)	Jun 30, 2017	Dec 31, 2016	Change
Assets			
Cash and due from banks	$21,781	$23,873	(9)%
Deposits with banks	427,380	365,762	17
Federal funds sold and securities purchased under resale agreements	218,570	229,967	(5)
Securities borrowed	90,654	96,409	(6)
Trading assets:			
Debt and equity instruments	350,558	308,052	14
Derivative receivables	56,506	64,078	(12)
Securities	263,458	289,059	(9)
Loans	908,767	894,765	2
Allowance for loan losses	(13,363)	(13,776)	(3)
Loans, net of allowance for loan losses	895,404	880,989	2
Accrued interest and accounts receivable	64,038	52,330	22
Premises and equipment	14,206	14,131	1
Goodwill	47,300	47,288	—
Mortgage servicing rights	5,753	6,096	(6)
Other intangible assets	827	862	(4)
Other assets	106,739	112,076	(5)
Total assets	$2,563,174	$2,490,972	3 %

Cash and due from banks and deposits with banks

The net increase was primarily driven by deposit growth and a shift in the deployment of excess cash from securities and securities purchased under resale agreements. 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 67–71.

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 when compared to lower levels at year-end.
- The increase in trading liabilities was driven by higher levels of client-driven short positions in debt instruments, partially offset by reductions in equity instruments.

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.

For additional information, refer to Derivative contracts on pages 61–62, and Notes 2 and 4.

Securities decreased primarily due to sales of U.S. Treasuries and non-U.S. government securities.

Loans increased reflecting the following:

-

- higher wholesale loans predominantly driven by originations in CB and higher loans to Private Banking clients in AWM, partially offset by
- lower consumer loans as a result of the student loan portfolio sale, lower home equity loans, and the seasonal decline in credit card balances, predominantly offset by higher retention of originated high-quality prime mortgages in CCB and AWM.

The allowance for loan losses decreased reflecting the following:

- a net reduction in the wholesale allowance primarily driven by Oil & Gas, Natural Gas Pipelines and Metals & Mining
- the consumer allowance remained relatively flat, with the utilization of the allowance in connection with the transfer of the student loan portfolio to held-for-sale, and a reduction in the residential real estate portfolio driven by continued improvement in home prices and delinquencies, predominantly offset by additions to the credit card, business banking and auto portfolios, driven by loan growth as well as higher loss rates in credit card.

For detailed discussion of loans and the allowance for loan losses, refer to Credit Risk Management on pages 49–65, and Notes 2, 3, 11 and 12.

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Accrued interest and accounts receivable increased reflecting higher client receivables related to client-driven market-making activities in CIB.

For information on Securities, see Notes 2 and 9; and MSRs, see Note 14.

Selected Consolidated balance sheets data (continued)

(in millions)	Jun 30, 2017	Dec 31, 2016	Change
Liabilities			
Deposits	$1,439,473	$1,375,179	5 %
Federal funds purchased and securities loaned or sold under repurchase agreements	165,621	165,666	—
Commercial paper	22,207	11,738	89
Other borrowed funds	30,936	22,705	36
Trading liabilities:			
Debt and equity instruments	91,628	87,428	5
Derivative payables	41,795	49,231	(15)
Accounts payable and other liabilities	189,160	190,543	(1)
Beneficial interests issued by consolidated variable interest entities (“VIEs”)	30,898	39,047	(21)
Long-term debt	292,973	295,245	(1)
Total liabilities	2,304,691	2,236,782	3
Stockholders’ equity	258,483	254,190	2
Total liabilities and stockholders’ equity	$2,563,174	$2,490,972	3 %

Deposits increased due to the following:

- higher wholesale deposits driven by growth in client activity in CIB’s Securities Services and Treasury Services businesses, partially offset by lower balances in AWM reflecting balance migration 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 existing and new customers, and low attrition rates

For more information on deposits, refer to the Liquidity Risk Management discussion on pages 67–71; and Notes 2 and 15.

Federal funds purchased and securities loaned or sold under repurchase agreements were flat reflecting a change in the mix of funding to commercial paper and other borrowed funds offset by on-going client activity in CIB.

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 67–71.

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 Note 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 67–71; 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 six months ended June 30, 2017 and 2016.

(in millions)	Six months ended June 30, 2017	2016
Net cash provided by/(used in)		
Operating activities	$(13,024)	$(22,907)
Investing activities	(37,079)	(52,064)
Financing activities	47,911	74,159
Effect of exchange rate changes on cash	100	32
Net decrease in cash and due from banks	$(2,092)	$(780)

Operating activities
Cash used in operating activities for the period ending June 30, 2017 resulted from:
Client-driven market-making activities in CIB

- an increase in trading assets was primarily driven by higher debt and equity instruments in Prime Services reflecting client demand and in Rates reflecting higher levels when compared to lower levels at year-end
- an increase in accrued interest and accounts receivable due to higher client receivables

Other operating activity

- higher net originations and purchases of loans held-for-sale predominantly in CIB and CB.

Cash used in operating activities for the period ending June 30, 2016 resulted from:
Client-driven market-making activities in CIB

- an increase in accrued interest and accounts receivable driven by higher client receivables
- an increase in trading assets, which was predominantly offset by an increase in trading liabilities.

Investing activities
Cash used in investing activities during 2017 resulted from:

- an increase in deposits with banks, which were placed with various central banks, predominantly Federal Reserve Banks
- higher wholesale loans predominantly driven by originations in CB and higher loans to Private Banking clients in AWM, partially offset by lower consumer loans as a result of the student loan portfolio sale, lower home equity loans, and the seasonal decline in credit card balances, predominantly offset by higher retention of originated high-quality prime mortgages in CCB and AWM

Partially offsetting these cash outflows was a decrease in securities and securities purchased under resale agreements due to the shift in the deployment of excess

cash to deposits with banks.
Cash used in investing activities during 2016 resulted from:

- an increase in wholesale loans driven by strong originations of commercial and industrial loans and commercial real estate loans
- an increase in consumer loans reflecting the retention of originated high-quality prime mortgages and growth in auto loans
- a net increase in securities purchased under resale agreements due to a higher demand for securities to cover short positions related to client-driven market-making activities in CIB and the deployment of excess cash by Treasury and Chief Investment Office ("CIO").

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 reflecting growth in client activity, partially offset by seasonal factors
- higher consumer deposits reflecting the continuation of strong growth from existing and new 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
- an increase in other borrowed funds driven by a change in the mix of funding from securities sold under repurchase agreements in CIB

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

Cash provided by financing activities in 2016 resulted from:

- an increase in consumer deposits reflecting the continued growth from new and existing customers, as well as the impact of low attrition rates
- higher wholesale deposits reflecting growth in client activity in Treasury Services
- an increase in securities loaned or sold under repurchase agreements due to higher secured financing of investment securities in Treasury and CIO, and higher client-driven market-making activities in CIB
- net proceeds from long-term borrowings.

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 67–71 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 June 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 $8.2 billion and $7.4 billion at June 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 61 and Note 19. For a discussion of liabilities associated with loan sales and securitization-related indemnifications, see Note 19.

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 49–65.

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 June 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	$1,472	$ 596	$2,068	$1,261	$ 529	$1,790
Total noninterest revenue	13,262	596	13,858	13,033	529	13,562
Net interest income	12,208	339	12,547	11,347	305	11,652
Total net revenue	25,470	935	26,405	24,380	834	25,214
Pre-provision profit	10,964	935	11,899	10,742	834	11,576
Income before income tax expense	9,749	935	10,684	9,340	834	10,174
Income tax expense	$2,720	$ 935	$3,655	$3,140	$ 834	$3,974
Overhead ratio	57 %	NM	55 %	56 %	NM	54 %

	Six months ended June 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	$2,242	$ 1,178	$3,420	$2,062	$ 1,080	$3,142
Total noninterest revenue	25,873	1,178	27,051	24,892	1,080	25,972

Net interest income	24,272	668	24,940	22,727	598	23,325
Total net revenue	50,145	1,846	51,991	47,619	1,678	49,297
Pre-provision profit	20,620	1,846	22,466	20,144	1,678	21,822
Income before income tax expense	18,090	1,846	19,936	16,918	1,678	18,596
Income tax expense	$4,613	$ 1,846	$6,459	$5,198	$ 1,678	$6,876
Overhead ratio	59 %	NM	57 %	58 %	NM	56 %

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

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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 June 30,			Six months ended June 30,		
(in millions, except rates)	2017	2016	Change	2017	2016	Change
Net interest income – managed basis[(a)(b)]	$12,547	$11,652	8 %	$24,940	$23,325	7 %
Less: CIB Markets net interest income[(c)]	1,075	1,579	(32)	2,439	3,078	(21)
Net interest income excluding CIB Markets[(a)]	$11,472	$10,073	14	$22,501	$20,247	11
Average interest-earning assets	$2,177,109	$2,079,525	5	$2,169,055	$2,061,754	5
Less: Average CIB Markets interest-earning assets[(c)]	537,263	522,321	3	530,051	519,054	2
Average interest-earning assets excluding CIB Markets	$1,639,846	$1,557,204	5 %	$1,639,004	$1,542,700	6 %
Net interest yield on average interest-earning assets – managed basis	2.31%	2.25 %		2.32 %	2.28 %	
Net interest yield on average CIB Markets interest-earning assets[(c)]	0.80	1.22		0.93	1.19	
Net interest yield on average interest-earning assets excluding CIB Markets	2.81%	2.60 %		2.77 %	2.64 %	

(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 prior period amounts were revised 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		Average			
	Jun 30, 2017	Dec 31, 2016	Three months ended June 30,		Six months ended June 30,	
			2017	2016	2017	2016
Common stockholders' equity	$232,415	$228,122	$230,200	$224,429	$228,959	$222,995
Less: Goodwill	47,300	47,288	47,290	47,309	47,292	47,320
Less: Certain identifiable intangible assets	827	862	838	928	845	957
Add: Deferred tax liabilities[a]	3,252	3,230	3,239	3,213	3,234	3,195
Tangible common equity	$187,540	$183,202	$185,311	$179,405	$184,056	$177,913
Return on tangible common equity	NA	NA	14 %	13 %	14 %	12 %
Tangible book value per share	$53.29	$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

The amount of capital assigned to each business is referred to as equity. On at least an annual basis, the Firm assesses the level of capital required for each line of business as well as the assumptions and methodologies used to allocate capital. Through the end of 2016, capital was allocated to the lines of business based on a single measure, Basel III Advanced Fully Phased-In RWA. 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 six months ended June 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 June 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	$11,412	$11,451	—	$6,500	$6,004	8%	$4,912	$5,447	(10)%
Corporate & Investment Bank	8,889	9,165	(3)	4,841	5,078	(5)	4,048	4,087	(1)
Commercial Banking	2,088	1,817	15	790	731	8	1,298	1,086	20
Asset & Wealth Management	3,212	2,939	9	2,192	2,098	4	1,020	841	21
Corporate	804	(158)	NM	183	(273)	NM	621	115	440
Total	$26,405	$25,214	5%	$14,506	$13,638	6%	$11,899	$11,576	3%

Three months ended June 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	$1,394	$1,201	16	$2,223	$2,656	(16)%	17%	20%
Corporate & Investment Bank	(53)	235	NM	2,710	2,493	9	15	15
Commercial Banking	(130)	(25)	(420)	902	696	30	17	16
Asset & Wealth Management	4	(8)	NM	624	521	20	27	22
Corporate	—	(1)	100%	570	(166)	NM	NM	NM
Total	$1,215	$1,402	(13)%	$7,029	$6,200	13%	12%	10%

Six months ended June 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	$22,382	$22,568	(1)%	$12,895	$12,092	7%	$9,487	$10,476	(9)%
Corporate & Investment Bank	18,425	17,300	7	9,962	9,886	1	8,463	7,414	14
Commercial Banking	4,106	3,620	13	1,615	1,444	12	2,491	2,176	14
Asset & Wealth Management	6,299	5,911	7	4,772	4,173	14	1,527	1,738	(12)
Corporate	779	(102)	NM	281	(120)	NM	498	18	NM
Total	$51,991	$49,297	5%	$29,525	$27,475	7%	$22,466	$21,822	3%

Six months ended June 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	$2,824	$2,251	25%	$4,211	$5,146	(18)%	16%	19%
Corporate & Investment Bank	(149)	694	NM	5,951	4,472	33	16	13
Commercial Banking	(167)	279	NM	1,701	1,192	43	16	14
Asset & Wealth Management	22	5	340	1,009	1,108	(9)	22	24
Corporate	—	(3)	100	605	(198)	NM	NM	NM
Total	$2,530	$3,226	(22)%	$13,477	$11,720	15%	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 June 30,			Six months ended June 30,		
(in millions, except ratios)	2017	2016	Change	2017	2016	Change
Revenue						
Lending- and deposit-related fees	$850	$780	9 %	$1,662	$1,549	7 %
Asset management, administration and commissions	562	535	5	1,101	1,065	3
Mortgage fees and related income	401	689	(42)	807	1,356	(40)
Card income	1,061	1,253	(15)	1,878	2,444	(23)
All other income	810	881	(8)	1,553	1,530	2
Noninterest revenue	3,684	4,138	(11)	7,001	7,944	(12)
Net interest income	7,728	7,313	6	15,381	14,624	5
Total net revenue	11,412	11,451	—	22,382	22,568	(1)
Provision for credit losses	1,394	1,201	16	2,824	2,251	25
Noninterest expense						
Compensation expense	2,511	2,420	4	5,044	4,802	5
Noncompensation expense[(a)]	3,989	3,584	11	7,851	7,290	8
Total noninterest expense	6,500	6,004	8	12,895	12,092	7
Income before income tax expense	3,518	4,246	(17)	6,663	8,225	(19)
Income tax expense	1,295	1,590	(19)	2,452	3,079	(20)
Net income	$2,223	$2,656	(16)	$4,211	$5,146	(18)
Revenue by line of business						
Consumer & Business Banking	$5,233	$4,616	13	$10,139	$9,166	11
Mortgage Banking	1,426	1,921	(26)	2,955	3,797	(22)
Card, Commerce Solutions & Auto	4,753	4,914	(3)	9,288	9,605	(3)
Mortgage fees and related income details:						
Net production revenue	152	261	(42)	293	423	(31)
Net mortgage servicing revenue[(b)]	249	428	(42)	514	933	(45)
Mortgage fees and related income	$401	$689	(42)%	$807	$1,356	(40)%
Financial ratios						
Return on equity	17 %	20 %		16 %	19 %	
Overhead ratio	57	52		58	54	

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 $638 million and $460 million for the three months ended June 30, 2017 and 2016, respectively, and $1.2 billion and $892 million for the six months ended June 30, 2017 and 2016, respectively.

(b) Included MSR risk management of $(57) million and $73 million for the three months ended June 30, 2017 and 2016, respectively, and $(109) million and $202 million for the six months ended June 30, 2017 and 2016, respectively.

Quarterly results

Net income was $2.2 billion, a decrease of 16%, driven by higher noninterest expense and provision for credit losses.

Net revenue was $11.4 billion, flat compared to prior year.

Net interest income was $7.7 billion, up 6%, driven by higher deposit balances, deposit margin expansion and higher loan balances in Card, partially offset by the impact of higher rates resulting in higher funding costs and an adjustment for capitalized interest on modified loans, both in Mortgage Banking.

Noninterest revenue was $3.7 billion, down 11%, driven by higher new account origination costs in Card, the absence of a gain on the sale of Visa Europe interests in the current year, lower MSR risk management results and net production revenue reflecting lower mortgage production margins. These factors were largely offset by higher auto lease volume, higher card- and deposit-related fees and the absence of fair-value losses on the investment in Square, Inc. in the current year. 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, an increase of 8%, driven by higher auto lease depreciation, continued business growth and investments in marketing.

The provision for credit losses was $1.4 billion, an increase of 16% from the prior year. The increase in the provision was driven by $118 million of higher net charge-offs, predominantly in the credit card portfolio, and a $75 million higher addition to the allowance for credit losses when compared to the prior year.

Current quarter results included:

- a $350 million addition to the allowance for credit losses in the credit card portfolio, due to loan growth and higher loss rates, compared to a $250 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 $50 million addition in the prior year;

the additions were partially offset by

- a $175 million reduction in the allowance for credit losses in the residential real estate portfolio, reflecting continued improvement in home prices and delinquencies, compared to a $100 million reduction in the prior year.

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.

Year-to-date results

Net income was $4.2 billion, a decrease of 18%, driven by higher noninterest expense and provision for credit losses.

Net revenue was $22.4 billion, a decrease of 1%.

Net interest income was $15.4 billion, up 5%, driven by higher deposit balances, higher loan balances in Card and deposit margin expansion, partially offset by the impact of higher rates resulting in higher funding costs and an adjustment for capitalized interest on modified loans, both in Mortgage Banking.

Noninterest revenue was $7.0 billion, down 12%, driven by higher new account origination costs in Card, the absence of a gain on the sale of Visa Europe interests in the current year and lower MSR risk management results, partially offset by higher auto lease volume and higher card- and deposit-related fees.

Noninterest expense was $12.9 billion, an increase of 7%, driven by higher auto lease depreciation, continued business growth and investments in marketing.

The provision for credit losses was $2.8 billion, an increase of 25% from the prior year, driven by $280 million higher net charge-offs, predominantly in the credit card portfolio, and a $75 million higher addition to the allowance for credit losses when compared to the prior year, (both drivers exclude the impact of the student loan portfolio transfer).

Current year results included:

- a $350 million addition to the allowance for credit losses in the credit card portfolio, due to loan growth and higher loss rates, compared to a $250 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 $50 million addition in the prior year;

the additions were partially offset by

- a $175 million reduction in the allowance for credit losses in the residential real estate portfolio, reflecting continued improvement in home prices and delinquencies, compared to a $100 million reduction in the prior year.

In addition, there was an increase to the provision related to the first quarter transfer of the student loan portfolio to held-for-sale, resulting in a write-down of the portfolio to the estimated fair value at the time of transfer. This write-down was recognized predominantly as a $467 million charge-off, resulting in a $218 million increase in the provision for credit losses after utilization of the allowance for loan losses of $249 million.

Selected metrics

(in millions, except headcount)	As of or for the three months ended June 30, 2017	2016	Change	As of or for the six months ended June 30, 2017	2016	Change
Selected balance sheet data (period-end)						
Total assets	$529,859	$519,187	2 %	$529,859	$519,187	2 %
Loans:						
Consumer & Business Banking	25,044	23,588	6	25,044	23,588	6
Home equity	46,330	54,569	(15)	46,330	54,569	(15)
Residential mortgage	189,661	178,670	6	189,661	178,670	6
Mortgage Banking	235,991	233,239	1	235,991	233,239	1
Card	140,141	131,591	6	140,141	131,591	6
Auto	65,627	64,056	2	65,627	64,056	2
Student	75	7,614	(99)	75	7,614	(99)
Total loans	466,878	460,088	1	466,878	460,088	1
Core loans	393,639	364,007	8	393,639	364,007	8
Deposits	648,369	586,074	11	648,369	586,074	11
Equity	51,000	51,000	—	51,000	51,000	—
Selected balance sheet data (average)						
Total assets	$528,598	$512,434	3	$530,338	$507,833	4
Loans:						
Consumer & Business Banking	24,725	23,223	6	24,543	22,998	7
Home equity	47,339	55,615	(15)	48,303	56,666	(15)
Residential mortgage	187,201	175,753	7	185,489	172,224	8
Mortgage Banking	234,540	231,368	1	233,792	228,890	2
Card	138,132	128,396	8	137,674	127,848	8
Auto	65,474	63,661	3	65,395	62,456	5
Student	4,642	7,757	(40)	5,772	7,896	(27)
Total loans	467,513	454,405	3	467,176	450,088	4
Core loans	387,783	356,380	9	384,419	350,042	10
Deposits	639,873	583,115	10	631,441	572,699	10
Equity	51,000	51,000	—	51,000	51,000	—
Headcount	135,453	131,815	3%	135,453	131,815	3 %

Selected metrics

(in millions, except ratio data)	As of or for the three months ended June 30, 2017	2016	Change	As of or for the six months ended June 30, 2017	2016	Change
Credit data and quality statistics						
Nonaccrual loans[a][b]	$4,124	$4,980	(17)%	$4,124	$4,980	(17)%
Net charge-offs/(recoveries)[c]						
Consumer & Business Banking	56	53	6	113	109	4
Home equity	7	35	(80)	54	94	(43)
Residential mortgage	(4)	3	NM	(1)	4	NM
Mortgage Banking	3	38	(92)	53	98	(46)
Card	1,037	860	21	2,030	1,690	20
Auto	48	46	4	129	113	14
Student	—	29	NM	498 [h]	66	NM
Total net charge-offs/(recoveries)	$1,144	$1,026	12	$2,823 [h]	$2,076	36
Net charge-off/(recovery) rate[c]						
Consumer & Business Banking	0.91 %	0.92 %		0.93 %	0.95 %	
Home equity(d)	0.08	0.34		0.30	0.45	
Residential mortgage(d)	(0.01)	0.01		—	0.01	
Mortgage Banking(d)	0.01	0.08		0.05	0.10	
Card	3.01	2.70		2.98	2.66	
Auto	0.29	0.29		0.40	0.36	
Student	—	1.50		NM	1.68	
Total net charge-off/(recovery) rate[d]	1.07	0.99		1.32 [h]	1.02	
30+ day delinquency rate						
Mortgage Banking[e][f]	1.02 %	1.33 %		1.02 %	1.33 %	
Card	1.59	1.40		1.59	1.40	
Auto	0.88	1.16		0.88	1.16	
Student[g]	—	1.43		—	1.43	
90+ day delinquency rate — Card	0.80	0.70		0.80	0.70	
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[c]	2,265	2,654	(15)	2,265	2,654	(15)
Card	4,384	3,684	19	4,384	3,684	19
Auto	499	449	11	499	449	11
Student	—	274	NM	—	274	NM
Total allowance for loan losses[c]	$9,097	$9,252	(2)%	$9,097	$9,252	(2)%

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

(b) At June 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 $4.1 billion and $5.2 billion, respectively; and (2) student loans insured by U.S. government agencies under the Federal Family Education Loan Program ("FFELP") of $24 million and $252 million, respectively. These amounts have been excluded based upon the government guarantee.

(c)

Net charge-offs/(recoveries) and the net charge-off/(recovery) rates for the three months ended June 30, 2017 and 2016, excluded $22 million and $41 million, respectively, and for six months ended June 30, 2017 and 2016, excluded $46 million and $88 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 64.

(d) Excludes the impact of PCI loans. For the three months ended June 30, 2017 and 2016, the net charge-off/(recovery) rates including the impact of PCI loans were as follows: (1) home equity of 0.06% and 0.25%, respectively; (2) residential mortgage of (0.01)% and 0.01%, respectively; (3) Mortgage Banking of 0.01% and 0.07%, respectively; and (4) total CCB of 0.99% and 0.91%, respectively. For the six months ended June 30, 2017 and 2016, the net charge-off/(recovery) rates including the impact of PCI loans were as follows: (1) home equity of 0.23% and 0.33%, respectively; (2) residential mortgage of -% for both periods; (3) Mortgage Banking of 0.05% and 0.09%, respectively; and (4) total CCB of 1.23% and 0.93%, respectively.

(e) At June 30, 2017 and 2016, excluded mortgage loans insured by U.S. government agencies of $6.0 billion and $7.2 billion, respectively, that are 30 or more days past due. These amounts have been excluded based upon the government guarantee.

(f) Excludes PCI loans. The 30+ day delinquency rate for PCI loans was 9.06% and 10.09% at June 30, 2017 and 2016, respectively.

(g) Excluded student loans insured by U.S. government agencies under FFELP of $458 million at June 30, 2016, that are 30 or more days past due. This amount has been excluded based upon the government guarantee.

(h) 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 six months ended June 30, 2017 would have been 1.10%.

Selected metrics

(in billions, except ratios and where otherwise noted)	As of or for the three months ended June 30, 2017	2016	Change	As of or for the six months ended June 30, 2017	2016	Change
Business Metrics						
CCB households (in millions)	60.7	59.2	3 %	60.7	59.2	3 %
Number of branches	5,217	5,366	(3)	5,217	5,366	(3)
Active digital customers (in thousands)[(a)]	45,876	42,833	7	45,876	42,833	7
Active mobile customers (in thousands)[(b)]	28,386	24,817	14	28,386	24,817	14
Debit and credit card sales volume	$230.1	$204.6	12	$438.5	$391.8	12
Consumer & Business Banking						
Average deposits	$625.4	$567.4	10	$617.3	$557.9	11
Deposit margin	1.96 %	1.80 %		1.92 %	1.83 %	
Business banking origination volume	$2.2	$2.2	—	$3.9	$3.9	1
Client investment assets	253.0	224.7	13	253.0	224.7	13
Mortgage Banking						
Mortgage origination volume by channel						
Retail	$9.7	$11.2	(13)	$18.7	$19.9	(6)
Correspondent	14.2	13.8	3	27.6	27.5	—
Total mortgage origination volume[(c)]	$23.9	$25.0	(4)	$46.3	$47.4	(2)
Total loans serviced (period-end)	$827.8	$880.3	(6)	$827.8	$880.3	(6)
Third-party mortgage loans serviced (period-end)	568.0	629.9	(10)	568.0	629.9	(10)
MSR carrying value (period-end)	5.8	5.1	14	5.8	5.1	14
Ratio of MSR carrying value (period-end) to third-party mortgage loans serviced (period-end)	1.02 %	0.81 %		1.02 %	0.81 %	
MSR revenue multiple[(d)]	2.91 x	2.31 x		2.91 x	2.31 x	
Card, excluding Commercial Card						
Credit card sales volume	$156.8	$136.0	15	$296.5	$257.7	15
New accounts opened (in millions)	2.1	2.7	(22)	4.6	5.0	(8)
Card Services						
Net revenue rate	10.53 %	12.28 %		10.34 %	12.04 %	
Commerce Solutions						
Merchant processing volume	$294.4	$263.8	12	$568.7	$511.3	11
Auto						
Loan and lease origination volume	$8.3	$8.5	(2)	$16.3	$18.1	(10)
Average Auto operating lease assets	14.7	10.4	41%	14.2	10.0	42%

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

Firmwide mortgage origination volume was $26.2 billion and $28.6 billion for the three months ended June 30, 2017 and 2016, respectively, and $51.8 billion and $53.0 billion for the six months ended June 30, 2017 and 2016, respectively.

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

CORPORATE
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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

	Three months ended June 30,			Six months ended June 30,		
(in millions, except ratios)	2017	2016	Change	2017	2016	Change
Revenue						
Investment banking fees	$1,803	$1,636	10 %	$3,615	$2,957	22 %
Principal transactions	2,928	2,965	(1)	6,435	5,435	18
Lending- and deposit-related fees	387	385	1	775	779	(1)
Asset management, administration and commissions	1,068	1,025	4	2,120	2,094	1
All other income	258	464	(44)	435	744	(42)
Noninterest revenue	6,444	6,475	—	13,380	12,009	11
Net interest income	2,445	2,690	(9)	5,045	5,291	(5)
Total net revenue[(a)]	8,889	9,165	(3)	18,425	17,300	7
Provision for credit losses	(53)	235	NM	(149)	694	NM
Noninterest expense						
Compensation expense	2,451	2,737	(10)	5,251	5,337	(2)
Noncompensation expense	2,390	2,341	2	4,711	4,549	4
Total noninterest expense	4,841	5,078	(5)	9,962	9,886	1
Income before income tax expense	4,101	3,852	6	8,612	6,720	28
Income tax expense	1,391	1,359	2	2,661	2,248	18
Net income	$2,710	$2,493	9%	$5,951	$4,472	33 %
Financial ratios						
Return on equity	15 %	15 %		16 %	13 %	
Overhead ratio	54	55		54	57	
Compensation to revenue ratio	28	30		28	31	

(a) Included tax-equivalent adjustments, predominantly due to income tax credits related to alternative energy investments; income tax credits and amortization of the cost of investments in affordable housing projects; and tax-exempt income from municipal bonds of $554 million and $476 million for the three months ended June 30, 2017 and 2016, respectively, and $1.1 billion and $974 million for the six months ended June 30, 2017 and 2016, respectively.

Selected income statement data

	Three months ended June 30,			Six months ended June 30,		
(in millions)	2017	2016	Change	2017	2016	Change
Revenue by business						
Investment Banking	$1,695	$1,492	14%	$3,346	$2,723	23 %
Treasury Services	1,055	892	18	2,036	1,776	15
Lending	373	277	35	762	579	32
Total Banking	3,123	2,661	17	6,144	5,078	21
Fixed Income Markets	3,216	3,959	(19)	7,431	7,556	(2)
Equity Markets	1,586	1,600	(1)	3,192	3,176	1
Securities Services	982	907	8	1,898	1,788	6

Credit Adjustments & Other[(a)]	(18)	38	NM	(240)	(298)	19
Total Markets & Investor Services	5,766	6,504	(11)	12,281	12,222	—
Total net revenue	$8,889	$9,165	(3)%	$18,425	$17,300	7%

(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.

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Quarterly results

Net income was $2.7 billion, up 9%, reflecting a lower provision for credit losses and lower noninterest expense on lower net revenue.

Net revenue was $8.9 billion, down 3%.

Banking revenue was $3.1 billion, up 17%. Investment banking revenue was $1.7 billion, up 14%, with strong performance across products. The Firm maintained its #1 ranking for Global Investment Banking fees, according to Dealogic. Equity underwriting fees were $367 million, up 29%, driven by growth in industry-wide issuance including a strong IPO market. Debt underwriting fees were $933 million, up 5%, driven by a higher share of fees. Advisory fees were $503 million, up 8%, driven by a higher level of completed transactions. Treasury Services revenue was $1.1 billion, up 18%, driven by the impact of higher interest rates and growth in operating deposits. Lending revenue was $373 million, up 35%, reflecting lower fair value losses on hedges of accrual loans.

Markets & Investor Services revenue was $5.8 billion, down 11%. Fixed Income Markets revenue was $3.2 billion, down 19% compared to a strong prior-year quarter, predominantly driven by lower revenue in Rates, Credit, and Commodities. These declines were due to reduced flows driven by sustained low volatility and tighter credit spreads. Equity Markets revenue was $1.6 billion, down 1% compared to a strong prior-year quarter, driven by lower revenue in other derivatives related to market-making activities offset by higher revenue in corporate derivatives and Prime Services. Securities Services revenue was $982 million, up 8%, driven by the impact of higher interest rates and higher asset-based fees driven by global markets.

The provision for credit losses was a benefit of $53 million compared with an expense of $235 million in the prior year. The prior year primarily reflected an increase in the allowance for credit losses in the Oil & Gas portfolio.

Noninterest expense was $4.8 billion, down 5%, driven by lower performance-based compensation expense.

Year-to-date results

Net income was $6.0 billion, up 33%, reflecting higher net revenue, lower provision for credit losses and a tax benefit resulting from the vesting of employee-based stock awards.

Net revenue was $18.4 billion, up 7%.

Banking revenue was $6.1 billion, up 21%. Investment banking revenue was $3.3 billion, up 23%, driven by higher debt and equity underwriting fees, partially offset by lower advisory fees. The Firm maintained its #1 ranking for Global Investment Banking fees, according to Dealogic. Debt underwriting fees were $1.9 billion, up 31%, driven by a higher share of fees and overall increase in industry-wide fee levels. Equity underwriting fees were $761 million, up 55%, driven by growth in industry-wide issuance including a stronger IPO market. Advisory fees were $1.0 billion, down 4%. Treasury Services revenue was $2.0 billion, up 15%, driven by the impact of higher interest rates and growth in operating deposits. Lending revenue was $762 million, up 32%, reflecting lower fair value losses on hedges of accrual loans and higher gains on securities received from restructurings.

Markets & Investor Services revenue was $12.3 billion, flat compared with the prior year. Fixed Income Markets revenue was $7.4 billion, down 2% from the prior year, driven by lower revenue in Commodities, Rates, and Credit, partially offset by higher revenue in Securitized Products. The lower revenue in Commodities, Rates, and Credit reflected reduced flows driven by low volatility in the second quarter, while higher revenue in Securitized Products was driven by strong demand in the first quarter. Equity Markets revenue was $3.2 billion, up 1%, driven by higher revenue in corporate derivatives and Prime Services offset by lower revenue from other derivatives related to market-making activities. Securities Services revenue was $1.9 billion, up 6%, driven by the impact of higher interest rates and higher asset-based fees driven by global markets. Credit Adjustments & Other was a loss of $240 million, largely driven by valuation adjustments.

The provision for credit losses was a benefit of $149 million compared with an expense of $694 million in the prior year. The prior year primarily reflected increases in the allowance for credit losses in the Oil & Gas and Metals & Mining portfolios.

Noninterest expense was $10.0 billion, up 1%.

Selected metrics

	As of or for the three months ended June 30,			As of or for the six months ended June 30,		
(in millions, except headcount)	2017	2016	Change	2017	2016	Change
Selected balance sheet data (period-end)						
Assets	$847,377	$826,019	3 %	$847,377	$826,019	3 %
Loans:						
Loans retained[(a)]	108,935	112,637	(3)	108,935	112,637	(3)
Loans held-for-sale and loans at fair value	7,168	5,600	28	7,168	5,600	28
Total loans	116,103	118,237	(2)	116,103	118,237	(2)
Core loans	115,764	117,821	(2)	115,764	117,821	(2)
Equity	70,000	64,000	9	70,000	64,000	9
Selected balance sheet data (average)						
Assets	$864,686	$815,886	6	$851,425	$806,717	6
Trading assets-debt and equity instruments	351,678	306,418	15	340,073	295,770	15
Trading assets-derivative receivables	54,937	61,457	(11)	56,931	62,007	(8)
Loans:						
Loans retained[(a)]	110,011	111,668	(1)	109,204	110,190	(1)
Loans held-for-sale and loans at fair value	5,789	3,169	83	5,550	3,187	74
Total loans	115,800	114,837	1	114,754	113,377	1
Core loans	115,434	114,421	1	114,375	112,919	1
Equity	70,000	64,000	9	70,000	64,000	9
Headcount	49,228	48,805	1%	49,228	48,805	1%

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

Selected metrics

	As of or for the three months ended June 30,			As of or for the six months ended June 30,		
(in millions, except ratios)	2017	2016	Change	2017	2016	Change
Credit data and quality statistics						
Net charge-offs/(recoveries)	$47	$90	(48)%	$29	$136	(79)%
Nonperforming assets:						
Nonaccrual loans:						
Nonaccrual loans retained[(a)]	462	623	(26)%	462	623	(26)
Nonaccrual loans held-for-sale and loans at fair value	31	7	343	31	7	343
Total nonaccrual loans	493	630	(22)	493	630	(22)
Derivative receivables	170	220	(23)	170	220	(23)
Assets acquired in loan satisfactions	71	75	(5)	71	75	(5)
Total nonperforming assets	734	925	(21)	734	925	(21)
Allowance for credit losses:						
Allowance for loan losses	1,298	1,669	(22)	1,298	1,669	(22)
Allowance for lending-related commitments	745	715	4	745	715	4
Total allowance for credit losses	2,043	2,384	(14)%	2,043	2,384	(14)%
Net charge-off/(recovery) rate[(b)]	0.17%	0.32%		0.05%	0.25 %	
Allowance for loan losses to period-end loans retained	1.19	1.48		1.19	1.48	
Allowance for loan losses to period-end loans retained, excluding trade finance and conduits[(c)]	1.83	2.23		1.83	2.23	
Allowance for loan losses to nonaccrual loans retained[(a)]	281	268		281	268	
Nonaccrual loans to total period-end loans	0.42%	0.53%		0.42%	0.53 %	

(a) Allowance for loan losses of $164 million and $211 million were held against these nonaccrual loans at June 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 June 30,			Six months ended June 30,		
(in millions)	2017	2016	Change	2017	2016	Change
Advisory	$503	$466	8%	$1,004	$1,051	(4)%
Equity underwriting	367	285	29	761	490	55
Debt underwriting[(a)]	933	885	5	1,850	1,416	31
Total investment banking fees	$1,803	$1,636	10%	$3,615	$2,957	22%

(a) Includes loans syndication.

League table results – wallet share

	Six months ended June 30, 2017		Full-year 2016	
	Rank	Share	Rank	Share
Based on fees[(a)]				
Debt, equity and equity-related				
Global	#1	7.6%	#1	7.1%
U.S.	1	11.1	1	11.9
Long-term debt[(b)]				
Global	1	7.7	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	11.6	1	13.4
M&A[(d)]				
Global	2	8.6	2	8.4
U.S.	2	9.1	2	9.9
Loan syndications				
Global	1	9.6	1	9.3
U.S.	1	12.0	2	11.8
Global investment banking fees[(e)]	#1	8.3%	#1	8.0%

(a) Source: Dealogic as of July 2, 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 June 30, 2017			Three months ended June 30, 2016		
(in millions)	Fixed Income Markets	Equity Markets	Total Markets	Fixed Income Markets	Equity Markets	Total Markets
Principal transactions	$1,851	$1,109	$ 2,960	$2,092	$ 938	$ 3,030
Lending- and deposit-related fees	48	1	49	60	1	61
Asset management, administration and commissions	103	410	513	101	370	471
All other income	207	(2)	205	397	21	418
Noninterest revenue	2,209	1,518	3,727	2,650	1,330	3,980
Net interest income	1,007	68	1,075	1,309	270	1,579
Total net revenue	$3,216	$1,586	$ 4,802	$3,959	$ 1,600	$ 5,559

	Six months ended June 30, 2017			Six months ended June 30, 2016		
(in millions)	Fixed Income Markets	Equity Markets	Total Markets	Fixed Income Markets	Equity Markets	Total Markets
Principal transactions	4,552	$2,118	$6,670	$4,077	$ 1,808	$5,885
Lending- and deposit-related fees	97	2	99	109	1	110
Asset management, administration and commissions	207	833	1,040	204	813	1,017
All other income	384	(9)	375	621	21	642
Noninterest revenue	5,240	2,944	8,184	5,011	2,643	7,654
Net interest income	2,191	248	2,439	2,545	533	3,078
Total net revenue	$7,431	$3,192	$10,623	$7,556	$ 3,176	$10,732

Selected metrics

(in millions, except where otherwise noted)	As of or for the three months ended June 30, 2017	2016	Change	As of or for the six months ended June 30, 2017	2016	Change
Assets under custody ("AUC") by asset class (period-end) (in billions):						
Fixed Income	$12,662	$12,539	1%	$12,662	$12,539	1%
Equity	7,214	6,138	18	7,214	6,138	18
Other[(a)]	2,258	1,793	26	2,258	1,793	26
Total AUC	$22,134	$20,470	8	$22,134	$20,470	8
Client deposits and other third party liabilities (average)[(b)]	$404,920	$373,671	8	$398,354	$366,299	9
Trade finance loans (period-end)	17,356	17,362	—	17,356	17,362	—

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

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

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International metrics

(in millions, except where otherwise noted)	As of or for the three months ended June 30, 2017	2016	Change	As of or for the six months ended June 30, 2017	2016	Change
Total net revenue[(a)]						
Europe/Middle East/Africa	$3,034	$2,823	7 %	$6,223	$5,280	18 %
Asia/Pacific	1,034	1,210	(15)	2,273	2,512	(10)
Latin America/Caribbean	244	403	(39)	585	724	(19)
Total international net revenue	4,312	4,436	(3)	9,081	8,516	7
North America	4,577	4,729	(3)	9,344	8,784	6
Total net revenue	$8,889	$9,165	(3)	$18,425	$17,300	7
Loans retained (period-end)[(a)]						
Europe/Middle East/Africa	$26,690	$29,770	(10)	$26,690	$29,770	(10)
Asia/Pacific	14,709	15,198	(3)	14,709	15,198	(3)
Latin America/Caribbean	6,196	9,048	(32)	6,196	9,048	(32)
Total international loans	47,595	54,016	(12)	47,595	54,016	(12)
North America	61,340	58,621	5	61,340	58,621	5
Total loans retained	$108,935	$112,637	(3)	$108,935	$112,637	(3)
Client deposits and other third-party liabilities (average)[(a)(b)]						
Europe/Middle East/Africa	$156,575	$135,213	16	$150,436	$131,655	14
Asia/Pacific	73,327	68,423	7	73,544	65,569	12
Latin America/Caribbean	25,806	22,334	16	24,934	22,431	11
Total international	$255,708	$225,970	13	$248,914	$219,655	13
North America	149,212	147,701	1	149,440	146,644	2
Total client deposits and other third-party liabilities	$404,920	$373,671	8	$398,354	$366,299	9
AUC (period-end)[(a)] (in billions)						
North America	$13,207	$12,310	7	$13,207	$12,310	7
All other regions	8,927	8,160	9	8,927	8,160	9
Total AUC	$22,134	$20,470	8%	$22,134	$20,470	8%

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

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

COMMERCIAL BANKING

For a discussion of the business profile of CB, see pages 63–65 of JPMorgan Chase's 2016 Annual Report and Line of Business Metrics on page 174.

Selected income statement data

(in millions)	Three months ended June 30, 2017	2016	Change	Six months ended June 30, 2017	2016	Change
Revenue						
Lending- and deposit-related fees	$232	$227	2 %	$467	$459	2 %
Asset management, administration and commissions	16	18	(11)	34	40	(15)
All other income[(a)]	335	341	(2)	681	643	6
Noninterest revenue	583	586	(1)	1,182	1,142	4
Net interest income	1,505	1,231	22	2,924	2,478	18
Total net revenue[(b)]	2,088	1,817	15	4,106	3,620	13
Provision for credit losses	(130)	(25)	(420)	(167)	279	NM
Noninterest expense						
Compensation expense	365	322	13	736	656	12
Noncompensation expense	425	409	4	879	788	12
Total noninterest expense	790	731	8	1,615	1,444	12
Income before income tax expense	1,428	1,111	29	2,658	1,897	40
Income tax expense	526	415	27	957	705	36
Net income	$902	$696	30%	$1,701	$1,192	43%

(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 $131 million and $124 million for the three months ended June 30, 2017 and 2016, respectively, and $252 million and $244 million for the six months ended June 30, 2017 and 2016, respectively.

Quarterly results

Net income was $902 million, an increase of 30%, driven by higher net revenue and a lower provision for credit losses, partially offset by higher noninterest expense.

Net revenue was $2.1 billion, an increase of 15%. Net interest income was $1.5 billion, an increase of 22%, predominantly driven by higher deposit spreads and loan growth. Noninterest revenue was $583 million, relatively flat versus the previous year.

Noninterest expense was $790 million, an increase of 8%, predominantly driven by hiring of bankers and business-related support staff, and investments in technology.

The provision for credit losses was a benefit of $130 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 a benefit of $25 million.

Year-to-date results

Net income was $1.7 billion, an increase of 43%, driven by higher net revenue and a lower provision for credit losses, partially offset by higher noninterest expense.

Net revenue was $4.1 billion, up 13%. Net interest income was $2.9 billion, up 18%, predominantly driven by higher deposit spreads and loan growth. Noninterest revenue was $1.2 billion, up 4%, driven by higher investment banking

revenue from loan syndications and equity underwriting.
Noninterest expense was $1.6 billion, up 12%, largely driven by hiring of bankers and business-related support staff, and investments in technology.
The provision for credit losses was a benefit of $167 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 $279 million, reflecting downgrades in the Oil & Gas and Natural Gas Pipeline portfolios.

Selected income statement data (continued)

	Three months ended June 30,			Six months ended June 30,		
(in millions, except ratios)	2017	2016	Change	2017	2016	Change
Revenue by product						
Lending	$1,023	$917	12 %	$2,015	$1,845	9 %
Treasury services	854	680	26	1,650	1,374	20
Investment banking[a]	189	207	(9)	405	362	12
Other	22	13	69	36	39	(8)
Total Commercial Banking net revenue	$2,088	$1,817	15	$4,106	$3,620	13
Investment banking revenue, gross[b]	$524	$595	(12)	$1,170	$1,078	9
Revenue by client segment						
Middle Market Banking[c]	$839	$689	22	$1,623	$1,389	17
Corporate Client Banking[c]	662	608	9	1,328	1,162	14
Commercial Term Lending	364	342	6	731	703	4
Real Estate Banking	147	107	37	281	211	33
Other	76	71	7	143	155	(8)
Total Commercial Banking net revenue	$2,088	$1,817	15 %	$4,106	$3,620	13 %
Financial ratios						
Return on equity	17%	16 %		16%	14 %	
Overhead ratio	38	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 effective in the second quarter of 2017. Prior period results were revised to conform with the current period presentation.

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Selected metrics

(in millions, except headcount)	As of or for the three months ended June 30, 2017	2016	Change	As of or for the six months ended June 30, 2017	2016	Change
Selected balance sheet data (period-end)						
Total assets	$220,676	$208,151	6 %	$220,676	$208,151	6 %
Loans:						
Loans retained	197,912	179,164	10	197,912	179,164	10
Loans held-for-sale and loans at fair value	1,661	134	NM	1,661	134	NM
Total loans	$199,573	$179,298	11	$199,573	$179,298	11
Core loans	199,319	178,809	11	199,319	178,809	11
Equity	20,000	16,000	25	20,000	16,000	25
Period-end loans by client segment						
Middle Market Banking[(a)]	$56,377	$51,949	9	$56,377	$51,949	9
Corporate Client Banking[(a)]	45,918	42,374	8	45,918	42,374	8
Commercial Term Lending	73,760	66,499	11	73,760	66,499	11
Real Estate Banking	16,726	12,872	30	16,726	12,872	30
Other	6,792	5,604	21	6,792	5,604	21
Total Commercial Banking loans	$199,573	$179,298	11	$199,573	$179,298	11
Selected balance sheet data (average)						
Total assets	$217,694	$205,953	6	$215,750	$204,222	6
Loans:						
Loans retained	196,454	176,229	11	193,630	173,033	12
Loans held-for-sale and loans at fair value	1,402	583	140	1,061	516	106
Total loans	$197,856	$176,812	12	$194,691	$173,549	12
Core loans	197,567	176,251	12	194,391	172,939	12
Average loans by client segment						
Middle Market Banking[(a)]	$55,651	$51,937	7	$54,963	$51,246	7
Corporate Client Banking[(a)]	46,483	41,111	13	45,041	40,231	12
Commercial Term Lending	73,081	65,262	12	72,484	64,369	13
Real Estate Banking	16,139	12,936	25	15,834	12,200	30
Other	6,502	5,566	17	6,369	5,503	16
Total Commercial Banking loans	$197,856	$176,812	12	$194,691	$173,549	12
Client deposits and other third-party liabilities	173,214	170,717	1	174,987	171,898	2
Equity	20,000	16,000	25	20,000	16,000	25
Headcount	8,823	8,127	9 %	8,823	8,127	9 %

(a) Certain clients were transferred from Middle Market Banking to Corporate Client Banking effective in the second quarter of 2017. Prior period results were revised to conform with the current period presentation.

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Selected metrics (continued)

(in millions, except ratios)	As of or for the three months ended June 30, 2017	2016	Change	As of or for the six months ended June 30, 2017	2016	Change
Credit data and quality statistics						
Net charge-offs/(recoveries)	$8	$60	(87)%	$(2)	$66	NM
Nonperforming assets						
Nonaccrual loans:						
Nonaccrual loans retained[(a)]	819	1,258	(35)%	819	1,258	(35)
Nonaccrual loans held-for-sale and loans at fair value	—	—	—	—	—	—
Total nonaccrual loans	819	1,258	(35)	819	1,258	(35)
Assets acquired in loan satisfactions	4	1	300	4	1	300
Total nonperforming assets	823	1,259	(35)	823	1,259	(35)
Allowance for credit losses:						
Allowance for loan losses	2,678	3,041	(12)	2,678	3,041	(12)
Allowance for lending-related commitments	331	226	46	331	226	46
Total allowance for credit losses	3,009	3,267	(8)%	3,009	3,267	(8)%
Net charge-off/(recovery) rate[(b)]	0.02%	0.14%		—	0.08%	
Allowance for loan losses to period-end loans retained	1.35	1.70		1.35	1.70	
Allowance for loan losses to nonaccrual loans retained[(a)]	327	242		327	242	
Nonaccrual loans to period-end total loans	0.41	0.70		0.41	0.70	

(a) Allowance for loan losses of $112 million and $292 million was held against nonaccrual loans retained at June 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.

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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 June 30,			Six months ended June 30,		
	2017	2016	Change	2017	2016	Change
Revenue						
Asset management, administration and commissions	$2,211	$2,102	5 %	$4,316	$4,118	5 %
All other income	155	90	72	318	319	—
Noninterest revenue	2,366	2,192	8	4,634	4,437	4
Net interest income	846	747	13	1,665	1,474	13
Total net revenue	3,212	2,939	9	6,299	5,911	7
Provision for credit losses	4	(8)	NM	22	5	340
Noninterest expense						
Compensation expense	1,278	1,249	2	2,609	2,490	5
Noncompensation expense	914	849	8	2,163	1,683	29
Total noninterest expense	2,192	2,098	4	4,772	4,173	14
Income before income tax expense	1,016	849	20	1,505	1,733	(13)
Income tax expense	392	328	20	496	625	(21)
Net income	$624	$521	20	$1,009	$1,108	(9)
Revenue by line of business						
Asset Management	$1,561	$1,424	10	$3,048	$2,923	4
Wealth Management	1,651	1,515	9	3,251	2,988	9
Total net revenue	$3,212	$2,939	9%	$6,299	$5,911	7 %
Financial ratios						
Return on equity	27 %	22 %		22 %	24 %	
Overhead ratio	68	71		76	71	
Pre-tax margin ratio:						
Asset Management	31	30		16	31	
Wealth Management	33	28		31	27	
Asset & Wealth Management	32	29		24	29	

Quarterly results

Net income was $624 million, an increase of 20%, reflecting higher net revenue partially offset by higher noninterest expense.

Net revenue was $3.2 billion, an increase of 9%. Net interest income was $846 million, up 13%, driven predominantly by higher deposit spreads. Noninterest revenue was $2.4 billion, up 8%, predominantly reflecting higher market levels.

Noninterest expense was $2.2 billion, an increase of 4%, largely driven by a combination of higher external fees and compensation expense on higher revenue.

Year-to-date results

Net income was $1.0 billion, a decrease of 9%, reflecting higher noninterest expense, largely offset by higher revenue.

Net revenue was $6.3 billion, an increase of 7%. Net interest income was $1.7 billion, up 13%, driven by higher deposit spreads. Noninterest revenue was $4.6 billion, up 4%, driven by higher market levels and brokerage revenue, partially offset by a reduction in revenue related to the disposal of assets at the beginning of 2016.

Noninterest expense was $4.8 billion, an increase of 14%, 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 June 30, 2017	2016	Change	As of or for the six months ended June 30, 2017	2016	Change
% of JPM mutual fund assets rated as 4- or 5-star[(a)(c)]	65 %	51 %		65 %	51 %	
% of JPM mutual fund assets ranked in 1st or 2nd quartile:[(b)]						
1 year	60	54		60	54	
3 years[(c)]	83	74		83	74	
5 years[(c)]	77	79		77	79	
Selected balance sheet data (period-end)						
Total assets	$147,508	$134,380	10 %	$147,508	$134,380	10 %
Loans	124,517	113,319	10	124,517	113,319	10
Core loans	124,517	113,319	10	124,517	113,319	10
Deposits	146,758	148,967	(1)	146,758	148,967	(1)
Equity	9,000	9,000	—	9,000	9,000	—
Selected balance sheet data (average)						
Total assets	$142,966	$131,529	9	$140,585	$130,659	8
Loans	122,173	111,704	9	120,252	111,101	8
Core loans	122,173	111,704	9	120,252	111,101	8
Deposits	150,786	151,214	—	154,776	150,915	3
Equity	9,000	9,000	—	9,000	9,000	—
Headcount	22,289	20,897	7	22,289	20,897	7
Number of client advisors	2,452	2,622	(6)	2,452	2,622	(6)
Credit data and quality statistics						
Net charge-offs	$2	$2	—	$5	$11	(55)
Nonaccrual loans	400	254	57	400	254	57
Allowance for credit losses:						
Allowance for loan losses	285	258	10	285	258	10
Allowance for lending-related commitments	10	4	150	10	4	150
Total allowance for credit losses	295	262	13 %	295	262	13 %
Net charge-off rate	0.01 %	0.01 %		0.01 %	0.02 %	
Allowance for loan losses to period-end loans	0.23	0.23		0.23	0.23	
Allowance for loan losses to nonaccrual loans	71	102		71	102	
Nonaccrual loans to period-end loans	0.32	0.22		0.32	0.22	

(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) 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.

(c) Prior period amounts were revised to conform with current period presentation.

Client assets

Client assets of $2.6 trillion and assets under management of $1.9 trillion were both up 11%, reflecting higher market levels, and net inflows into liquidity and long-term products.

Client assets

	June 30,		
(in billions)	2017	2016	Change
Assets by asset class			
Liquidity	$434	$385	13 %
Fixed income	440	424	4
Equity	390	342	14
Multi-asset and alternatives	612	542	13
Total assets under management	1,876	1,693	11
Custody/brokerage/administration/deposits	722	651	11
Total client assets	$2,598	$2,344	11
Memo:			
Alternatives client assets [(a)]	$159	$151	5
Assets by client segment			
Private Banking	$488	$425	15
Institutional	889	811	10
Retail	499	457	9
Total assets under management	$1,876	$1,693	11
Private Banking	$1,188	$1,058	12
Institutional	909	827	10
Retail	501	459	9
Total client assets	$2,598	$2,344	11%

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

Client assets (continued)

	Three months ended June 30,		Six months ended June 30,	
(in billions)	2017	2016	2017	2016
Assets under management rollforward				
Beginning balance	$1,841	$1,676	$1,771	$1,723
Net asset flows:				
Liquidity	(7)	1	(6)	(29)
Fixed income	2	13	7	27
Equity	(3)	(5)	(7)	(10)
Multi-asset and alternatives	10	(2)	17	4
Market/performance/other impacts	33	10	94	(22)
Ending balance, June 30	$1,876	$1,693	$1,876	$1,693
Client assets rollforward				
Beginning balance	$2,548	$2,323	$2,453	$2,350
Net asset flows	2	2	12	(5)
Market/performance/other impacts	48	19	133	(1)
Ending balance, June 30	$2,598	$2,344	$2,598	$2,344

International metrics

(in millions)	As of or for the three months ended June 30, 2017	2016	Change	As of or for the six months ended June 30, 2017	2016	Change
Total net revenue [(a)]						
Europe/Middle East/Africa	$494	$463	7%	$956	$894	7 %
Asia/Pacific	286	267	7	556	522	7
Latin America/Caribbean	222	186	19	401	358	12
Total international net revenue	1,002	916	9	1,913	1,774	8
North America	2,210	2,023	9	4,386	4,137	6
Total net revenue	$3,212	$2,939	9 %	$6,299	$5,911	7 %

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

(in billions)	As of or for the three months ended June 30, 2017	2016	Change	As of or for the six months ended June 30, 2017	2016	Change
Assets under management						
Europe/Middle East/Africa	$335	$293	14 %	$335	$293	14 %
Asia/Pacific	136	124	10	136	124	10
Latin America/Caribbean	57	46	24	57	46	24
Total international assets under management	528	463	14	528	463	14
North America	1,348	1,230	10	1,348	1,230	10
Total assets under management	$1,876	$1,693	11	$1,876	$1,693	11
Client assets						
Europe/Middle East/Africa	$387	$342	13	$387	$342	13
Asia/Pacific	196	176	11	196	176	11
Latin America/Caribbean	152	115	32	152	115	32
Total international client assets	735	633	16	735	633	16
North America	1,863	1,711	9	1,863	1,711	9
Total client assets	$2,598	$2,344	11 %	$2,598	$2,344	11 %

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 June 30,			As of or for the six months ended June 30,		
(in millions, except headcount)	2017	2016	Change	2017	2016	Change
Revenue						
Principal transactions	$148	$29	410 %	$163	$126	29 %
Securities gains/(losses)	(34)	20	NM	(37)	71	NM
All other income/(loss)[(a)]	667	122	447	728	243	200
Noninterest revenue	781	171	357	854	440	94
Net interest income	23	(329)	NM	(75)	(542)	86
Total net revenue[(b)]	804	(158)	NM	779	(102)	NM
Provision for credit losses	—	(1)	100	—	(3)	100
Noninterest expense[(c)]	183	(273)	NM	281	(120)	NM
Income/(loss) before income tax expense/(benefit)	621	116	435	498	21	NM
Income tax expense/(benefit)	51	282	(82)	(107)	219	NM
Net income/(loss)	$570	$(166)	NM	$605	$(198)	NM
Total net revenue						
Treasury and CIO	86	(226)	NM	79	(320)	NM
Other Corporate	718	68	NM	700	218	221
Total net revenue	$804	$(158)	NM	$779	$(102)	NM
Net income/(loss)						
Treasury and CIO	(14)	(199)	93	(81)	(310)	74
Other Corporate	584	33	NM	686	112	NM
Total net income/(loss)	$570	$(166)	NM	$605	$(198)	NM
Total assets (period-end)	$817,754	$778,359	5	$817,754	$778,359	5
Loans (period-end)	1,696	1,862	(9)	1,696	1,862	(9)
Core loans[(d)]	1,696	1,857	(9)	1,696	1,857	(9)
Headcount	33,464	30,402	10	33,464	30,402	10

(a) Included revenue related to a legal settlement of $645 million for both the three and six months ended June 30, 2017.

(b) Included tax-equivalent adjustments, predominantly due to tax-exempt income from municipal bond investments of $237 million and $227 million for the three months ended June 30, 2017 and 2016, respectively, and $465 million and $445 million for the six months ended June 30, 2017 and 2016, respectively.

(c) Included legal expense/(benefit) of $16 million and $(467) million for the three months ended June 30, 2017 and 2016, respectively, and $(212) million and $(465) million for the six months ended June 30, 2017 and 2016, respectively.

(d) Average core loans were $1.6 billion and $2.0 billion for the three months ended June 30, 2017 and 2016, respectively, and $1.6 billion and $2.0 billion for the six months ended June 30, 2017 and 2016, respectively.

Quarterly results

Net income was $570 million, compared with a net loss of $166 million in the prior-year quarter. Net revenue was a gain of $804 million, compared with a loss of $158 million in the prior-year quarter. Current quarter 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 $183 million, up $456 million from the prior year quarter, which included a net legal benefit.

Year-to-date results
Net income was $605 million, compared with a net loss of $198 million in the prior year. Net revenue was a gain of $779 million, compared with a loss of $102 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 $281 million, up $401 million from prior year, driven by lower legal benefit and higher compensation expense.

Treasury and CIO overview
At June 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 67–71. For information on interest rate, foreign exchange and other risks, see Market Risk Management on pages 72–76.

Selected income statement and balance sheet data

	As of or for the three months ended June 30,			As of or for the six months ended June 30,		
(in millions)	2017	2016	Change	2017	2016	Change
Securities gains/(losses)	$(34)	$ 20	NM	$(49)	$ 71	NM
AFS investment securities (average)	225,053	225,536	—	229,920	230,321	—
HTM investment securities (average)	48,232	53,426	(10)	48,794	50,882	(4)
Investment securities portfolio (average)	273,285	278,962	(2)	278,714	281,203	(1)
AFS investment securities (period-end)	213,291	221,751	(4)	213,291	221,751	(4)
HTM investment securities (period-end)	47,761	53,811	(11)	47,761	53,811	(11)
Investment securities portfolio (period-end)	261,052	275,562	(5)%	261,052	275,562	(5)

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	41–76	71–131
I. Economic risks		
Capital Risk Management	42–48	76–85
Credit Risk Management	49–65	86–107
Country Risk Management	66	108–109
Liquidity Risk Management	67–71	110–115
Market Risk Management	72–76	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

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 both 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 June 30, 2017, and December 31, 2016. For further discussion of these capital metrics and the Standardized and Advanced approaches, refer to Strategy and Governance on pages 78–82 of JPMorgan Chase's 2016 Annual Report.

June 30, 2017 (in millions, except ratios)	Transitional Standardized	Transitional Advanced	Minimum capital ratios[d]	Fully Phased-In Standardized	Fully Phased-In Advanced	Minimum capital ratios[e]
Risk-based capital metrics:						
CET1 capital	$186,942	$186,942		$186,596	$186,596	
Tier 1 capital	212,353	212,353		212,221	212,221	
Total capital	243,061	233,345		241,742	232,026	
Risk-weighted assets	1,478,816	1,459,196		1,488,511	1,469,473	
CET1 capital ratio	12.6 %	12.8 %	7.5 %	12.5 %	12.7 %	10.5 %
Tier 1 capital ratio	14.4	14.6	9.0	14.3	14.4	12.0
Total capital ratio	16.4	16.0	11.0	16.2	15.8	14.0
Leverage-based capital metrics						
Adjusted average assets[a]	$2,512,120	$2,512,120		$2,512,679	$2,512,679	
Tier 1 leverage ratio[b]	8.5 %	8.5 %	4.0 %	8.4 %	8.4 %	4.0 %
Total leverage exposure	NA	$3,193,072		NA	$3,193,632	
SLR [c]	NA	6.7 %	NA	NA	6.6 %	5.0 % [f]

December 31, 2016 (in millions, except ratios)	Transitional Standardized	Transitional Advanced	Minimum capital ratios[d]	Fully Phased-In Standardized	Fully Phased-In Advanced	Minimum capital ratios[e]
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 % [f]

Note: As of June 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)

(d) Represents the Transitional minimum capital ratios applicable to the Firm under Basel III as of June 30, 2017, and December 31, 2016. At June 30, 2017, the CET1 minimum capital ratio includes 1.25% resulting from the phase in of the Firm's 2.5% capital conservation buffer and 1.75%, resulting from the phase in of the Firm's 3.5% GSIB surcharge. At December 31, 2016, the CET1 minimum capital ratio includes 0.625% resulting from the phase in of the Firm's 2.5% capital conservation buffer and 1.125%, resulting from the phase in of the Firm's 4.5% GSIB surcharge.

(e) Represents the minimum capital ratios applicable to the Firm on a Fully Phased-In Basel III basis. At June 30, 2017, and December 31, 2016, the ratios include the Firm's estimate of its Fully Phased-In U.S. GSIB surcharge of 3.5%. The minimum capital ratios will be fully phased-in effective January 1, 2019.

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

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 SLR. For additional information on 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. 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 Firm's estimates of its Basel III Standardized and Advanced Fully Phased-In capital, RWA and capital ratios and of 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 and on the application of such rules to the Firm's businesses as currently conducted. The actual impact on the Firm's capital ratios and SLR as of the effective date of the rules may differ from the Firm's current estimates depending on changes the Firm may make to its businesses in the future, further implementation guidance from the regulators, and regulatory approval of certain of the Firm's internal risk models (or, alternatively, regulatory disapproval of the Firm's internal risk models that have previously been conditionally approved).

Risk-based capital regulatory minimums

The capital adequacy of the Firm and its national bank 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").

At June 30, 2017, the Firm's Basel III Standardized Fully Phased-In CET1 ratio became the current binding constraint. The Firm anticipates that the Basel III Standardized Fully Phased-In CET1 ratio will remain its binding constraint.

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%. It is the Firm's intention that the Firm's capital ratios 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

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 June 30, 2017 and December 31, 2016.

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

Capital components

(in millions)	June 30, 2017	December 31, 2016
Total stockholders' equity	$258,483	$ 254,190
Less: Preferred stock	26,068	26,068
Common stockholders' equity	232,415	228,122
Less:		
Goodwill	47,300	47,288
Other intangible assets	827	862
Add:		
Deferred tax liabilities[(a)]	3,252	3,230
Less: Other CET1 capital adjustments	944	1,468
Standardized/Advanced Fully Phased-In CET1 capital	186,596	181,734
Preferred stock	26,068	26,068
Less:		
Other Tier 1 adjustments[(b)]	443	328
Standardized/Advanced Fully Phased-In Tier 1 capital	$212,221	$ 207,474
Long-term debt and other instruments qualifying as Tier 2 capital	$15,157	$ 15,253
Qualifying allowance for credit losses	14,480	14,854
Other	(116)	(94)
Standardized Fully Phased-In Tier 2 capital	$29,521	$ 30,013
Standardized Fully Phased-In Total capital	$241,742	$ 237,487
Adjustment in qualifying allowance for credit losses for Advanced Tier 2 capital	(9,716)	(10,961)
Advanced Fully Phased-In Tier 2 capital	$19,805	$ 19,052
Advanced Fully Phased-In Total capital	$232,026	$ 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 June 30, 2017 and December 31, 2016.

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

(in millions)	June 30, 2017	December 31, 2016
Transitional CET1 capital	$186,942	$182,967
AOCI phase-in[(a)]	70	(156)
CET1 capital deduction phase-in[(b)]	(264)	(695)
Intangibles deduction phase-in[(c)]	(151)	(312)
Other adjustments to CET1 capital[(d)]	(1)	(70)
Fully Phased-In CET1 capital	$186,596	$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 six months ended June 30, 2017.

Six months ended June 30, (in millions)	2017
Standardized/Advanced CET1 capital at December 31, 2016	$181,734
Net income applicable to common equity	12,654
Dividends declared on common stock	(3,606)
Net purchase of treasury stock	(4,515)
Changes in additional paid-in capital	(1,023)
Changes related to AOCI	682
Adjustment related to DVA[a]	140
Other	530
Increase in Standardized/Advanced CET1 capital	4,862
Standardized/Advanced CET1 capital at June 30, 2017	$186,596
Standardized/Advanced Tier 1 capital at December 31, 2016	$207,474
Change in CET1 capital	4,862
Net issuance of noncumulative perpetual preferred stock	—
Other	(115)
Increase in Standardized/Advanced Tier 1 capital	4,747
Standardized/Advanced Tier 1 capital at June 30, 2017	$212,221
Standardized Tier 2 capital at December 31, 2016	$30,013
Change in long-term debt and other instruments qualifying as Tier 2	(97)
Change in qualifying allowance for credit losses	(374)
Other	(21)
Decrease in Standardized Tier 2 capital	(492)
Standardized Tier 2 capital at June 30, 2017	$29,521
Standardized Total capital at June 30, 2017	$241,742
Advanced Tier 2 capital at December 31, 2016	$19,052
Change in long-term debt and other instruments qualifying as Tier 2	(97)
Change in qualifying allowance for credit losses	871
Other	(21)
Decrease in Advanced Tier 2 capital	753
Advanced Tier 2 capital at June 30, 2017	$19,805
Advanced Total capital at June 30, 2017	$232,026

(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 six months ended June 30, 2017. The amounts in the rollforward categories are estimates, based on the predominant driver of the change.

	Standardized			Advanced			
Six months ended June 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)]	(3,900)	5,039	1,139	(3,120)	5,039	—	1,919
Portfolio runoff[(b)]	(8,700)	—	(8,700)	(10,400)	—	—	(10,400)
Movement in portfolio levels[(c)]	17,180	4,227	21,407	(13,515)	4,289	—	(9,226)
Changes in RWA	4,580	9,266	13,846	(27,035)	9,328	—	(17,707)
June 30, 2017	$1,351,566	$136,945	$1,488,511	$932,488	$136,985	$400,000	$1,469,473

(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 and the sale of substantially all of the student loan portfolio during the second 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 June 30, 2017 and December 31, 2016.

(in millions, except ratio)	June 30, 2017	December 31, 2016
Tier 1 Capital	$212,221	$207,474
Total average assets	2,559,236	2,532,457
Less: Adjustments for deductions from Tier 1 capital	46,557	46,977
Total adjusted average assets[(a)]	2,512,679	2,485,480
Off-balance sheet exposures[(b)]	680,953	707,359
Total leverage exposure	$3,193,632	$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 June 30, 2017, the Firm estimates that JPMorgan Chase Bank, N.A.'s and Chase Bank USA, N.A.'s Fully Phased-In SLRs are approximately 6.7% and 10.9%, 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

	June 30,	December 31,
(in billions)	2017	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	82.4	88.1
Total common stockholders' equity	$ 232.4	$ 228.1

The amount of capital assigned to each business is referred to as equity. On at least an annual basis, the Firm assesses the level of capital required for each line of business as well as the assumptions and methodologies used to allocate capital. Through the end of 2016, capital was allocated to the lines of business based on a single measure, Basel III Advanced Fully Phased-In RWA. 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 $411 million and $823 million for the three and six months ended June 30, 2017.

For additional information on the Firm's preferred stock, see Note 22 of JPMorgan Chase's 2016 Annual Report.

Common stock dividends

On May 16, 2017, the Firm announced that its Board of Directors had declared a quarterly common stock dividend of $0.50 per share, effective with the dividend paid on July 31, 2017. On June 28, 2017, the Firm announced that its Board of Directors intends to increase the quarterly common stock dividend to $0.56 per share, effective the third quarter of 2017. The Firm's dividends are subject to the Board of Directors' approval at the customary times those dividends are to be declared.

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.

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

	Three months ended June 30,		Six months ended June 30,	
(in millions)	2017	2016	2017	2016
Total shares of common stock repurchased	35.0	45.8	67.1	75.0
Aggregate common stock repurchases	$3,007	$2,840	$5,839	$4,536

There were 19.3 million warrants outstanding at June 30, 2017 compared with 24.9 million outstanding at December 31, 2016.

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

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

For additional information regarding repurchases of the Firm's equity securities, see Part II, Item 5: Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities on page 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, among other things, to maintain minimum levels of external TLAC and external long-term debt that satisfies certain eligibility criteria ("eligible LTD") by January 1, 2019. The minimum external TLAC requirement is the greater of (A) 18% of the financial institution's RWA plus applicable buffers, including its GSIB surcharge as calculated under Method 1 and (B) 7.5% of its total leverage exposure plus a buffer equal to 2.0%. The required minimum level of eligible long-term debt is equal to the greater of (A) 6% of the financial institution's RWA, plus its U.S. Method 2 GSIB surcharge and (B) 4.5% of the Firm's total leverage exposure. The final rule permanently grandfathered all long-term debt issued before December 31, 2016, to the extent these securities would be ineligible only due to containing impermissible acceleration rights or being governed by foreign law. While the Firm may have to raise long-term debt to be in full compliance with the rule, management estimates that the remaining net amount to be raised is not material and the timing for raising such funds is manageable.

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 June 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:

June 30, 2017	Net Capital	
(in billions)	Actual	Minimum
JPMorgan Chase's subsidiary:		
JPMorgan Securities	$13.9	$ 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:

June 30, 2017	Total capital	CET1 ratio		Total capital ratio	
(in billions, except ratios)	Estimated	Estimated	Minimum	Estimated	Minimum
JPMorgan Chase, N.A.'s subsidiary:					
J.P. Morgan Securities plc	$ 37.2	13.6%	4.5%	16.8%	8.0%

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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 (which are carried at the lower of cost or fair value, with valuation changes recorded in the provision for credit losses and/or noninterest revenue); 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

(in millions)	Credit exposure Jun 30, 2017	Credit exposure Dec 31, 2016	Nonperforming[b][c] Jun 30, 2017	Nonperforming[b][c] Dec 31, 2016
Loans retained	$899,576	$889,907	$ 5,827	$ 6,721
Loans held-for-sale	7,212	2,628	64	162
Loans at fair value	1,979	2,230	—	—
Total loans	908,767	894,765	5,891	6,883
Derivative receivables	56,506	64,078	170	223
Receivables from customers and other	19,531	17,560	—	—
Total credit-related assets	984,804	976,403	6,061	7,106
Assets acquired in loan satisfactions				
Real estate owned	NA	NA	322	370
Other	NA	NA	49	59
Total assets acquired in loan satisfactions	NA	NA	371	429
Total assets	984,804	976,403	6,432	7,535
Lending-related commitments	1,000,924	976,702	750	506
Total credit portfolio	$1,985,728	$1,953,105	$ 7,182	$ 8,041
Credit derivatives used in credit portfolio management activities[a]	$(21,723)	$(22,114)	$ —	$ —
Liquid securities and other cash collateral held against derivatives	(18,552)	(22,705)	NA	NA

(in millions, except ratios)	Three months ended June 30, 2017	Three months ended June 30, 2016	Six months ended June 30, 2017	Six months ended June 30, 2016
Net charge-offs[d]	$1,204	$1,181	$2,858	$2,291
Average retained loans				
Loans	892,840	855,622	889,229	846,036
Loans – excluding residential real estate PCI loans	859,102	816,572	854,842	806,314
Net charge-off rates[d]				
Loans	0.54 %	0.56 %	0.65 %	0.54 %

Loans – excluding PCI	0.56	0.58	0.67	0.57

(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 62 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 June 30, 2017, and December 31, 2016, nonperforming assets excluded: (1) mortgage loans insured by U.S. government agencies of $4.1 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 $24 million 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 $105 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 six months ended June 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 0.54% and for Loans – excluding PCI would have been 0.56%. For additional information refer to CCB segment results on page 21.

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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

(in millions, except ratios)	Credit exposure		Nonaccrual loans[k][l]		Three months ended June 30, Net charge-offs/(recoveries)[m]		Three months ended June 30, Average annual net charge-off/(recovery) rate[m][n]		Six months ended June 30, Net charge-offs[e][m]		Six months ended June 30, Average annual net charge-off rate[e][m][n]	
	Jun 30, 2017	Dec 31, 2016	Jun 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	$36,000	$39,063	$1,645	$1,845	$9	$36	0.10 %	0.34 %	$58	$95	0.31 %	0.43 %
Residential mortgage[a]	205,380	192,486	2,089	2,256	(3)	3	(0.01)	0.01	—	4	—	—
Auto[b][c]	65,627	65,814	158	214	48	46	0.29	0.29	129	113	0.40	0.36
Consumer & Business Banking[a][c][d]	25,044	24,307	301	287	56	53	0.91	0.92	113	109	0.93	0.95
Student[a][e]	—	7,057	—	165	—	29	—	1.50	498	66	NM	1.68
Total loans, excluding PCI loans and loans held-for-sale	332,051	328,727	4,193	4,767	110	167	0.13	0.21	798	387	0.49	0.25
Loans – PCI												
Home equity	11,838	12,902	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Prime mortgage	7,023	7,602	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Subprime mortgage	2,771	2,941	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Option ARMs[f]	11,432	12,234	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total loans – PCI	33,064	35,679	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total loans – retained	365,115	364,406	4,193	4,767	110	167	0.12	0.19	798	387	0.44	0.22
Loans held-for-sale	256 [j]	238 [j]	33	53	—	—	—	—	—	—	—	—

Total consumer, excluding credit card loans	365,371	364,644	4,226	4,820	110	167	0.12	0.19	798	387	0.44	0.22
Lending-related commitments[g]	58,162	54,797										
Receivables from customers[h]	136	120										
Total consumer exposure, excluding credit card	423,669	419,561										
Credit card												
Loans retained[i]	140,035	141,711	—	—	1,037	860	3.01	2.70	2,030	1,690	2.98	2.66
Loans held-for-sale	106	105	—	—	—	—	—	—	—	—	—	—
Total credit card loans	140,141	141,816	—	—	1,037	860	3.01	2.70	2,030	1,690	2.98	2.66
Lending-related commitments[g]	576,264	553,891										
Total credit card exposure	716,405	695,707										
Total consumer credit portfolio	$1,140,074	$1,115,268	$4,226	$4,820	$1,147	$1,027	0.92 %	0.85 %	$2,828	$2,077	1.14 %	0.87 %
Memo: Total consumer credit portfolio, excluding PCI	$1,107,010	$1,079,589	$4,226	$4,820	$1,147	$1,027	0.99 %	0.92 %	$2,828	$2,077	1.22 %	0.95 %

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

(b) At June 30, 2017, and December 31, 2016, excluded operating lease assets of $15.2 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 six months ended June 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 0.20%; Total consumer– retained excluding credit card loans would have been 0.18%; 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 June 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 June 30, 2017 and December 31, 2016. Also includes student loans held-for-sale at June 30, 2017.

(k) At June 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 $4.1 billion and $5.0 billion, respectively; and (2) student loans insured by U.S. government agencies under the FFELP of $24 million 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 $22 million and $41 million for the three months ended June 30, 2017 and 2016, respectively, and $46 million and $88 million for the six months ended June 30, 2017 and 2016, respectively. These write-offs decreased the allowance for loan losses for PCI loans. See Allowance for Credit Losses on pages 63–65 for further details.

(n) Average consumer loans held-for-sale were $4.9 billion and $354 million for the three months ended June 30, 2017 and 2016, respectively, and $2.6 billion and $389 million for the six months ended June 30, 2017 and 2016, respectively. These amounts were excluded when calculating net charge-off rates.

Consumer, excluding credit card

Portfolio analysis

Consumer loan balances were relatively flat compared to balances at December 31, 2016 as originations of high-quality prime mortgage loans that have been retained on the balance sheet were 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 six months ended June 30, 2017 declined when compared with the same periods of the prior year, partially as a result of lower loan balances.

At June 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 $32 billion at June 30, 2017. Of such amounts, $13 billion have recast from interest-only to fully amortizing payments or have been modified. Of the remaining $19 billion, approximately:

- $13 billion are scheduled to recast from interest-only to fully amortizing payments in future periods, and
- $6 billion are interest-only balloon HELOCs, which primarily mature after 2030.

The following chart illustrates the payment recast composition of the approximately $19 billion of HELOCs scheduled to recast in the future, based upon their current contractual terms.

HELOCs scheduled to recast

(at June 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 June 30, 2017, the Firm estimated that the carrying value of its home equity portfolio contained approximately $0.9 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 in subprime mortgage loans. These subprime mortgage loans continue to run-off and are performing in line with expectations. The residential mortgage portfolio, including loans held-for-sale, increased from December 31, 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 six months ended June 30, 2017 remain low, reflecting continued improvement in home prices and delinquencies.

At June 30, 2017, and December 31, 2016, the Firm's residential mortgage portfolio, including loans held-for-sale, included $8.7 billion and $9.5 billion, respectively, of mortgage loans insured and/or guaranteed by U.S. government agencies, of which $6.0 billion and $7.0 billion, respectively, were 30 days or more past due (of these past due loans, $4.1 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 June 30, 2017, and December 31, 2016, the Firm's residential mortgage portfolio included $19.7 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 offset by new originations. Nonaccrual loans decreased compared with December 31, 2016. Net charge-offs for the three and six months ended June 30, 2017 increased compared with the same period in the prior year, as a result of a moderate increase in loss severity. 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 were partially offset by paydowns and the charge-off or liquidation of delinquent loans. Nonaccrual loans increased slightly compared with December 31, 2016. Net charge-offs for the three and six months ended June 30, 2017 increased 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 six months ended June 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 June 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

	Lifetime loss estimates[a]		Life-to-date liquidation losses[b]	
(in billions)	Jun 30, 2017	Dec 31, 2016	Jun 30, 2017	Dec 31, 2016
Home equity	$14.0	$ 14.4	$12.8	$ 12.8
Prime mortgage	3.9	4.0	3.8	3.7
Subprime mortgage	3.2	3.2	3.1	3.1
Option ARMs	9.9	10.0	9.7	9.7
Total	$31.0	$ 31.6	$29.4	$ 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 $962 million and $1.1 billion at June 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 June 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 June 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 June 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 June 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 six months ended June 30, 2017 and 2016, see Note 11.

Modified residential real estate loans

(in millions)	June 30, 2017 Retained loans	June 30, 2017 Non-accrual retained loans[(d)]	December 31, 2016 Retained loans	December 31, 2016 Non-accrual retained loans[(d)]
Modified residential real estate loans, excluding PCI loans[(a)(b)]				
Home equity	$2,162	$ 1,056	$2,264	$ 1,116
Residential mortgage	5,804	1,684	6,032	1,755
Total modified residential real estate loans, excluding PCI loans	$7,966	$ 2,740	$8,296	$ 2,871
Modified PCI loans[(c)]				
Home equity	$2,369	NA	$2,447	NA
Prime mortgage	4,767	NA	5,052	NA
Subprime mortgage	2,815	NA	2,951	NA
Option ARMs	8,770	NA	9,295	NA
Total modified PCI loans	$18,721	NA	$19,745	NA

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

(b) At June 30, 2017, and December 31, 2016, $3.9 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 both June 30, 2017, and December 31, 2016, nonaccrual loans included $2.3 billion 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 June 30, 2017, and December 31, 2016, about consumer, excluding credit card, nonperforming assets.

Nonperforming assets[(a)]

(in millions)	June 30, 2017	December 31, 2016
Nonaccrual loans[(b)]		
Residential real estate[(c)]	$ 3,763	$ 4,154
Other consumer[(c)]	463	666
Total nonaccrual loans	4,226	4,820
Assets acquired in loan satisfactions		
Real estate owned	249	292
Other	47	57
Total assets acquired in loan satisfactions	296	349
Total nonperforming assets	$ 4,522	$ 5,169

(a) At June 30, 2017, and December 31, 2016, nonperforming assets excluded: (1) mortgage loans insured by U.S. government agencies of $4.1 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 $24 million and $263 million, respectively, that are 90 or more days past due; and (3) REO insured by U.S. government agencies of $105 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 $3.8 billion at June 30, 2017 from $4.2 billion at December 31, 2016, of which 27% 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 43% to the estimated net realizable value of the collateral at both June 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 six months ended June 30, 2017 and 2016.

Nonaccrual loan activity

Six months ended June 30, (in millions)	2017	2016
Beginning balance	$4,820	$5,413
Additions	1,647	1,802
Reductions:		
Principal payments and other[(a)]	888	730
Charge-offs	372	354
Returned to performing status	750	853
Foreclosures and other liquidations	231	193
Total reductions	2,241	2,130
Net changes	(594)	(328)
Ending balance	$4,226	$5,085

(a) Other reductions includes loan sales.

Credit card

Total credit card loans decreased from December 31, 2016 due to seasonality. The June 30, 2017 30+ day delinquency rate decreased to 1.59% from 1.61% at December 31, 2016, and remains near record lows. For the three months ended June 30, 2017 and 2016, the net charge-off rates were 3.01% and 2.70%, respectively. For the six months ended June 30, 2017 and 2016, the net charge-off rates were 2.98% and 2.66%, respectively. The credit card portfolio continues to reflect a largely well-seasoned portfolio that has good U.S. geographic diversification. New originations continue to grow as a percentage of the total portfolio; these originations have generated higher loss rates than the more seasoned portion of the portfolio given the higher mix of near-prime accounts being originated, in line with the Firm's credit parameters. These near-prime accounts, once seasoned, 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 June 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 six months ended June 30, 2017, characterized by low levels of criticized exposure, nonaccrual loans and charge-offs. See industry discussion on pages 58–60 for further information. Growth in retained loans was predominantly driven by CB. 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)	Jun 30, 2017	Dec 31, 2016	Jun 30, 2017	Dec 31, 2016
Loans retained	$394,426	$383,790	$ 1,634	$ 1,954
Loans held-for-sale	6,850	2,285	31	109
Loans at fair value	1,979	2,230	—	—
Loans	403,255	388,305	1,665	2,063
Derivative receivables	56,506	64,078	170	223
Receivables from customers and other[a]	19,395	17,440	—	—
Total wholesale credit-related assets	479,156	469,823	1,835	2,286
Lending-related commitments	366,498	368,014	750	506
Total wholesale credit exposure	$845,654	$837,837	$ 2,585	$ 2,792
Credit derivatives used in credit portfolio management activities[b]	$(21,723)	$(22,114)	$ —	$ —
Liquid securities and other cash collateral held against derivatives	(18,552)	(22,705)	NA	NA

(a) Receivables from customers and other include $19.4 billion and $17.3 billion of margin loans at June 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 62, 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 June 30, 2017, and December 31, 2016. The ratings scale is based on the Firm's internal risk ratings, which generally correspond to the ratings defined 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		
June 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	$114,667	$177,751	$102,008	$394,426	$302,686	$ 91,740	$394,426	77 %
Derivative receivables				56,506			56,506	
Less: Liquid securities and other cash collateral held against derivatives				(18,552)			(18,552)	
Total derivative receivables, net of all collateral	8,820	8,372	20,762	37,954	30,010	7,944	37,954	79
Lending-related commitments	88,305	266,467	11,726	366,498	269,686	96,812	366,498	74
Subtotal	211,792	452,590	134,496	798,878	602,382	196,496	798,878	75
Loans held-for-sale and loans at fair value[a]				8,829			8,829	
Receivables from customers and other				19,395			19,395	
Total exposure – net of liquid securities and other cash collateral held against derivatives				$827,102			$827,102	
Credit derivatives used in credit portfolio management activities[b][c]	$(1,134)	$(16,247)	$(4,342)	$(21,723)	$(18,420)	$ (3,303)	$(21,723)	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 June 30, 2017, may become payable prior to maturity based on their cash flow profile or changes in market conditions.

Wholesale credit exposure – industry exposures

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

of the special mention, substandard and doubtful categories. The total criticized component of the portfolio, excluding loans held-for-sale and loans at fair value, was $16.5 billion at June 30, 2017, compared with $19.8 billion at December 31, 2016, with the decrease largely driven by 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 companies or enterprises. 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 June 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 six months ended June 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	$137,743	$110,956	$25,652	$983	$152	$140	$(2)	$(40)	$(6)
Consumer & Retail	90,296	61,168	27,492	1,480	156	155	13	(407)	(22)
Technology, Media & Telecommunications	58,668	36,000	21,370	1,249	49	7	(18)	(445)	(86)
Industrials	57,316	36,582	19,629	932	173	98	6	(379)	(38)
Healthcare	48,697	37,481	10,190	968	58	7	(1)	(245)	(260)
Banks & Finance Cos	46,489	33,160	12,805	493	31	16	(1)	(1,359)	(4,470)
Oil & Gas	38,832	18,967	12,734	5,896	1,235	4	37	(1,127)	(37)
Asset Managers	32,248	27,456	4,763	28	1	66	—	—	(4,853)
Utilities	30,605	24,508	5,762	174	161	—	11	(266)	(106)
State & Municipal Govt[(b)]	27,590	26,990	569	1	30	5	—	(130)	(97)
Central Govt	18,760	18,411	323	26	—	2	—	(10,355)	(3,599)
Transportation	17,677	11,287	5,743	524	123	3	10	(71)	(170)
Automotive	15,895	9,309	6,450	135	1	1	—	(362)	(9)
Chemicals & Plastics	15,494	11,306	4,123	65	—	2	—	(30)	(5)
Metals & Mining	13,455	6,240	6,344	871	—	1	(14)	(374)	(14)
Insurance	11,808	9,684	2,026	—	98	8	—	(232)	(2,064)
Financial Markets Infrastructure	7,872	6,862	1,010	—	—	—	—	—	(358)
Securities Firms	5,200	2,701	2,496	3	—	—	—	(274)	(912)
All other[(c)]	142,785	130,104	12,306	89	286	936	(11)	(5,627)	(1,446)
Subtotal	$817,430	$619,172	$181,787	$13,917	$2,554	$1,451	$30	$(21,723)	$(18,552)
Loans held-for-sale and loans at fair value	8,829								

Receivables from customers and other	19,395
Total[(d)]	$ 845,654

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(continued from previous page)

As of or for the year ended December 31, 2016 (in millions)	Credit exposure[(e)]	Investment-grade	Noninvestment-grade			Selected metrics			
			Noncriticized	Criticized performing	Criticized nonperforming	30 days or more past due and accruing loans	Net charge-offs/ (recoveries)	Credit derivative hedges[(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)
Technology, Media & Telecommunications	63,324	39,998	21,751	1,559	16	9	2	(589)	(30)
Industrials	55,733	36,710	17,854	1,033	136	128	3	(434)	(40)
Healthcare	49,445	39,244	9,279	882	40	86	37	(286)	(246)
Banks & Finance Cos	48,393	35,385	12,560	438	10	21	(2)	(1,336)	(7,337)
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)
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)
Chemicals & Plastics	15,043	10,405	4,452	156	30	3	—	(35)	(3)
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 June 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 June 30, 2017, and December 31, 2016, noted above, the Firm held: $8.8 billion and $9.1 billion, respectively, of trading securities; $32.5 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 59%, 37%, and 4%, respectively, at both June 30, 2017 and December 31, 2016.

(d) Excludes cash placed with banks of $440.8 billion and $380.2 billion, at June 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 $3.5 billion during the six months ended June 30, 2017, to $137.7 billion, predominantly driven by multifamily lending within CB. Of the $137.7 billion as of June 30, 2017, 81% was investment-grade, and 84% was secured. As of June 30, 2017, $84.2 billion of the $137.7 billion was multifamily, largely in California; of the $84.2 billion, 85% was investment-grade and 96% was secured. Other Real Estate exposure was $53.5 billion, of which 73% was investment-grade, and 64% was secured; unsecured exposure was 85% investment-grade. For further information on commercial real estate loans, see Note 11.

Oil & Gas and Natural Gas Pipelines

The following table presents Oil & Gas and Natural Gas Pipeline exposures as of June 30, 2017, and December 31, 2016.

(in millions, except ratios)	June 30, 2017 Loans and Lending-related Commitments	Derivative Receivables	Credit exposure	% Investment-grade	% Drawn[(d)]
Exploration & Production ("E&P") and Oilfield Services[(a)]	$20,416	$ 417	$ 20,833	30 %	31 %
Other Oil & Gas[(b)]	17,722	277	17,999	71	31
Total Oil & Gas	38,138	694	38,832	49	31
Natural Gas Pipelines[(c)]	4,740	60	4,800	60	16
Total Oil & Gas and Natural Gas Pipelines	$42,878	$ 754	$ 43,632	50	30

(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[(a)]	$20,971	$ 1,256	$ 22,227	27 %	35 %
Other Oil & Gas[(b)]	17,518	622	18,140	70	31
Total Oil & Gas	38,489	1,878	40,367	46	33
Natural Gas Pipelines[(c)]	4,253	106	4,359	66	30
Total Oil & Gas and Natural Gas Pipelines	$42,742	$ 1,984	$ 44,726	48	33

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

Exposure to the Oil & Gas and Natural Gas Pipelines portfolios was approximately 5.2% and 5.3% of the Firm's total wholesale exposure as of June 30, 2017 and December 31, 2016, respectively. Exposure to these industries decreased by $1.1 billion during the six months ended June 30, 2017 to $43.6 billion; of the $43.6 billion, approximately $12.9 billion was drawn as of June 30, 2017. As of June 30, 2017, approximately $21.9 billion of the exposure was investment grade, of which $4.6 billion was drawn, and approximately $21.8 billion of the exposure was noninvestment-grade, of which $8.3 billion was drawn; 16% of the exposure to the Oil & Gas and Natural Gas Pipelines industries was criticized. Secured lending, of which approximately half is reserve-based lending to the Exploration & Production sub-sector of the Oil & Gas industry, was $14.7 billion as of June 30, 2017; 42% of the secured lending exposure was drawn. Exposure to commercial real estate, which is reported within the Real Estate industry, in certain areas of Texas, California and Colorado that are deemed sensitive to the Oil & Gas industry, was approximately $4.5 billion as of June 30, 2017. While the overall trends and sentiment have been stabilizing, the Firm continues to actively monitor and manage its exposure to these portfolios.

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 six months ended June 30, 2017 and 2016.

Wholesale nonaccrual loan activity[(a)]

Six months ended June 30, (in millions)	2017	2016
Beginning balance	$2,063	$1,016
Additions	747	1,902
Reductions:		
Paydowns and other	666	419
Gross charge-offs	93	226
Returned to performing status	183	149
Sales	203	24
Total reductions	1,145	818
Net changes	(398)	1,084
Ending balance	$1,665	$2,100

(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 six months ended June 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 June 30,		Six months ended June 30,	
	2017	2016	2017	2016
Loans – reported				
Average loans retained	$392,257	$369,706	$387,339	$365,006
Gross charge-offs	73	159	99	228
Gross recoveries	(16)	(5)	(69)	(14)
Net charge-offs/(recoveries)	57	154	30	214
Net charge-off/(recovery) rate	0.06%	0.17%	0.02%	0.12%

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 June 30, 2017	Derivative receivables December 31, 2016
Interest rate	$26,912	$ 28,302
Credit derivatives	1,014	1,294
Foreign exchange	16,662	23,271
Equity	6,273	4,939
Commodity	5,645	6,272
Total, net of cash collateral	56,506	64,078
Liquid securities and other cash collateral held against derivative receivables[(a)]	(18,552)	(22,705)
Total, net of collateral	$37,954	$ 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 $56.5 billion and $64.1 billion at June 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 bonds) and other cash collateral held by the Firm aggregating $18.6 billion and $22.7 billion at June 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 June 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.

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)	June 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	$9,472	25	%	$11,449	28	%
A+/A1 to A-/A3	8,252	22		8,505	20	
BBB+/Baa1 to BBB-/Baa3	12,286	32		13,127	32	
BB+/Ba1 to B-/B3	7,295	19		7,308	18	
CCC+/Caa1 and below	649	2		984	2	
Total	$37,954	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 June 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] June 30, 2017	December 31, 2016
Credit derivatives used to manage:		
Loans and lending-related commitments	$1,681	$ 2,430
Derivative receivables	20,042	19,684
Credit derivatives used in credit portfolio management activities	$21,723	$ 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 77–79 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 June 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 remained relatively unchanged from December 31, 2016. Changes to the allowance for credit losses included:

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

predominantly offset by

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

For additional information about delinquencies and nonaccrual loans in the consumer, excluding credit card, loan portfolio, see Consumer Credit Portfolio on pages 50–55 and Note 11.

The wholesale allowance for credit losses decreased from December 31, 2016, primarily driven by a net reduction in the allowance related to the Oil & Gas, Natural Gas Pipelines, and Metals & Mining portfolios. For additional information on the wholesale portfolio, see Wholesale Credit Portfolio on pages 56–62 and Note 11.

Summary of changes in the allowance for credit losses

Six months ended June 30, (in millions, except ratios)	2017 Consumer, excluding credit card	Credit card	Wholesale	Total	2016 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	1,105	2,223	99	3,427	688	1,874	228	2,790
Gross recoveries	(307)	(193)	(69)	(569)	(301)	(184)	(14)	(499)
Net charge-offs/(recoveries)[(a)]	798	2,030	30	2,858	387	1,690	214	2,291
Write-offs of PCI loans[(b)]	46	—	—	46	88	—	—	88
Provision for loan losses	448	2,380	(337)	2,491	316	1,940	796	3,052
Other	(2)	—	2	—	(1)	—	—	(1)
Ending balance at June 30,	$4,800	$4,384	$4,179	$13,363	$5,646	$3,684	$4,897	$14,227
Impairment methodology								
Asset-specific[(c)]	$296	$370	$345	$1,011	$365	$361	$525	$1,251
Formula-based	2,239	4,014	3,834	10,087	2,627	3,323	4,372	10,322
PCI	2,265	—	—	2,265	2,654	—	—	2,654
Total allowance for loan losses	$4,800	$4,384	$4,179	$13,363	$5,646	$3,684	$4,897	$14,227
Allowance for lending-related commitments								
Beginning balance at January 1,	$26	$—	$1,052	$1,078	$14	$—	$772	$786
Provision for lending-related commitments	6	—	33	39	—	—	174	174
Other	—	—	—	—	—	—	—	—
Ending balance at June 30,	$32	$—	$1,085	$1,117	$14	$—	$946	$960
Impairment methodology								
Asset-specific	$—	$—	$211	$211	$—	$—	$143	$143
Formula-based	32	—	874	906	14	—	803	817
Total allowance for lending-related commitments[(d)]	$32	$—	$1,085	$1,117	$14	$—	$946	$960
Total allowance for credit losses	$4,832	$4,384	$5,264	$14,480	$5,660	$3,684	$5,843	$15,187
Memo:								
Retained loans, end of period	$365,115	$140,035	$394,426	$899,576	$361,050	$131,507	$374,174	$866,731
Retained loans, average	364,316	137,574	387,339	889,229	353,259	127,771	365,006	846,036
PCI loans, end of period	33,064	—	3	33,067	38,360	—	4	38,364
Credit ratios								
Allowance for loan losses to retained loans	1.31%	3.13%	1.06%	1.49%	1.56%	2.80%	1.31%	1.64%
Allowance for loan losses to retained nonaccrual	114	NM	256	229	111	NM	234	198

loans[e]								
Allowance for loan losses to retained nonaccrual loans excluding credit card	114	NM	256	154	111	NM	234	147
Net charge-off/(recovery) rates[a]	0.44	2.98	0.02	0.65	0.22	2.66	0.12	0.54
Credit ratios, excluding residential real estate PCI loans								
Allowance for loan losses to retained loans	0.76	3.13	1.06	1.28	0.93	2.80	1.31	1.40
Allowance for loan losses to retained nonaccrual loans[e]	60	NM	256	190	59	NM	234	161
Allowance for loan losses to retained nonaccrual loans excluding credit card	60	NM	256	115	59	NM	234	110
Net charge-off/(recovery) rates[a]	0.49 %	2.98 %	0.02 %	0.67 %	0.25 %	2.66 %	0.12 %	0.57 %

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

(a) For the six months ended June 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 0.18%; total Firm would have been 0.54%; Consumer, excluding credit card and PCI loans would have been 0.20%; and total Firm, excluding PCI would have been 0.56%. 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

For the three and six months ended June 30, 2017, the provision for credit losses was $1.2 billion and $2.5 billion, respectively, compared with $1.4 billion and $3.2 billion, respectively, in the prior year periods. The decrease in the provision for both periods was driven by a decline in the wholesale provision, partially offset by an increase in the consumer provision.

The wholesale provision for credit losses for the three months and six months ended June 30, 2017 was a benefit, primarily driven by reductions in the allowance for credit losses related to the Oil & Gas, Natural Gas Pipelines, and Metals & Mining portfolios. The prior year reflected increases due to the impact of downgrades in the Oil & Gas, Natural Gas Pipelines, and Metals & Mining portfolios.

The increase in the consumer provision for the three months ended June 30, 2017 was primarily driven by $120 million of higher net charge-offs, predominantly in the credit card portfolio, and a $74 million higher addition to the allowance for credit losses when compared to the prior year.

Current quarter results included:

- a $350 million addition to the allowance for credit losses in the credit card portfolio, due to loan growth and higher loss rates, compared to a $250 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 $50 million addition in the prior year;

the additions were partially offset by

- a $173 million reduction in the allowance for credit losses in the residential real estate portfolio, reflecting continued improvement in home prices and delinquencies, compared to a $97 million reduction in the prior year.

The increase in the consumer provision for the six months ended June 30, 2017 was primarily driven by $284 million of higher net charge-offs, predominantly in the credit card portfolio, $218 million related to the transfer of the student loan portfolio to held-for-sale, and a $76 million higher addition to the allowance for credit losses when compared to the prior year.

Current year results included:

- a $350 million addition to the allowance for credit losses in the credit card portfolio, due to loan growth and higher loss rates, compared to a $250 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 $50 million addition in the prior year;

the additions were partially offset by

- a $170 million reduction in the allowance for credit losses in the residential real estate portfolio, reflecting continued improvement in home prices and delinquencies, compared to a $96 million reduction in the prior year.

	Three months ended June 30,						Six months ended June 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	$6	$95	$ 6	$ —	$12	$95	$448	$316	$ 6	$ —	$454	$316
Credit card	1,387	1,110	—	—	1,387	1,110	2,380	1,940	—	—	2,380	1,940
Total consumer	1,393	1,205	6	—	1,399	1,205	2,828	2,256	6	—	2,834	2,256
Wholesale	(218)	251	34	(54)	(184)	197	(337)	796	33	174	(304)	970
Total	$1,175	$1,456	$ 40	$ (54)	$1,215	$1,402	$2,491	$3,052	$ 39	$ 174	$2,530	$3,226

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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 June 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.)

	June 30, 2017			
(in billions)	Lending and deposits[(a)]	Trading and investing[(b)(c)]	Other[(d)]	Total exposure
Germany	$42.3	$ 13.7	$ 0.3	$ 56.3
United Kingdom	27.9	13.9	0.6	42.4
Japan	23.5	6.8	0.1	30.4
France	11.6	7.1	0.3	19.0
China	9.2	5.0	0.8	15.0
Canada	11.1	3.0	0.1	14.2
Switzerland	8.0	0.8	3.7	12.5
Australia	6.3	5.1	—	11.4
India	3.8	5.1	0.8	9.7
Luxembourg	7.7	1.0	—	8.7
Netherlands	5.9	1.9	0.4	8.2
Korea	4.9	1.8	0.7	7.4
Brazil	3.8	2.9	—	6.7
Italy	5.8	0.8	0.1	6.7
Mexico	4.1	1.8	—	5.9
Hong Kong	2.5	1.4	1.6	5.5
Spain	4.2	1.0	—	5.2
Singapore	2.6	1.1	1.1	4.8
Saudi Arabia	3.7	1.0	—	4.7
Ireland	1.1	0.3	2.5	3.9

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

LCR and NSFR

The LCR rule requires the Firm to maintain an amount of HQLA that is sufficient to meet its estimated total net cash outflows over a prospective 30 calendar-day period of significant stress. Under the LCR rule, the amount of HQLA held by JPMorgan Chase Bank N.A. and Chase Bank USA, N.A that is in excess of each entity's standalone 100% minimum LCR requirement, and that is not available for transfer to non-bank affiliates, must be excluded from the Firm's reported HQLA. The LCR was required to be a minimum of 100% commencing January 1, 2017. At June 30, 2017, the Firm was compliant with the LCR.

On December 19, 2016, the Federal Reserve published final LCR public disclosure requirements for certain bank holding companies and nonbank financial companies. Effective the second quarter of 2017, the Firm is required to disclose quarterly its consolidated LCR, including the Firm's average LCR for the quarter and the key quantitative components of the average LCR in a standardized template, along with a qualitative discussion of material drivers of the ratio, changes over time, and causes of such changes. The initial public disclosure is required to be provided within 60 days of the end of the second quarter of 2017 and, thereafter, no later than the applicable filing deadline for the Firm's 10-Q or 10-K.

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

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

The Firm estimates it was compliant with the proposed U.S. NSFR based on data as of March 31, 2017, and on its current understanding of the proposed rule.

HQLA

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

As of June 30, 2017, the Firm's HQLA was $577 billion, compared with $524 billion as of December 31, 2016. The increase was largely driven by a reduction in the amount of excess HQLA in JPMorgan Chase Bank, N.A. and Chase Bank USA, N.A. that is excluded from the Firm's HQLA. The reduction in the amount of excluded excess HQLA was primarily due to (a) an increase in the amount of cash and securities held by the banks that became available to transfer to non-bank affiliates in accordance with Section 23A and Section 23B of the Federal Reserve Act and (b) an increase in deposits which funded loans, resulting in less excess HQLA at the banks. The Firm's HQLA may fluctuate from period to period primarily due to normal flows from client activity.

The following table presents the Firm's HQLA included in the LCR, broken out by HQLA-eligible cash and securities as of June 30, 2017.

(in billions)	June 30, 2017
HQLA	
Eligible cash[(a)]	$ 366
Eligible securities[(b)]	211
Total HQLA[(c)]	$ 577

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

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

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

As of June 30, 2017, in addition to HQLA reported above, the Firm had approximately $233 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 is not transferable to non-bank affiliates. The Firm also maintains borrowing capacity at various Federal Home Loan Banks ("FHLBs"), the Federal Reserve Bank discount window and various other central banks as a result of collateral pledged by the Firm to such banks. Although available, the Firm does not view the borrowing capacity at the Federal Reserve Bank discount window and the various other central banks as a primary source of liquidity. As of June 30, 2017, the Firm's remaining borrowing capacity at various FHLBs and the Federal Reserve Bank discount window was approximately $258 billion. This remaining borrowing capacity excludes the benefit of securities included in 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.

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 ($908.8 billion at June 30, 2017) is funded with a portion of the Firm's deposits ($1,439.5 billion at June 30, 2017), 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 deposits balances as of June 30, 2017, and December 31, 2016, and the average deposits balances for the three and six months ended June 30, 2017 and 2016, respectively.

Deposits	June 30, 2017	December 31, 2016	Three months ended June 30, Average		Six months ended June 30, Average	
(in millions)			2017	2016	2017	2016
Consumer & Community Banking	$648,369	$ 618,337	$639,873	$583,115	$631,441	$572,699
Corporate & Investment Bank	467,858	412,434	442,387	407,084	434,968	399,853
Commercial Banking	173,964	179,532	173,081	169,090	174,843	170,105
Asset & Wealth Management	146,758	161,577	150,786	151,214	154,776	150,915
Corporate	2,524	3,299	4,002	5,463	4,870	6,046
Total Firm	$1,439,473	$ 1,375,179	$1,410,129	$1,315,966	$1,400,898	$1,299,618

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

As of June 30, 2017, the Firm's loans-to-deposits ratio was 63%, compared with 65% at December 31, 2016.

Total deposits for the Firm were $1,439.5 billion as of June 30, 2017, compared with $1,375.2 billion at December 31, 2016 (62% and 61% of total liabilities at June 30, 2017, and December 31, 2016, respectively). Deposits increased due to both higher wholesale and consumer deposits. The higher wholesale deposits were

driven by growth in client activity in CIB's Securities Services and Treasury Services businesses, partially offset by lower balances in AWM reflecting balance migration into the Firm's investment-related products, and the impact of seasonality in both CB and AWM. The higher consumer deposits reflected the continuation of strong growth from existing and new customers, and low attrition rates.

The Firm believes average deposit balances are generally more representative of deposit trends. The increase in average deposits for the three and six months ended June 30, 2017, compared with the three and six months ended June 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 June 30, 2017, and December 31, 2016, and average balances for the three and six months ended June 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)	June 30, 2017	December 31, 2016	Three months ended June 30, Average		Six months ended June 30, Average	
(in millions)			2017	2016	2017	2016
Commercial paper	$22,207	$ 11,738	$19,466	$17,462	$16,432	$17,499
Obligations of Firm-administered multi-seller conduits[(a)]	$2,928	$ 2,719	$2,750	$5,327	$3,557	$5,914
Other borrowed funds	$30,936	$ 22,705	$23,693	$20,107	$23,427	$20,169
Securities loaned or sold under agreements to repurchase:						
Securities sold under agreements to repurchase[(b)]	$149,406	$ 149,826	$178,624	$158,142	$175,963	$154,330
Securities loaned[(c)(d)]	11,217	12,137	13,505	13,832	13,342	14,445
Total securities loaned or sold under agreements to repurchase[(d)(e)]	$160,623	$ 161,963	$192,129	$171,974	$189,305	$168,775
Senior notes	$156,637	$ 151,042	$153,661	$152,246	$151,557	$150,657
Trust preferred securities	2,338	2,345	2,340	3,969	2,342	3,970
Subordinated debt	18,994	21,940	20,546	25,176	20,857	25,271
Structured notes	43,077	37,292	42,957	35,602	40,941	34,576
Total long-term unsecured funding	$221,046	$ 212,619	$219,504	$216,993	$215,697	$214,474
Credit card securitization[(a)]	$25,732	$ 31,181	$27,034	$27,014	$28,226	$27,356
Other securitizations[(a)(f)]	—	1,527	1,003	1,700	1,262	1,729
Federal Home Loan Bank (“FHLB”) advances	68,464	79,519	73,053	69,528	75,155	70,384
Other long-term secured funding[(g)]	3,463	3,107	3,311	5,205	3,204	5,085
Total long-term secured funding	$97,659	$ 115,334	$104,401	$103,447	$107,847	$104,554
Preferred stock[(h)]	$26,068	$ 26,068	$26,068	$26,068	$26,068	$26,068
Common stockholders’ equity[(h)]	$232,415	$ 228,122	$230,200	$224,429	$228,959	$222,995

(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 $2.1 billion and $1.8 billion as of June 30, 2017, and December 31, 2016, respectively, average balances of $1.9 billion and $2.7 billion for the three months ended June 30, 2017 and 2016, respectively, and $1.4 billion and $3.1 billion for the six months ended June 30, 2017 and 2016, respectively.

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

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

(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 six months ended June 30, 2017, compared with June 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 and other borrowed funds. The increase in commercial paper and other borrowed funds as of June 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 requirements. Long-term funding objectives include maintaining diversification, maximizing market access and optimizing funding costs. The Firm evaluates various funding markets, tenors and currencies in creating its optimal long-term funding plan.

The significant majority of the Firm's long-term unsecured funding is issued by the Parent Company to provide maximum flexibility in support of both bank and nonbank subsidiary funding needs. The Parent Company advances substantially all net funding proceeds to 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 six months ended June 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

(in millions)	Three months ended June 30, 2017	Three months ended June 30, 2016	Six months ended June 30, 2017	Six months ended June 30, 2016
Issuance				
Senior notes issued in the U.S. market	$8,308	$5,968	$14,773	$13,187
Senior notes issued in non-U.S. markets	2,210	4,891	2,210	4,891
Total senior notes	10,518	10,859	16,983	18,078
Subordinated debt	—	—	—	—
Structured notes	8,160	5,278	16,594	13,611
Total long-term unsecured funding – issuance	$18,678	$16,137	$33,577	$31,689
Maturities/redemptions				
Senior notes	$3,615	$6,499	$14,042	$16,310
Trust preferred securities	—	—	—	—
Subordinated debt	2,011	2,000	3,006	2,002
Structured notes	7,043	4,437	12,373	8,541
Total long-term unsecured funding – maturities/redemptions	$12,669	$12,936	$29,421	$26,853

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 six months ended June 30, 2017 and 2016, respectively.

Long-term secured funding

	Three months ended June 30,				Six months ended June 30,			
	Issuance		Maturities/Redemptions		Issuance		Maturities/Redemptions	
(in millions)	2017	2016	2017	2016	2017	2016	2017	2016
Credit card securitization	$—	$3,814	$ 3,016	$ 2,350	$1,545	$3,814	$ 7,006	$ 2,775
Other securitizations[(a)]	—	—	—	61	—	—	55	119
FHLB advances	—	—	5,852	3	—	—	11,054	2,054
Other long-term secured funding[(b)]	344	236	80	46	447	326	124	89
Total long-term secured funding	$344	$4,050	$ 8,948	$ 2,460	$1,992	$4,140	$ 18,239	$ 5,037

(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 June 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		
June 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 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 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,								
	June 30, 2017			March 31, 2017			June 30, 2016		
(in millions)	Avg.	Min	Max	Avg.	Min	Max	Avg.	Min	Max
CIB trading VaR by risk type									
Fixed income	$28	$25	$31	$28	$20	$40	$46	$37	$ 62
Foreign exchange	8	5	12	10	6	16	12	7	17
Equities	12	9	16	11	8	14	14	10	20
Commodities and other	8	6	10	8	5	10	9	7	10
Diversification benefit to CIB trading VaR	(30)(a)	NM(b)	NM(b)	(34)(a)	NM(b)	NM(b)	(37)(a)	NM(b)	NM(b)
CIB trading VaR	26	20	31	23	14	34	44	35	59
Credit portfolio VaR	9	6	10	10	9	12	12	11	13
Diversification benefit to CIB VaR	(8)(a)	NM(b)	NM(b)	(8)(a)	NM(b)	NM(b)	(12)(a)	NM(b)	NM(b)
CIB VaR	27	22	32	25	17	38	44	34	59
CCB VaR	2	2	3	2	1	3	3	1	5
Corporate VaR	3	2	3	2	2	3	11	7	13
AWM VaR	—	—	—	—	—	—	4	3	4
Diversification benefit to other VaR	(2)(a)	NM(b)	NM(b)	(1)(a)	NM(b)	NM(b)	(5)(a)	NM(b)	NM(b)
Other VaR	3	3	4	3	3	4	13	10	16
Diversification benefit to CIB and other VaR	(3)(a)	NM(b)	NM(b)	(3)(a)	NM(b)	NM(b)	(12)(a)	NM(b)	NM(b)
Total VaR	$27	$22	$33	$25	$17	$37	$45	$36	$ 56

(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 $2 million for the three months ended June 30, 2017 as compared with the prior quarter, reflecting a change in exposure profile for the Equities risk type which also contributed to a reduction in the diversification benefit to CIB trading VaR.

Year over Year results

Average total VaR decreased by $18 million for the three months ended June 30, 2017, compared with the same period in the prior year. The decrease in average total VaR is primarily in the Fixed income, Foreign Exchange and Equities risk types. The reduction reflected enhancements to VaR models for certain asset backed products, refinement of the scope of positions included in risk management VaR, and reduced volatility in the one-year historical look-back period.

The Firm refined the scope of positions included in risk management VaR during the third quarter of 2016 and refined the historical proxy time series inputs to certain VaR models during the first quarter of 2017. In the absence of these refinements, the average Total VaR for the three months ended June 30, 2017 would have been higher by $10 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 June 30, 2017
CIB fixed income VaR	$ 6
CIB equities VaR	3
CIB trading VaR	8
CIB VaR	10
Corporate VaR	8
AWM VaR	5
Other VaR	8

VaR can vary significantly as positions change, market volatility fluctuates, and diversification benefits change.

VaR back-testing

The Firm evaluates the effectiveness of its VaR methodology by back-testing, which compares the daily Risk Management VaR results with the daily gains and losses actually recognized on market-risk related revenue.

The Firm's definition of market risk-related gains and losses is consistent with the definition used by the banking regulators under Basel III. Under this definition market risk-related gains and losses are defined as: gains and losses on the positions included in the Firm's Risk Management VaR excluding fees, commissions, certain valuation adjustments (e.g., liquidity and DVA), net interest income, and gains and losses arising from intraday trading.

The following chart compares actual daily market risk-related gains and losses with the Firm's Risk Management VaR for the six months ended June 30, 2017. As the chart presents market risk-related gains and losses related to those positions included in the Firm's Risk Management VaR, the results in the table below differ from the results of back-testing disclosed in the Market Risk section of the Firm's Basel III Pillar 3 Regulatory Capital Disclosures reports, which are based on Regulatory VaR applied to covered positions. The chart shows that for the six months ended June 30, 2017, the Firm observed seven VaR back-testing exceptions and posted gains on 80 of the 129 days. The Firm observed four VaR back-testing exceptions and posted gains on 36 of the 65 days for the three months ended June 30, 2017.

Daily Market Risk-Related Gains and Losses
vs. Risk Management VaR (1-day, 95% Confidence level)
Six months ended June 30, 2017

Market Risk-Related Gains and Losses

Risk Management VaR

January February March April May June

Earnings-at-risk

The VaR and sensitivity measures illustrate the economic sensitivity of the Firm's Consolidated balance sheets to changes in market variables. The effect of interest rate exposure on the Firm's reported net income is also important as interest rate risk represents one of the Firm's significant market risks. Interest rate risk arises not only from trading activities but also from the Firm's traditional banking activities, which include extension of loans and credit facilities, taking deposits and issuing debt. The Firm evaluates its structural interest rate risk exposure through earnings-at-risk, which measures the extent to which changes in interest rates will affect the Firm's net interest income and interest rate-sensitive fees. For a summary by line of business, identifying positions included in earnings-at-risk, see the table on page 117 of JPMorgan Chase's 2016 Annual Report.

The Firm generates a baseline for net interest income and certain interest rate sensitive fees, and then conducts simulations of changes for interest rate-sensitive assets and liabilities denominated in U.S. dollars and other currencies ("non-U.S. dollar" currencies). Earnings-at-risk scenarios estimate the potential change in this baseline, over the following 12 months utilizing multiple assumptions. These scenarios consider the impact on exposures as a result of changes in interest rates from baseline rates, as well as pricing sensitivities of deposits, optionality and changes in product mix. The scenarios include forecasted balance sheet changes, as well as modeled prepayment and reinvestment behavior, but do not include assumptions about actions that could be taken by the Firm in response to any such instantaneous rate changes. Mortgage prepayment assumptions are based on scenario interest rates compared with underlying contractual rates, the time since origination, and other factors which are updated periodically based on historical experience. The pricing sensitivity of deposits in the baseline and scenarios use modeled rates paid which may differ from actual rates paid due to timing lags and other factors. The Firm's earnings-at-risk scenarios are periodically evaluated and enhanced in response to changes in the composition of the Firm's balance sheet, changes in market conditions, improvements in the Firm's simulation and other factors.

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

JPMorgan Chase's 12-month earnings-at-risk sensitivity profiles

U.S. dollar	Instantaneous change in rates			
(in billions)	+200bps	+100bps	-100bps	-200bps
June 30, 2017	$3.6	$ 2.2	$(4.5) [a]	NM [b]
December 31, 2016	$4.0	$ 2.4	NM [b]	NM [b]

(a) As a result of the June 2017 increase in the Fed Funds target rate to between 1.00% and 1.25%, the -100 bps sensitivity has been included.

(b) Given the level of market interest rates, these downward parallel earnings-at-risk scenarios are not considered to be meaningful.

The non-U.S. dollar sensitivities for an instantaneous increase in rates by 200 and 100 basis points results in a 12-month benefit to net interest income of approximately $800 million and $500 million, respectively, at June 30, 2017. The non-U.S. dollar sensitivity for an instantaneous decrease in rates by 200 and 100 basis points is not material to the Firm's earnings-at-risk at June 30, 2017.

The Firm's sensitivity to rates is largely a result of assets re-pricing at a faster pace than deposits.

Separately, another U.S. dollar interest rate scenario used by the Firm — involving a steeper yield curve with long-term rates rising by 100 basis points and short-term rates staying at current levels — results in a 12-month benefit to net interest income of approximately $800 million. The increase in net interest income under this scenario reflects the Firm reinvesting at the higher long-term rates, with funding costs remaining unchanged. The result of the comparable non-U.S. dollar scenario was not material to the Firm.

Other sensitivity-based measures

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

captured in other sensitivity-based measures, please refer to the Risk identification and classification table on page 117 of JPMorgan Chase's 2016 Annual Report.

The table below represents the potential impact to net revenue or OCI for market risk-sensitive instruments that are not included in VaR or earnings-at-risk. Where appropriate, instruments used for hedging purposes are reported along with the positions being hedged. The sensitivities disclosed in the table below may not be representative of the actual gain or loss that would have been realized at June 30, 2017 and December 31, 2016, as the movement in market parameters across maturities may vary and are not intended to imply management's expectation of future deterioration in these sensitivities.

Gain/(loss) (in millions)				
Activity	Description	Sensitivity measure	June 30, 2017	December 31, 2016
Investment activities				
Investment management activities	Consists of seed capital and related hedges; and fund co-investments	10% decline in market value	$(142)	$ (166)
Other investments	Consists of private equity and other investments held at fair value	10% decline in market value	(401)	(358)
Funding activities				
Non-USD LTD cross-currency basis	Represents the basis risk on derivatives used to hedge the foreign exchange risk on the non-USD LTD	1 basis point parallel tightening of cross currency basis	(10)	(7)
Non-USD LTD hedges foreign currency ("FX") exposure	Primarily represents the foreign exchange revaluation on the fair value of the derivative hedges	10% depreciation of currency	(6)	(23)
Funding spread risk – derivatives	Impact of changes in the spread related to derivatives DVA/FVA	1 basis point parallel increase in spread	(5)	(4)
Funding spread risk – fair value option elected liabilities[(a)]	Impact of changes in the spread related to fair value option elected liabilities DVA	1 basis point parallel increase in spread	19	17

(a) Impact recognized through OCI.

CRITICAL ACCOUNTING ESTIMATES USED BY THE FIRM

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

Allowance for credit losses

JPMorgan Chase's allowance for credit losses covers the retained consumer and wholesale loan portfolios, as well as the Firm's wholesale and certain consumer lending-related commitments. The allowance for loan losses is intended to adjust the carrying value of the Firm's loan assets to reflect probable credit losses inherent in the loan portfolio as of the balance sheet date. Similarly, the allowance for lending-related commitments is established to cover probable credit losses inherent in the lending-related commitments portfolio as of the balance sheet date.

The allowance for credit losses includes a formula-based component, an asset-specific component, and a component related to PCI loans. The determination of each of these components involves significant judgment on a number of matters. For further discussion of these components, areas of judgment and methodologies used in establishing the Firm's allowance for credit losses, see pages 105–107, pages 132–133 and Note 15 of JPMorgan Chase's 2016 Annual Report; and see Allowance for credit losses on pages 63–65 and Note 12 of this Form 10-Q.

As noted in the discussion on pages 132–133 of JPMorgan Chase's 2016 Annual Report, the Firm's allowance for credit losses is sensitive to numerous factors, which may differ depending on the portfolio. Changes in economic conditions or in the Firm's assumptions and estimates could affect its estimate of probable credit losses inherent in the portfolio at the balance sheet date. The Firm uses its best judgment to assess these economic conditions and loss data in estimating the allowance for credit losses and these estimates are subject to periodic refinement based on changes to underlying external or Firm-specific historical data. During the second quarter of 2017, the Firm refined its loss estimates relating to the wholesale portfolio. See Note 12 of this Form 10-Q for further discussion. The use of

alternate estimates, data sources, adjustments to modeled loss estimates for model imprecision and other factors would result in a different estimated allowance for credit losses, as well as impact any related sensitivities described below.

To illustrate the potential magnitude of certain alternate judgments, the Firm estimates that changes in the following inputs would have the following effects on the Firm's modeled credit loss estimates as of June 30, 2017, without consideration of any offsetting or correlated effects of other inputs in the Firm's allowance for loan losses:

- A combined 5% decline in housing prices and a 100 basis point increase in unemployment rates from current levels could imply:
  - an increase to modeled credit loss estimates of approximately $550 million for PCI loans.
  - an increase to modeled annual credit loss estimates of approximately $100 million for the residential real estate, excluding PCI loans.
- For credit card loans, a 100 basis point increase in unemployment rates from current levels could imply an increase to modeled annual credit loss estimates of approximately $925 million.
- An increase in PD factors consistent with a one-notch downgrade in the Firm's internal risk ratings for its entire wholesale loan portfolio could imply an increase in the Firm's modeled credit loss estimates of approximately $1.6 billion.

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

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

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

Fair value of financial instruments, MSRs and commodities inventory

Assets measured at fair value

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

June 30, 2017 (in billions, except ratios)	Total assets at fair value	Total level 3 assets
Trading–debt and equity instruments	$350.5	$7.3
Derivative receivables[a]	56.5	4.6
Trading assets	407.0	11.9
AFS securities	215.7	0.5
Loans	2.0	0.3
MSRs	5.8	5.8
Other	26.2	1.9
Total assets measured at fair value on a recurring basis	$656.7	$20.4
Total assets measured at fair value on a nonrecurring basis	1.0	0.7
Total assets measured at fair value	$657.7	$21.1
Total Firm assets	$2,563.2	
Level 3 assets as a percentage of total Firm assets[a]		0.8 %
Level 3 assets as a percentage of total Firm assets at fair value[a]		3.2 %

(a) For purposes of the table above, the derivative receivables total reflects the impact of netting adjustments; however, the $4.6 billion of derivative receivables classified as level 3 does not reflect the netting adjustment as such netting is not relevant to a presentation based on the transparency of inputs to the valuation of an asset. The level 3 balances would be reduced if netting were applied, including the netting benefit associated with cash collateral.

Valuation

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

In arriving at an estimate of fair value for an instrument within level 3, management must first determine the appropriate valuation technique to use. Second, the lack of observability of certain significant inputs requires management to assess all relevant empirical data in deriving valuation inputs — including, for example,

transaction details, yield curves, interest rates, prepayment rates, default rates, volatilities, correlations, equity or debt prices, valuations of comparable instruments, foreign exchange rates and credit curves. For further discussion of the valuation of level 3 instruments, including unobservable inputs used, see Note 2.

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

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

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

Goodwill impairment

Management applies significant judgment when testing goodwill for impairment. For a description of the significant valuation judgments associated with goodwill impairment, see Goodwill impairment on pages 133–134 of JPMorgan Chase's 2016 Annual Report.

For the three months ended June 30, 2017, the Firm reviewed current conditions (including the estimated effects of regulatory and legislative changes and the current estimated market cost of equity) and prior projections of business performance for all its businesses. Based upon such reviews, the Firm concluded that the goodwill allocated to its reporting units was not impaired as of June 30, 2017.

Declines in business performance, increases in credit losses, increases in equity capital requirements, as well as deterioration in economic or market conditions, adverse regulatory or legislative changes or increases in the estimated market cost of equity, could cause the estimated fair values of the Firm's reporting units or their associated goodwill to decline in the future, which could result in a material impairment charge to earnings in a future period related to some portion of the associated goodwill.

For additional information on goodwill, see Note 14.

Income taxes
For a description of the significant assumptions, judgments and interpretations associated with the accounting for income taxes, see Income taxes on page 134 of JPMorgan Chase’s 2016 Annual Report.
Litigation reserves
For a description of the significant estimates and judgments associated with establishing litigation reserves, see Note 21 of this Form 10-Q, and Note 31 of JPMorgan Chase’s 2016 Annual Report.

ACCOUNTING AND REPORTING DEVELOPMENTS

Financial Accounting Standards Board ("FASB") Standards Issued but not yet Adopted

Standard	Summary of guidance	Effects on financial statements
Revenue recognition – revenue from contracts with customers Issued May 2014	• Requires that revenue from contracts with customers be recognized upon transfer of control of a good or service in the amount of consideration expected to be received. • Changes the accounting for certain contract costs, including whether they may be offset against revenue in the Consolidated statements of income, and requires additional disclosures about revenue and contract costs. • May be adopted using a full retrospective approach or a modified, cumulative effect approach wherein the guidance is applied only to existing contracts as of the date of initial application, and to new contracts transacted after that date.	• Required effective date: January 1, 2018.[a] • Because the guidance does not apply to revenue associated with financial instruments, including loans and securities that are accounted for under other U.S. GAAP, the Firm does not expect the new revenue recognition guidance to have a material impact on the elements of its Consolidated statements of income most closely associated with financial instruments, including securities gains, interest income and interest expense. • The Firm plans to adopt the revenue recognition guidance in the first quarter of 2018 using the modified retrospective method of adoption. The Firm's implementation efforts include the identification of revenue within the scope of the guidance, as well as the evaluation of revenue contracts and related accounting policies. While the Firm has not yet identified any material changes in the timing of revenue recognition, the Firm's review is ongoing, and it continues to evaluate the presentation of certain contract costs (whether presented gross or offset against noninterest revenue). The Firm plans to expand its qualitative disclosures within the noninterest revenue and noninterest expense note to the Consolidated Financial Statements.
Recognition and measurement of financial assets and financial liabilities Issued January 2016	• Requires that certain equity instruments be measured at fair value, with changes in fair value recognized in earnings. • Generally requires a cumulative-effect adjustment to retained earnings as of the beginning of the reporting period of adoption.	• Required effective date: January 1, 2018.[a] • The Firm early adopted the provisions of this guidance related to presenting DVA in OCI for financial liabilities where the fair value option has been elected, effective January 1, 2016. The Firm plans to adopt the portions of the guidance that were not eligible for early adoption in the first quarter of 2018. • The Firm is currently evaluating the additional impacts on the Consolidated Financial Statements. The Firm's implementation efforts include the identification of securities within the scope of the guidance, the evaluation of the measurement alternative available for equity securities without a readily determinable fair value, and the related impact to accounting policies, presentation, and disclosures.
Leases Issued February 2016	• Requires lessees to recognize all leases longer than twelve months on the Consolidated balance sheets as lease liabilities with corresponding right-of-use assets. • Requires lessees and lessors to classify most leases using principles similar to existing lease accounting,	• Required effective date: January 1, 2019.[a] • The Firm is currently evaluating the potential impact on the Consolidated Financial Statements by reviewing its existing lease contracts and service contracts that may include embedded leases. The Firm expects to recognize lease liabilities and corresponding right-of-use assets (at their present value) related to predominantly all of the $10 billion of future minimum payments required under operating leases as

	but eliminates the “bright line” classification tests. • Expands qualitative and quantitative disclosures regarding leasing arrangements. • Requires adoption using a modified cumulative effect approach wherein the guidance is applied to all periods presented.	disclosed in Note 30 of JPMorgan Chase’s 2016 Annual report. However, the population of contracts subject to balance sheet recognition and their initial measurement remains under evaluation. The Firm does not expect material changes to the recognition of operating lease expense in its Consolidated statements of income. • The Firm plans to adopt the new guidance in the first quarter of 2019.
Financial instruments - credit losses Issued June 2016	• Replaces existing incurred loss impairment guidance and establishes a single allowance framework for financial assets carried at amortized cost (including HTM securities), which will reflect management’s estimate of credit losses over the full remaining expected life of the financial assets. • Eliminates existing guidance for PCI loans, and requires recognition of an allowance for expected credit losses on financial assets purchased with more than insignificant credit deterioration since origination. • Amends existing impairment guidance for AFS securities to incorporate an allowance, which will allow for reversals of impairment losses in the event that the credit of an issuer improves. • Requires a cumulative-effect adjustment to retained earnings as of the beginning of the reporting period of adoption.	• Required effective date: January 1, 2020.[a] • The Firm has begun its implementation efforts by establishing a Firmwide, cross-discipline governance structure. The Firm is currently identifying key interpretive issues, and is assessing existing credit loss forecasting models and processes against the new guidance to determine what modifications may be required. The Firm is also evaluating the timing of adoption, as early adoption is permitted as of January 1, 2019. • The Firm expects that the new guidance will result in an increase in its allowance for credit losses due to several factors, including: 1. The allowance related to the Firm’s loans and commitments will increase to cover credit losses over the full remaining expected life of the portfolio, and will consider expected future changes in macroeconomic conditions 2. The nonaccretable difference on PCI loans will be recognized as an allowance, offset by an increase in the carrying value of the related loans 3. An allowance will be established for estimated credit losses on HTM securities • The extent of the increase is under evaluation, but will depend upon the nature and characteristics of the Firm’s portfolio at the adoption date, and the macroeconomic conditions and forecasts at that date.

FASB Standards Issued but not yet Adopted (continued)

Standard	Summary of guidance	Effects on financial statements
Classification of certain cash receipts and cash payments in the statement of cash flows Issued August 2016	• Provides targeted amendments to the classification of certain cash flows, including treatment of cash payments for settlement of zero-coupon debt instruments and distributions received from equity method investments. • Requires retrospective application to all periods presented.	• Required effective date: January 1, 2018.[a] • No material impact is expected because the Firm is either already in compliance with the new guidance or the balances to which it would be applied are immaterial. The Firm plans to adopt the new guidance in the first quarter of 2018.
Treatment of restricted cash on the statement of cash flows Issued November 2016	• Requires inclusion of restricted cash in the cash and cash equivalents balances in the Consolidated statements of cash flows. • Requires additional disclosures to supplement the Consolidated statements of cash flows. • Requires retrospective application to all periods presented.	• Required effective date: January 1, 2018.[a] • The guidance will have no impact on the Firm's Consolidated statements of income or Consolidated balance sheets, but will result in reclassification of restricted cash balances and associated changes on the Consolidated statements of cash flows. • The Firm plans to adopt the new guidance in the first quarter of 2018.
Definition of a business Issued January 2017	• Narrows the definition of a business and clarifies that, to be considered a business, the fair value of the gross assets acquired (or disposed of) may not be substantially all concentrated in a single identifiable asset or a group of similar assets. • In addition, in order to be considered a business, a set of activities and assets must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create outputs.	• Required effective date: January 1, 2018.[a] • No material impact is expected because the guidance is to be applied prospectively, although it is anticipated that after adoption, fewer transactions will be treated as acquisitions or dispositions of a business. The Firm plans to adopt the new guidance in the first quarter of 2018.
Goodwill Issued January 2017	• Requires an impairment loss to be recognized when the estimated fair value of a reporting unit falls below its carrying value. • Eliminates the second condition in the current guidance that requires an impairment loss to be recognized only if the estimated implied fair value of the goodwill is below its carrying value.	• Required effective date: January 1, 2020.[a] • Based on current impairment test results, the Firm does not expect a material effect on the Consolidated Financial Statements. • After adoption, the guidance may result in more frequent goodwill impairment losses due to the removal of the second condition. • The Firm is evaluating the timing of adoption.
Presentation of net periodic pension cost and net periodic postretirement	• Requires the service cost component of net periodic pension and postretirement benefit cost to be reported separately in the consolidated	• Required effective date: January 1, 2018.[a] • The guidance will have no impact on the Firm's net income, but based on recent trends, the Firm expects that the guidance will result in an increase in

benefit cost Issued March 2017	results of operations from the other components (e.g., expected return on assets, interest costs, amortization of gains/losses and prior service costs). • Requires presentation in the consolidated results of operations of the service cost component in the same line item as other employee compensation costs and presentation of the other components in a different line item from the service cost component.	compensation expense and a reduction in other expense. The Firm plans to adopt the new guidance in the first quarter of 2018.
Premium amortization on purchased callable debt securities Issued March 2017	• Requires amortization of premiums to the earliest call date on debt securities with call features that are explicit, noncontingent and callable at fixed prices and on preset dates. • Does not impact securities held at a discount; the discount continues to be amortized to the contractual maturity. • Requires adoption on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption.	• Required effective date: January 1, 2019.[(a)] • The Firm is currently evaluating the impact on the Consolidated Financial Statements as well as the timing of adoption. At adoption, the guidance is expected to result in a cumulative effect adjustment which will reduce retained earnings with a corresponding increase to AOCI for AFS securities. Post-adoption, it will result in reduced interest income prior to the call date on callable debt securities held at a premium because those premiums will be amortized over a shorter time period. • The Firm's implementation efforts include identifying the population of debt securities subject to the new guidance (primarily obligations of U.S. states and municipalities) and quantifying the expected impact.

(a) Early adoption is permitted.

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FORWARD-LOOKING STATEMENTS

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

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

- Local, regional and global business, economic and political conditions and geopolitical events;
- Changes in laws and regulatory requirements, including capital and liquidity requirements affecting the Firm’s businesses, and the ability of the Firm to address those requirements;
- Heightened regulatory and governmental oversight and scrutiny of JPMorgan Chase’s business practices, including dealings with retail customers;
- Changes in trade, monetary and fiscal policies and laws;
- Changes in income tax laws and regulations;
- Securities and capital markets behavior, including changes in market liquidity and volatility;
- Changes in investor sentiment or consumer spending or savings behavior;
- Ability of the Firm to manage effectively its capital and liquidity, including approval of its capital plans by banking regulators;
- Changes in credit ratings assigned to the Firm or its subsidiaries;
- Damage to the Firm’s reputation;
- Ability of the Firm to deal effectively with an economic slowdown or other economic or market disruption;
- Technology changes instituted by the Firm, its counterparties or competitors;
- The success of the Firm’s business simplification initiatives and the effectiveness of its control agenda;
- Ability of the Firm to develop new products and services, and the extent to which products or services previously sold by the Firm (including but not limited to mortgages and asset-backed securities) require the Firm to incur liabilities or absorb losses not contemplated at their initiation or origination;
- Acceptance of the Firm’s new and existing products and services by the marketplace and the ability of the Firm to innovate and to increase market share;
- Ability of the Firm to attract and retain qualified employees;
- Ability of the Firm to control expense;
- Competitive pressures;
- Changes in the credit quality of the Firm’s customers and counterparties;
- Adequacy of the Firm’s risk management framework, disclosure controls and procedures and internal control over financial reporting;
- Adverse judicial or regulatory proceedings;
- Changes in applicable accounting policies, including the introduction of new accounting standards;
- Ability of the Firm to determine accurate values of certain assets and liabilities;
- Occurrence of natural or man-made disasters or calamities or conflicts and the Firm’s ability to deal effectively with disruptions caused by the foregoing;
-

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

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

Item 1A: Risk Factors in JPMorgan Chase’s 2016 Annual Report on Form 10-K for the year ended December 31, 2016.

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

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

	Three months ended June 30,		Six months ended June 30,	
(in millions, except per share data)	2017	2016	2017	2016
Revenue				
Investment banking fees	$1,810	$1,644	$3,627	$2,977
Principal transactions	3,137	2,976	6,719	5,655
Lending- and deposit-related fees	1,482	1,403	2,930	2,806
Asset management, administration and commissions	3,824	3,681	7,501	7,305
Securities gains/(losses)	(34)	21	(37)	72
Mortgage fees and related income	404	689	810	1,356
Card income	1,167	1,358	2,081	2,659
Other income	1,472	1,261	2,242	2,062
Noninterest revenue	13,262	13,033	25,873	24,892
Interest income	15,650	13,813	30,692	27,365
Interest expense	3,442	2,466	6,420	4,638
Net interest income	12,208	11,347	24,272	22,727
Total net revenue	25,470	24,380	50,145	47,619
Provision for credit losses	1,215	1,402	2,530	3,226
Noninterest expense				
Compensation expense	7,706	7,778	15,907	15,438
Occupancy expense	912	899	1,873	1,782
Technology, communications and equipment expense	1,870	1,665	3,698	3,283
Professional and outside services	1,644	1,700	3,187	3,248
Marketing	756	672	1,469	1,375
Other expense	1,618	924	3,391	2,349
Total noninterest expense	14,506	13,638	29,525	27,475
Income before income tax expense	9,749	9,340	18,090	16,918
Income tax expense	2,720	3,140	4,613	5,198
Net income	$7,029	$6,200	$13,477	$11,720
Net income applicable to common stockholders[(a)]	$6,555	$5,728	$12,531	$10,773
Net income per common share data				
Basic earnings per share	$1.83	$1.56	$3.49	$2.92
Diluted earnings per share	1.82	1.55	3.47	2.89
Weighted-average basic shares[(a)]	3,574.1	3,675.5	3,587.9	3,693.0
Weighted-average diluted shares[(a)]	3,599.0	3,706.2	3,614.7	3,721.9
Cash dividends declared per common share	$0.50	$0.48	$1.00	$0.92

(a) The prior period amounts have been revised to conform with the current period presentation. The revision had no impact on the Firm’s reported earnings per share.

The Notes to Consolidated Financial Statements (unaudited) are an integral part of these statements.

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

	Three months ended June 30,		Six months ended June 30,	
(in millions)	2017	2016	2017	2016
Net income	$7,029	$6,200	$13,477	$11,720
Other comprehensive income/(loss), after–tax				
Unrealized gains on investment securities	457	867	695	1,292
Translation adjustments, net of hedges	—	3	7	1
Cash flow hedges	53	(87)	144	(157)
Defined benefit pension and OPEB plans	19	56	4	81
DVA on fair value option elected liabilities	2	(3)	(67)	55
Total other comprehensive income, after–tax	531	836	783	1,272
Comprehensive income	$7,560	$7,036	$14,260	$12,992

The Notes to Consolidated Financial Statements (unaudited) are an integral part of these statements.

JPMorgan Chase & Co.
Consolidated balance sheets (unaudited)

(in millions, except share data)	Jun 30, 2017	Dec 31, 2016
Assets		
Cash and due from banks	$21,781	$23,873
Deposits with banks	427,380	365,762
Federal funds sold and securities purchased under resale agreements (included $18,026 and $21,506 at fair value)	218,570	229,967
Securities borrowed (included $1,590 and $0 at fair value)	90,654	96,409
Trading assets (included assets pledged of $136,213 and $115,847)	407,064	372,130
Securities (included $215,697 and $238,891 at fair value and assets pledged of $16,608 and $16,115)	263,458	289,059
Loans (included $1,979 and $2,230 at fair value)	908,767	894,765
Allowance for loan losses	(13,363)	(13,776)
Loans, net of allowance for loan losses	895,404	880,989
Accrued interest and accounts receivable	64,038	52,330
Premises and equipment	14,206	14,131
Goodwill	47,300	47,288
Mortgage servicing rights	5,753	6,096
Other intangible assets	827	862
Other assets (included $7,412 and $7,557 at fair value and assets pledged of $1,493 and $1,603)	106,739	112,076
Total assets[(a)]	$2,563,174	$2,490,972
Liabilities		
Deposits (included $17,754 and $13,912 at fair value)	$1,439,473	$1,375,179
Federal funds purchased and securities loaned or sold under repurchase agreements (included $721 and $687 at fair value)	165,621	165,666
Commercial paper	22,207	11,738
Other borrowed funds (included $8,515 and $9,105 at fair value)	30,936	22,705
Trading liabilities	133,423	136,659
Accounts payable and other liabilities (included $11,543 and $9,120 at fair value)	189,160	190,543
Beneficial interests issued by consolidated VIEs (included $72 and $120 at fair value)	30,898	39,047
Long-term debt (included $43,484 and $37,686 at fair value)	292,973	295,245
Total liabilities[(a)]	2,304,691	2,236,782
Commitments and contingencies (see Notes 19, 20 and 21)		
Stockholders' equity		
Preferred stock ($1 par value; authorized 200,000,000 shares; issued 2,606,750 shares)	26,068	26,068
Common stock ($1 par value; authorized 9,000,000,000 shares; issued 4,104,933,895 shares)	4,105	4,105
Additional paid-in capital	90,604	91,627
Retained earnings	171,488	162,440
Accumulated other comprehensive (loss)	(392)	(1,175)
Shares held in restricted stock units ("RSU") Trust, at cost (472,953 shares)	(21)	(21)
Treasury stock, at cost (585,969,485 and 543,744,003 shares)	(33,369)	(28,854)
Total stockholders' equity	258,483	254,190
Total liabilities and stockholders' equity	$2,563,174	$2,490,972

(a) The following table presents information on assets and liabilities related to VIEs that are consolidated by the Firm at June 30, 2017, and December 31, 2016. The difference between total VIE assets and liabilities represents the Firm's interests in those entities, which are eliminated in consolidation.

(in millions)	Jun 30, 2017	Dec 31, 2016
Assets		
Trading assets	$2,688	$3,185
Loans	71,012	75,614
All other assets	2,819	3,321
Total assets	$76,519	$82,120
Liabilities		
Beneficial interests issued by consolidated VIEs	$30,898	$39,047
All other liabilities	427	490
Total liabilities	$31,325	$39,537

The assets of the consolidated VIEs are used to settle the liabilities of those entities. The holders of the beneficial interests do not have recourse to the general credit of JPMorgan Chase. At both June 30, 2017, and December 31, 2016, the Firm provided limited program-wide credit enhancements of 2.4 billion related to its Firm-administered multi-seller conduits, which are eliminated in consolidation. For further discussion, see Note 13.
The Notes to Consolidated Financial Statements (unaudited) are an integral part of these statements.

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

	Six months ended June 30,	
(in millions, except per share data)	2017	2016
Preferred stock		
Balance at January 1 and June 30	$26,068	$26,068
Common stock		
Balance at January 1 and June 30	4,105	4,105
Additional paid-in capital		
Balance at January 1	91,627	92,500
Shares issued and commitments to issue common stock for employee stock-based compensation awards, and related tax effects	(865)	(539)
Other	(158)	13
Balance at June 30	90,604	91,974
Retained earnings		
Balance at January 1	162,440	146,420
Cumulative effect of change in accounting principle	—	(154)
Net income	13,477	11,720
Dividends declared:		
Preferred stock	(823)	(823)
Common stock ($1.00 and $0.92 per share)	(3,606)	(3,414)
Balance at June 30	171,488	153,749
Accumulated other comprehensive income		
Balance at January 1	(1,175)	192
Cumulative effect of change in accounting principle	—	154
Other comprehensive income/(loss)	783	1,272
Balance at June 30	(392)	1,618
Shares held in RSU Trust, at cost		
Balance at January 1 and June 30	(21)	(21)
Treasury stock, at cost		
Balance at January 1	(28,854)	(21,691)
Purchase of treasury stock	(5,839)	(4,536)
Reissuance from treasury stock	1,324	1,157
Balance at June 30	(33,369)	(25,070)
Total stockholders' equity	$258,483	$252,423

The Notes to Consolidated Financial Statements (unaudited) are an integral part of these statements.

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

(in millions)	Six months ended June 30, 2017	2016
Net income	$13,477	$11,720
Adjustments to reconcile net income to net cash provided by operating activities:		
Provision for credit losses	2,530	3,226
Depreciation and amortization	2,968	2,625
Deferred tax expense	(161)	577
Other	1,163	1,001
Originations and purchases of loans held-for-sale	(58,119)	(24,963)
Proceeds from sales, securitizations and paydowns of loans held-for-sale	53,053	22,356
Net change in:		
Trading assets	(22,914)	(52,501)
Securities borrowed	5,845	(4,505)
Accrued interest and accounts receivable	(11,940)	(18,407)
Other assets	11,366	(10,764)
Trading liabilities	(12,827)	42,738
Accounts payable and other liabilities	(5,189)	3,714
Other operating adjustments	7,724	276
Net cash used in operating activities	(13,024)	(22,907)
Investing activities		
Net change in:		
Deposits with banks	(61,618)	(5,580)
Federal funds sold and securities purchased under resale agreements	11,364	(24,624)
Held-to-maturity securities:		
Proceeds from paydowns and maturities	2,289	2,718
Purchases	—	(134)
Available-for-sale securities:		
Proceeds from paydowns and maturities	29,481	33,070
Proceeds from sales	42,972	22,559
Purchases	(45,613)	(42,002)
Proceeds from sales and securitizations of loans held-for-investment	7,762	5,599
Other changes in loans, net	(24,266)	(43,094)
All other investing activities, net	550	(576)
Net cash used in investing activities	(37,079)	(52,064)
Financing activities		
Net change in:		
Deposits	53,122	68,209
Federal funds purchased and securities loaned or sold under repurchase agreements	(43)	13,346
Commercial paper and other borrowed funds	18,222	311
Beneficial interests issued by consolidated VIEs	(1,067)	(2,668)
Proceeds from long-term borrowings	35,530	36,064
Payments of long-term borrowings	(47,743)	(32,022)
Treasury stock purchased	(5,839)	(4,536)
Dividends paid	(4,386)	(4,120)
All other financing activities, net	115	(425)
Net cash provided by financing activities	47,911	74,159
Effect of exchange rate changes on cash and due from banks	100	32

Net decrease in cash and due from banks	(2,092)	(780)
Cash and due from banks at the beginning of the period	23,873	20,490
Cash and due from banks at the end of the period	$21,781	$19,710
Cash interest paid	$6,322	$4,283
Cash income taxes paid, net	1,736	1,261

The Notes to Consolidated Financial Statements (unaudited) are an integral part of these statements.

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See the Glossary of Terms and Acronyms on pages 168–175 for definitions of terms and acronyms used throughout the Notes to Consolidated Financial Statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (unaudited)

Note 1 – Basis of presentation

JPMorgan Chase & Co. ("JPMorgan Chase" or "the Firm"), a financial holding company incorporated under Delaware law in 1968, is a leading global financial services firm and one of the largest banking institutions in the U.S., with operations worldwide. The Firm is a leader in investment banking, financial services for consumers and small business, commercial banking, financial transaction processing and asset management. For a discussion of the Firm's business segments, see Note 22.

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

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

These unaudited Consolidated Financial Statements should be read in conjunction with the audited Consolidated Financial Statements, and related notes thereto, included in JPMorgan Chase's 2016 Annual Report.

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

Consolidation

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

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

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

For a further description of JPMorgan Chase's accounting policies regarding consolidation, see Notes 1 and 16 of JPMorgan Chase's 2016 Annual Report.

Offsetting assets and liabilities

U.S. GAAP permits entities to present derivative receivables and derivative payables with the same counterparty and the related cash collateral receivables and payables on a net basis on the Consolidated balance sheets when a legally enforceable master netting agreement exists. U.S. GAAP also permits securities sold and purchased under repurchase agreements to be presented net when specified conditions are met, including the existence of a legally enforceable master netting agreement. The Firm has elected to net such balances when the specified conditions are met. For further information on offsetting assets and liabilities, see Note 1 of JPMorgan Chase's 2016 Annual Report.

Note 2 – Fair value measurement

For a discussion of the Firm's valuation methodologies for assets, liabilities and lending-related commitments measured at fair value and the fair value hierarchy, see Note 3 of JPMorgan Chase's 2016 Annual Report.

The following table presents the assets and liabilities reported at fair value as of June 30, 2017, and December 31, 2016, by major product category and fair value hierarchy.

Assets and liabilities measured at fair value on a recurring basis

June 30, 2017 (in millions)	Fair value hierarchy Level 1	Level 2	Level 3	Derivative netting adjustments	Total fair value
Federal funds sold and securities purchased under resale agreements	$—	$18,026	$—	$—	$18,026
Securities borrowed	—	1,590	—	—	1,590
Trading assets:					
Debt instruments:					
Mortgage-backed securities:					
U.S. government agencies[(a)]	1	37,058	365	—	37,424
Residential – nonagency	—	1,530	98	—	1,628
Commercial – nonagency	—	1,388	65	—	1,453
Total mortgage-backed securities	1	39,976	528	—	40,505
U.S. Treasury and government agencies[(a)]	33,996	5,041	—	—	39,037
Obligations of U.S. states and municipalities	—	8,136	681	—	8,817
Certificates of deposit, bankers' acceptances and commercial paper	—	1,699	—	—	1,699
Non-U.S. government debt securities	31,827	31,689	37	—	63,553
Corporate debt securities	—	27,068	461	—	27,529
Loans[(b)]	—	31,697	4,488	—	36,185
Asset-backed securities	—	2,739	83	—	2,822
Total debt instruments	65,824	148,045	6,278	—	220,147
Equity securities	113,460	251	284	—	113,995
Physical commodities[(c)]	3,326	1,262	—	—	4,588
Other	—	11,045	731	—	11,776
Total debt and equity instruments[(d)]	182,610	160,603	7,293	—	350,506
Derivative receivables:					
Interest rate	463	521,260	1,713	(496,524)	26,912
Credit	—	24,610	1,289	(24,885)	1,014
Foreign exchange	841	173,433	522	(158,134)	16,662
Equity	—	36,584	963	(31,274)	6,273
Commodity	—	14,015	119	(8,489)	5,645
Total derivative receivables[(e)]	1,304	769,902	4,606	(719,306)	56,506
Total trading assets[(f)]	183,914	930,505	11,899	(719,306)	407,012
Available-for-sale securities:					
Mortgage-backed securities:					
U.S. government agencies[(a)]	4	67,913	—	—	67,917
Residential – nonagency	—	13,877	1	—	13,878
Commercial – nonagency	—	6,667	—	—	6,667
Total mortgage-backed securities	4	88,457	1	—	88,462
U.S. Treasury and government agencies[(a)]	28,158	—	—	—	28,158
Obligations of U.S. states and municipalities	—	32,539	—	—	32,539
Certificates of deposit	—	57	—	—	57
Non-U.S. government debt securities	19,291	11,280	—	—	30,571
Corporate debt securities	—	4,132	—	—	4,132
Asset-backed securities:					
Collateralized loan obligations	—	23,780	547	—	24,327

Other	—	6,526	—	—	6,526
Equity securities	925	—	—	—	925
Total available-for-sale securities	48,378	166,771	548	—	215,697
Loans	—	1,674	305	—	1,979
Mortgage servicing rights	—	—	5,753	—	5,753
Other assets[(f)]	4,721	—	1,934	—	6,655
Total assets measured at fair value on a recurring basis	$237,013	$1,118,566	$20,439	$(719,306)	$656,712
Deposits	$—	$15,623	$2,131	$—	$17,754
Federal funds purchased and securities loaned or sold under repurchase agreements	—	721	—	—	721
Other borrowed funds	—	7,201	1,314	—	8,515
Trading liabilities:					
Debt and equity instruments[(d)]	68,035	23,557	36	—	91,628
Derivative payables:					
Interest rate	341	484,248	1,001	(477,384)	8,206
Credit	—	24,789	1,334	(24,498)	1,625
Foreign exchange	933	175,931	1,208	(164,051)	14,021
Equity	—	39,670	3,407	(33,721)	9,356
Commodity	—	17,145	177	(8,735)	8,587
Total derivative payables[(e)]	1,274	741,783	7,127	(708,389)	41,795
Total trading liabilities	69,309	765,340	7,163	(708,389)	133,423
Accounts payable and other liabilities	11,533	—	10	—	11,543
Beneficial interests issued by consolidated VIEs	—	71	1	—	72
Long-term debt	—	26,824	16,660	—	43,484
Total liabilities measured at fair value on a recurring basis	$80,842	$815,780	$27,279	$(708,389)	$215,512

December 31, 2016 (in millions)	Fair value hierarchy Level 1	Level 2	Level 3	Derivative netting adjustments	Total fair value
Federal funds sold and securities purchased under resale agreements	$—	$21,506	$—	$—	$21,506
Securities borrowed	—	—	—	—	—
Trading assets:					
Debt instruments:					
Mortgage-backed securities:					
U.S. government agencies[a]	13	40,586	392	—	40,991
Residential – nonagency	—	1,552	83	—	1,635
Commercial – nonagency	—	1,321	17	—	1,338
Total mortgage-backed securities	13	43,459	492	—	43,964
U.S. Treasury and government agencies[a]	19,554	5,201	—	—	24,755
Obligations of U.S. states and municipalities	—	8,403	649	—	9,052
Certificates of deposit, bankers' acceptances and commercial paper	—	1,649	—	—	1,649
Non-U.S. government debt securities	28,443	23,076	46	—	51,565
Corporate debt securities	—	22,751	576	—	23,327
Loans[b]	—	28,965	4,837	—	33,802
Asset-backed securities	—	5,250	302	—	5,552
Total debt instruments	48,010	138,754	6,902	—	193,666
Equity securities	96,759	281	231	—	97,271
Physical commodities[c]	5,341	1,620	—	—	6,961
Other	—	9,341	761	—	10,102
Total debt and equity instruments[d]	150,110	149,996	7,894	—	308,000
Derivative receivables:					
Interest rate	715	602,747	2,501	(577,661)	28,302
Credit	—	28,256	1,389	(28,351)	1,294
Foreign exchange	812	231,743	870	(210,154)	23,271
Equity	—	34,032	908	(30,001)	4,939
Commodity	158	18,360	125	(12,371)	6,272
Total derivative receivables[e]	1,685	915,138	5,793	(858,538)	64,078
Total trading assets[f]	151,795	1,065,134	13,687	(858,538)	372,078
Available-for-sale securities:					
Mortgage-backed securities:					
U.S. government agencies[a]	—	64,005	—	—	64,005
Residential – nonagency	—	14,442	1	—	14,443
Commercial – nonagency	—	9,104	—	—	9,104
Total mortgage-backed securities	—	87,551	1	—	87,552
U.S. Treasury and government agencies[a]	44,072	29	—	—	44,101
Obligations of U.S. states and municipalities	—	31,592	—	—	31,592
Certificates of deposit	—	106	—	—	106
Non-U.S. government debt securities	22,793	12,495	—	—	35,288
Corporate debt securities	—	4,958	—	—	4,958
Asset-backed securities:					
Collateralized loan obligations	—	26,738	663	—	27,401
Other	—	6,967	—	—	6,967
Equity securities	926	—	—	—	926
Total available-for-sale securities	67,791	170,436	664	—	238,891

Loans	—	1,660	570	—	2,230
Mortgage servicing rights	—	—	6,096	—	6,096
Other assets[f]	4,357	—	2,223	—	6,580
Total assets measured at fair value on a recurring basis	$223,943	$1,258,736	$23,240	$(858,538)	$647,381
Deposits	$—	$11,795	$2,117	$—	$13,912
Federal funds purchased and securities loaned or sold under repurchase agreements	—	687	—	—	687
Other borrowed funds	—	7,971	1,134	—	9,105
Trading liabilities:					
Debt and equity instruments[d]	68,304	19,081	43	—	87,428
Derivative payables:					
Interest rate	539	569,001	1,238	(559,963)	10,815
Credit	—	27,375	1,291	(27,255)	1,411
Foreign exchange	902	231,815	2,254	(214,463)	20,508
Equity	—	35,202	3,160	(30,222)	8,140
Commodity	173	20,079	210	(12,105)	8,357
Total derivative payables[e]	1,614	883,472	8,153	(844,008)	49,231
Total trading liabilities	69,918	902,553	8,196	(844,008)	136,659
Accounts payable and other liabilities	9,107	—	13	—	9,120
Beneficial interests issued by consolidated VIEs	—	72	48	—	120
Long-term debt	—	23,792	13,894	—	37,686
Total liabilities measured at fair value on a recurring basis	$79,025	$946,870	$25,402	$(844,008)	$207,289

(a) At June 30, 2017, and December 31, 2016, included total U.S. government-sponsored enterprise obligations of $84.8 billion and $80.6 billion, respectively, which were predominantly mortgage-related.

(b) At June 30, 2017, and December 31, 2016, included within trading loans were $15.6 billion and $16.5 billion, respectively, of residential first-lien mortgages, and $3.1 billion and $3.3 billion, respectively, of commercial first-lien mortgages. Residential mortgage loans include conforming mortgage loans originated with the intent to sell to U.S. government agencies of $9.5 billion and $11.0 billion, respectively, and reverse mortgages of $2.0 billion for both periods.

(c) Physical commodities inventories are generally accounted for at the lower of cost or net realizable value. “Net realizable value” is a term defined in U.S. GAAP as not exceeding fair value less costs to sell (“transaction costs”). Transaction costs for the Firm’s physical commodities inventories are either not applicable or immaterial to the value of the inventory. Therefore, net realizable value approximates fair value for the Firm’s physical commodities inventories. When fair value hedging has been applied (or when net realizable value is below cost), the carrying value of physical commodities approximates fair value, because under fair value hedge accounting, the cost basis is adjusted for changes in fair value. For a further discussion of the Firm’s hedge accounting relationships, see Note 4. To provide consistent fair value disclosure information, all physical commodities inventories have been included in each period presented.

(d) Balances reflect the reduction of securities owned (long positions) by the amount of identical securities sold but not yet purchased (short positions).

(e) As permitted under U.S. GAAP, the Firm has elected to net derivative receivables and derivative payables and the related cash collateral received and paid when a legally enforceable master netting agreement exists. For purposes of the tables above, the Firm does not reduce derivative receivables and derivative payables balances for this netting adjustment, either within or across the levels of the fair value hierarchy, as such netting is not relevant to a presentation based on the transparency of inputs to the valuation of an asset or liability. The level 3 balances would be reduced if netting were applied, including the netting benefit associated with cash collateral.

(f) Certain investments that are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient are not required to be classified in the fair value hierarchy. At June 30, 2017, and December 31, 2016, the fair values of these investments, which include certain hedge funds, private equity funds, real estate and other funds, were $809 million and $1.0 billion, respectively. Included in these balances at June 30, 2017, and December 31, 2016, were trading assets of $52 million for both periods, and other assets of $757 million and $977 million, respectively.

Transfers between levels for instruments carried at fair value on a recurring basis

For the three and six months ended June 30, 2017 and 2016, there were no individually significant transfers.
All transfers are based on changes in the observability of the valuation inputs and are assumed to occur at the beginning of the quarterly reporting period in which they occur.

Level 3 valuations

For further information on the Firm's valuation process and a detailed discussion of the determination of fair value for individual financial instruments, see Note 3 of JPMorgan Chase's 2016 Annual Report.
The following table presents the Firm's primary level 3 financial instruments, the valuation techniques used to measure the fair value of those financial instruments, the significant unobservable inputs, the range of values for those inputs and, for certain instruments, the weighted averages of such inputs. While the determination to classify an instrument within level 3 is based on the significance of the unobservable inputs to the overall fair value measurement, level 3 financial instruments typically include observable components (that is, components that are actively quoted and can be validated to external sources) in addition to the unobservable components. The level 1 and/or level 2 inputs are not included in the table. In addition, the Firm manages the risk of the observable components of level 3 financial instruments using securities and derivative positions that are classified within levels 1 or 2 of the fair value hierarchy.
The range of values presented in the table is representative of the highest and lowest level input used to value the significant groups of instruments within a product/instrument classification. Where provided, the weighted averages of the input values presented in the table are calculated based on the fair value of the instruments that the input is being used to value.

In the Firm's view, the input range and the weighted average value do not reflect the degree of input uncertainty or an assessment of the reasonableness of the Firm's estimates and assumptions. Rather, they reflect the characteristics of the various instruments held by the Firm and the relative distribution of instruments within the range of characteristics. For example, two option contracts may have similar levels of market risk exposure and valuation uncertainty, but may have significantly different implied volatility levels because the option contracts have different underlyings, tenors, or strike prices. The input range and weighted average values will therefore vary from period-to-period and parameter-to-parameter based on the characteristics of the instruments held by the Firm at each balance sheet date.
For the Firm's derivatives and structured notes positions classified within level 3 at June 30, 2017, interest rate correlation inputs used in estimating fair value were concentrated towards the upper end of the range presented; equity correlation and equity-FX and equity-IR correlation inputs were concentrated in the middle of the range; commodity correlation inputs were concentrated towards the lower end of the range; credit correlation inputs were distributed across the range; and the interest rate-foreign exchange ("IR-FX") correlation inputs were concentrated towards the lower end of the range. In addition, the interest rate spread volatility inputs used in estimating fair value were distributed across the range presented; equity volatilities and commodity volatilities were concentrated towards the lower end of the range; and forward commodity prices used in estimating the fair value of commodity derivatives

were concentrated in the middle of the range presented. Recovery rate, yield, prepayment speed, conditional default rate and loss severity inputs used in estimating the fair value of credit derivatives were distributed across the range; and credit spreads were concentrated towards the lower end of the range.

Level 3 inputs[(a)]
June 30, 2017 (in millions, except for ratios and basis points)

Product/Instrument	Fair value	Principal valuation technique	Unobservable inputs[(g)]	Range of input values	Weighted average
Residential mortgage-backed securities and loans[(b)]	$2,641	Discounted cash flows	Yield	5% – 18%	5%
			Prepayment speed	0% – 26%	8%
			Conditional default rate	0% – 7%	2%
			Loss severity	0% – 100%	6%
Commercial mortgage-backed securities and loans[(c)]	956	Market comparables	Price	$0 – $114	$ 94
Obligations of U.S. states and municipalities	681	Market comparables	Price	$58 – $100	$ 97
Corporate debt securities	461	Market comparables	Price	$0 – $108	$ 87
Loans[(d)]	1,725	Market comparables	Price	$5 – $103	$ 84
Asset-backed securities	547	Discounted cash flows	Credit spread	246 bps – 461 bps	260 bps
			Prepayment speed	20%	20%
			Conditional default rate	2%	2%
			Loss severity	30%	30%
	83	Market comparables	Price	$0 – $169	$ 85
Net interest rate derivatives	648	Option pricing	Interest rate spread volatility	3% – 38%	
			Interest rate correlation	(50)% – 97%	
			IR-FX correlation	60% – 70%	
	64	Discounted cash flows	Prepayment speed	4% – 15%	
Net credit derivatives	(45)	Discounted cash flows	Credit correlation	35% – 85%	
			Credit spread	6bps – 1,557bps	
			Recovery rate	20% – 65%	
			Yield	5% – 8%	
			Prepayment speed	2% – 14%	
			Conditional default rate	2% – 100%	
			Loss severity	39% – 100%	
Net foreign exchange derivatives	(490)	Option pricing	IR-FX correlation	(50)% – 70%	
	(196)	Discounted cash flows	Prepayment speed	7%	
Net equity derivatives	(2,444)	Option pricing	Equity volatility	15% – 55%	
			Equity correlation	(5)% – 90%	
			Equity-FX correlation	(55)% – 25%	
			Equity-IR correlation	20% – 35%	
Net commodity derivatives	(58)	Option pricing	Forward commodity price	$41 – $ 54 per barrel	
			Commodity volatility	22% – 50%	
			Commodity correlation	15% – 97%	
MSRs	5,753	Discounted cash flows	Refer to Note 14		
Other assets	1,124	Discounted cash flows	Credit spread	40bps – 90bps	65bps
			Yield	8% – 40%	32%
	1,541	Market comparables	EBITDA multiple	6.6x – 10.3x	7.6x

	20,105	Option pricing	Interest rate spread volatility	3% –38%
Long-term debt, other borrowed funds, and deposits[(e)]			Interest rate correlation	(50)% 97%
			IR-FX correlation	(50)% 70%
			Equity correlation	(5)% 90%
			Equity-FX correlation	(55)% 25%
			Equity-IR correlation	20% 35%
Other level 3 assets and liabilities, net[(f)]	274			