JPMORGAN CHASE & CO. PILLAR 3 REGULATORY CAPITAL DISCLOSURES

For the quarterly period ended June 30, 2018

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DISCLOSURE MAP

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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 United States of America ("U.S."), with operations worldwide; the Firm had \$2.6 trillion in assets and \$257.5 billion in stockholders' equity as of June 30, 2018. 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 principal credit card-issuing bank. JPMorgan Chase's principal nonbank subsidiary is J.P. Morgan Securities LLC ("J.P. Morgan Securities"), a U.S. broker-dealer. The bank and non-bank subsidiaries of JPMorgan Chase operate nationally as well as through overseas branches and subsidiaries, and representative offices. The Firm's principal operating subsidiary in the U.K is J.P. Morgan Securities plc, a subsidiary of JPMorgan Chase Bank, N.A.

Pillar 3 report overview

This report provides information on the Firm's capital structure, capital adequacy, risk exposures, and risk-weighted assets ("RWA"). This report describes the internal models used to translate risk exposures into required capital.

This report should be read in conjunction with JPMorgan Chase's Pillar 3 Regulatory Capital Disclosures Report for the quarterly period ended December 31, 2017 ("4Q17 Pillar 3 Report"), as well as the Annual Report on Form 10-K for the year ended December 31, 2017 ("2017 Form 10-K") and the Quarterly Report on Form 10-Q for the period ended June 30, 2018 ("2Q18 Form 10-Q") which has been filed with the U.S. Securities and Exchange Commission ("SEC").

Basel III overview

The Basel framework consists of a three "Pillar" approach:

- Pillar 1 establishes minimum capital requirements, defines eligible capital instruments, and prescribes rules for calculating RWA.
- Pillar 2 requires banks to have an internal capital adequacy assessment process and requires that banking supervisors evaluate each bank's overall risk profile as well as its risk management and internal control processes.
- Pillar 3 encourages market discipline through disclosure requirements which allow market participants to assess the risk and capital profiles of banks.

Capital rules under Basel III establish minimum capital ratios and overall capital adequacy standards for large and internationally active U.S. bank holding companies ("BHC") 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"). While this required capital remains subject to the transitional rules during 2018, the Firm's capital in the form of common equity Tier 1 ("CET1") capital and Tier 1, and the Firm's risk-weighted assets became fully phased-in effective January 1, 2018.

Basel III also includes a requirement for Advanced Approach banking organizations, including the Firm, to calculate the supplementary leverage ratio ("SLR") which also became fully phased-in as of January 1, 2018.

Refer to pages 1-8 of the 2017 Form 10-K for information on Basel III Reforms.

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.

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 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.

Firmwide Risk Management is overseen and managed on an enterprise-wide basis. The Firm's approach to risk management involves understanding drivers of risks, risk types, and impacts of risks.

Drivers of risk include, but are not limited to, the economic environment, regulatory or government policy, competitor or market evolution, business decisions, process or judgment error, deliberate wrongdoing, dysfunctional markets, and natural disasters.

The Firm's risks are generally categorized in the following four risk types:

- Strategic risk is the risk associated with the Firm's current and future business plans and objectives, including capital risk, liquidity risk, and the impact to the Firm's reputation.
- Credit and investment risk is the risk associated with the default or change in credit profile of a client, counterparty or customer; or loss of principal or a reduction in expected returns on investments, including consumer credit risk, wholesale credit risk, and investment portfolio risk.
- Market risk is the risk associated with the effect of changes in market factors, such as interest and foreign exchange rates, equity and commodity prices, credit spreads or implied volatilities, on the value of assets and liabilities held for both the short and long term.

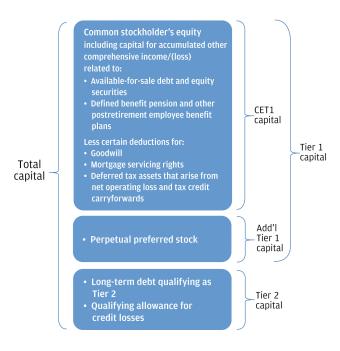
 Operational risk is the risk associated with inadequate or failed internal processes, people and systems, or from external events and includes compliance risk, conduct risk, legal risk, and estimations and model risk.

There may be many consequences of risks manifesting, including quantitative impacts such as reduction in earnings and capital, liquidity outflows, and fines or penalties, or qualitative impacts, such as reputation damage, loss of clients, and regulatory and enforcement actions.

Governance and oversight

Refer to pages 77-80 of the 2017 Form 10-K for information on Risk Governance and oversight.

The three categories of risk-based capital and their predominant components under the Basel III Transitional rules are illustrated below:



Terms of capital instruments

The terms and conditions of the Firm's capital instruments are described in the Firm's SEC filings.

- Refer to Note 20 on page 251 and Note 21 on pages 252 respectively of the 2017 Form 10-K for additional information on preferred stock and common stock.
- Refer to Note 19 on pages 249-250 of the 2017 Form 10-K for information on trust preferred securities.
- Refer to the Supervision and Regulation section in Part 1, Item 1 on pages 1-2 of the 2017 Form 10-K.

Components of capital

A reconciliation of total stockholders' equity to Basel III Advanced Transitional CET1 capital, Tier 1 capital, Tier 2 capital and Total capital is presented in the table below.

Refer to the Consolidated balance sheets on page 86 of the 2Q18 Form 10-Q for the components of total stockholders' equity.

June 30, 2018 (in millions)	l III Advanced ransitional
Total stockholders' equity	\$ 257,458
Less: Preferred stock	26,068
Common stockholders' equity	231,390
Less:	
Goodwill	47,488
Other intangible assets	806
Other CET1 capital adjustments(a)	615
Add:	
Deferred tax liabilities(b)	2,227
CET1 capital	184,708
Preferred stock	26,068
Other Tier 1 capital adjustments	9
Less: Tier 1 capital deductions	464
Total Tier 1 capital	210,321
Long-term debt and other instruments qualifying	12 527
as Tier 2 capital	13,537
Qualifying allowance for credit losses	4,764
Other Tier 2 capital adjustments	488
Less: Tier 2 capital deductions	83
Total Tier 2 capital	18,706
Total capital	\$ 229,027

- (a) Includes debit valuation adjustments ("DVA") related to structured notes recorded in accumulated other comprehensive income ("AOCI").
- (b) Represents certain deferred tax liabilities related to tax-deductible goodwill and identifiable intangibles created in nontaxable transactions, which are netted against goodwill and other intangibles.

Restrictions on capital and transfer of funds

Regulations govern the amount of dividends the Firm's banking subsidiaries could pay without the prior approval of their relevant banking regulators.

Refer to Note 18 on page 157 of the 2Q18 Form 10-Q and Note 25 on page 258 of the 2017 Form 10-K for information on restrictions on cash and intercompany funds transfers.

Capital management

For additional information on regulatory capital, capital actions and the regulatory capital outlook, refer to the Capital Risk Management section on pages 43-47 of the 2Q18 Form 10-Q and Note 26 on pages 259-260 of the 2017 Form 10-K. The Capital Risk Management section of the Form 10-K reflects regulatory capital, RWA and capital ratios calculated under both the Basel III Advanced and Standardized Fully Phased-In and Transitional rules, whereas the related capital metrics presented in this report are calculated under Basel III Advanced Transitional rules, except where explicitly noted. As a result, there are differences in the amounts presented between the two reports.

Risk-weighted assets

Basel III establishes two comprehensive approaches for calculating RWA (a Standardized approach and an Advanced approach) which include capital requirements for credit risk, market risk, and in the case of Basel III Advanced, also operational risk. Key differences in the calculation of credit risk RWA between the Standardized and Advanced approaches are that for Basel III Advanced, credit risk RWA is based on risk-sensitive approaches which largely rely on the use of internal credit models and parameters, whereas for Basel III Standardized, credit risk RWA is generally based on supervisory risk-weightings which vary primarily by counterparty type and asset class. Market risk RWA is calculated on a generally consistent basis between Basel III Standardized and Basel III Advanced.

Covered position definition

The covered position definition determines which positions are subject to market risk RWA treatment and, consequently, which positions are subject to credit risk RWA treatment.

For information on the definition of a covered position, refer to Regulatory Capital on page 6 of the 4Q17 Pillar 3 Report.

Throughout this report, covered positions are also referred to as "trading book" positions. Similarly, non-covered positions are referred to as "banking book" positions. Both covered and non-covered derivative transactions are assigned counterparty credit risk RWA.

Components of risk-weighted assets

The following table presents the components of the Firm's total risk-weighted assets under Basel III Advanced Fully Phased-In at June 30, 2018.

June 30, 2018 (in millions)	Basel III Advanced Fully Phased-In RWA		
Credit risk	\$ 932,629		
Market risk	118,618		
Operational risk	387,500		
Total RWA	\$ 1,438,747		

For information on the components of risk-weighted assets, refer to Regulatory Capital on page 7 of the 4Q17 Pillar 3 Report.

RWA rollforward

The following table presents changes in the components of RWA under Basel III Advanced Fully Phased-In for the three months ended June 30, 2018. The amounts represented in the rollforward categories are an approximation, based on the predominant driver of the change.

	Basel	Basel III Advanced Fully Phased-In RWA			
Three months ended June 30, 2018 (in millions)	Credit risk	Market risk	0	perational risk	Total
March 31, 2018	\$934,022	\$132,073	\$	400,000	\$ 1,466,095
Model & data changes ^(a)	1,543	(1,400)		_	143
Portfolio runoff(b)	(3,644)	_		_	(3,644)
Movement in portfolio levels ^(c)	708	(12,055)		(12,500)	(23,847)
Changes in RWA	(1,393)	(13,455)		(12,500)	(27,348)
June 30, 2018	\$932,629	\$118,618	\$	387,500	\$ 1,438,747

- (a) Model & data changes refer to movements in levels of RWA as a result of revised methodologies and/or treatment per regulatory guidance (exclusive of rule changes).
- (b) Portfolio runoff for credit risk RWA primarily reflects reduced risk from position rolloffs in legacy portfolios in the Home Lending business and sale of reverse mortgages.
- (c) Movement in portfolio levels refers to: changes in book size, composition, credit quality, and market movements for credit risk RWA; changes in position and market movements for market risk RWA; and an update to cumulative losses for operational risk RWA (inclusive of rule changes).

Capital requirements

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 fortress 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.

Refer to the Capital Risk Management section on pages 43-47 of the 2Q18 Form 10-Q and pages 82-91 of the 2017 Form 10-K for information on the Firm's strategy and governance.

The Basel III framework applies to the consolidated results of JPMorgan Chase & Co. The basis of consolidation used for regulatory reporting is the same as that used under U.S. GAAP. There are no material entities within JPMorgan Chase that are deconsolidated and whose capital is deducted.

Under the risk-based capital ("RBC") guidelines of the Federal Reserve, JPMorgan Chase is required to maintain minimum ratios for CET1, Tier 1, Total, Tier 1 leverage and the SLR. Failure to meet these minimum requirements could cause the Federal Reserve to take action. IDI subsidiaries are also subject to these capital requirements by their respective primary regulators.

The following table represents the minimum and well-capitalized ratios to which the Firm and its IDI subsidiaries were subject as of June 30, 2018.

	Minimum capital ratios		Well-capitalized ratios		
	BHC ^(a)	IDI ^(b)	BHC ^(c)	IDI ^(d)	
Capital ratios					
CET1	9.0%	6.375%	-%	6.5%	
Tier 1	10.5	7.875	6.0	8.0	
Total	12.5	9.875	10.0	10.0	
Tier 1 leverage	4.0	4.000	5.0	5.0	
SLR	5.0	6.000	_	6.0	

Note: The table above is as defined by the regulations issued by the Federal Reserve, OCC and FDIC and to which the Firm and its IDI subsidiaries are subject.

- (a) Represents the Transitional minimum capital ratios applicable to the Firm under Basel III at June 30, 2018. The CET1 minimum capital ratio includes 1.875% resulting from the phase in of the Firm's 2.5% capital conservation buffer and 2.625%, resulting from the phase in of the Firm's 3.5% global systematically important banks ("GSIB")
- (b) Represents requirements for JPMorgan Chase's IDI subsidiaries. The CET1 minimum capital ratio includes 1.875% resulting from the phase in of the 2.5% capital conservation buffer that is applicable to the IDI subsidiaries. The IDI subsidiaries are not subject to the GSIB surcharge.
- (c) Represents requirements for bank holding companies pursuant to regulations issued by the Federal Reserve.
- (d) Represents requirements for IDI subsidiaries pursuant to regulations issued under the FDIC Improvement Act.

Capital adequacy

As of June 30, 2018, JPMorgan Chase and all of its IDI subsidiaries were well-capitalized and met all capital requirements to which each was subject. Capital ratios for the Firm's significant IDI subsidiaries are presented on the following page.

In addition to its IDI subsidiaries, JPMorgan Chase also has other regulated subsidiaries, all of which meet applicable capital requirements.

The capital adequacy of the Firm and its IDI subsidiaries, both during the transitional period and upon full phase-in, is evaluated against the Basel III approach (Standardized or Advanced) which, for each quarter, results in the lower ratio as required by the Collins Amendment of the Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act").

For information on the Firm's Internal Capital Adequacy Assessment Process ("ICAAP") and Comprehensive Capital Analysis and Review ("CCAR") processes, refer to Regulatory Capital on page 8 of the 4Q17 Pillar 3 Report and page 46 of the 2Q18 Form 10-Q.

Regulatory capital metrics for JPMorgan Chase and its significant IDI subsidiaries

The following tables present the risk-based and leverage-based capital metrics for JPMorgan Chase and its significant IDI subsidiaries under both the Basel III Standardized Transitional and Basel III Advanced Transitional Approaches at June 30, 2018.

		JPMorgan Chase & Co.			
June 30, 2018 (in millions, except ratios)	Basel III Basel III Standardized Advanced Transitional Transitiona		Advanced		
Regulatory capital					
CET1 capital	\$	184,708	\$	184,708	
Tier 1 capital		210,321		210,321	
Total capital ^(a)		238,630		229,027	
Assets					
Risk-weighted	\$	1,543,370		1,438,747	
Adjusted average ^(b)	2,566,013		2,566,013		
Capital ratios ^(c)					
CET1 ^(d)		12.0%		12.8%	
Tier 1		13.6		14.6	
Total		15.5		15.9	
Tier 1 leverage ^(e)		8.2		8.2	

	 JPMorgan Chase Bank, N.A.			
June 30, 2018 (in millions, except ratios)	Basel III Basel III Standardized Advanced Transitional Transitiona			
Regulatory capital	_		_	
CET1 capital	\$ 188,784	\$	188,784	
Tier 1 capital	188,784		188,784	
Total capital	200,065		193,844	
Assets				
Risk-weighted	\$ 1,356,526	\$	1,216,608	
Adjusted average ^(b)	2,153,804		2,153,804	
Capital ratios ^(c)				
CET1 ^(d)	13.9%		15.5%	
Tier 1	13.9		15.5	
Total	14.7		15.9	
Tier 1 leverage ^(e)	8.8		8.8	

IDManage Chase Bank N. A

	Chase Bank USA, N.A.		
June 30, 2018 (in millions, except ratios)	Basel III Standardized Transitional		Basel III Advanced ransitional
Regulatory capital		-	
CET1 capital	\$ 22,447	\$	22,447
Tier 1 capital	22,447		22,447
Total capital	27,321		25,947
Assets			
Risk-weighted	\$ 107,938	\$	178,118
Adjusted average ^(b)	114,160		114,160
Capital ratios ^(c)			
CET1 ^(d)	20.8%		12.6%
Tier 1	20.8		12.6
Total	25.3		14.6
Tier 1 leverage ^(e)	19.7		19.7

- (a) Total capital for JPMorgan Chase & Co. includes \$523 million of surplus capital in insurance subsidiaries.
- (b) Adjusted average assets, for purposes of calculating the Tier 1 leverage ratio, 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.
- (c) For each of the risk-based capital ratios, the capital adequacy of the Firm and its IDI subsidiaries is evaluated against the lower of the two ratios as calculated under Basel III approaches (Standardized or Advanced) as required by the Collins Amendment of the Dodd-Frank Act (the "Collins Floor").
- (d) At June 30, 2018, the Firm and its U.S. subsidiary banks are required to maintain a capital conservation buffer in addition to the 4.5% minimum CET1 requirement or be subject to limitations on the amount of capital that may be distributed, including dividends and common equity repurchases. The capital conservation buffer is calculated as the lowest of the: (i) CET1 ratio less the CET1 minimum requirement, (ii) Tier 1 ratio less the Tier1 minimum requirement and (iii) Total capital ratio less the Total capital minimum requirement. At June 30, 2018, the calculated capital conservation buffer of the Firm, JPMorgan Chase Bank, N.A. and Chase Bank USA, N.A. was 7.4%, 6.5% and 6.6.%, respectively. This was in excess of the estimated required capital conservation buffer of 4.5% (inclusive of the GSIB surcharge) for the Firm and 1.875% for JPMorgan Chase Bank, N.A. and Chase Bank USA, N.A. at that date. In addition, the buffer for retained earnings for the Firm, JPMorgan Chase Bank, N.A and Chase Bank USA, N.A. was \$2.8 billion, \$4.4 billion and \$0.7 billion respectively.
- (e) The Tier 1 leverage ratio is not a risk-based measure of capital.

Supplementary leverage ratio ("SLR")

The following table presents the components of the Firm's Advanced Fully Phased-In SLR as of June 30, 2018.

(in millions, except ratio)	June 30, 2018
Basel III Advanced Fully Phased-In Tier 1 capital	\$ 210,321
Total spot assets	2,590,050
Add: Adjustments for frequency of calculations ^(a)	22,919
Total average assets	2,612,969
Less: Adjustments for deductions from tier 1 capital	46,956
Total adjusted average assets(b)	2,566,013
Off-balance sheet exposures(c)	689,283
Total leverage exposure	\$ 3,255,296
Basel III Advanced Fully Phased-In SLR	6.5%

- (a) The adjustment for frequency of calculations represents the difference between total spot assets at June 30, 2018 and total average assets for the three months ended June 30, 2018.
- (b) 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.
- (c) Off-balance sheet exposures are calculated as the average of the three month-end spot balances during the quarter.

Additional information on the components of the leverage exposure is provided in the SLR section of this report.

Credit risk is the risk associated with the default or change in credit profile of a client, counterparty or customer. The Firm provides credit to a variety of customers, ranging from large corporate and institutional clients to individual consumers and small businesses. The consumer credit portfolio refers to exposures held by the Consumer & Community Banking ("CCB") business segment as well as prime mortgage and home equity loans held in the Asset & Wealth Management ("AWM") business segment and prime mortgage loans held in the Corporate segment. The consumer portfolio consists primarily of residential real estate loans, credit card loans, auto loans, and business banking loans, as well as associated lending-related commitments. The wholesale credit portfolio refers primarily to exposures held by the Corporate & Investment Bank ("CIB"), Commercial Banking ("CB"), AWM and Corporate segment. In addition to providing credit to clients, the Firm engages in client-related activities that give rise to counterparty credit risk such as securities financing, margin lending and market-making activities in derivatives. Finally, credit risk is also inherent in the Firm's investment securities portfolio held by Treasury and Chief Investment Office ("CIO") in connection with its assetliability management objectives. Investment securities, as well as deposits with banks and cash due from banks, are classified as wholesale exposures for RWA reporting.

Basel III includes capital charges for counterparty default risk and credit valuation adjustments ("CVA"). CVA is a fair value adjustment to reflect counterparty credit risk in the valuation of over-the-counter ("OTC") derivatives. The Firm calculates CVA RWA using the Simple CVA approach, which uses internal ratings based probability of default ("PD") and a combination of the current exposure method ("CEM") and the internal model method ("IMM") exposure at default ("EAD") for each netting set.

For information on IMM and CEM EAD methodologies, refer to Credit Risk on page 17 of the 4Q17 Pillar 3 Report.

For information on risk management policies and practices, governance and oversight and accounting policies related to these exposures:

- Refer to Credit and Investment Risk Management on pages 99-120 of the 2017 Form 10-K and page 53 of the 2Q18 Form 10-Q
- Refer to the Notes to the Consolidated Financial Statements beginning on page 153 of the 2017 Form 10-K. Specific page references are contained in the Appendix of this report.

Summary of credit risk RWA

Credit risk RWA includes retail, wholesale and counterparty credit exposures described in this section as well as securitization and equity exposures in the banking book. Other exposures such as non-material portfolios, unsettled transactions and other assets that are not classified elsewhere are also included. The following table presents the Firm's total credit risk RWA at June 30, 2018.

June 30, 2018 (in millions)	 Basel III Advanced Fully Phased-In RWA	
Retail exposures	\$ 211,275	
Wholesale exposures	433,137	
Counterparty exposures	110,511	
Securitization exposures ^(a)	25,919	
Equity exposures	38,740	
Other exposures ^(b)	69,899	
CVA	43,148	
Total credit risk RWA	\$ 932,629	

- (a) Represents banking book securitization RWA only.
- (b) Includes other assets, non-material portfolios, and unsettled transactions.

Credit risk exposures

Credit risk exposures as reported under U.S. GAAP as of and for the three months ended June 30, 2018 are contained in the 2Q18 Form 10-Q. Specific references to the 2Q18 Form 10-Q are listed below.

Traditional credit products

- Refer to Credit Risk Management beginning on page 53 for credit-related information on the consumer and wholesale portfolios.
- Refer to Note 11 on pages 130-143 for the distribution of loans by geographic region and industry.
- Refer to Note 20 on pages 159-162 for the contractual amount and geographic distribution of lending-related commitments.

Counterparty credit risk

- Refer to the Consumer Credit Portfolio section on pages 55-59, and to the Wholesale Credit Portfolio section on pages 60-66 for eligible margin loans balances.
- Refer to Wholesale Credit Portfolio footnote (d) on page 63, Country Risk on page 76.
- Refer to Note 4 on pages 108-119 for the gross positive fair value, netting benefits, and net exposure of derivative receivables.
- Refer to Derivative contracts on pages 65-66 for credit derivatives used in credit portfolio management activities.
- Refer to Note 10 on pages 128-129 for information on gross and net securities purchased under resale agreements and securities borrowed transactions, and for information regarding the credit risk inherent in the securities financing portfolio.

Investment securities

Refer to Credit and Investment Risk Management on pages 53-70 and Note 9 on pages 124-127 for the investment securities portfolio by issuer type.

Country risk

Refer to page 76 for the top 20 country exposures (excluding the U.S.).

Allowance for credit losses

- Refer to Allowance for Credit Losses on pages 67-69 for a summary of changes in the allowance for loan losses and allowance for lending-related commitments.
- Refer to Note 12 on page 144 for the allowance for credit losses and loans and lending-related commitments by impairment methodology.

Average balances

Refer to page 170-171 for the Consolidated average balance sheet.

Credit risk concentrations

For further information on credit risk concentrations, refer to Credit risk monitoring on page 11 in the 4Q17 Pillar 3 Report. The retail portfolio is comprised of exposures that are scored and managed on a pool basis rather than on an individual-exposure basis. For the retail portfolio, credit loss estimates are based on statistical analysis of credit losses over discrete periods of time. The statistical analysis uses portfolio modeling, credit scoring, and decision-support tools, which consider loan-level factors such as delinquency status, credit scores, collateral values, and other risk factors.

The population of exposures subject to retail capital treatment for regulatory reporting substantially overlaps with the consumer credit portfolio reflected in the Firm's SEC disclosures. The retail population consists of all scored exposures (mainly in CCB business segment), certain residential mortgages booked as trading assets (that do not meet the definition of a covered position) and certain wholesale loans under \$1 million as required by the Basel III capital rules.

The retail capital population excludes certain risk-rated business banking and auto dealer loans that are included in the consumer portfolio in the Firm's SEC disclosures; these are subject to wholesale capital treatment as required by the Basel III capital rules.

Risk-weighted assets

To calculate retail credit RWA, the Firm inputs its risk parameter estimates (PD, LGD and EAD) into the Internal Ratings Based (IRB) risk weight formula, as specified by the Basel III capital rules. The IRB risk weight formula generates an estimate of unexpected losses at a 99.9% confidence level. Unexpected losses are converted to a RWA measure by an application of a 12.5 supervisory multiplier.

For information on risk parameter estimation methods for the retail credit portfolio, refer to Retail Credit Risk on page 12-13 of the 4Q17 Pillar 3 Report.

June 30, 2018 (in millions)	Basel III Advanced Fully Phased-In RWA		
Residential mortgages	\$	85,364	
Qualifying revolving		102,715	
Other retail		23,196	
Total retail credit RWA	\$	211,275	

Residential mortgage exposures

The following table includes first lien and junior lien mortgages and revolving home equity lines of credit. First lien mortgages were 86.2% of the exposure amount, revolving exposures were 13.3%, and the remaining exposures related to junior lien mortgages. Most revolving exposures were originated prior to 2010 and drive approximately 35.2% of the total risk weighted assets of this portfolio, with nearly 29.4% of the exposures in the equal to or greater than 0.75% PD ranges. Recent originations are primarily first lien mortgages and are predominantly reflected in the less than 0.75% PD ranges.

June 30, 2018 (in millions, except ratios)

	Palanco choot (Off balance sheet			Expos	ure-weighted aver	age
PD range (%)	Balance sheet C amount	commitments	EAD	RWA	PD	LGD	Risk weight
0.00 to < 0.10	\$ 131,398 \$	21,782 \$	140,806 \$	7,582	0.05%	35.15%	5.38%
0.10 to < 0.20	70,475	3,299	73,287	9,422	0.16	36.45	12.86
0.20 to < 0.75	59,895	1,460	61,048	17,808	0.35	45.43	29.17
0.75 to < 5.50	24,369	1,735	24,761	25,582	1.95	53.58	103.32
5.50 to < 10.00	2,484	451	2,567	5,581	6.90	53.36	217.41
10.00 to < 100	3,054	8	3,057	7,483	27.89	46.79	244.77
100 (default)	13,130	193	13,325	11,906	100.00	_ (a)	89.35 ^(b)
Total	\$ 304,805 \$	28,928 \$	318,851 \$	85,364	4.78%	38.06%	26.77%

⁽a) The LGD rate is reported as zero for residential mortgage exposures in default because by the time they reach the Basel III capital rules definition of default they have been charged off to the fair value of any underlying collateral less cost to sell.

⁽b) The exposure-weighted average risk weight for defaulted loans is less than 100% due to certain loans being insured and/or guaranteed by U.S. government agencies which attract lower than 100% risk weight.

Qualifying revolving exposures

The following table includes exposures to individuals that are revolving, unsecured and unconditionally cancelable by JPMorgan Chase; and they have a maximum exposure amount of up to \$100,000 (i.e. credit card and overdraft lines on individual checking accounts).

June 30, 2018 (in millions, except ratios)

	Balance	Off balance			Expos	ge	
PD range (%)	sheet amount	sheet commitments	EAD	RWA	PD	LGD	Risk weight
0.00 to < 0.50	\$ 53,095 \$	519,547 \$	213,810 \$	11,914	0.10%	93.27%	5.57%
0.50 to < 2.00	36,264	46,855	44,724	17,690	1.08	93.32	39.55
2.00 to < 3.50	15,650	9,048	16,788	12,935	2.61	93.50	77.05
3.50 to < 5.00	13,745	2,172	13,879	13,768	3.75	93.04	99.20
5.00 to < 8.00	7,108	1,771	7,167	10,463	6.75	93.68	145.99
8.00 to < 100	18,782	1,369	18,787	35,945	19.59	93.23	191.32
100 (default)	_	_	_		-	_ (a)	
Total	\$ 144,644 \$	580,762 \$	315,155 \$	102,715	1.85%	93.29%	32.59%

⁽a) The LGD rate is reported as zero for qualifying revolving exposures in default as these unsecured credit cards are charged off prior to reaching the Basel III capital rules definition of default.

Other retail exposures

The following table includes other retail exposures to individuals that are not classified as residential mortgage or qualifying revolving exposures (e.g. includes auto loans, credit card accounts above \$100,000, business card exposures without a personal guarantee, scored business banking loans and certain wholesale loans under \$1 million).

June 30, 2018 (in millions, except ratios)

	Balance	Off balance		_	Exposure-weighted average				
PD range (%)	sheet amount	sheet commitments	EAD	RWA	PD	LGD	Risk weight		
0.00 to < 0.50	\$ 34,566 \$	8,824 \$	37,802 \$	7,059	0.20%	44.08%	18.67%		
0.50 to < 2.00	21,228	2,659	21,908	9,956	0.94	44.17	45.45		
2.00 to < 3.50	3,065	482	3,176	2,267	2.94	48.73	71.39		
3.50 to < 5.00	575	41	602	718	3.84	78.35	119.21		
5.00 to < 8.00	1,264	71	1,280	918	6.75	44.23	71.72		
8.00 to < 100	1,620	6	1,630	1,774	24.17	51.58	108.86		
100 (default)	459	16	475	504	100.00	_ (a)	106.00		
Total	\$ 62,777 \$	12,099 \$	66,873 \$	23,196	2.02%	44.52%	34.69%		

⁽a) The LGD rate is reported as zero for retail exposures in default because by the time they reach the Basel III capital rules definition of default they have been charged off to the fair value of any underlying collateral less cost to sell.

The wholesale portfolio is a risk-rated portfolio. Risk-rated portfolios are generally held in CIB, CB and AWM business segments and in Corporate but also include certain business banking and auto dealer loans held in the CCB business segment that are risk-rated because they have characteristics similar to commercial loans. For the risk-rated portfolio, credit loss estimates are based on estimates of the probability of default and loss severity given a default. The estimation process begins when risk-ratings are assigned to each obligor and credit facility to differentiate risk within the portfolio. These risk ratings are reviewed regularly by Credit Risk management and revised as needed to reflect the borrower's current financial position, risk profile and related collateral.

The population of risk-rated loans and lending-related commitments receiving wholesale treatment for regulatory capital purposes largely overlaps with the wholesale credit portfolio reflected in the Firm's SEC disclosures. In accordance with the Basel III capital rules, the wholesale population for regulatory capital consists of:

- All risk-rated loans and commitments (excluding certain wholesale loans under \$1 million which receive retail regulatory capital treatment);
- Deposits with banks, and cash and due from banks;
- Exposures to issuer risk for debt securities in the banking book;
- Certain exposures recorded as trading assets that do not meet the definition of a covered position;

Certain off-balance sheet items, such as standby letters of credit and letters of credit, are reported net of risk participations for U.S. GAAP reporting, but are included gross of risk participations for regulatory reporting.

Risk-weighted assets

To calculate wholesale credit RWA, the Firm inputs its risk parameter estimates (PD, LGD and EAD) into the IRB risk weight formula as specified by the U.S. banking supervisors. The IRB risk weight formula generates an estimate of unexpected losses at a 99.9% confidence level. Unexpected losses are converted to a RWA measure by an application of a 12.5 supervisory multiplier.

For information on risk parameter estimation methods for the wholesale credit portfolio, refer to Wholesale Credit Risk on page 15 of the 4Q17 Pillar 3 Report.

The below table presents risk-weighted assets by Basel reporting classification. The Corporate classification includes both credit and issuer exposure to corporate entities. Similarly, the Bank and Sovereign classifications include both credit and issuer exposure to banks and sovereign entities respectively. High volatility commercial real estate ("HVCRE") refers to acquisition, development and construction lending. HVCRE is a separate Basel classification because these loans represent higher risk than loans financing income-producing real estate ("IPRE").

June 30, 2018	Basel	III Advanced
(in millions)	Fully P	hased-In RWA
Corporate	\$	359,647
Bank		13,264
Sovereign		11,851
Income-producing real estate		47,150
High volatility commercial real estate		1,225
Total wholesale credit RWA	\$	433,137

Wholesale exposures

The following table presents exposures to wholesale clients and issuers by PD range. Exposures are comprised primarily of traditional credit products (i.e. loans and lending-related commitments), debt securities, and cash placed with various central banks, predominantly Federal Reserve Banks. Total EAD is \$1.4 trillion, with 75% of this exposure in the first two PD ranges, which are predominantly investment-grade. Exposures meeting the Basel definition of default represent 0.2% of total EAD. The exposure-weighted average LGD for the wholesale portfolio is 30%.

June 30, 2018 (in millions, except ratios)

	Balance sheet	Off balance sheet		_	Exposur	e-weighted average	
PD range (%)	amount	commitments	EAD	RWA	PD	LGD	Risk weight
0.00 to < 0.15	\$ 684,580 \$	168,750 \$	811,344 \$	106,020	0.04%	28.16%	13.07%
0.15 to < 0.50	135,570	135,671	215,945	100,120	0.26	36.29	46.36
0.50 to < 1.35	176,844	97,222	233,659	125,743	0.76	28.36	53.81
1.35 to < 10.00	61,567	58,232	94,101	90,103	3.74	32.62	95.75
10.00 to < 100	3,638	3,765	5,329	8,328	22.76	32.50	156.28
100 (default)	1,980	1,353	2,662	2,823	100.00	39.83	106.04
Total	\$ 1,064,179 \$	464,993 \$	1,363,040 \$	433,137	0.74%	29.83%	31.78%

Credit risk mitigation

The risk mitigating benefit of eligible guarantees and credit derivative hedges are reflected in the RWA calculation as permitted by the Basel III capital rules. At June 30, 2018, \$80.7 billion of EAD for wholesale exposures is covered by eligible guarantees or credit derivatives.

COUNTERPARTY CREDIT RISK

Counterparty credit risk exposures arise from OTC derivatives, repo-style transactions, eligible margin loans and cleared transactions.

Risk-weighted assets

To calculate counterparty credit risk RWA, the Firm inputs its risk parameter estimates (PD, LGD and EAD) into the same IRB risk weight formula as wholesale exposures. The IRB risk weight formula generates an estimate of unexpected losses at a 99.9% confidence level. Unexpected losses are converted to an RWA measure by an application of a 12.5 supervisory multiplier.

RWA for exposures where the counterparty is a CCP depends on whether the CCP meets the criteria for classification as a qualifying CCP. The appropriate risk weights are applied to the trade exposure and contributions to the CCP's guarantee fund.

The following table presents risk-weighted assets by transaction type.

Except as outlined below with regards to eligible margin loans, for information on risk parameter estimation methods and wrong-way risk for the counterparty credit risk, refer to Counterparty Credit Risk on page 17-18 of the 4Q17 Pillar 3 Report.

Effective with the three months ended June 30, 2018, the credit risk mitigation benefits of collateral that can be netted for eligible margin loans in accordance with the Basel III capital rules are recognized in the determination of EAD using the Supervisory Haircut Approach rather than in the determination of LGD under the prior methodology.

June 30, 2018	Basel III Advance				
(in millions)	Fully Ph	ased-In RWA			
OTC derivatives	\$	55,702			
Repo-style transactions		35,309			
Eligible margin loans		12,476			
Cleared transactions		7,024			
Total counterparty credit RWA	\$	110,511			

Counterparty credit exposures

The following table presents counterparty credit risk exposures for OTC derivatives, repo-style transactions and eligible margin loans by PD range. The table does not include cleared transactions. Total EAD is \$250.8 billion, with 76% of this exposure in the first two PD ranges, which are predominantly investment-grade. Exposures meeting the Basel definition of default represent 0.1% of total EAD. The exposure-weighted average LGD for this portfolio is 42%. The collateral benefit is reflected primarily in the EAD.

June 30, 2018 (in millions, except ratios)

		·	Exposu	re-weighted average	
PD range (%)	EAD	RWA	PD	LGD	Risk weight
0.00 to < 0.15	\$ 148,587 \$	33,379	0.09%	41.89%	22.46%
0.15 to < 0.50	42,411	20,729	0.26	45.19	48.88
0.50 to < 1.35	41,576	27,525	0.73	40.62	66.20
1.35 to < 10.00	16,901	19,004	3.63	38.79	112.44
10.00 to < 100	1,075	2,622	22.70	43.75	244.18
100 (default)	213	228	100.00	35.54	107.00
Total	\$ 250,763 \$	103,487	0.65%	42.03%	41.27%

Credit risk mitigation

The risk mitigating benefit of eligible guarantees and credit derivative hedges are reflected in the RWA calculation as permitted by the Basel III capital rules. At June 30, 2018, \$3.8 billion of EAD for OTC derivatives is covered by eligible guarantees.

SECURITIZATION

Securitizations are transactions in which:

- The credit risk of the underlying exposure is transferred to third parties and has been separated into two or more tranches;
- The performance of the securitization depends upon the performance of the underlying exposures or reference assets; and
- All or substantially all of the underlying exposures or reference assets are financial exposures.

Securitizations are classified as either traditional or synthetic. In a traditional securitization, the originator establishes a special purpose entity ("SPE") and sells assets (either originated or purchased) off its balance sheet into the SPE, which issues securities to investors. In a synthetic securitization, credit risk is transferred to an investor through the use of credit derivatives or guarantees. In a synthetic securitization, there is no change in accounting treatment for the assets securitized.

Securitizations include on- or off-balance sheet exposures (including credit enhancements) that arise from a securitization or re-securitization transaction; or an exposure that directly or indirectly references a securitization (e.g. credit derivative). A re-securitization is a securitization transaction in which one or more of the underlying exposures that have been securitized is itself a securitization.

On-balance sheet exposures include securities, loans, as well as servicing advances related to private-label mortgage backed securitizations for which the Firm acts as servicer. Off-balance sheet exposures include liquidity commitments, certain recourse obligations, and derivatives for which the counterparty risk or the reference obligation is a securitization exposure.

The Firm plays a variety of roles in asset securitizations such as investor or originator in traditional and synthetic securitization transactions and servicer/collateral manager of assets transferred into traditional securitizations. The Firm also provides liquidity facilities to securitization transactions.

This section includes both banking book and trading book securitizations with the exception of modeled correlation trading positions which are included in the Market Risk section.

For information on risk management and due diligence for securitization exposures, refer to Securitization on page 19 of the 4Q17 Pillar 3 Report.

Hierarchy of approaches

For information on Hierarchy of approaches for securitization exposures, refer to Securitization on page 20 of the 4Q17 Pillar 3 Report.

Risk-weighted assets

The following table presents banking book and trading book exposures receiving securitization capital treatment (with the exception of modeled correlation trading positions which are presented in the Market Risk section). The amounts include traditional and synthetic securitization exposures with re-securitizations shown separately.

								Securi	tizati	ion					
		SFA				SSFA				1250%	Ď	To	Total		
June 30, 2018 (in millions)	E	xposure		RWA	E	xposure		RWA	Ex	posure	RWA	Exposure		RWA	
Risk weight															
= 0% < 20%	\$	47,546	\$	10,077	\$	65,067	\$	13,731	\$	- \$	_	\$ 112,613	\$	23,808	
> 20% < 50%		2,746		760		2,914		852		_	_	5,660		1,612	
> 50% < 100%		50		33		385		311		_	_	435		344	
> 100% < 1250%		58		453		593		1,684		_	_	652		2,137	
= 1250%		8		99		12		156		75	989	95		1,243	
Securitization, excluding re-securitization	\$	50,408	\$	11,422	\$	68,971	\$	16,734	\$	75 \$	989	\$ 119,455	\$	29,144	

								Re-secu	ritiza	tion					
		SFA			SSF	A			1250%)	Total				
June 30, 2018 (in millions)	E	xposure		RWA	Е	xposure		RWA	Ex	posure	RWA	Е	Exposure		RWA
Risk weight															
= 0% ≤ 20%	\$	998	\$	211	\$	6	\$	1	\$	- \$	_	\$	1,004	\$	213
> 20% < 50%		_		_		2		1		_	_		2		1
> 50% < 100%		_		_		_		_		_	_		_		_
> 100% < 1250%		2		12		31		93		_	_		33		105
= 1250%		_		_		1		8		1	10		1		19
Re-securitization ^(a)	\$	1,000	\$	223	\$	40	\$	103	\$	1 \$	10	\$	1,041	\$	338
Total securitization (b)	\$	51,408	\$	11,645	\$	69,011	\$	16,837	\$	76 \$	999	\$	120,496	\$	29,482

⁽a) As of June 30, 2018, there were no re-securitizations to which credit risk mitigation has been applied.

Any gain-on-sale in connection with a securitization exposure must be deducted from CET1 capital. The amount deducted as of June 30, 2018 was zero.

⁽b) Total securitization RWA includes \$3.6 billion of RWA on trading book exposure of \$5.6 billion. The trading book RWA represents non-modeled securitization charges in the Market Risk section of this report.

Exposure by collateral type

The following table presents banking book and trading book exposures receiving securitization capital treatment (with the exception of modeled correlation trading positions which are presented in the Market Risk section). The amounts below include traditional and synthetic securitization exposures

June 30, 2018 (in millions)	Oı	n-balance sheet	Off-balance sheet ^(a)			Total	RWA	
Collateral type:								
Residential mortgages	\$	19,280	\$	424	\$	19,704 \$	5,114	
Commercial mortgages		14,219		158		14,377	3,867	
Commercial and industrial loans		31,669		2,836		34,504	8,110	
Consumer auto loans		17,307		5,613		22,921	5,049	
Student loans		9,094		706		9,800	2,693	
Municipal bonds		1		5,198		5,199	1,154	
Other		10,352		3,639		13,991	3,495	
Total securitization exposure	\$	101,922	\$	18,574	\$	120,496 \$	29,482	

⁽a) Includes the counterparty credit risk EAD associated with derivative transactions for which the counterparty credit risk is a securitization exposure.

Assets securitized

The following table presents the total outstanding principal balance of JPMorgan Chase-sponsored securitization trusts in which the Firm has retained exposure in either the banking book or the trading book. Third-party assets in deals sponsored by JPMorgan Chase are shown separately.

		Pr	incipal am	nount outstandir	ng			
June 30, 2018 (in millions)	JPMc assets he secui	held i	-party assets in traditional ritizations ^(a)	JPMorgan Chase assets held in synthetic securitizations			Assets paired or st due ^(b)	
Collateral type:								
Residential mortgages	\$	75,518	\$	11	\$	_	\$	7,900
Commercial mortgages		41,883		35,244		_		632
Commercial and industrial loans		_		_		_		_
Consumer auto loans		_		_		_		-
Student loans		76		_		_		7
Municipal bonds				_		_		_
Other		_		_				
Total	\$	117,477	\$	35,255	\$	_	\$	8,539

⁽a) Represents assets held in nonconsolidated securitization VIEs.

Securitization activity

The following table presents assets pending securitization (i.e., assets held with the intent to securitize) at June 30, 2018, and the Firm's securitization activities for six months ended June 30, 2018, related to assets held in Firm-sponsored securitization entities that were not consolidated by the Firm and where sale accounting was achieved based on the accounting rules in effect at the time of the securitization. All instruments transferred into securitization trusts during the six months ended June 30, 2018 were classified as trading assets under U.S. GAAP. As such, changes in fair value were recorded in principal transactions revenue and there were no significant gains or losses associated with the securitization activity.

	Ca	rrying value	 Original principal amount				
June 30, 2018 (in millions)		sets pending curitization	ecuritized with led exposure	Assets securitized without retained exposure			
Collateral type:							
Residential mortgages	\$	12,159	\$ 4,459	\$	_		
Commercial mortgages		4,972	3,430		1,743		
Commercial and industrial loans			_		_		
Consumer auto loans			_		_		
Student loans			_		_		
Municipal bonds			_		_		
Other			_		_		
Total	\$	17,131	\$ 7,889	\$	1,743		

⁽b) Represents assets 90 days or more past due or on nonaccrual status.

EQUITY RISK IN THE BANKING BOOK

Equity investments in the banking book include principal investments, investments in unconsolidated subsidiaries, other equity investments classified within other assets and certain equity investments classified within trading assets that do not meet the definition of a covered position.

Principal investments are typically private non-traded financial instruments representing ownership or other forms of junior capital. Principal investments cover multiple asset classes and are made either in stand-alone investing businesses or as part of a broader business platform. Asset classes include tax-oriented investments (e.g., affordable housing and alternative energy investments), private equity, various debt and equity instruments, real assets and investment funds (including separate accounts).

Equity Investments in the banking book are held primarily for reasons other than capital gains including client relationships and employee benefits.

Investments in separate accounts are held in connection with corporate- and bank-owned life insurance ("COLI/BOLI") and certain asset management activities.

- Refer to Note 8 on pages 195-200 of the 2017 Form 10-K for a discussion of COLI and the related investment strategy and asset allocation.
- For information on investments in marketable equity, refer to Equity risk in the banking book on page 22 of the 4017 Pillar 3 Report.

Accounting and valuation policies for equity investments

- Refer to Principal risk, on page 120 of the 2017 Form 10-K for a discussion of investment risk management related to principal investments.
- Refer to Note 1 on pages 89-90 of 2Q18 Form 10-Q and pages 153-155 of the 2017 Form 10-K for a discussion of the accounting for investments in unconsolidated subsidiaries.
- Refer to Note 2 on pages 155-173 of the 2017 Form 10-K for more information on the Firm's methodologies regarding the valuation of private equity direct investments and fund investments (i.e., mutual/collective investment funds, private equity funds, hedge funds and real estate funds).

Risk-weight approaches

For equity exposures to investment funds, the Firm uses either the Full Look-Through Approach ("FLTA") or the Simple Modified Look-Through Approach ("SML-TA") to calculate RWA. For all other equity exposures, the Firm uses the Simple Risk-Weight Approach ("SRWA").

For information on Risk-weight approaches, refer to Equity risk in the banking book on page 22 of the 4Q17 Pillar 3 Report.

Equity risk-weighted assets

The table below presents the exposure and RWA by risk weight.

June 30, 2018 (in millions)

Risk-weight category	Ex	RWA		
0%	\$	6,339 ^(b)	\$ _	
20%		2,078	441	
100%		20,600	21,835	
250%		665	1,763	
600%		174	1,108	
Look-through		21,994	13,593	
Total	\$	51,850	\$ 38,740	

⁽a) Includes off-balance sheet unfunded commitments for equity investments of \$1.5\$ billion.

Carrying value and fair value

The following table presents the carrying value and fair value of equity investments in the banking book.

June 30, 2018 (in millions)	Carr	ying value	Fair value
Publicly traded	\$	25,072	\$ 25,081
Non-publicly traded		24,418	31,057
Total	\$	49,490	\$ 56,138

Realized gains/(losses)

Cumulative realized gains/(losses) from sales and liquidations during the three months ended June 30, 2018 were \$(43) million. This includes previously recognized unrealized gains/(losses) that have been reversed and booked as realized gains/(losses).

Unrealized gains/(losses)

Total net unrealized and unrecognized gains on non-trading equity investments in the banking book that are accounted for under the cost, measurement alternative and equity method were \$6.6 billion as of June 30, 2018.

⁽b) Consists of Federal Reserve Bank stock.

Market risk is the risk associated with the effect of changes in market factors such as interest and foreign exchange rates, equity and commodity prices, credit spreads or implied volatilities, on the value of assets and liabilities held for both the short and long term.

For a discussion of the Firm's Market Risk Management organization, tools used to measure risk and risk monitoring and control, see Market Risk Management on pages 121-128 of the 2017 Form 10-K

Measures included in market risk RWA

The following table presents the Firm's market risk-based capital and risk-weighted assets at June 30, 2018. The components of market risk RWA are discussed in detail in the Regulatory market risk capital models section on pages 20–23 of this report. RWA is calculated as RBC times a multiplier of 12.5; any calculation differences are due to rounding.

Three months ended June 30, 2018 (in millions)	 k-based apital	RWA
Internal models:		
Value-at-Risk based measure ("VBM")	\$ 538	\$ 6,724
Stressed Value-at-Risk based measure ("SVBM")	2,191	27,388
Incremental risk charge ("IRC")	276	3,455
Comprehensive risk measure ("CRM")	192	2,394
Total internal models	3,197	39,961
Non-modeled specific risk ^(a)	4,724	59,054
Other charges	1,568	19,603
Total Market risk	\$ 9,489	\$ 118,618

⁽a) Non-modeled specific risk includes trading book securitization RWA of \$3.6 billion.

Material portfolio of covered positions

The Firm's market risks arise predominantly from activities in the CIB business. CIB makes markets in products across fixed income, foreign exchange, equities, commodities and credit markets; hence the Firm's portfolio of covered positions under the Basel III capital rules is predominantly comprised of positions held by the CIB. Other lines of business have covered positions; these positions are not material.

Refer to pages 55-56 and to pages 62-66 of the 2017 Form 10-K for a discussion of CIB's Business Segment Results.

Value-at-Risk ("VaR")

VaR is a statistical risk measure used, 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.

Refer to Market Risk Management on pages 121-128 of the 2017 Form 10-K for information on the Firm's VaR framework.

Since VaR is based on historical data, it is an imperfect measure of market risk exposure and potential future losses. In addition, based on their reliance on available historical data, limited time horizons, and other factors, VaR measures are inherently limited in their ability to measure certain risks and to predict losses, particularly those associated with market illiquidity and sudden or severe shifts in market conditions.

The Firm therefore considers other measures such as stress testing and nonstatistical measures, in addition to VaR, to capture and manage its market risk positions.

Refer to the Economic-value stress testing section on page 24 of this report for further information on stress testing.

Risk management VaR comparison to Regulatory VaR

Risk Management VaR is calculated assuming a one-day holding period and an expected tail-loss methodology which approximates a 95% confidence level. VaR provides a consistent framework to measure risk profiles and levels of diversification across product types and is used for aggregating risks and monitoring limits across businesses.

VaR results are reported to senior management, the Board

of Directors and regulators.

Under the Firm's Risk Management VaR methodology, assuming current changes in market values are consistent with the historical changes used in the simulation, the Firm would expect to incur VaR "back-testing exceptions," defined as losses greater than that predicted by VaR estimates, an average of five times every 100 trading days. For risk management purposes, the Firm believes the use of a 95% confidence level with a one-day holding period 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 appropriate information to respond to risk events on a daily basis. The Firm's Risk Management VaR is disclosed in its SEC filings.

As required by the Basel III capital rules, the Firm calculates Regulatory VaR assuming a 10-day holding period and an expected tail loss methodology, which approximates a 99% confidence level. Under this methodology, the Firm would expect to incur Regulatory VaR "back-testing exceptions", defined as losses greater than that predicted by Regulatory VaR estimates, on average once every 100 trading days. However, the Firm expects that, under normal market conditions, it may experience fewer "back-testing exceptions" because the Firm's Regulatory VaR models are calibrated to exclude certain diversification benefits, which generally results in higher VaR measures. The Firm's Risk Management VaR as reported in the Firm's Form 10-Qs and Form 10-K does not exclude these diversification benefits.

As noted above, Regulatory VaR is applied to "covered positions" as defined by the Basel III capital rules, which may be different from the positions included in the Firm's Risk Management VaR. For example, credit derivative hedges of accrual loans are included in the Firm's Risk Management VaR, while Regulatory VaR excludes these credit derivative hedges.

Refer to Value-at-risk on pages 123-125 of the 2017 Form 10-K and pages 71-73 of the 2Q18 Form 10-Q for additional information on Risk Management VaR.

Regulatory market risk capital models

VaR-Based Measure ("VBM")

The VBM is an aggregate loss measure that combines Regulatory VaR and modeled specific risk ("SR") factors over a 10-day holding period and a 99% confidence level. While Regulatory VaR measures the risk of loss due to market price or rate movements, the modeled SR portion of the VBM measures the risk of loss from factors other than broad market movements. Modeled SR factors include event risk and idiosyncratic risk for a subset of covered positions for which the model is approved by the Firm's banking supervisors.

CIB VaR-Based Measure ("VBM")

For the three months ended June 30, 2018, average CIB VBM was \$178 million, compared with CIB average Risk Management VaR of \$33 million. The CIB VBM was higher due to the longer holding period (10 days), the higher confidence level (99%), differences in population, and the exclusion of the diversification benefit for certain VaR models.

The following table presents the average, minimum, maximum and period-end VBM by risk type for the CIB and total VBM for the Firm. In addition, the table presents the reduction of total risk resulting from the diversification of the portfolio, which is the sum of the CIB VBMs for each risk type less the total CIB VBM.

	Thre					
(in millions)	Avg	Min	Max		J	une 30, 2018
CIB VBM by risk type						
Interest rate ^(a)	\$ 116	\$ 85	\$ 142		\$	142
Credit spread ^(a)	105	94	131			112
Foreign exchange	25	16	49			23
Equities	68	56	75			73
Commodities and other	41	27	51			47
Diversification benefit	(177) (b)	NM	(c) NM	(c)		(163) ^{(b}
Total CIB VBM	178	148	241			235
Total Firm VBM	\$ 179	\$ 150	\$ 239		\$	233

- (a) For certain products and portfolios, a full revaluation model is used to calculate VBM, which considers both interest rate and credit spread risks together. As such, the Firm allocates the results of the full revaluation model between interest rate and credit spread risk based on the predominant characteristics of the product or portfolio.
- (b) Average portfolio VBM and period-end portfolio VBM were less than the sum of the components described above due to portfolio diversification.
- (c) Designated as not meaningful ("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.

The following table presents the results of the Firm's VBM converted to risk-based capital based on the application of a regulatory multiplier of 3, and the risk-weighted assets which are calculated by multiplying the risk-based capital measure by 12.5 as prescribed by the Basel III capital rules.

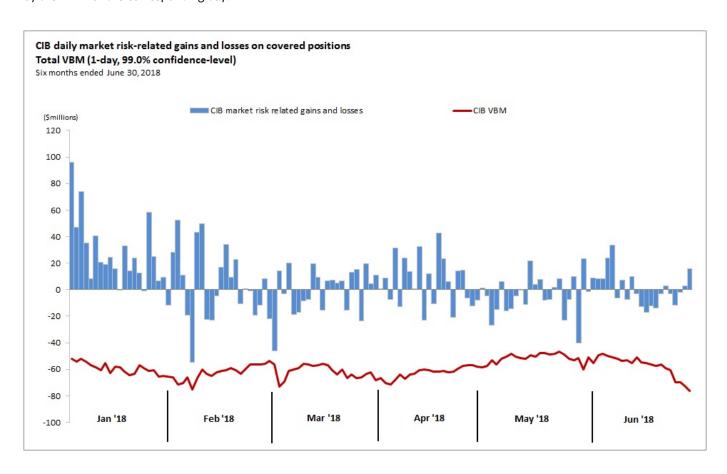
Three months ended June 30, 2018 (in millions)	Average VBM		b	lisk- ased pital	RWA
Firm modeled VBM	\$ 179		\$	538	\$ 6,724

Refer to pages 123-125 of the 2017 Form 10-K for additional information on Value-at-risk and Risk Management VaR in the Market Risk Management section.

VBM back-testing

The Firm evaluates the effectiveness of its VBM methodology by back-testing, which compares daily market risk-related gains and losses with daily VBM results for a one-day holding period and a 99% confidence level as prescribed by the Basel III capital rules. Market risk-related gains and losses are defined as profits and losses on covered positions, excluding fees, commissions, valuation adjustments such as liquidity and DVA, net interest income, and gains and losses arising from intraday trading. VBM "back-testing exceptions" occur when market risk-related losses are greater than the estimate predicted by the VBM for the corresponding day.

The following chart presents the VBM back-testing results for CIB's covered positions. The VBM presented in the chart excludes the diversification benefit for certain VaR models. The chart shows that for the six months ended June 30, 2018, the CIB observed no back-testing exceptions and posted market risk related gains on 74 of the 129 trading days. The results in the chart below are different from the results of VaR back-testing disclosed in the Firm's SEC filings due to the differences between the Risk Management VaR and Regulatory VaR as described on page 19–20 of this report.



Stressed VaR-Based Measure ("SVBM")

The SVBM uses the same Regulatory VaR and SR models as are used to calculate the VBM, but the models are calibrated to reflect historical data from a continuous 12-month period that reflects significant financial stress appropriate to the Firm's current portfolio. SVBM is calculated weekly over a 10-day holding period and a 99% confidence level. The Firm's selection of the one-year period of significant financial stress is evaluated on an ongoing basis.

The following table presents the average, minimum, maximum and final week of the quarter SVBM for the CIB and the Firm.

Three months ended June 30, 2018

(in millions)	-	Avg.	Min	ı	Мах	_	June 30, 2018
Total CIB SVBM	\$	729	\$ 624	\$	895	\$	764
Total Firm SVBM	\$	730	\$ 625	\$	899	\$	767

(a) Represents the SVBM for the final week of the quarter, in line with Basel III rules. The measurement date need not coincide with the quarter-end date.

The following table presents the results of the Firm's SVBM converted to risk-based capital based on the application of a regulatory multiplier of 3, and the risk-weighted assets which are calculated by multiplying the risk-based capital measure by 12.5 as prescribed by the Basel III capital rules.

Three months ended June 30, 2018 (in millions)	Average SVBM		Risk-based capital	RWA
Firm modeled SVBM	\$	730	2,191	\$ 27,388

Incremental Risk Charge ("IRC")

The IRC measure captures the risks of issuer default and credit migration that are incremental to the risks already captured in the VBM. The model is intended to measure the potential loss over a one-year holding period at a 99.9% confidence level and is applicable to debt positions that are not correlation trading or securitization positions. The IRC is calculated on a weekly basis.

For information on the Firm's IRC model, refer to Market risk on page 27 of the 4Q17 Pillar 3 Report. The following table presents the average, minimum, maximum and period-end IRC for the CIB.

Three months ended June 30, 2018

(in millions)	 Avg.	Min	Max	June 30, 2018
CIB IRC on trading positions	\$ 276	\$ 206	\$ 435	\$ 206

The following table presents the IRC risk-based capital requirement for the CIB, which is the same as the risk measure itself, and the risk-weighted assets which are calculated by multiplying the risk measure by 12.5 as prescribed by the Basel III capital rules.

Three months ended June 30, 2018			
(in millions)	I	RC ^(a)	RWA
Total CIB IRC	\$	276	\$ 3,455

(a) IRC reflects the higher of the quarterly average and period-end spot measure under the Basel III capital rules.

Comprehensive Risk Measure ("CRM")

The CRM captures the material price risks of portfolios of correlation trading positions. Correlation trading positions refer to client-driven, market-making activities in credit index and bespoke tranche swaps that are delta hedged with single-name and index credit default swap positions. The CRM risk-based capital requirement is the greater of modeled CRM and a floor, which is equal to 8% of the total specific risk add-on for such positions using a non-modeled approach.

Similar to the IRC, the CRM model measures potential losses over a one-year holding period at a 99.9% confidence level. The CRM is calculated on a weekly basis.

For information on the Firm's CRM model, refer to Market risk on page 27-28 of the 4Q17 Pillar 3 Report.

The following table presents the average, minimum, maximum and period-end CRM for the CIB.

	Т		June 30.				
(in millions)	Avg. Min Max						2018
CIB CRM Capital	\$ 192	\$	148	\$	216	\$	148

The following table presents the CRM risk-based capital requirement for the CIB, which is the same as the risk measure itself, and the risk-weighted assets which are calculated by multiplying the risk-based capital measure by 12.5 as prescribed by the Basel III capital rules.

Three months ended June 30, 2018 (in millions)	CRM ^(a)	RWA
Total CIB CRM Capital	\$ 192	\$ 2,394

(a) CRM reflects the higher of the quarterly average and period-end spot measure under the Basel III capital rules.

Aggregate securitization positions

For information on the aggregate amount of onbalance sheet and off-balance sheet securitization positions by exposure type, refer to Securitization on page 17 of this Pillar 3 Report.

Aggregate correlation trading positions

The following table presents the net notional amount and fair value of the Firm's aggregate correlation trading positions and the associated credit hedges. Credit hedges of the correlation trading positions are included as they are considered to be part of the aggregate correlation trading positions. The presentation distinguishes between positions that are modeled in CRM and those that are not modeled in CRM (included in non-modeled specific risk).

June 30, 2018 (in millions)	Notional amount ^(a)	Fair value ^(b)		
Positions modeled in CRM	\$ 1,223	\$	205	
Positions not modeled in CRM	364		11	
Total correlation trading positions	\$ 1,587	\$	216	

- (a) Reflects the net of the notional amount of the correlation trading portfolio, including credit hedges. Negative balances, if any, reflect aggregate net short correlation trading positions.
- (b) Reflects the fair value of securities and derivatives, including credit hedges.

Non-modeled specific risk

Non-modeled specific risk is calculated using supervisory-prescribed risk weights and methodologies for covered debt, equity and securitization positions that are not included in modeled SR. The market risk-based capital and risk-weighted assets (which are calculated by multiplying the capital requirement by 12.5 as prescribed by the Basel III capital rules) for non-modeled specific risk are shown in the table below.

June 30, 2018 (in millions)		-based pital	RWA
	Securitization positions	\$ 285	\$ 3,563
	Nonsecuritization positions	4,439	55,491
	Total Non-modeled specific risk	\$ 4,724	\$ 59,054

Other charges

Other charges reflect exposures receiving alternative capital treatments. The capital requirement is translated to risk-weighted assets by multiplying by 12.5 as prescribed by the Basel III capital rules.

June 30, 2018 (in millions)	 Risk-based capital RWA		
Total Firm other charges	\$ 1,568	\$	19,603

Independent review of market risk regulatory capital models

For information on the independent review of the market risk regulatory capital models, refer to Market risk on page 29 of the 4Q17 Pillar 3 Report and to Estimations and Model Risk Management on page 137 of the 2017 Form 10-K.

Economic-value stress testing

Along with VaR, stress testing is an important tool in measuring and controlling risk. While VaR reflects the risk of loss due to adverse changes in markets using recent historical market behavior as an indicator of losses, stress testing is intended to capture the Firm's exposure to unlikely but plausible events in abnormal markets. The Firm runs weekly stress tests on market-related risks across the lines of business using multiple scenarios that assume significant changes in risk factors such as credit spreads, equity prices, interest rates, currency rates and commodity prices.

The Firm uses a number of standard scenarios that capture different risk factors across asset classes including geographical factors, specific idiosyncratic factors and extreme tail events. The stress framework calculates multiple magnitudes of potential stress for both market rallies and market sell-offs for each risk factor and combines them in multiple ways to capture different market scenarios. For example, certain scenarios assess the potential loss arising from current exposures held by the Firm due to a broad sell-off in bond markets or an extreme widening in corporate credit spreads. The flexibility of the stress testing framework allows risk managers to construct new, specific scenarios that can be used to form decisions about future possible stress events.

Stress testing complements VaR by allowing risk managers to shock current market prices to more extreme levels relative to those historically realized, and to stress test the relationships between market prices under extreme scenarios.

Stress scenarios are defined and reviewed by Market Risk Management, and significant changes are reviewed by the relevant LOB Risk Committees and may be redefined on a periodic basis to reflect current market conditions.

Stress-test results, trends and qualitative explanations based on current market risk positions are reported to the respective LOBs and the Firm's senior management to allow them to better understand the sensitivity of positions to certain defined events and to enable them to manage their risks with more transparency. Results are also reported to the Board of Directors.

The Firm's stress testing framework is utilized in calculating results for the Firm's CCAR and ICAAP processes. In addition, the results are incorporated into the quarterly assessment of the Firm's Risk Appetite Framework and are also presented to the DRPC.

OPERATIONAL RISK MANAGEMENT

Operational risk is the risk associated with inadequate or failed internal processes, people and systems, or from external events.

Refer to Operational Risk on page 31 in 4Q17 Pillar 3 Report and pages 131-137 of the 2017 Form 10-K for a discussion of Operational Risk Management.

Measurement

- Refer to Operational Risk Management on page 131-132 of the 2017 Form 10-K for information related to operational risk measurement.
- Refer to Capital Risk Management on page 82-91 of the 2017 Form 10-K and page 46 of the 2Q18 Form 10-Q for operational risk RWA.

Other operational risks

Refer to Other Operational Risk Management on pages 131-133 of the 2017 Form 10-K for information related to other operational risks that can lead to losses which are captured through the Firm's operational risk measurement processes.

INTEREST RATE RISK IN THE BANKING BOOK

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.

Refer to the table on page 122 of the 2017 Form 10-K for a summary of positions included in Earnings-at-risk.

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). This simulation primarily includes retained loans, deposits, deposits with banks, investment securities, long term debt and any related interest rate hedges, and excludes other positions in risk management VaR and other sensitivity-based measures.

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 assumed 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.

- Refer to page 126 of the 2017 Form 10-K for a detailed discussion of Earnings-at-risk.
- Refer to page 74 of the 2Q18 Form 10-Q for further discussion of Earnings-at-risk.

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)	+20	00 bps	+1	.00 bps	-100 bps	-200 bps
June 30, 2018	\$	1.9	\$	1.0	(2.1)	NM (a)

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

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

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 \$900 million and \$500 million, respectively, at June 30, 2018. The non-U.S. dollar sensitivities for an instantaneous decrease in rates by 200 and 100 basis points are not material to the Firm's earnings-at-risk at June 30, 2018.

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 \$500 million at June 30, 2018. 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 results of the comparable non-U.S. dollar scenarios are not material to the Firm at June 30, 2018.

The SLR is defined as Tier 1 capital under the Basel III capital rules divided by the Firm's total leverage exposure. The tables below present the components of the Firm's SLR as of June 30, 2018 with on-balance sheet amounts calculated as the quarterly average and off-balance sheet amounts calculated as the average of each of the three month's period-end balances.

Summary comparison of accounting assets and total leverage exposure

(in millions, except ratio)	Jun. 30, 2018		
Basel III Advanced Fully Phased-In Tier 1 capital		210,321	
Total spot assets		2,590,050	
Add: Adjustments for frequency of calculations ^(a)		22,919	
Total average assets		2,612,969	
Less: Adjustments for deductions from Tier 1 capital		46,956	
Total adjusted average assets		2,566,013	
Adjustment for derivative transactions		355,456	
Adjustment for repo-style transactions		26,952	
Adjustment for off-balance sheet exposures		306,875	
Total leverage exposure	\$	3,255,296	
Basel III Advanced Fully Phased-In SLR		6.5%	

⁽a) The adjustment for frequency of calculations represents the difference between total spot assets at June 30, 2018, and average assets for the three months ended June 30, 2018.

Derivative transactions

The following table presents the components of total derivative exposure.

(in millions)	Jur	n. 30, 2018
Replacement cost for all derivative transactions ^(a)	\$	62,046
Add-on amounts for potential future exposure ("PFE") for all derivative transactions		406,275
Gross-up for collateral posted in derivative transactions if collateral is deducted from on-balance sheet assets		1,450
Less: Exempted exposures to central counterparties ("CCPs") in cleared transactions		83,274
Adjusted effective notional principal amount of sold credit protection		807,438
Less: Effective notional principal amount offsets and PFE deductions for sold credit protection		777,920
Total derivative exposure(b)		416,015
Less: On-balance-sheet average derivative receivables		60,559
Adjustment for derivative transactions	\$	355,456

⁽a) Includes cash collateral received of \$1.5 billion.

Repo-style transactions

The following table presents the components of total exposures for repo-style transactions.

(in millions)		Jun. 30, 2018	
Gross assets for repo-style transactions ^(a)	\$	611,947	
Less: amounts netted(b)		297,592	
Counterparty credit risk for all repo-style transactions		29,923	
Exposure amount for repo-style transactions where the Firm acts as an agent ^(c)		17	
Total exposures for repo-style exposures		344,295	
Less: on-balance sheet amounts			
Securities purchased under resale agreements		204,878	
Securities borrowed		112,464	
Adjustment for repo-style transactions	\$	26,952	

- (a) Includes adjustments for securities received where the securities lender has not sold or rehypothecated securities received.
- (b) Reflects netting of transactions where the Firm has obtained an appropriate legal opinion with respect to master netting agreements with the same counterparty, and where other relevant criteria under U.S. GAAP are met.
- (c) Includes exposures where the Firm's guarantee is greater than the difference between the fair value of the security or cash the Firm's customer has lent and the value of the collateral provided.

Other off-balance sheet exposures

The following table presents wholesale and retail commitments after applying the relevant credit conversion factors.

Adjustment for other off-balance sheet exposures		306,875
Less: Adjustments for conversion to credit equivalent amounts		797,574
Off-balance sheet exposures - gross notional amounts	\$	1,104,449
(in millions)	Ju	ın. 30, 2018

⁽b) Receivables for cash variation margin that are posted under a qualifying derivative contract where the Firm has obtained an appropriate legal opinion with respect to master netting agreements with the same counterparty, and where other relevant criteria under U.S. GAAP are met, are netted against derivative liabilities and are not included in on-balance sheet assets.

Valuation process

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, refer to Valuation Process in the 4Q17 Pillar 3 Report and to Note 2 of the 2017 Form 10-K.

Refer to Note 2 on page 91-104 of the 2Q18 Form 10-Q, for information on credit and funding valuation adjustments.

Estimations and Model Risk Management

Model risk is the potential for adverse consequences from decisions based on incorrect or misused model outputs.

For a discussion of the Firm's Model Risk Management, model risk review and governance, refer to Model risk management on page 35 of the 4Q17 Pillar 3 Report and Model Risk Management on page 137 of the 2017 Form 10-K for additional information.

References to JPMorgan Chase's 2017 Form 10-K and 2Q18 Form 10-Q

JPMorgan Chase's 2017 Form 10-K contains important information on the Firm's risk management policies and practices, capital management processes, and accounting policies relevant to this report. Specific references are listed below.

Management's discussion and analysis

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