Non-collateralised Structured Products

Issuer

J.P. Morgan Structured Products B.V.

(Incorporated with limited liability in The Netherlands)

Guarantor

JPMorgan Chase Bank, National Association

(a national banking association organized under the laws of United States of America)

Managers

J.P. Morgan Securities plc
J.P. Morgan Securities (Asia Pacific) Limited

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This document, for which the issuer and the guarantor accept full responsibility, includes particulars given in compliance with the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the Stock Exchange's Listing Rules) for the purpose of giving information with regard to the issuer, the guarantor and the structured products referred to in this document. The issuer and the guarantor accept full responsibility for the accuracy of the information contained in the base listing document dated 6 April 2018 (the base listing document), the supplemental disclosure document dated 27 April 2018 (the first supplemental disclosure document) and this document and confirm, having made all reasonable enquiries, that to the best of their knowledge and belief there are no other facts the omission of which would make any statement in the base listing document, the first supplemental disclosure document and this document misleading.

Investors are warned that the price of the structured products may fall in value as rapidly as it may rise and holders may sustain a total loss of their investment. Prospective purchasers should therefore ensure that they understand the nature of the structured products and carefully study the risk factors set out in this document, the base listing document and the first supplemental disclosure document and, where necessary, seek professional advice, before they invest in the structured products.

The structured products constitute general unsecured contractual obligations of the issuer and of no other person and the guarantee constitutes the general unsecured contractual obligation of the guarantor and of no other person. The structured products will rank equally among themselves and with all our other unsecured obligations and the guarantee will rank equally with all of the guarantor's other unsecured obligations (in each case, save for obligations preferred by law) upon liquidation. If you purchase the structured products you are relying upon the creditworthiness of the issuer and the guarantor and have no rights under the structured products against (a) the company which has issued the underlying shares; (b) the trustee or the manager of the underlying trust; or (c) the index compiler of the underlying index. If the issuer becomes insolvent or defaults on its obligations under the structured products or the guarantor becomes insolvent or defaults on its obligations under the guarantee, you may not be able to recover all or even part of the amount due under the structured products (if any).

The issuer and the guarantor are part of a large global financial institution and have many financial products and contracts outstanding at any given time. When purchasing the structured products, you will be relying on the creditworthiness of the issuer and the guarantor and of no one else.

The distribution of this document, our base listing document and the first supplemental disclosure document and the offering, sale and delivery of structured products in certain jurisdictions may be restricted by law. You are required to inform yourselves about and to observe such restrictions. Please read Annex 3 "Purchase and Sale" in the base listing document. **The structured products have not been and will not be registered under the United States Securities Act of 1933, as amended (the Securities Act), and trading in the structured products has not been and will not be approved by the United States Commodity Futures Trading Commission under the United States Commodity Exchange Act. The structured products may not be offered or sold within the United States or to or for the account or benefit of U.S. Persons (as defined in Regulation S under the Securities Act).**

Supplemental Disclosure Document dated 28 September 2018

J.P.Morgan

IMPORTANT

If you are in doubt as to the contents of this supplemental disclosure document, you should obtain independent professional advice.

We, the issuer of our structured products, are publishing this supplemental disclosure document in order to obtain a listing on the Stock Exchange of our warrants, callable bull/bear contracts (the CBBCs) and other structured products. We will refer to the warrants, the CBBCs and other structured products as "structured products" in this supplemental disclosure document. This supplemental disclosure document contains the issuer's financial statements for the six months ended 30 June 2018 and the guarantor's consolidated financial statements for the six months ended 30 June 2018. You should read this supplemental disclosure document as well as our base listing document (including the first supplemental disclosure document and any other supplemental disclosure document to be issued by us from time to time) and the relevant launch announcement and supplemental listing document (including any addendum to such launch announcement and supplemental listing document to be issued by us from time to time) (together, the listing documents) to understand the offer before deciding whether to buy our structured products.

Copies of our base listing document, the first supplemental disclosure document, this supplemental disclosure document and the relevant launch announcement and supplemental listing document (together with a Chinese translation of each of these documents) and other documents set out in the relevant launch announcement and supplemental listing document may be inspected during usual business hours on any weekday (Saturdays, Sundays and holidays excepted) at the offices of J.P. Morgan Securities (Asia Pacific) Limited at 25/F, Chater House, 8 Connaught Road Central, Hong Kong.

本公司基本上市文件、第一份補充披露文件、本補充披露文件及有關推出公佈及補充上市文件（及以上各份文件的中譯本）連同有關推出公佈及補充上市文件內所列之其他文件，可於平日（星期六，星期日及假期除外）的一般營業時間於J.P. Morgan Securities (Asia Pacific) Limited的辦事處（地址為香港干諾道中8號遮打大廈25樓）查閱。

We do not give you investment advice; you must decide for yourself, after reading the listing documents for the relevant structured products and, if necessary, seeking professional advice, whether our structured products meet your investment needs.

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FINANCIAL STATEMENTS
FOR THE SIX MONTHS ENDED 30 JUNE 2018 RELATING TO THE ISSUER

This section sets out the issuer's financial statements for the six months ended 30 June 2018 (the issuer's 2018 interim financial statements). You can read and inspect a copy of the issuer's 2018 interim financial statements by going to the offices of J.P. Morgan Securities (Asia Pacific) Limited at 25/F, Chater House, 8 Connaught Road Central, Hong Kong.

References to page numbers in the issuer's 2018 interim financial statements refer to the original page numbers of the issuer's 2018 interim financial statements.

J.P. MORGAN STRUCTURED PRODUCTS B.V.
Amsterdam, the Netherlands

(Chamber of Commerce Number: 34259454)

Financial statements for the six month period ended 30 June 2018

J.P. MORGAN STRUCTURED PRODUCTS B.V.
Interim report for the six month period ended 30 June 2018

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J.P. MORGAN STRUCTURED PRODUCTS BV
Directors' report

The directors present their report and the interim financial statements of J.P. Morgan Structured Products B.V. (the "Company") for the six month period ended 30 June 2018.

Principal activity

The Company's primary activity is the management and issuance of structured products comprising certificates, warrants and other market participation notes, and the subsequent hedging ("hedge","hedging") of these positions.

Review of business

During the period, the Company continued to issue structured products. The proceeds from the sale of the structured products were used to fund the activities of other JPMorgan Chase & Co. (together with its subsidiaries "Firm" or "JPMorgan Chase") undertakings through certain economic hedging arrangements. The principal purpose of these hedging arrangements is to hedge against various risks associated with the issuance activity. During the period, the Company issued structured products in the Asia Pacific region, Europe, the Middle East, Latin America and the United States of America, issued to private investors or listed on exchanges.

The Company's ultimate controlling entity is JPMorgan Chase & Co.

Key performance indicators ("KPI")

As the Company is managed as part of the Corporate Investment Bank of JPMorgan Chase there are no KPl's that are specific to the Company. The results are monitored against expectations of the business activities. A more detailed description of the Firm's key performance indicators may be found within the JPMorgan Chase & Co. 2017 Annual Report.

Business environment, strategy and future outlook

The primary objective of the Company is the continued development of structured products to be offered and sold to retail, 'high net worth' and institutional investors principally outside of the United States of America, linked to a range of underlying reference assets including equity, credit, interest rates, commodities and so called 'alternatives' such as funds and hedge funds.

Principal risks and uncertainties

The Company's issuance activities expose it to financial and operational risks, which are managed by the Board of Directors, using the Firm's risk management framework. The Board of Directors monitors the Company's financial and operational risks and has responsibility for ensuring effective risk management and control. Further details on the financial risks of the Company are set out in note 16 to the financial statements.

Results and dividends

The results for the period are set out on page 5 and show the Company's profit for the period after taxation is $2.1 million (2017: $2.5 million).

No dividend was paid or proposed during the period (2017: nil).

Events after the reporting period

The Directors are not aware of any events or circumstances which have taken place after 30 June 2018 but before these financial statements have been approved for issue, that could materially affect the financial position or results of the Company and which would require specific disclosure in these financial statements.

Directors

The directors of the Company who served during the period and up to the date of signing the financial statements were as follows:

J.C.P. van Uffelen	(Appointed 6 March 2007)
D.R. Hansson	(Appointed 5 August 2010)
W.H. Kamphuijs	(Appointed 1 September 2014)
D. Robertson	(Appointed 20 March 2018)
M.F.C van der Werff	(Appointed 20 March 2018)

Composition of the Board

The size and composition of the Board of Managing Directors and the combined experience and expertise should reflect the best fit for profile and strategy of the Company. With effect from the 20 March 2018, the Company complies with the gender diversity goals set out in article 2:276 section 2 of the Dutch Civil Code.

Creditor payment policy

All invoices from suppliers are settled on the Company's behalf by an affiliated JPMorgan Chase company, JPMorgan Chase Bank, N.A.

JPMorgan Chase Bank, N.A.'s policy is to pay invoices (including those in respect of the Company) upon presentation, except where other arrangements have been negotiated with the supplier. It is the policy of the Company to abide by the terms of payment, provided the supplier performs according to the terms of the contract.

Registered address

Herikerbergweg 238
Luna ArenA, 1101CM
Amsterdam

Expected developments of the Company

The directors of the Company expect:

a) that the Company will continue to issue structured products;
b) that the Company will not enter into fixed asset investments; and
c) that the interest income will continue to fluctuate in line with the development in market interest rates.

Statement under Transparency Directive (as implemented in Dutch law)

The directors confirm to the best of their knowledge that:

a) the attached financial statements are prepared in accordance with International Financial Reporting Standards ("IFRS") as endorsed by the European Union and give a true and fair view of the assets, liabilities, financial position and profit of the Company for the period ended 30 June 2018, and
b) the interim report for the period ended 30 June 2018, consisting of the directors report and the financial statements, gives a true and fair view of the position as per the balance sheet date 30 June 2018.

The directors further herewith report their arrangements for an audit committee (the "Audit Committee") as follows:

Audit Committee

The Company makes use of the exemption to the requirement to establish its own Audit Committee based on Article 3a of the Royal Decree of 26 July 2008 implementing article 41 of the EU Directive 2006/43EG, as the Audit Committee of JPMorgan Chase & Co. that is compliant with the requirements will fulfil the role of the Company's Audit Committee. JPMorgan Chase & Co. operates an Audit Committee, which covers the Firm, including the Company and is formed of entirely non-management, independent directors in compliance with the recommendations from the EU Commission. Details of the Charter, Membership, Duties and Responsibilities can be found on the Firm's website.

The financial statements on pages 4 to 25 were approved by the Board of Directors on 19 September 2018 and signed on its behalf by:

W.H. Kamphuijs

M.F.C van der Werff

Date:

J.P. MORGAN STRUCTURED PRODUCTS B.V.
Balance sheet

	Notes	Unaudited 30 June 2018	31 December 2017
		$'000	**$'000**
Assets			
Current assets			
Financial assets held at fair value through profit and loss	5	21,555,825	25,708,466
Trade and other receivables	6	275,607	113,042
Cash and cash equivalents	7	7,484,679	6,238,197
Current tax asset		84	—
Total assets		**29,316,195**	**32,059,705**
Liabilities			
Current liabilities			
Financial liabilities designated at fair value through profit or loss	8	17,756,259	17,889,305
Financial liabilities held at fair value through profit and loss	9	3,799,566	7,819,161
Trade and other payables	11	7,072,595	5,773,691
Current tax liabilities		—	584
Bank overdraft	7	150,850	42,098
Total liabilities		**28,779,270**	**31,524,839**
Equity			
Capital and reserves attributable to equity shareholders of the Company			
Share capital	12	26	26
Share premium reserve		499,997	499,997
Legal reserve		2	2
Retained earnings		36,900	34,841
Total equity		**536,925**	**534,866**
Total liabilities and equity		**29,316,195**	**32,059,705**

Chamber of Commerce Number: 34259454

The notes on pages 8 - 25 form an integral part of the financial statements.

J.P. MORGAN STRUCTURED PRODUCTS B.V.
Income statement (unaudited)

Six month period ended	Notes	Unaudited 30 June 2018 $'000	Unaudited 30 June 2017 $'000
Fee and commission income	13	5,283	6,703
Fee and commission expense	13	(4,428)	(2,436)
Administrative expense		(481)	(1,076)
Net foreign exchange gain/(loss)		83	(64)
Operating profit		**457**	**3,127**
Net interest income	14	2,356	305
Profit before income tax		**2,813**	**3,432**
Income tax expense	15	(754)	(892)
Profit for the period attributable to equity shareholders of the Company		**2,059**	**2,540**

The profit for the period resulted from continuing operations.

There were no items of other comprehensive income or expense therefore no statement of comprehensive income has been separately presented.

The notes on pages 8 - 25 form an integral part of the financial statements.

J.P. MORGAN STRUCTURED PRODUCTS B.V.
Statement of changes in equity (unaudited)

	Share capital	Share premium reserve	Legal reserve	Retained earnings	Total equity
	$'000	$'000	$'000	$'000	$'000
Balance at 1 January 2017	**26**	**499,997**	**2**	**30,609**	**530,634**
Profit for the period	—	—	—	2,540	2,540
Balance as at 30 June 2017	**26**	**499,997**	**2**	**33,149**	**533,174**
Balance as at 1 January 2018	**26**	**499,997**	**2**	**34,841**	**534,866**
Profit for the period	—	—	—	2,059	2,059
Balance as at 30 June 2018	**26**	**499,997**	**2**	**36,900**	**536,925**

The notes on pages 8 - 25 form an integral part of the financial statements.

J.P. MORGAN STRUCTURED PRODUCTS B.V.
Statement of cash flows (unaudited)

	Notes	Unaudited 30 June 2018 $'000	Unaudited 30 June 2017 $'000
Cash flow from operating activities			
Profit before income tax		**2,813**	**3,432**
Income tax paid		(1,422)	(592)
Net interest income	14	(2,356)	(305)
Net foreign exchange (gain)/loss		(83)	64
		(1,048)	**2,599**
Changes in working capital			
Decrease/(increase) in financial assets held at fair value through profit and loss		4,152,641	(2,713,933)
(Increase)/decrease in trade and other receivables		(162,566)	261,203
Decrease in financial liabilities held at fair value through profit and loss*		(4,019,595)	(3,362,012)
(Decrease)/increase in financial liabilities designated at fair value through profit or loss*		(133,046)	6,075,945
Increase/(decrease) in trade and other payables*		1,298,905	(382,941)
Net cash from operating activities		**1,135,291**	**(119,139)**
Cash flow from investing activities			
Net interest income	14	2,356	305
Net cash from investing activities		**2,356**	**305**
Net increase/(decrease) in cash and cash equivalents		**1,137,647**	**(118,834)**
Net cash and cash equivalents at the beginning of the period		**6,196,099**	**573,938**
Effect of exchange rate changes on cash and cash equivalents		83	(64)
Net cash and cash equivalents at the end of the period	7	**7,333,829**	**455,040**

The notes on pages 8 - 25 form an integral part of the financial statements.

*Certain prior period balances have been restated to conform with current period disclosure.

1. General information

J.P. Morgan Structured Products B.V. (the "Company") was incorporated on 6 November 2006 as a private company with limited liability and is incorporated and domiciled in The Netherlands, with registration number 34259454. The address of the registered office is at Herikerbergweg 238, Luna ArenA, 1101CM, Amsterdam, The Netherlands. The company's immediate parent undertaking is J.P. Morgan International Finance Limited which is incorporated in the state of Delaware in the United States of America. The company's ultimate parent undertaking of the largest group in which the results of the Company are consolidated is J.P. Morgan Chase & Co. (together with its subsidiaries, the "Firm" or "JPMorgan Chase"), which is also incorporated in the state of Delaware in the United States of America. The parent undertaking of the smallest group in which the Company's results are consolidated is J.P. Morgan International Finance Limited. The largest and the smallest group's consolidated financial statements can be obtained from 25 Bank Street, Canary Wharf, London E14 5JP, England.

The Company's main activity is the issuance of structured products comprising certificates, warrants and market participation notes, and the subsequent hedging ("hedge", "hedging") of the risk associated with these notes through hedging with other JPMorgan Chase companies. The valuation of a structured product will have no impact on the income statement, capital or net assets; as a change in valuation of a structured product will have an equal offsetting change in the value of the hedging transaction with other JPMorgan Chase undertakings.

These financial statements reflect the operations of the Company during the period from 1 January 2018 to 30 June 2018 and have been approved for issue by the Board of Directors on 19 September 2018.

2.1 Accounting convention

The principal accounting policies applied in the preparation of these financial statements are set out below. These policies have been applied consistently to all the interim periods presented, unless otherwise stated, and the financial statements have been prepared on a going concern basis.

These condensed interim financial statements for the six months ended 30 June 2018 have been prepared in accordance with IAS 34, ‘Interim financial reporting’, as adopted by the European Union and in accordance with Book 2, Title 9 of the Dutch Civil Code. The condensed interim financial statements should be read in conjunction with the annual financial statements for the year ended 31 December 2017, which have been prepared in accordance with IFRSs as adopted by the European Union. The financial statements have been prepared under the historical cost convention as modified by the revaluation of certain financial assets and financial liabilities measured at fair value through profit or loss.

The preparation of the financial statements in conformity with IFRS required the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Company's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements are disclosed in note 3.

Reclassification of and adjustments to prior period amounts have been made to conform with current period presentation and to correctly reflect the nature of the balances so as to provide additional transparency and information in these financial statements.

New and amended standards adopted by the Company

IFRS 9 was issued by the International Accounting Standards Board (“IASB”) in July 2014 and replaces the existing guidance in IAS 39 ‘Financial Instruments: Recognition and Measurement’ (“IAS 39”). The standard includes a new model for classification and measurement of financial assets and a single, forward-looking Expected Credit Loss (“ECL”) impairment model. The standard also requires entities to provide users of financial statements with additional disclosures. IFRS 9 is applicable retrospectively, except where otherwise prescribed by transitional provisions of the standard, and is effective for annual periods beginning on or after 1 January 2018. The Company has adopted the new standard on 1 January 2018, however the impact has been immaterial.

IFRS 15 was released in May 2014 by the IASB. This standard requires that revenue from contracts with customers be recognised upon transfer of control of a good or service in the amount of consideration expected to be received. IFRS 15 also changes the accounting for certain contract costs, including whether they may be offset against revenue in the income statement, and requires additional disclosures about revenue and contract costs. IFRS 15 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. IFRS 15 is applicable retrospectively and must be applied in an entity's first annual IFRS financial statements for periods beginning on or after 1 January 2018. The Company has adopted the new standard on 1 January 2018, using the full retrospective method of adoption, where applicable. The Company did not identify any material changes in the timing of revenue recognition or presentation of revenues and expenses.

2. Significant accounting policies (continued)

New standards, amendments and interpretations not yet adopted

There are no other IFRS or IFRIC interpretations that are not yet effective that would be expected to have a material impact on the Company.

2.2 Foreign currency translation

Monetary assets and monetary liabilities in foreign currencies are translated into United States ("U.S.") dollars at rates of exchange ruling on the balance sheet date. Income and expense items denominated in foreign currencies are translated into U.S. dollars at exchange rates prevailing at the date of the transactions. Any gains or losses arising on translation are taken directly to the income statement.

Non-monetary items denominated in foreign currencies that are stated at historical cost are translated into U.S. dollars at the exchange rate ruling at the date of the transaction.

2.3 Functional and presentation currency

Items included in the financial statements of the Company are measured using the currency of the primary economic environment in which the entity operates (the "functional currency").

U.S. dollars is considered as the functional and presentation currency of the Company.

2.4 Financial assets and financial liabilities

The Company classifies its financial assets and financial liabilities in the following categories on initial recognition: financial assets and financial liabilities held at fair value through profit and loss ("FVTPL") and financial assets and financial liabilities designated at fair value through profit or loss.

The Company recognises financial assets and financial liabilities when it becomes a party to the contractual provisions of the instrument. Regular way purchases and sales of financial assets are recognised on the trade-date, the date on which the Company commits to purchase or sell the asset.

i. Financial assets and financial liabilities held at fair value through profit and loss

Financial assets and financial liabilities are measured at fair value through profit or loss if they are held for trading. A financial asset or a financial liability is held for trading if it is acquired or incurred principally for the purpose of selling or repurchasing it in the near term, or forms part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit taking or it is a derivative.

Financial instruments measured at FVTPL are initially recognised at fair value in the balance sheet with transaction costs being recorded in profit or loss and any gains or losses are taken directly to the income statement.

ii. Financial assets and financial liabilities designated at fair value through profit or loss

Subject to certain criteria, the Company can designate financial assets and financial liabilities to be measured at fair value through profit or loss. Designation is only possible when the financial instrument is initially recognised and cannot subsequently be reclassified. Financial assets can be designated as measured at fair value through profit or loss only if such designation eliminates or significantly reduces a measurement or recognition inconsistency.

Financial liabilities can be designated as measured at fair value through profit or loss only if such designation (a) eliminates or significantly reduces a measurement or recognition inconsistency; or (b) applies to a group of financial assets, financial liabilities or both that the Company manages and evaluates on a fair value basis; or (c) relates to an instrument that contains an embedded derivative unless the embedded derivative does not significantly modify the cash flows required by the contract or when a similar hybrid instrument is considered that separation of the embedded derivative is prohibited.

Financial assets and financial liabilities that the Company designates as measured at fair value through profit or loss are recognised at fair value, with transaction costs being recognised in profit or loss and subsequently measured at fair value. Gains and losses on financial assets and financial liabilities that are designated at fair value through profit or loss are recognised in profit or loss as they arise.

2. Significant accounting policies (continued)

2.4 Financial assets and financial liabilities (continued)

iii. Derecognition of financial assets and financial liabilities

Financial assets are derecognised when the contractual right to receive cash flows from the asset has expired, or has been transferred with either of the following conditions met:

a. the Company has transferred substantially all the risks and rewards of ownership of the asset; or

b. the Company has neither retained nor transferred substantially all of the risks and rewards; but has relinquished control of the asset.

Financial liabilities are derecognised when they are extinguished, that is when the obligation is discharged, cancelled or expires.

iv. Recognition of deferred day one profit and loss

The Company enters into transactions where fair value is determined using valuation models for which not all inputs are market observable prices or rates. Such a financial instrument is initially recognised at the transaction price, although the value obtained from the relevant valuation model may differ. The difference between the transaction price and the model value, commonly referred to as 'day one profit and loss', is not recognised immediately in the income statement when based on unobservable inputs.

The timing of recognition of deferred day one profit and loss is determined for each class of financial asset and liability. It is either amortised over the life of the transaction, deferred until the instrument's fair value can be determined using market observable inputs, or realised through settlement.

2.5 Fair value

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Fair values are determined by reference to observable market prices where available and reliable. Fair values of financial assets and financial liabilities are based on quoted market prices or dealer price quotations for financial instruments traded in active markets. Where market prices are unavailable, fair value is based on valuation models that consider relevant transaction characteristics (such as maturity) and use as inputs observable or unobservable market parameters, including but not limited to yield curves, interest rates, volatilities, equity or debt prices, foreign exchange rates and credit curves. Valuation adjustments may be made to ensure that financial instruments are recorded at fair value.

For financial assets and liabilities held at fair value, most market parameters in the valuation model are either directly observable or are implied from instrument prices. When input values do not directly correspond to the most actively traded market parameters the model may perform numerical procedures in the pricing such as interpolation.

The Company classifies its assets and liabilities according to a hierarchy that has been established under IFRS for disclosure of fair value measurements. The fair value hierarchy is based on the transparency of inputs to the valuation of an asset or liability as of the measurement date. The fair value hierarchy gives the highest priority to quoted prices (unadjusted) in active markets for identical assets or liabilities (level 1) and the lowest priority to unobservable inputs (level 3 inputs).

A financial instrument’s categorisation within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement.

Further details on fair value measurements are provided in note 10 to the financial statements.

2.6 Income and expense recognition

Interest income and expense are recognised on an effective interest rate basis. Effective interest rate is the rate that exactly discounts estimated future cash flows to the instrument's initial carrying amount. Calculation of the effective interest rate takes into account fees receivable, that are an integral part of the instrument’s yield, premiums or discounts on acquisition or issue, early redemption fees and transaction costs. All contractual terms of a financial instrument are considered when estimating future cash flows

Fees and commissions are recognised when the underlying contract becomes legally binding or at the agreed due date if later.

Profits and losses resulting from the purchase and sale of securities and the revaluation of financial instruments are recognised as trading gains or losses on a trade-date basis, including related transaction costs but excluding the associated interest.

2. Significant accounting policies (continued)

2.7 Cash and cash equivalents

Cash and cash equivalents include cash and balances at banks and loans and advances to banks with maturities of three months or less.

2.8 Share capital

The share capital of the Company consists of ordinary shares, classified as equity.

2.9 Trade and other receivables

Trade and other receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method.

2.10 Trade and other payables

Trade and other payables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method.

2.11 Current and deferred income tax

Income tax payable on taxable profits (current tax) is recognised as an expense in the period in which the profits arise. Income tax recoverable on tax allowable losses is recognised as a current tax asset only to the extent that it is regarded as recoverable by offset against taxable profits arising in the current or prior period. Current tax is measured using tax rates and tax laws that have been enacted or substantively enacted at the balance sheet date.

Deferred tax is provided in full, using the liability method, on temporary differences arising from the differences between the tax bases of assets and liabilities and their carrying amounts in the financial statements. Deferred tax is determined using tax rates and legislation enacted or substantively enacted by the balance sheet date, which are expected to apply when the deferred tax asset is realised or the deferred tax liability is settled. Deferred tax assets and liabilities are only offset when there is both a legal right and an intention to settle on a net basis.

3. Critical accounting estimates and judgements

The preparation of financial statements generally requires management to make judgements, estimates and assumptions that affect the amounts recognised in the financial statements. The nature of estimation means that actual outcomes could differ from those estimates. The following judgements have had the most significant effect on amounts recognised in the financial statements:

Fair value measurement

The Company carries a significant portion of its assets and liabilities at fair value on a recurring basis. Estimating fair value often requires the application of judgement. The type and level of judgement required is largely dependent on the amount of observable market information available to the Company. For instruments valued using internally developed models that use significant unobservable inputs that are classified within level 3 of the valuation hierarchy, judgements used to estimate fair value are more significant than those required when estimating the fair value of instruments classified within levels 1 and 2.

In arriving at an estimate of fair value for an instrument within level 3, management must first determine the appropriate model to use. Second, the lack of observability of certain significant inputs requires management to assess all relevant empirical data in deriving valuation inputs - including, for example, transaction details, yield curves, interest rates, prepayment rates, default rates, volatilities, correlations, equity or debt prices, valuations of comparable instruments, foreign exchange rates and credit curves. For further discussion of the valuation of level 3 instruments, including unobservable inputs used, see note 10.

For instruments classified in levels 2 and 3, management judgement must be applied to assess the appropriate level of valuation adjustments, the Company's credit-worthiness, market funding rates, liquidity considerations, unobservable parameters, and for portfolios that meet specified criteria, the size of the net open risk position. The judgements 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 Company, see note 10.

The use of methodologies or assumptions different than those used by the Company could result in a different estimate of fair value at the reporting date. For a detailed discussion of the Company's valuation process and hierarchy, its determination of fair value for individual financial instruments, and the potential impact of using reasonable possible alternative assumptions for the valuations, see note 10.

The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements are the same as those applied for the year ended 31 December 2017.

4. Segmental analysis

The Company's activities comprise only one business segment, namely Corporate and Investment Banking services. The Company issues structured notes, of which the majority are issued within EMEA. All fee and commission income is received from JPMorgan Chase undertakings within the EMEA region.

5. Financial assets held at fair value through profit and loss

	Unaudited 30 June 2018	31 December 2017
	$'000	$'000
Financial assets held at fair value through profit and loss	21,555,825	25,708,466

Financial assets held at fair value through profit and loss include derivatives and fully funded OTC financial instruments with other JPMorgan Chase undertakings, see note 10.

6. Trade and other receivables

	Unaudited 30 June 2018	31 December 2017
	$'000	$'000
Trade receivables	214,988	101,043
Amounts owed by JPMorgan Chase undertakings	60,619	11,999
	275,607	**113,042**

The majority of amounts within trade and other receivables were not past due or impaired as at 30 June 2018 and 31 December 2017.

7. Net cash and cash equivalents

	Unaudited 30 June 2018	31 December 2017
	$'000	$'000
Cash held with JPMorgan Chase undertakings	7,425,490	6,222,828
Cash held with third parties	59,189	15,369
	7,484,679	**6,238,197**
Bank overdraft		
Balances due to JPMorgan Chase undertakings	(150,732)	(30,934)
Balances due to third parties	(118)	(11,164)
	(150,850)	**(42,098)**
Net cash and cash equivalents as reported for the period/year	**7,333,829**	**6,196,099**

8. Financial liabilities designated at fair value through profit or loss

	Unaudited 30 June 2018	31 December 2017
	$'000	$'000
Financial liabilities designated at fair value through profit or loss	17,756,259	17,889,305

Financial liabilities designated at fair value through profit and loss include short term and long term structured notes. In certain instances, the customers have the rights to exercise put options. Other securities include early redemption clauses. As a result, the notes have been disclosed as having a maturity within one year in the table above. The contractual payments associated with the notes issued by the Company are predominantly guaranteed by JPMorgan Chase Bank, N.A. and may be repayable on customer demand. The details of each note are set out in the prospectus for each issuance.

Debit valuation adjustments are necessary to reflect the credit quality of the Firm in the valuation of such liabilities. The directors consider that the Company is fully hedged and that there would, in the normal course of business, be no impact to the results of the Company due to movements in the fair value of the financial liabilities designated at fair value through profit or loss.

The amount of change attributable to changes in its own credit and funding risk in the financial liabilities designated at fair value through profit or loss and held at fair value through profit and loss for the period ended 30 June 2018 is a gain of $154.5 million (2017: gain of $76.9 million). This is fully offset by an equal and opposite amount in financial assets held at fair value through profit and loss (refer to note 5).

9. Financial liabilities held at fair value through profit and loss

	Unaudited 30 June 2018	31 December 2017
	$'000	$'000
Financial liabilities held at fair value through profit and loss	3,799,566	7,819,161

10. Assets and liabilities measured at fair value

Valuation process

The Company carries a portion of its assets and liabilities at fair value on a recurring basis.

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value is based on quoted market prices or inputs, where available. If prices or quotes are not available, fair value is based on valuation models and other valuation techniques that consider relevant transaction characteristics (such as maturity) and use as inputs observable or unobservable market parameters, including yield curves, interest rates, volatilities, equity or debt prices, foreign exchange rates, and credit curves.

The level of precision in estimating unobservable market inputs or other factors can affect the amount of gain or loss recorded for a particular position. Furthermore, while the Company believes its valuation methods are appropriate and consistent with those of other market participants, the methods and assumptions used reflect management judgement and may vary across the Company's businesses and portfolios. The use of different methodologies or assumptions to those used by the Company could result in a different estimate of fair value at the reporting date.

Risk-taking functions are responsible for providing fair value estimates for assets and liabilities carried on the balance sheet at fair value. The Firm's valuation control function, which is part of the Firm's Finance function and independent of the risk-taking functions, is responsible for verifying these estimates and determining any fair value adjustments that may be required to ensure that the Firm's positions are recorded at fair value. The valuation control function verifies fair value estimates provided by the risk-taking functions by leveraging independently derived prices, valuation inputs and other market data, where available.

Debit valuation adjustments ("DVA") are taken to reflect the credit quality of the Company in the valuation of liabilities measured at fair value. The Firm also incorporates the impact of funding in its valuation estimates where there is evidence that a market participant in the principal market would incorporate it in a transfer of the instrument.

10. Assets and liabilities measured at fair value (continued)

Valuation model review and approval

If prices or quotes are not available for an instrument or a similar instrument, fair value is generally determined using valuation models that consider relevant transaction data such as maturity and use as inputs market-based or independently sourced parameters. The Model Risk function is independent of the model owners and reviews and approves valuation models used by the Company.

Fair value hierarchy

The Company classifies its assets and liabilities according to a valuation hierarchy that reflects the observability of significant market inputs. The three levels are defined as follows:

Level 1 - inputs to the valuation methodology are quoted prices (unadjusted) for identical assets or liabilities in active markets.

Level 2 - inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.

Level 3 - one or more inputs to the valuation methodology are unobservable and significant to the fair value measurement.

A financial instrument's categorisation within the valuation hierarchy is based on the lowest level of input that is significant to the fair value measurement.

Valuation methodologies

The following table describes the valuation methodologies used by the Firm to measure its more significant products/ instruments at fair value, including the general classification of such instruments pursuant to the valuation hierarchy.

Product/instrument	Valuation methodology, inputs and assumptions	Classifications in the valuation hierarchy
Structured notes	• Valuations are based on discounted cash flow analysis that consider the embedded derivative and the terms and payment structure of the note. • The embedded derivative features are considered using models such as the Black-Scholes option pricing model, simulation models, or a combination of models that use observable or unobservable valuation inputs, depending on the embedded derivative. The specific inputs used vary according to the nature of the embedded derivative features, as described in the discussion below regarding derivative valuation. Adjustments are then made to this base valuation to reflect the Firm's own credit risk (DVA).	Level 2 or 3
Equity securities	Quoted market prices are used where available.	Level 1
Derivatives and fully funded OTC financial instruments	Derivatives that are valued using models such as the Black-Scholes option pricing model, simulation models, or a combination of models, that use observable or unobservable valuation inputs as well as considering the contractual terms. The key valuation inputs used will depend on the type of derivative and the nature of the underlying instruments and may include equity prices, commodity prices, interest rate yield curves, foreign exchange rates, volatilities, correlations, credit default swaps ("CDS") spreads and recovery rates. Additionally, the credit quality of the counterparty and of the Firm's as well as market funding levels may also be considered.	Level 1 Level 2 or 3

10. Assets and liabilities measured at fair value (continued)

The following tables present the assets and liabilities reported at fair value as of 30 June 2018 and 31 December 2017, by major product category and fair value hierarchy.

Assets and liabilities measured at fair value on a recurring basis

	Level 1	Level 2	Level 3	Total
	$'000	$'000	$'000	$'000
Unaudited at 30 June 2018				
Financial assets held at fair value through profit and loss:				
Financial assets held at fair value through profit and loss	352,335	11,593,899	9,609,591	21,555,825
Total financial assets	352,335	11,593,899	9,609,591	21,555,825
Financial liabilities held at fair value through profit and loss:				
Financial liabilities held at fair value through profit and loss	—	(3,332,862)	(466,704)	(3,799,566)
Financial liabilities designated at fair value through profit or loss:				
Structured notes	—	(9,160,785)	(8,595,474)	(17,756,259)
Total financial liabilities	—	(12,493,647)	(9,062,178)	(21,555,825)

	Level 1	Level 2	Level 3	Total
	$'000	$'000	$'000	$'000
At 31 December 2017				
Financial assets held at fair value through profit and loss:				
Financial assets held at fair value through profit and loss	411,580	17,829,952	7,466,934	25,708,466
Total financial assets	411,580	17,829,952	7,466,934	25,708,466
Financial liabilities held at fair value through profit and loss:				
Financial liabilities held at fair value through profit and loss	—	(7,081,469)	(737,692)	(7,819,161)
Financial liabilities designated at fair value through profit or loss:				
Structured notes	—	(9,703,119)	(8,186,186)	(17,889,305)
Total financial liabilities	—	(16,784,588)	(8,923,878)	(25,708,466)

The Company hedges all structured note issuances by entering into hedging transactions with other JPMorgan Chase companies. The hedging transactions can be booked as multiple elements in order to ensure the risk associated with the notes is fully hedged. Each of these elements is classified in the fair value hierarchy in line with the requirements of IFRS 13 'Fair Value Measurement', and as such the fair value hierarchy of the structured notes and hedges can differ.

10. Assets and liabilities measured at fair value (continued)

Level 3 valuations

The Firm has established well structured processes for determining fair value, including for instruments where fair value is estimated using significant unobservable inputs (level 3).

Estimating fair value requires the application of judgement. The type and level of judgement required is largely dependent on the amount of observable market information available to the Company. For instruments valued using internally developed valuation models and other valuation techniques that use significant unobservable inputs are classified within level 3 of the fair value hierarchy, judgements used to estimate fair value are more significant than those required when estimating the fair value of instruments classified within levels 1 and 2. In arriving at an estimate of fair value for an instrument within level 3, management must first determine the appropriate valuation model or other valuation technique to use.

The following table presents the Company'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 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 Company'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 Company's estimates and assumptions. Rather, they reflect the characteristics of the various instruments held by the Company 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 Company at each balance sheet date.

Unaudited 30 June 2018	Asset	Liability	Net fair value	Principal valuation technique	Unobservable input	Range of input values
	$'000	$'000	$'000			
Derivatives and fully funded OTC financial instruments	**9,609,591**	**(466,704)**	**9,142,887**	Option pricing	Interest rate correlation	(50)% - 97%
					Interest rate spread volatility	16bps - 38bps
					Interest rate - FX correlation	(50)% - 60%
					Equity correlation	10% - 95%
					Equity - FX correlation	(70)% - 60%
					Equity - interest rate correlation	20% - 40%
					Equity volatility	10% - 60%
Structured notes	**—**	**(8,595,474)**	**(8,595,474)**	Option pricing	Interest rate correlation	(50)% - 97%
					interest rate spread volatility	16bps - 38bps
					interest rate - FX correlation	(50)% - 60%
					Equity correlation	10% - 95%
					Equity-FX correlation	(70)% - 60%
					Equity-Interest rate correlation	20% - 40%
Total	**9,609,591**	**(9,062,178)**	**547,413**			

10. Assets and liabilities measured at fair value (continued)

Level 3 valuations (continued)

31 December 2017	Asset	Liability	Net fair value	Principal valuation technique	Unobservable input	Range of input values
	$'000	$'000	$'000			
Derivatives and fully funded OTC financial instruments	**7,466,934**	**(737,692)**	**6,729,242**	Option pricing	Interest rate correlation	(50)% - 98%
					Interest rate spread volatility	27bps-38bps
					Interest rate - FX correlation	(50)% - 70%
					Equity correlation	0% - 85%
					Equity - FX correlation	(50)% - 30%
					Equity - Interest rate correlation	10% - 40%
					Equity volatility	20% - 55%
Structured notes	**—**	**(8,186,186)**	**(8,186,186)**	Option pricing	Interest rate correlation	(50)% - 98%
					Interest rate spread volatility	27bps-38bps
					Interest rate - FX correlation	(50)%-70%
					Equity correlation	0%-85%
					Equity - FX correlation	(50)%-30%
					Equity - Interest rate correlation	10%-40%
Total	**7,466,934**	**(8,923,878)**	**(1,456,944)**			

The categories presented in the tables above have been aggregated based upon the product type, which may differ from their classification on the balance sheet.

Changes in and ranges of unobservable inputs

The following discussion provides a description of the impact on fair value measurement of a change in each unobservable input in isolation, and the interrelationship between unobservable inputs, where relevant and significant. The impact of changes in inputs may not be independent as a change in one unobservable input may give rise to a change in another unobservable input. Where relationships exist between two unobservable inputs, those relationships are discussed below. Relationships may also exist between observable and unobservable inputs (for example, as observable interest rates rise, unobservable prepayment rates decline); such relationships have not been included in the discussion below. In addition, for each of the individual relationships described below, the inverse relationship would also generally apply.

Yield - The yield of an asset is the interest rate used to discount future cash flows in a discounted cash flow calculation. An increase in the yield, in isolation, would result in a decrease in a fair value measurement.

Credit spread - The credit spread is the amount of additional annualised return over the market interest rate that a market participant would demand for taking exposure to the credit risk of an instrument. The credit spread for an instrument forms part of the discount rate used in a discounted cash flow calculation. Generally, an increase in the credit spread would result in a decrease in a fair value measurement.

Correlation - Correlation is a measure of the relationship between the movements of two variables (e.g., how the change in one variable influences the change in the other). Correlation is a pricing input for a derivative product where the payoff is driven by one or more underlying risks. Correlation inputs are related to the type of derivative due to the nature of the underlying risks. When parameters are positively correlated, an increase in one parameter will result in an increase in the other parameter. When parameters are negatively correlated, an increase in one parameter will result in a decrease in the other parameter. An increase in correlation can result in an increase or a decrease in a fair value measurement. Given a short correlation position, an increase in correlation, in isolation, would generally result in a decrease in a fair value measurement.

10. Assets and liabilities measured at fair value (continued)

Changes in and ranges of unobservable inputs (continued)

Volatility - Volatility is a measure of the variability in possible returns for an instrument, parameter or market index given how much the particular instrument, parameter or index changes in value over time. Volatility is a pricing input for options, including equity options and interest rate options. Generally, the higher the volatility of the underlying, the riskier the instrument. Given a long position in an option, an increase in volatility, in isolation, would generally result in an increase in a fair value measurement.

Fair value of financial instruments valued using techniques that incorporate unobservable inputs

Price risk from the issued instruments is matched by entering into equal and offsetting OTC transactions with other JPMorgan Chase undertakings so that any price risk is effectively hedged. As at 30 June 2018, the use of alternative inputs would result in no change to the results of the Company. Consequently, no sensitivity analysis for level 3 financial instruments is disclosed.

Movement in Level 3 assets and liabilities

Financial assets held at fair value through profit and loss

	Unaudited 30 June 2018	31 December 2017
	$'000	$'000
At 1 January	**7,466,934**	**4,637,424**
Total (loss)/gain recognised in income statement *	(212,933)	708,645
Purchases	4,803,603	5,980,031
Settlements	(2,527,694)	(4,300,656)
Transfers into level 3	327,168	849,130
Transfers out of level 3	(247,487)	(407,640)
Total assets at fair value	**9,609,591**	**7,466,934**
Change in unrealised (loss)/profit related to financial instruments	(28,155)	439,045

Financial liabilities held at fair value through profit and loss and designated at fair value through profit and loss

	Unaudited 30 June 2018	31 December 2017
	$'000	$'000
At 1 January	**8,923,878**	**6,320,029**
Total (gain)/loss recognised in income statement *	(370,512)	558,771
Purchases	92,041	112,293
Issuances	4,216,135	8,208,958
Settlements	(3,869,282)	(6,874,126)
Transfers into level 3	331,944	1,101,082
Transfers out of level 3	(262,026)	(503,129)
Total assets at fair value	**9,062,178**	**8,923,878**
Change in unrealised (loss) related to financial instruments	**(24,227)**	(211,169)

* As explained above, the Company's hedging transactions are booked as multiple elements in order to ensure the risk associated with the notes is fully hedged, and as such the levelling of the structured notes and hedges can differ. The gain/(loss) recognised in the income statement as a result of changes in fair value related to level 3 financial instruments, including any changes to unrealised gain/(loss) is offset by an equal and opposite impact as a result of changes in fair value of the related hedging instruments that are classified across multiple levels.

10. Assets and liabilities measured at fair value (continued)

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

For the period ended 30 June 2018, there were no significant transfers between levels 1 and 2.

There were no significant transfers to and from level 3 for the period ended 30 June 2018. Transfers to level 3 were due to increased un-observability of inputs for debt and equity instruments and equity hedge instruments.

During the year ended 31 December 2017, significant transfers from level 2 to level 3 included the following:

- $831 million of assets driven by a reduction in observability of debt and equity instruments.
- $1,082 million of liabilities driven by a reduction in observability of structured notes and equity hedge instruments.

Fair value of financial instruments not carried on balance sheet at fair value

Certain financial instruments that are not carried at fair value on balance sheet are carried at amounts that approximate fair value, due to their short term nature and generally negligible credit risk. These instruments include trade and other receivables, cash and cash equivalents, trade and other payables and bank overdraft.

The company has $7,760.3 million (31 December 2017: $6,351.2 million) of current financial assets and $7,223.4 million (31 December 2017: $5,815.8 million) of current financial liabilities that are not measured at fair value. Given the short-term nature of these instruments, their carrying amounts in the balance sheet are a reasonable approximation of fair value.

Offsetting financial assets and financial liabilities

No financial assets and liabilities have been offset in the balance sheet as at 30 June 2018 (31 December 2017: nil).

Financial instruments, recognised within financial assets and liabilities held at fair value through profit and loss, which were subject to master netting arrangements or other similar agreements but not offset, as at 30 June 2018, amounted to $512.5 million (31 December 2017: $2,429.2 million).

11. Trade and other payables

	Unaudited 30 June 2018	31 December 2017
	$'000	$'000
Trade payables	130,820	132,086
Amounts owed to JPMorgan Chase undertakings	6,941,775	5,641,605
	7,072,595	**5,773,691**

Current year trade and other payables predominantly consist of variation margin received from other JPMorgan Chase undertakings.

12. Share capital

	Unaudited 30 June 2018	31 December 2017
	€'000	€'000
Authorised share capital		
90,000 (2017: 90,000) Ordinary shares of €1.00 each	90	90

	Unaudited 30 June 2018	31 December 2017
	$'000	$'000
Issued and fully paid share capital		
20,000 (2017: 20,000) Ordinary shares of €1.00 each	26	26

In accordance with the requirements of Article 373 Book 2 of the Dutch Civil Code, the Company holds an amount of $2,000 in a legal reserve in respect of revaluation of the Euro denominated share capital. There has been no change in the amount of authorised share capital during the period.

13. Fees and commissions

All fee and commission income is receivable from other JPMorgan Chase undertakings.

All fee and commission expense are paid by other JPMorgan Chase undertakings and reimbursed by the Company.

14. Interest income and expenses

All interest income and expenses are from JPMorgan chase undertakings.

15. Income tax expense

	Unaudited 30 June 2018	Unaudited 30 June 2017
Current tax	682	892
Adjustments in respect of prior years	72	—
Tax on profit on ordinary activities	**754**	**892**
Profit before income tax	2,813	3,432
Tax calculated at applicable tax rates	682	876
Impact of:		
Adjustments in respect of prior years	72	16
Income tax expense	**754**	**892**

The standard tax rate in the Netherlands is 25% (2017: 25%). A tax rate of 20% is applied to the first €200,000 (2017: €200,000).

16. Financial risk management

Risk is an inherent part of the Company's business activities. The Company's overall objective is to manage its businesses, and the associated risks, in a manner that balances serving the interests of its clients and customers and protects the safety and soundness of the Company.

JPMorgan Chase's and the Company's risk management framework seeks to mitigate risk and loss to the Firm and Company. The Firm has established processes and procedures intended to identify, measure, monitor, report and analyse the types of risk to which the Firm is subject. However, as with any risk management framework, there are inherent limitations to the Firm's risk management strategies because there may exist, or develop in the future, risks that the Firm has not appropriately anticipated or identified.

The Company exercises oversight through the Board of Directors which are aligned to the Firm risk management framework and regulatory requirements.

An overview of the key aspects of risk management is provided below. A substantial majority of these risks, which arise from the structured products issued by the Company are offset by simultaneously entering into equal and offsetting OTC transactions with other JPMorgan Chase undertakings so that all such risks are effectively hedged.

The following sections outline the key risks that are inherent in the Company's business activities.

Risk	Definition
Economic risks	
Credit risk	The risk associated with the default or change in credit profile of a customer.
Liquidity risk	The risk that the Company will be unable to meet its contractual and contingent financial obligations as they arise or that it does not have the appropriate amount, composition and tenor of funding and liquidity to support its assets and liabilities.
Market risk	The risk associated with the effect of changes in market factors, such as interest rates or foreign exchange rates, equity and commodity prices, implied volatilities or credit spreads, on the value of assets and liabilities held for both the short and long term.
Other core risks	
Compliance risk	The risk of failure to comply with applicable laws, rules and regulations.
Operational risk	The risk associated with inadequate or failed internal processes, people or systems, or from external events.
Reputation risk	The potential that an action, inaction, transaction, investment or event will reduce trust in the Company and the Firm's integrity or competence by our various constituents, including clients, counterparties, regulators, employees and the broader public.

An overview of the key aspects of risk management is provided below. A detailed description of the policies and processes adopted by the Firm may be found within the JPMorgan Chase & Co. 2017 Annual Report on Form 10-K.

Credit risk

Credit risk is the risk associated with the default or change in credit profile of a client, counterparty or customer. The Company is not exposed to credit risk through the issuance of securities. The hedging activity exposes the Company to credit risk of internal JPMorgan Chase undertakings, which is collateralised.

Credit exposures

Balance sheet exposure by financial asset

The table below presents the Company's gross balance sheet exposure to financial assets without taking account of any collateral or economic hedges in place.

	Unaudited 30 June 2018	31 December 2017
	$'000	$'000
Financial assets held at fair value through profit and loss	21,203,490	25,296,886
Trade and other receivables	275,607	113,042
Cash and cash equivalents	7,484,679	6,238,197
	28,963,776	**31,648,125**

Included within the above assets, balances held with other JPMorgan Chase undertakings are $28,668 million (2017: $31,532 million). Financial assets held at fair value through profit and loss and cash and cash equivalents are considered to be of investment grade.

16. Financial risk management (continued)

Liquidity risk

Liquidity risk is the risk that the Company will be unable to meet its contractual and contingent financial obligations as they arise or that it does not have the appropriate amount, composition and tenor of funding and liquidity to support its assets and liabilities.

The Company's issuances are economically hedged with the OTC transactions with other JPMorgan Chase undertakings. To the extent that settlement-related timing differences between issuances and the OTC hedge may result in funding requirements, these are funded by other Firm companies involved in the transactions. The contractual payments associated with the notes issued by the Company are predominantly guaranteed by JPMorgan Chase Bank, N.A.

The following table provides details on the contractual maturity of all liabilities:

	Unaudited 30 June 2018	31 December 2017
	Less than 1 year	Less than 1 year
	$'000	$'000
Financial liabilities designated at fair value through profit or loss	17,756,259	17,889,305
Financial liabilities held at fair value through profit and loss	3,799,566	7,819,161
Bank overdraft	150,850	42,098
Trade and other payables	7,072,595	5,773,691
	28,779,270	**31,524,255**

Included with the above liabilities, the balances held with other JPMorgan Chase undertakings are $7,651 million (2017: $8,195 million).

Market risk

Market risk is the exposure to an adverse change in the market value of financial instruments caused by a change in market parameters. The primary categories of market parameters are:

- Interest rates - Interest rate risk primarily results from exposure to changes in the level, slope and curvature of the yield curve and the volatility of interest rates;
- Foreign exchange rates - Foreign exchange rate risk results from exposure to changes in prices and volatility of currency rates;
- Equity prices - Equity price risk arises from exposure to changes in prices and volatility of individual equities, equity baskets and equity indices;
- Credit spreads - Credit spreads are the difference between yields on corporate debt subject to default risk and government bonds, and
- Commodity prices - Commodity price risk results form exposures to changes in prices and volatility of commodities, such as natural gas, crude oil, petroleum products, precious and base metals and electricity.

Market risk, arising from the Company's issuances are economically hedged by equal and offsetting OTC transactions with other Firm companies. Should this change, the Company would be managed as part of the enterprise wide market risk management framework. There is no significant residual price, foreign exchange risk and interest rate risk in the Company as at 30 June 2018 and 31 December 2017.

The Company has an immaterial cash flow interest rate risk from interest bearing cash and cash equivalents balances.

16. Financial risk management (continued)

Compliance risk

Compliance risk is the risk of failure to comply with applicable laws, rules and regulations.

Each line of business and function is accountable for managing its compliance risk. The Firm's Compliance Organisation ("Compliance") works closely with senior management to provide independent review, monitoring and oversight of business operations with a focus on compliance with regulatory obligations applicable to the offering of the Firm's products and services to clients and customers.

These compliance risks relate to a wide variety of legal and regulatory obligations, depending on the Line of Business ("LOB") and the jurisdiction, and include those related to products and services, relationships and interactions with clients and customers, and employee activities.

Governance and oversight

Compliance is led by the Firms' Chief Compliance Officer ("CCO") who reports to the Firm's Chief Risk Officer ("CRO"). The regional CCOs, including the EMEA CCO, are part of this structure.

The Firm maintains oversight and coordination of its Compliance practices through the Firm's CCO, lines of business CCOs and regional CCOs who implement the Compliance program globally across the lines of business and regions.

The Firm has in place a Code of Conduct (the "Code") which applies to the Company. Each employee is given annual training in respect of the Code and is required annually to affirm his or her compliance with the Code. The Code sets forth the Firm's core principles and fundamental values, including that no employee should ever sacrifice integrity - or give the impression that he or she has. The Code requires prompt reporting of any known or suspected violation of the Code, any internal Firm policy, or any law or regulation applicable to the Firm's business. It also requires the reporting of any illegal conduct, or conduct that violates the underlying principles of the Code, by any of the Firm's employees, customers, suppliers, contract workers, business partners, or agents. Specified employees are specially trained and designated as "code specialists" who act as a resource to employees on Code matters. In addition, concerns may be reported anonymously and the Firm prohibits retaliation against employees for the good faith reporting of any actual or suspected violations of the Code. The Code and the associated employee compliance program are focused on the regular assessment of certain key aspects of the Firm's culture and conduct initiatives.

Operational Risk

Operational risk is the risk associated with inadequate or failed internal processes, people and systems, or from external events; operational risk includes cybersecurity risk, business and technology resiliency risk, payment fraud risk, and third-party outsourcing risk.

Operational risk is inherent in the Company's activities and can manifest itself in various ways, including fraudulent acts, business interruptions, inappropriate employee behavior, failure to comply with applicable laws and regulations or failure of vendors to perform in accordance with their arrangements. These events could result in financial losses, litigation and regulatory fines, as well as other damages to the Company. The goal is to keep operational risk at appropriate levels in light of the Company's financial position, the characteristics of its businesses, and the markets and regulatory environments in which it operates.

Risk management

To monitor and control operational risk, the Firm has an Operational Risk Management Framework ("ORMF") which is designed to enable the Firm to maintain a sound and well-controlled operational environment. The ORMF has four main components: Governance, Risk Assessment, Measurement, and Monitoring and Reporting.

Cybersecurity risk

Cybersecurity risk is an important, continuous and evolving focus for the Firm and Company. The Firm and Company devotes significant resources to protecting and continuing to improve the security of the Firm and Company's computer systems, software, networks and other technology assets. These security efforts are intended to protect against, among other things, cybersecurity attacks by unauthorised parties to obtain access to confidential information, destroy data, disrupt or degrade service, sabotage systems or cause other damage. The Firm continues to make significant investments in enhancing its cyberdefense capabilities and to strengthen its partnerships with the appropriate government and law enforcement agencies and other businesses in order to understand the full spectrum of cybersecurity risks in the operating environment, enhance defenses and improve resiliency against cybersecurity threats. The Firm actively participates in discussions of cybersecurity risks with law enforcement, government officials, peer and industry groups, and has significantly increased efforts to educate employees and clients on the topic.

16. Financial risk management (continued)

Operational Risk (continued)

Third parties with which the Company does business or that facilitate the Company's business activities (e.g. vendors) could also be sources of cybersecurity risk to the Company. Third party cybersecurity incidents such as system breakdowns or failures, misconduct by the employees of such parties, or cyberattacks could affect their ability to deliver a product or service to the Company or result in lost or compromised information of the Company or its clients. Clients can also be sources of cybersecurity risk to the Company, particularly when their activities and systems are beyond the Company's own security and control systems. As a result, the Company engages in regular and ongoing discussions with certain vendors and clients regarding cybersecurity risks and opportunities to improve security. However, where cybersecurity incidents are due to client failure to maintain the security of their own systems and processes, clients will generally be responsible for losses incurred.

To protect the confidentiality, integrity and availability of the Firm and Company's infrastructure, resources and information, the Firm leverages the ORMF to ensure risks are identified and managed within defined corporate tolerances. The Firm's Board of Directors and the Audit Committee are regularly briefed on the Firm's cybersecurity policies and practices and ongoing efforts to improve security, as well as its efforts regarding significant cybersecurity events.

Reputation risk

Reputation risk is the potential that an action, inaction, transaction, investment or event will reduce trust in the Company's integrity or competence by our various constituents, including clients, counterparties, regulators, employees and the broader public.

Risk management

Maintaining the Company's reputation is the responsibility of each individual employee. The Firm's Reputation Risk Governance policy explicitly vests each employee with the responsibility to consider the reputation of the Firm when engaging in any activity. Because the types of events that could harm the Firm's reputation are so varied across the Firm's LOB, each LOB has a separate reputation risk governance infrastructure in place, which consists of three key elements: clear, documented escalation criteria appropriate to the business; a designated primary discussion forum - in most cases, one or more dedicated reputation risk committees; and a list of designated contacts, to whom questions relating to reputation risk should be referred. Any matter giving rise to reputation risk that originates in a corporate function is required to be escalated directly to Firmwide Reputation Risk Governance ("FRRG") or to the relevant Risk Committee. LOB reputation risk governance is overseen by a Firmwide Reputation Risk Governance function, which provides oversight of the governance infrastructure and process to support the consistent identification, escalation, management and monitoring of reputation risk issues Firmwide.

17. Managed capital

Total equity of $536.9 million (2017: $534.9 million) constitutes the managed capital of the Company, which consists entirely of issued share capital, share premium reserve, legal reserve and retained earnings.

The directors are responsible for setting the objectives, policies and processes relating to the management of the Company's capital and maintain a set of policy documents to assist in discharging their responsibilities.

The Company is not subject to any externally imposed capital requirements.

18. Related party transactions

Related parties comprise:

(a) Directors and shareholders of the Company and companies in which they have an ownership interest;

(b) Other JPMorgan Chase undertakings.

None of the Directors received remuneration from the Company during the period (2017: $nil). The Company did not employ any staff in 2018 or 2017.

The Company's parent undertaking is detailed in note 1. There were no transactions with the parent undertaking during the period.

Related party transactions, outstanding balances at period end, and income and expenses for the period, relating to normal business activities are as follows:

18. Related party transactions (continued)

(i) Outstanding balances at period end

	Unaudited JPMorgan Chase undertakings 30 June 2018 $'000	JPMorgan Chase undertakings 31 December 2017 $'000
Financial assets held at fair value through profit and loss	21,181,749	25,708,466
Trade and other receivables	60,619	11,999
Cash and cash equivalents	7,425,490	6,222,828
Financial liabilities held at fair value through profit and loss	(536,294)	(2,482,502)
Financial liabilities designated at fair value through profit or loss	(22,340)	(40,310)
Trade and other payables	(6,941,775)	(5,641,605)
Bank overdraft	(150,732)	(30,934)

(ii) Income and expenses

	Unaudited JPMorgan Chase undertakings 30 June 2018 $'000	Unaudited JPMorgan Chase undertakings 30 June 2017 $'000
Fees and commission income	5,283	6,703
Fees and commission expense	(4,428)	(2,436)
Interest income	2,356	305

20. Proposed appropriation of net results

Management propose to appropriate the current year profit to the retained earnings. No dividend was paid or proposed during the year.

By order of the Board of Directors

W.H. Kamphuijs

M.F.C van der Werff

Date:

Other Information

Profit appropriation according to the Articles of Association

The Articles of Association of the Company require that the allocation of profits be determined in a general meeting of the shareholders. The Management Board may resolve to pay interim dividends up to an amount which does not exceed the amount of the distributable part of the net assets. Dividends shall be paid after adoption of the annual financial statements from which it appears that payment of dividends is permissible.

CONSOLIDATED FINANCIAL STATEMENTS FOR THE SIX MONTHS ENDED 30 JUNE 2018 RELATING TO THE GUARANTOR

This section sets out the guarantor's consolidated financial statements for the six months ended 30 June 2018 (the guarantor's 2018 interim financial statements). You can read and inspect a copy of the guarantor's 2018 interim financial statements by going to the offices of J.P. Morgan Securities (Asia Pacific) Limited at 25/F, Chater House, 8 Connaught Road Central, Hong Kong.

References to page numbers in the guarantor's 2018 interim financial statements refer to the original page numbers of the guarantor's 2018 interim financial statements.

JPMorgan Chase Bank, National Association
(a wholly-owned subsidiary of JPMorgan Chase & Co.)
Consolidated statements of income (unaudited)

(in millions)	Six months ended June 30, 2018	Six months ended June 30, 2017
Revenue		
Investment banking fees	**$ 1,679**	$ 1,722
Principal transactions	**7,135**	5,619
Lending- and deposit-related fees	**2,975**	2,934
Asset management, administration and commissions	**6,383**	5,747
Investment securities losses	**(325)**	(37)
Mortgage fees and related income	**789**	810
Card income	**2,210**	2,203
Other income	**3,101**	2,596
Noninterest revenue	**23,947**	21,594
Interest income	**27,292**	22,912
Interest expense	**5,074**	3,004
Net interest income	**22,218**	19,908
Total net revenue	**46,165**	41,502
Provision for credit losses	**790**	869
Noninterest expense		
Compensation expense	**13,593**	12,606
Occupancy expense	**1,778**	1,720
Technology, communications and equipment expense	**4,000**	3,472
Professional and outside services	**2,723**	2,328
Marketing	**493**	493
Other expense	**5,466**	5,097
Total noninterest expense	**28,053**	25,716
Income before income tax expense	**17,322**	14,917
Income tax expense	**3,760**	4,644
Net income	**$ 13,562**	$ 10,273

Effective January 1, 2018, JPMorgan Chase Bank, N.A. adopted several new accounting standards. Certain of the new accounting standards were applied retrospectively and, accordingly, prior period amounts were revised. For additional information, refer to Note 1.

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

JPMorgan Chase Bank, National Association
(a wholly-owned subsidiary of JPMorgan Chase & Co.)
Consolidated statements of comprehensive income (unaudited)

(in millions)	Six months ended June 30, 2018	Six months ended June 30, 2017
Net income	**$ 13,562**	$ 10,273
Other comprehensive income/(loss), after-tax		
Unrealized gains/(losses) on investment securities	**(1,427)**	708
Translation adjustments, net of hedges	**117**	(7)
Fair value hedges	**1**	NA
Cash flow hedges	**(239)**	146
Defined benefit pension and OPEB plans	**(1,631)**	(41)
Debit valuation adjustment ("DVA") on fair value option elected liabilities	**137**	(14)
Total other comprehensive income/(loss), after-tax	**(3,042)**	792
Comprehensive income	**$ 10,520**	$ 11,065

Effective January 1, 2018, JPMorgan Chase Bank, N.A. adopted several new accounting standards. For additional information, refer to Note 1.

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

JPMorgan Chase Bank, National Association
(a wholly-owned subsidiary of JPMorgan Chase & Co.)
Consolidated balance sheets (unaudited)

(in millions, except share data)		Jun 30, 2018		Dec 31, 2017
Assets				
Cash and due from banks	**$**	**20,267**	$	21,943
Deposits with banks		**414,993**		440,710
Federal funds sold and securities purchased under resale agreements (included **$3,534** and $2,894 at fair value)		**168,347**		155,214
Securities borrowed (included **$4,052** and $3,049 at fair value)		**37,198**		39,009
Trading assets (included assets pledged of **$54,623** and $49,765)		**268,906**		249,223
Investment securities (included **$199,932** and $199,364 at fair value and assets pledged of **$19,198** and $23,170)		**230,938**		247,097
Loans (included **$3,076** and $2,508 at fair value)		**852,723**		826,213
Allowance for loan losses		**(9,861)**		(10,081)
Loans, net of allowance for loan losses		**842,862**		816,132
Accrued interest and accounts receivable		**52,967**		48,063
Premises and equipment		**13,487**		13,481
Goodwill, MSRs and other intangible assets		**33,729**		33,570
Other assets (included **$7,613** and $7,454 at fair value and assets pledged of **$1,501** and $1,639)		**84,006**		76,336
Total assets[(a)]	**$**	**2,167,700**	$	2,140,778
Liabilities				
Deposits (included **$19,863** and $21,380 at fair value)	**$**	**1,526,755**	$	1,534,907
Federal funds purchased and securities loaned or sold under repurchase agreements (included **$4,650** and $3,405 at fair value)		**101,073**		94,692
Short-term borrowings (included **$6,023** and $5,577 at fair value)		**16,554**		8,993
Trading liabilities		**108,285**		96,737
Accounts payable and other liabilities (included **$7,650** and $7,454 at fair value)		**97,431**		91,200
Beneficial interests issued by consolidated variable interest entities		**4,818**		4,853
Long-term debt (included $**22,861** and $21,401 at fair value)		**97,304**		97,711
Total liabilities[(a)]		**1,952,220**		1,929,093
Commitments and contingencies (refer to Notes 21, 22 and 23)				
Stockholder's equity				
Preferred stock ($1 par value; authorized 15,000,000 shares; issued **0** shares)		**—**		—
Common stock ($12 par value; authorized 200,000,000 shares; issued **148,761,243** shares)		**1,785**		1,785
Additional paid-in capital		**99,132**		94,283
Retained earnings		**115,624**		114,242
Accumulated other comprehensive income		**(1,061)**		1,375
Total stockholder's equity		**215,480**		211,685
Total liabilities and stockholder's equity	**$**	**2,167,700**	$	2,140,778

Effective January 1, 2018, JPMorgan Chase Bank, N.A. adopted several new accounting standards. Certain of the new accounting standards were applied retrospectively and, accordingly, prior period amounts were revised. For additional information, refer to Note 1.

(a) The following table presents information on assets and liabilities related to VIEs that are consolidated by JPMorgan Chase Bank, N.A. at June 30, 2018, and December 31, 2017. The assets of the consolidated VIEs are used to settle the liabilities of those entities. The holders of the beneficial interests generally do not have recourse to the general credit of JPMorgan Chase Bank, N.A. The assets and liabilities in the table below include third-party assets and liabilities of consolidated VIEs and exclude intercompany balances that eliminate in consolidation. For a further discussion, refer to Note 14.

(in millions)		Jun 30, 2018		Dec 31, 2017
Assets				
Trading assets	**$**	**1,502**	$	1,380
Loans		**26,588**		27,072
All other assets		**1,551**		1,698
Total assets		**29,641**	$	30,150
Liabilities				
Beneficial interests issued by consolidated VIEs		**4,818**	$	4,853
All other liabilities		**230**		254
Total liabilities	**$**	**5,048**	$	5,107

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

JPMorgan Chase Bank, National Association
(a wholly-owned subsidiary of JPMorgan Chase & Co.)
Consolidated statements of changes in stockholder's equity (unaudited)

(in millions)	Six months ended June 30, 2018	2017
Common stock		
Balance at January 1 and June 30	**$ 1,785**	$ 1,785
Additional paid-in capital		
Balance at January 1	**94,283**	94,125
Cash capital contribution from JPMorgan Chase & Co.	**1,094**	–
Adjustments to capital due to transactions with JPMorgan Chase & Co.	**3,755**	–
Balance at June 30	**99,132**	94,125
Retained earnings		
Balance at January 1	**114,242**	108,312
Cumulative effect of change in accounting principles	**(680)**	–
Net income	**13,562**	10,273
Dividends declared to JPMorgan Chase & Co.	**(11,500)**	(6,000)
Balance at June 30	**115,624**	112,585
Accumulated other comprehensive income		
Balance at January 1	**1,375**	865
Cumulative effect of change in accounting principles	**606**	–
Adjustments to AOCI due to transactions with JPMorgan Chase & Co.	**(1,623)**	–
Other comprehensive income/(loss)	**(1,419)**	792
Balance at June 30	**(1,061)**	1,657
Total stockholder's equity	**$ 215,480**	$ 210,152

Effective January 1, 2018, JPMorgan Chase Bank, N.A. adopted several new accounting standards. For additional information, refer to Note 1.

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

JPMorgan Chase Bank, National Association
(a wholly-owned subsidiary of JPMorgan Chase & Co.)
Consolidated statements of cash flows (unaudited)

	Six months ended June 30,	
(in millions)	**2018**	2017
Operating activities		
Net income	**$ 13,562**	$ 10,273
Adjustments to reconcile net income to net cash provided by operating activities:		
Provision for credit losses	**790**	869
Depreciation and amortization	**3,555**	2,813
Deferred tax expense/(benefit)	**(4)**	111
Other	**325**	37
Originations and purchases of loans held-for-sale	**(43,141)**	(58,119)
Proceeds from sales, securitizations and paydowns of loans held-for-sale	**41,657**	52,984
Net change in:		
Trading assets	**(23,308)**	(13,229)
Securities borrowed	**1,813**	4,935
Accrued interest and accounts receivable	**(4,967)**	(9,944)
Other assets	**(2,179)**	3,940
Trading liabilities	**7,752**	(14,740)
Accounts payable and other liabilities	**6,924**	(8,380)
Other operating adjustments	**(1,642)**	4,827
Net cash provided by/(used in) operating activities	**1,137**	(23,623)
Investing activities		
Net change in:		
Federal funds sold and securities purchased under resale agreements	**(13,148)**	16,426
Held-to-maturity securities:		
Proceeds from paydowns and maturities	**1,458**	2,289
Purchases	**(7,426)**	–
Available-for-sale securities:		
Proceeds from paydowns and maturities	**19,576**	29,137
Proceeds from sales	**25,138**	42,920
Purchases	**(27,452)**	(45,567)
Proceeds from sales and securitizations of loans held-for-investment	**12,963**	7,762
Other changes in loans, net	**(40,342)**	(25,439)
All other investing activities, net	**(553)**	193
Net cash provided by/(used in) investing activities	**(29,786)**	27,721
Financing activities		
Net change in:		
Deposits	**(2,142)**	48,409
Federal funds purchased and securities loaned or sold under repurchase agreements	**6,388**	18,119
Short-term borrowings	**7,372**	(744)
Beneficial interests issued by consolidated variable interest entities	**(261)**	(805)
Proceeds from long-term borrowings	**21,667**	10,753
Payments of long-term borrowings	**(20,164)**	(16,302)
Cash capital contribution from JPMorgan Chase & Co.	**1,094**	–
Dividends paid to JPMorgan Chase & Co.	**(11,500)**	(6,000)
All other financing activities, net	**262**	1,263
Net cash provided by/(used in) financing activities	**2,716**	54,693
Effect of exchange rate changes on cash and due from banks and deposits with banks	**(1,460)**	5,388
Net increase/(decrease) in cash and due from banks and deposits with banks	**(27,393)**	64,179
Cash and due from banks and deposits with banks at the beginning of the period	**462,653**	410,813
Cash and due from banks and deposits with banks at the end of the period	**$ 435,260**	$ 474,992
Cash interest paid	**$ 4,620**	$ 2,903
Cash income taxes paid, net	**2,897**	986

Effective January 1, 2018, JPMorgan Chase Bank, N.A. adopted several new accounting standards. Certain of the new accounting standards were applied retrospectively and, accordingly, prior period amounts were revised. For additional information, refer to Note 1.

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (unaudited)

Note 1 – Overview and basis of presentation

JPMorgan Chase Bank, National Association ("JPMorgan Chase Bank, N.A."), is a wholly-owned bank subsidiary of JPMorgan Chase & Co. ("JPMorgan Chase"), which 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. JPMorgan Chase Bank, N.A. is a national banking association that is chartered by the Office of the Comptroller of the Currency ("OCC"), a bureau of the United States Department of the Treasury. JPMorgan Chase Bank, N.A.'s main office is located in Columbus, Ohio, and it has retail branches in 23 states. JPMorgan Chase Bank, N.A. operates nationally as well as through non-U.S. bank branches and subsidiaries, and representative offices. JPMorgan Chase Bank, N.A. either directly or through such offices, branches and subsidiaries offers a wide range of banking services to its U.S. and non-U.S. customers including 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, JPMorgan Chase Bank, N.A. serves millions of customers in the U.S. and many of the world's most prominent corporate, institutional and government clients.

The JPMorgan Chase Bank, N.A. Board of Directors is responsible for the oversight of the management of JPMorgan Chase Bank, N.A. The JPMorgan Chase Bank, N.A. Board accomplishes this function acting directly and through the principal standing committees of JPMorgan Chase's Board of Directors. Risk and control oversight on behalf of JPMorgan Chase Bank N.A. is primarily the responsibility of the Directors' Risk Policy Committee ("DRPC") and Audit Committee of JPMorgan Chase's Board of Directors, respectively, and, with respect to compensation and other management-related matters, the Compensation & Management Development Committee of JPMorgan Chase's Board of Directors.

The accounting and financial reporting policies of JPMorgan Chase Bank, N.A. and its subsidiaries conform to accounting principles generally accepted in the U.S. ("U.S. GAAP"). Additionally, where applicable, the policies conform to the accounting and reporting guidelines prescribed by regulatory authorities.

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

These unaudited Consolidated Financial Statements should be read in conjunction with the audited Consolidated Financial Statements, and related notes thereto, included in JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

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 Bank, N.A. and other entities in which JPMorgan Chase Bank, N.A. 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 JPMorgan Chase Bank, N.A. are not assets of JPMorgan Chase Bank, N.A. and are not included on the Consolidated balance sheets.

JPMorgan Chase Bank, N.A. determines whether it has a controlling financial interest in an entity by first evaluating whether the entity is a voting interest entity or a VIE.

For a further description of JPMorgan Chase Bank, N.A.'s accounting policies regarding consolidation, refer to Notes 1 and 15 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

Offsetting assets and liabilities

U.S. GAAP permits entities to present derivative receivables and derivative payables with the same counterparty and the related cash collateral receivables and payables on a net basis on the Consolidated balance sheets when a legally enforceable master netting agreement exists. U.S. GAAP also permits securities financing activities to be presented on a net basis when specified conditions are met, including the existence of a legally enforceable master netting agreement. JPMorgan Chase Bank, N.A. has elected to net such balances when the specified conditions are met. For further information on offsetting assets and liabilities, refer to Note 1 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

Application of U.S. GAAP related to the Tax Cuts and Jobs Act ("TCJA") SEC Staff Accounting Bulletin No. 118

On December 22, 2017, the TCJA was signed into law and JPMorgan Chase Bank, N.A. recorded the estimated impact of the deemed repatriation of JPMorgan Chase Bank, N.A.'s unremitted non-U.S. earnings and the remeasurement of deferred taxes under the TCJA. These provisional amounts represent estimates under SEC guidance, which provides a one-year measurement period in which to refine the estimates based on new information or the issuance of interpretative guidance. Based on legislative clarifications published during the first half of 2018, which were specific to the deemed repatriation tax on non-U.S. earnings, JPMorgan Chase Bank, N.A. recorded a tax benefit of $160 million. JPMorgan Chase Bank, N.A. has made and continues to anticipate refinements to both calculations as a result of the issuance of additional legislative and accounting guidance as well as those in the normal course of business, including true-ups to the tax liability on the tax return as filed and the resolution of tax audits. JPMorgan Chase Bank, N.A. considers any legislative or accounting guidance issued as of the balance sheet date when evaluating potential refinements to these estimates.

Accounting standards adopted January 1, 2018

Recognition and measurement of financial assets and financial liabilities
The adoption of this guidance requires that certain equity instruments be measured at fair value, with changes in fair value recognized in earnings. The guidance also provides an alternative to measure equity securities without readily determinable fair values at cost less impairment (if any), plus or minus observable price changes from an identical or similar investment of the same issuer (the "measurement alternative"). JPMorgan Chase Bank, N.A. elected the measurement alternative for its qualifying equity securities and the adoption of the guidance resulted in fair value gains of $456 million in other income in the first half of 2018. For additional information, refer to Notes 3 and 10.

Premium amortization on purchased callable debt securities
The adoption of this guidance requires that premiums be amortized to the earliest call date on certain debt securities. The adoption of this guidance resulted in a cumulative-effect adjustment to retained earnings and accumulated other comprehensive income/(loss) ("AOCI"). For additional information, refer to the table below, and Notes 10 and 18.

Hedge accounting
The adoption of this guidance better aligns hedge accounting with the economics of JPMorgan Chase Bank, N.A.'s risk management activities. As permitted by the guidance, JPMorgan Chase Bank, N.A. also elected to transfer certain investment securities from Held-to-maturity ("HTM") to Available-for-sale ("AFS"). The adoption of this guidance resulted in a cumulative-effect adjustment to retained earnings and AOCI as a result of the investment securities transfer and the revised guidance for excluded components. For additional information, refer to the table below, and Notes 5, 10 and 18.

Treatment of restricted cash on the statement of cash flows
The adoption of this guidance requires restricted cash to be combined with unrestricted cash when reconciling the beginning and ending cash balances on the Consolidated statements of cash flows. To align the Consolidated balance sheets with the Consolidated statements of cash flows, JPMorgan Chase Bank, N.A. reclassified restricted cash into cash and due from banks or deposits with banks. In addition, for JPMorgan Chase Bank, N.A.'s Consolidated statements of cash flows, cash is defined as those amounts included in cash and due from banks and deposits with banks. This guidance was applied retrospectively and, accordingly, prior period amounts have been revised. For additional information, refer to the table below, and Note 19.

Presentation of net periodic pension cost and net periodic postretirement benefit cost
The adoption of this guidance requires the service cost component of net periodic pension cost to be reported separately in the Consolidated statements of income from the other components of pension cost. This change was adopted retrospectively and, accordingly, prior period amounts were revised, which resulted in an increase in compensation expense and a reduction in other expense of $35 million in the first half of 2017. For additional information, refer to Note 8.

Reclassification of certain tax effects from AOCI
The adoption of this guidance permitted JPMorgan Chase Bank, N.A. to reclassify the income tax effects of the TCJA on items within AOCI to retained earnings so that the tax effects of items within AOCI reflect the appropriate tax rate. The adoption of this guidance resulted in a cumulative-effect adjustment to retained earnings and AOCI. For additional information, refer to the table below, and Note 18.

The following table presents the prior period impact to the Consolidated balance sheets from the retrospective adoption of the new accounting standards on January 1, 2018:

Selected Consolidated balance sheets data

December 31, 2017 (in millions)	Reported	Revisions[a]	Revised
Assets			
Cash and due from banks	$ 21,890	$ 53	$ 21,943
Deposits with banks	439,989	721	440,710
Other assets	77,110	(774)	76,336
Total assets	$ 2,140,778	$ –	$ 2,140,778

(a) Revisions relate to the reclassification of restricted cash.

The following table presents the adjustment to retained earnings and AOCI as a result of the new accounting standards adopted January 1, 2018:

Increase/(decrease) (in millions)	Retained earnings	AOCI
Premium amortization on purchased callable debt securities	**$ (494)**	**$ 252**
Hedge accounting	**–**	**168**
Reclassification of certain tax effects from AOCI	**(186)**	**186**
Total	**$ (680)**	**$ 606**

Note 2 – Accounting and reporting developments

Financial Accounting Standards Board ("FASB") Standards Adopted since January 1, 2018

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.	• Adopted January 1, 2018. • JPMorgan Chase Bank, N.A. adopted the revenue recognition guidance using the full retrospective method of adoption. • The adoption of the guidance did not result in any material changes in the timing or presentation of JPMorgan Chase Bank, N.A.'s revenue recognition. • JPMorgan Chase Bank, N.A.'s Note 7 qualitative disclosures are consistent with the guidance.
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. • Provides a measurement alternative for equity securities without readily determinable fair values to be measured at cost less impairment (if any), plus or minus observable price changes from an identical or similar investment of the same issuer. Any such price changes are reflected in earnings beginning in the period of adoption.	• Adopted January 1, 2018 • For further information, refer to Note 1.
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 settlement payments for zero-coupon debt instruments and distributions received from equity method investments.	• Adopted January 1, 2018. • The adoption of the guidance had no material impact as JPMorgan Chase Bank, N.A. was either in compliance with the amendments or the amounts to which it was applied were immaterial.
Treatment of restricted cash on the statement of cash flows *Issued November 2016*	• Requires restricted cash to be combined with unrestricted cash when reconciling the beginning and ending cash balances on the Consolidated statements of cash flows. • Requires additional disclosures to supplement the Consolidated statements of cash flows.	• Adopted January 1, 2018. • For further information, refer to Note 1.

FASB Standards Adopted since January 1, 2018 (continued)

Standard	Summary of guidance	Effects on financial statements
Definition of a business *Issued January 2017*	• Narrows the definition of a business and clarifies that, to be considered a business, substantially all of the fair value of the gross assets acquired (or disposed of) may not be concentrated in a single identifiable asset or a group of similar assets. • In addition, the definition now requires that 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.	• Adopted January 1, 2018. • The adoption of the guidance had no impact because it is being applied prospectively. Subsequent to adoption, fewer transactions will be treated as acquisitions or dispositions of a business.
Presentation of net periodic pension cost and net periodic postretirement benefit cost *Issued March 2017*	• Requires the service cost component of net periodic pension and postretirement benefit cost to be reported separately in the Consolidated statements of income from the other components (e.g., expected return on assets, interest costs, amortization of gains/losses and prior service costs)	• Adopted January 1, 2018. • For further information, refer to Note 1.
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 date.	• Adopted January 1, 2018. • For further information, refer to Note 1.
Hedge accounting *Issued August 2017*	• Aligns the accounting with the economics of the risk management activities. • Expands the ability for certain hedges of interest rate risk to qualify for hedge accounting. • Allows recognition of ineffectiveness in cash flow hedges and net investment hedges in OCI. • Permits an election at adoption to transfer certain investment securities classified as held-to-maturity to available-for-sale. • Simplifies hedge documentation requirements.	• Adopted January 1, 2018. • For further information, refer to Note 1.
Reclassification of certain tax effects from AOCI *Issued February 2018*	• Permits reclassification of the income tax effects of the TCJA on items within AOCI to retained earnings so that the tax effects of items within AOCI reflect the appropriate tax rate.	• Adopted January 1, 2018. • For further information, refer to Note 1.

FASB Standards Issued but not yet Adopted

Standard	Summary of guidance	Effects on financial statements
Leases *Issued February 2016*	• Requires lessees to recognize all leases longer than twelve months on the Consolidated balance sheets as a lease liability with a corresponding right-of-use asset. • Requires lessees and lessors to classify most leases using principles similar to existing lease accounting, but eliminates the "bright line" classification tests. • Permits the JPMorgan Chase Bank, N.A. to generally account for its existing leases consistent with current guidance, except for the incremental balance sheet recognition. • Expands qualitative and quantitative leasing disclosures. • May be adopted using 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, or a cumulative-effect adjustment to retained earnings at the effective date.	• Required effective date: January 1, 2019.[(a)] • JPMorgan Chase Bank, N.A. is in the process of its implementation which includes an evaluation its leasing activities and certain contracts for embedded leases, implementing a new lease accounting software solution for its real estate leases, and updating processes and internal controls for its leasing activities. As a lessee, JPMorgan Chase Bank, N.A. is developing its methodology to estimate the right-of-use asset and lease liability, which is based on the present value of lease payments. JPMorgan Chase Bank, N.A. expects to recognize a lease liability and a corresponding right-of-use asset (at their present value) related to predominantly all of the $9 billion of future minimum payments required under operating leases as disclosed in Note 26 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements. However, the population of contracts subject to balance sheet recognition and their initial measurement remains under evaluation; final financial statement impacts will depend on the lease portfolio at the time of adoption. JPMorgan Chase Bank, N.A. does not expect material changes to the recognition of operating lease expense in its Consolidated statements of income. • JPMorgan Chase Bank, N.A. plans to adopt the new guidance on January 1, 2019 and elect the available practical expedients, which will not require it to reassess whether an existing contract contains a lease or whether classification or unamortized initial lease costs would be different under the new lease guidance.
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, 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 credit impairments 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, 2021.[(a)] • JPMorgan Chase Bank, N.A. has established a Firmwide, cross-discipline governance structure, which provides implementation oversight. JPMorgan Chase Bank, N.A. continues to identify key interpretive issues, and is in the process of developing and implementing current expected credit loss models that satisfy the requirements of the new standard. • JPMorgan Chase Bank, N.A. 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 JPMorgan Chase Bank, N.A.'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, which will be offset by an increase in the carrying value of the related loans 3. An allowance will be established for estimated credit losses on non-agency HTM securities • The extent of the increase is under evaluation, but will depend upon the nature and characteristics of JPMorgan Chase Bank, N.A.'s portfolio at the adoption date, and the macroeconomic conditions and forecasts at that date.
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, JPMorgan Chase Bank, N.A. does not expect a material effect on the Consolidated Financial Statements. However, the impact of the new accounting guidance will depend on the performance of the reporting unit and the market conditions at the time of adoption. • After adoption, the guidance may result in more frequent goodwill impairment losses due to the removal of the second condition. • JPMorgan Chase Bank, N.A. plans to adopt the new guidance on January 1, 2020.

(a) Early adoption is permitted.

Note 3 – Fair value measurement

For a discussion of JPMorgan Chase Bank, N.A.'s valuation methodologies for assets, liabilities and lending-related commitments measured at fair value and the fair value hierarchy, refer to Note 3 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

The following table presents the assets and liabilities reported at fair value as of June 30, 2018, and December 31, 2017, by major product category and fair value hierarchy.

Assets and liabilities measured at fair value on a recurring basis

	Fair value hierarchy				
June 30, 2018 (in millions)	Level 1	Level 2	Level 3	Derivative netting adjustments	Total fair value
Federal funds sold and securities purchased under resale agreements	$ –	$ 3,534	$ –	$ –	$ 3,534
Securities borrowed	–	4,052	–	–	4,052
Trading assets:					
Debt instruments:					
Mortgage-backed securities:					
U.S. government agencies[a]	–	138	467	–	605
Residential – nonagency	–	898	31	–	929
Commercial – nonagency	–	86	2	–	88
Total mortgage-backed securities	–	1,122	500	–	1,622
U.S. Treasury and government agencies[a]	4,063	1	–	–	4,064
Obligations of U.S. states and municipalities	–	4,349	9	–	4,358
Certificates of deposit, bankers' acceptances and commercial paper	–	590	–	–	590
Non-U.S. government debt securities	34,735	31,647	183	–	66,565
Corporate debt securities	–	16,030	117	–	16,147
Loans	–	43,810	1,568	–	45,378
Asset-backed securities	–	448	23	–	471
Total debt instruments	38,798	97,997	2,400	–	139,195
Equity securities	57,577	267	132	–	57,976
Physical commodities[b]	51	–	–	–	51
Other	–	13,289	400	–	13,689
Total debt and equity instruments[c]	96,426	111,553	2,932	–	210,911
Derivative receivables:					
Interest rate	412	285,351	2,003	(264,950)	22,816
Credit	–	18,938	1,017	(19,430)	525
Foreign exchange	1,498	195,741	837	(181,328)	16,748
Equity	–	56,096	6,744	(52,709)	10,131
Commodity	–	30,680	105	(23,060)	7,725
Total derivative receivables[d]	1,910	586,806	10,706	(541,477)	57,945
Total trading assets[e]	98,336	698,359	13,638	(541,477)	268,856
Available-for-sale securities:					
Mortgage-backed securities:					
U.S. government agencies[a]	–	61,922	–	–	61,922
Residential – nonagency	–	9,679	1	–	9,680
Commercial – nonagency	–	7,700	–	–	7,700
Total mortgage-backed securities	–	79,301	1	–	79,302
U.S. Treasury and government agencies	25,344	–	–	–	25,344
Obligations of U.S. states and municipalities	–	37,424	–	–	37,424
Certificates of deposit	–	75	–	–	75
Non-U.S. government debt securities	17,359	8,327	–	–	25,686
Corporate debt securities	–	2,133	–	–	2,133
Asset-backed securities:					
Collateralized loan obligations	–	20,999	147	–	21,146
Other	–	8,822	–	–	8,822
Total available-for-sale securities	42,703	157,081	148	–	199,932
Loans	–	2,917	159	–	3,076
Mortgage servicing rights ("MSRs")	–	–	6,241	–	6,241
Other assets[e][f]	7,601	–	12	–	7,613
Total assets measured at fair value on a recurring basis	$ 148,640	$ 865,943	$ 20,198	$ (541,477)	$ 493,304
Deposits	$ –	$ 15,533	$ 4,330	$ –	$ 19,863
Federal funds purchased and securities loaned or sold under repurchase agreements	–	4,650	–	–	4,650
Short-term borrowings	–	3,824	2,199	–	6,023
Trading liabilities:					
Debt and equity instruments[c]	48,598	18,959	43	–	67,600
Derivative payables:					
Interest rate	312	256,149	1,638	(249,809)	8,290
Credit	–	18,784	1,039	(18,506)	1,317
Foreign exchange	1,537	185,415	1,181	(175,654)	12,479
Equity	–	57,218	8,794	(54,546)	11,466
Commodity	–	30,292	887	(24,046)	7,133
Total derivative payables[d]	1,849	547,858	13,539	(522,561)	40,685
Total trading liabilities	50,447	566,817	13,582	(522,561)	108,285
Accounts payable and other liabilities	7,650	–	–	–	7,650
Long-term debt	–	11,647	11,214	–	22,861
Total liabilities measured at fair value on a recurring basis	$ 58,097	$ 602,471	$ 31,325	$ (522,561)	$ 169,332

December 31, 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	$ –	$ 2,894	$ –	$ –	$ 2,894
Securities borrowed	–	3,049	–	–	3,049
Trading assets:					
Debt instruments:					
Mortgage-backed securities:					
U.S. government agencies[a]	–	2,981	289	–	3,270
Residential – nonagency	–	1,036	24	–	1,060
Commercial – nonagency	–	109	2	–	111
Total mortgage-backed securities	–	4,126	315	–	4,441
U.S. Treasury and government agencies[a]	4,254	–	1	–	4,255
Obligations of U.S. states and municipalities	–	4,285	15	–	4,300
Certificates of deposit, bankers' acceptances and commercial paper	–	38	–	–	38
Non-U.S. government debt securities	28,837	28,777	78	–	57,692
Corporate debt securities	–	16,310	191	–	16,501
Loans	–	35,079	2,332	–	37,411
Asset-backed securities	–	589	51	–	640
Total debt instruments	33,091	89,204	2,983	–	125,278
Equity securities	52,950	32	121	–	53,103
Physical commodities[b]	1,774	–	–	–	1,774
Other	–	14,039	350	–	14,389
Total debt and equity instruments[c]	87,815	103,275	3,454	–	194,544
Derivative receivables:					
Interest rate	68	317,904	1,911	(295,441)	24,442
Credit	–	20,987	1,208	(21,481)	714
Foreign exchange	851	159,842	580	(145,215)	16,058
Equity	–	51,183	6,323	(50,403)	7,103
Commodity	–	39,723	381	(33,796)	6,308
Total derivative receivables[d]	919	589,639	10,403	(546,336)	54,625
Total trading assets[e]	88,734	692,914	13,857	(546,336)	249,169
Available-for-sale securities:					
Mortgage-backed securities:					
U.S. government agencies[a]	–	70,280	–	–	70,280
Residential – nonagency	–	11,366	1	–	11,367
Commercial – nonagency	–	4,880	–	–	4,880
Total mortgage-backed securities	–	86,526	1	–	86,527
U.S. Treasury and government agencies	22,745	–	–	–	22,745
Obligations of U.S. states and municipalities	–	30,175	–	–	30,175
Certificates of deposit	–	59	–	–	59
Non-U.S. government debt securities	18,140	9,154	–	–	27,294
Corporate debt securities	–	2,757	–	–	2,757
Asset-backed securities:					
Collateralized loan obligations	–	20,720	276	–	20,996
Other	–	8,773	–	–	8,773
Equity securities[f]	38	–	–	–	38
Total available-for-sale securities	40,923	158,164	277	–	199,364
Loans	–	2,232	276	–	2,508
Mortgage servicing rights	–	–	6,030	–	6,030
Other assets[e][f]	7,454	–	–	–	7,454
Total assets measured at fair value on a recurring basis	$ 137,111	$ 859,253	$ 20,440	$ (546,336)	$ 470,468
Deposits	$ –	$ 17,230	$ 4,150	$ –	$ 21,380
Federal funds purchased and securities loaned or sold under repurchase agreements	–	3,405	–	–	3,405
Short-term borrowings	–	3,973	1,604	–	5,577
Trading liabilities:					
Debt and equity instruments[c]	45,597	14,834	37	–	60,468
Derivative payables:					
Interest rate	54	288,043	1,653	(282,736)	7,014
Credit	–	21,026	1,241	(21,182)	1,085
Foreign exchange	826	154,952	1,021	(144,201)	12,598
Equity	–	54,976	8,210	(53,935)	9,251
Commodity	–	39,808	1,029	(34,516)	6,321
Total derivative payables[d]	880	558,805	13,154	(536,570)	36,269
Total trading liabilities	46,477	573,639	13,191	(536,570)	96,737
Accounts payable and other liabilities	7,454	–	–	–	7,454
Long-term debt	–	11,247	10,154	–	21,401
Total liabilities measured at fair value on a recurring basis	$ 53,931	$ 609,494	$ 29,099	$ (536,570)	$ 155,954

(a) At June 30, 2018, and December 31, 2017, included total U.S. government-sponsored enterprise obligations of $39.7 billion and $49.1 billion, respectively, which were predominantly mortgage-related.

(b) 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 JPMorgan Chase Bank, N.A.'s physical commodities inventories are either not applicable or immaterial to the value of the inventory. Therefore, net realizable value approximates fair value for JPMorgan Chase Bank, N.A.'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 JPMorgan Chase Bank, N.A.'s hedge accounting relationships, refer to Note 5. To provide consistent fair value disclosure information, all physical commodities inventories have been included in each period presented.

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

(d) As permitted under U.S. GAAP, JPMorgan Chase Bank, N.A. 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, JPMorgan Chase Bank, N.A. 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. Additionally, includes derivative receivables and payables with affiliates on a net basis. Refer to Note 17 for information regarding our derivative activities with affiliates.

(e) 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, 2018, and December 31, 2017, the fair values of these investments, which include certain hedge funds, private equity funds, real estate and other funds, were $50 million and $54 million, respectively.

(f) Effective January 1, 2018, JPMorgan Chase Bank, N.A. adopted the recognition and measurement guidance. Equity securities that were previously reported as AFS securities were reclassified to other assets upon adoption.

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

For the six months ended June 30, 2018 there were no significant transfers between levels 1 and 2 and for the six months ended June 30, 2017 there were no individual significant transfers.

For the six months ended June 30, 2018, transfers from level 3 to level 2 included the following:

$1.2 billion of gross equity derivative receivables and $1.4 billion of gross equity derivative payables as a result of an increase in observability and a decrease in the significance of unobservable inputs.

For the six months ended June 30, 2018, transfers from level 2 to level 3 included the following:

$1.3 billion of gross equity derivative receivables as a result of a decrease in observability and an increase in the significance of unobservable inputs.

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 JPMorgan Chase Bank, N.A.'s valuation process and a detailed discussion of the determination of fair value for individual financial instruments, refer to Note 3 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

The following table presents JPMorgan Chase Bank, N.A.'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, JPMorgan Chase Bank, N.A. 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 JPMorgan Chase Bank, N.A.'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 JPMorgan Chase Bank, N.A.'s estimates and assumptions. Rather, they reflect the characteristics of the various instruments held by JPMorgan Chase Bank, N.A. 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 JPMorgan Chase Bank, N.A. at each balance sheet date.

For JPMorgan Chase Bank, N.A.'s derivatives and structured notes positions classified within level 3 at June 30, 2018, interest rate correlation inputs used in estimating fair value were concentrated towards the upper end of the range; equity correlation, equity-FX, and equity-IR correlation inputs were concentrated in the middle of the range; commodity correlation inputs were concentrated in the middle of the range; credit correlation inputs were concentrated towards the lower end of the range; and the interest rate-foreign exchange ("IR-FX") correlation inputs were distributed across the range. In addition, the interest rate spread volatility inputs used in estimating fair value were distributed across the range; 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 towards the lower end of the range. Prepayment speed inputs used in estimating fair value of interest rate derivatives were concentrated towards the lower end of the range. Recovery rate, yield and prepayment speed inputs used in estimating fair value of credit derivatives were distributed across the range; credit spreads and conditional default rates were concentrated towards the lower end of the range; loss severity and price inputs were concentrated towards the upper end of the range.

Level 3 inputs(a)

June 30, 2018

Product/Instrument	Fair value (in millions)	Principal valuation technique	Unobservable inputs(g)	Range of input values	Weighted average
Residential mortgage-backed securities and loans(b)	$ 731	Discounted cash flows	Yield	3% - 18 %	6%
			Prepayment speed	0% - 22 %	8%
			Conditional default rate	0% - 5 %	1%
			Loss severity	0% - 60 %	1%
Commercial mortgage-backed securities and loans(c)	421	Market comparables	Price	$ 12 - $ 100	$ 93
Obligations of U.S. states and municipalities	9	Market comparables	Price	$ 72 - $ 100	$ 86
Corporate debt securities	117	Market comparables	Price	$ 2 - $ 106	$ 75
Loans(d)	1,075	Market comparables	Price	$ 6 - $ 104	$ 88
Asset-backed securities	147	Discounted cash flows	Credit spread	216 bps	216bps
			Prepayment speed	20%	20%
			Conditional default rate	2%	2%
			Loss severity	30%	30%
	23	Market comparables	Price	$0 - $97	$ 83
Net interest rate derivatives	169	Option pricing	Interest rate spread volatility	16 bps - 38 bps	
			Interest rate correlation	(50)% - 98%	
			IR-FX correlation	55% - 60%	
	196	Discounted cash flows	Prepayment speed	0% - 30%	
Net credit derivatives	(26)	Discounted cash flows	Credit correlation	35% - 65%	
			Credit spread	8 bps - 1,497 bps	
			Recovery rate	20% - 70%	
			Yield	1% - 36%	
			Prepayment speed	0% - 18%	
			Conditional default rate	0% - 93%	
			Loss severity	0% - 100%	
	4	Market comparables	Price	$10 $98	
Net foreign exchange derivatives	(161)	Option pricing	IR-FX correlation	(50)% - 60%	
	(183)	Discounted cash flows	Prepayment speed	8% 9%	
Net equity derivatives	(2,050)	Option pricing	Equity volatility	10% - 60%	
			Equity correlation	10% - 95%	
			Equity-FX correlation	(70)% - 60%	
			Equity-IR correlation	20% - 40%	
Net commodity derivatives	(782)	Option pricing	Forward commodity price	$52 - $80 per barrel	
			Commodity volatility	5% - 53%	
			Commodity correlation	(52)% - 95%	
MSRs	6,241	Discounted cash flows	Refer to Note 15		
Other assets	412	Discounted cash flows	Credit spread	25 bps - 70 bps	48 bps
Long-term debt, other borrowed funds, and deposits(e)	17,743	Option pricing	Interest rate spread volatility	16 bps - 38 bps	
			Interest rate correlation	(50)% - 98%	
			IR-FX correlation	(50)% - 60%	
			Equity correlation	10% - 95%	
			Equity-FX correlation	(70)% - 60%	
			Equity-IR correlation	20% - 40%	
Other level 3 assets and liabilities, net(f)	272				

(a) The categories presented in the table have been aggregated based upon the product type, which may differ from their classification on the Consolidated balance sheets. Furthermore, the inputs presented for each valuation technique in the table are, in some cases, not applicable to every instrument valued using the technique as the characteristics of the instruments can differ.
(b) Includes U.S. government agency securities of $467 million, nonagency securities of $32 million and trading loans of $232 million.
(c) Includes nonagency securities of $2 million, trading loans of $260 million and non-trading loans of $159 million.
(d) Comprises trading loans.
(e) Long-term debt, short-term borrowings and deposits include structured notes issued by JPMorgan Chase Bank, N.A. that are predominantly financial instruments containing embedded derivatives. The estimation of the fair value of structured notes includes the derivative features embedded within the instrument. The significant unobservable inputs are broadly consistent with those presented for derivative receivables.
(f) Includes level 3 assets and liabilities that are insignificant both individually and in aggregate.
(g) Price is a significant unobservable input for certain instruments. When quoted market prices are not readily available, reliance is generally placed on price-based internal valuation techniques. The price input is expressed assuming a par value of $100.

Changes in and ranges of unobservable inputs

For a discussion of the impact on fair value of changes in unobservable inputs and the relationships between unobservable inputs as well as a description of attributes of the underlying instruments and external market factors that affect the range of inputs used in the valuation of JPMorgan Chase Bank, N.A.'s positions refer to Note 3 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

Changes in level 3 recurring fair value measurements

The following tables include a rollforward of the Consolidated balance sheets amounts (including changes in fair value) for financial instruments classified by JPMorgan Chase Bank, N.A. within level 3 of the fair value hierarchy for the six months ended June 30, 2018 and 2017. When a determination is made to classify a financial instrument within level 3, the determination is based on the significance of the unobservable parameters to the overall fair value measurement. However, level 3 financial instruments typically include, in addition to the unobservable or level 3 components, observable components (that is, components that are actively quoted and can be validated to external sources); accordingly, the gains and losses in the table below include changes in fair value due in part to observable factors that are part of the valuation methodology. Also, JPMorgan Chase Bank, N.A. risk-manages the observable components of level 3 financial instruments using securities and derivative positions that are classified within level 1 or 2 of the fair value hierarchy; as these level 1 and level 2 risk management instruments are not included below, the gains or losses in the following tables do not reflect the effect of JPMorgan Chase Bank, N.A.'s risk management activities related to such level 3 instruments.

Six months ended June 30, 2018 (in millions)	Fair value measurements using significant unobservable inputs: Fair value at Jan 1, 2018	Total realized/ unrealized gains/ (losses)	Purchases(f)	Sales	Settlements(g)	Transfers into level 3(h)	Transfers (out of) level 3(h)	Fair value at June 30, 2018	Change in unrealized gains/ (losses) related to financial instruments held at June 30, 2018
Assets:									
Trading assets:									
Debt instruments:									
Mortgage-backed securities:									
U.S. government agencies	$ 289	$ 3	$ 321	$ (114)	$ (32)	$ –	$ –	$ 467	$ 1
Residential – nonagency	24	2	7	(8)	(1)	8	(1)	31	1
Commercial – nonagency	2	1	–	–	(1)	–	–	2	–
Total mortgage-backed securities	315	6	328	(122)	(34)	8	(1)	500	2
U.S. Treasury and government agencies	1	–	–	–	–	–	(1)	–	–
Obligations of U.S. states and municipalities	15	–	–	–	(6)	–	–	9	–
Non-U.S. government debt securities	78	(10)	352	(184)	(1)	17	(69)	183	(9)
Corporate debt securities	191	(13)	116	(145)	(11)	148	(169)	117	(5)
Loans	2,332	58	961	(1,445)	(237)	322	(423)	1,568	(10)
Asset-backed securities	51	1	4	–	(12)	–	(21)	23	1
Total debt instruments	2,983	42	1,761	(1,896)	(301)	495	(684)	2,400	(21)
Equity securities	121	(14)	84	(53)	(1)	3	(8)	132	(15)
Other	350	33	371	(223)	(110)	39	(60)	400	19
Total trading assets – debt and equity instruments	3,454	61 (c)	2,216	(2,172)	(412)	537	(752)	2,932	(17) (c)
Net derivative receivables:(a)									
Interest rate	258	462	55	(123)	(315)	(27)	55	365	444
Credit	(33)	40	2	(6)	(24)	(4)	3	(22)	10
Foreign exchange	(441)	274	14	(16)	(71)	(119)	15	(344)	110
Equity	(1,887)	(70)	2,433	(1,769)	(2,033)	1,086	190	(2,050)	128
Commodity	(648)	175	6	(101)	(205)	(5)	(4)	(782)	164
Total net derivative receivables	(2,751)	881 (c)	2,510	(2,015)	(2,648)	931	259	(2,833)	856 (c)
Available-for-sale securities:									
Asset-backed securities	276	1	–	–	(130)	–	–	147	1
Other	1	–	–	–	–	–	–	1	–
Total available-for-sale securities	277	1 (d)	–	–	(130)	–	–	148	1 (d)
Loans	276	(4) (c)	123	–	(162)	–	(74)	159	(5) (c)
Mortgage servicing rights	6,030	478 (e)	479	(399)	(347)	–	–	6,241	478 (e)
Other assets	–	–	14	(2)	–	–	–	12	–

Six months ended June 30, 2018 (in millions)	Fair value measurements using significant unobservable inputs: Fair value at Jan 1, 2018	Total realized/ unrealized (gains)/ losses	Purchases	Sales	Issuances	Settlements(g)	Transfers into level 3(h)	Transfers (out of) level 3(h)	Fair value at June 30, 2018	Change in unrealized (gains)/losses related to financial instruments held at June 30, 2018
Liabilities:(b)										
Deposits	$ 4,150	$ (35) (c)(i)	$ –	$ –	$ 763	$ (252)	$ 1	$ (297)	$ 4,330	$ (75) (c)(i)
Short-term borrowings	1,604	(119) (c)(i)	–	–	2,015	(1,306)	44	(39)	2,199	(45) (c)(i)
Trading liabilities – debt and equity instruments	37	(7) (c)	(61)	76	–	1	–	(3)	43	(1) (c)
Long-term debt	10,154	(520) (c)(i)	–	–	4,139	(2,590)	212	(181)	11,214	(418) (c)(i)

Six months ended June 30, 2017 (in millions)	Fair value measurements using significant unobservable inputs								Change in unrealized gains/(losses) related to financial instruments held at June 30, 2017
	Fair value at Jan 1, 2017	Total realized/unrealized gains/(losses)	Purchases[f]	Sales	Settlements[g]	Transfers into level 3[h]	Transfers (out of) level 3[h]	Fair value at June 30, 2017	
Assets:									
Trading assets:									
Debt instruments:									
Mortgage-backed securities:									
U.S. government agencies	$ 369	$ (8)	$ 155	$ (149)	$ (32)	$ –	$ –	$ 335	$ (16)
Residential – nonagency	11	1	1	–	(3)	4	(3)	11	1
Commercial – nonagency	6	(1)	1	–	–	4	–	10	(1)
Total mortgage-backed securities	386	(8)	157	(149)	(35)	8	(3)	356	(16)
Obligations of U.S. states and municipalities	19	–	–	–	(4)	–	–	15	–
Non-U.S. government debt securities	46	3	175	(179)	–	27	(35)	37	3
Corporate debt securities	318	4	187	(122)	(19)	17	(115)	270	5
Loans	4,325	148	1,412	(972)	(642)	316	(499)	4,088	109
Asset-backed securities	70	7	6	(10)	(3)	–	(41)	29	1
Total debt instruments	5,164	154	1,937	(1,432)	(703)	368	(693)	4,795	102
Equity securities	89	17	43	(2)	–	–	(17)	130	11
Other	281	95	53	(3)	(120)	7	(11)	302	33
Total trading assets – debt and equity instruments	5,534	266 (c)	2,033	(1,437)	(823)	375	(721)	5,227	146 (c)
Net derivative receivables:[a]									
Interest rate	1,001	(25)	118	(165)	(464)	35	(188)	312	(215)
Credit	96	(97)	4	(3)	(62)	17	–	(45)	(41)
Foreign exchange	(1,531)	43	3	(17)	646	24	75	(757)	22
Equity	(1,488)	(239)	1,019	(238)	(515)	21	73	(1,367)	(163)
Commodity	35	(155)	–	–	(3)	7	1	(115)	27
Total net derivative receivables	(1,887)	(473) (c)	1,144	(423)	(398)	104	(39)	(1,972)	(370) (c)
Available-for-sale securities:									
Asset-backed securities	663	12	–	(50)	(78)	–	–	547	10
Other	1	–	–	–	–	–	–	1	–
Total available-for-sale securities	664	12	–	(50)	(78)	–	–	548	10 (d)
Loans	568	24 (c)	1	–	(289)	–	–	304	16 (c)
Mortgage servicing rights	6,096	(157) (e)	371	(138)	(419)	–	–	5,753	(157) (e)
Other assets	41	9 (c)	–	(13)	(37)	–	–	–	–

Six months ended June 30, 2017 (in millions)	Fair value measurements using significant unobservable inputs									Change in unrealized (gains)/losses related to financial instruments held at June 30, 2017
	Fair value at Jan 1, 2017	Total realized/unrealized (gains)/losses	Purchases	Sales	Issuances	Settlements[g]	Transfers into level 3[h]	Transfers (out of) level 3[h]	Fair value at June 30, 2017	
Liabilities:[b]										
Deposits	$ 2,121	$ 33 (c)	$ –	$ –	$ 563	$ (117)	$ –	$ (464)	$ 2,136	$ 65 (c)
Short-term borrowings	1,019	62 (c)	–	–	1,226	(1,033)	41	(49)	1,266	51 (c)
Trading liabilities – debt and equity instruments	36	(1) (c)	(7)	2	–	1	3	–	34	–
Long-term debt	7,662	662 (c)(j)	–	–	4,097 (j)	(3,190)	40	(96)	9,175 (j)	649 (c)(j)

(a) All level 3 derivatives are presented on a net basis, irrespective of the underlying counterparty.
(b) Level 3 liabilities as a percentage of total JPMorgan Chase Bank, N.A. liabilities accounted for at fair value (including liabilities measured at fair value on a nonrecurring basis) were 19% at both June 30, 2018 and December 31, 2017, respectively.
(c) Predominantly reported in principal transactions revenue, except for changes in fair value for consumer & community banking business mortgage loans, and lending-related commitments originated with the intent to sell, and mortgage loan purchase commitments, which are reported in mortgage fees and related income.
(d) Realized gains/(losses) on AFS securities, as well as other-than-temporary impairment ("OTTI") losses that are recorded in earnings, are reported in investment securities losses. Unrealized gains/(losses) are reported in OCI. There were no realized gains/(losses) or foreign exchange hedge accounting adjustments recorded in income on AFS securities for the six months ended June 30, 2018 and 2017, respectively. Unrealized gains/(losses) recorded on AFS securities in OCI were $1 million and $12 million for the six months ended June 30, 2018 and 2017, respectively.
(e) Changes in fair value for the consumer & community banking business's MSRs are reported in mortgage fees and related income.

(f) Loan originations are included in purchases.
(g) Includes financial assets and liabilities that have matured, been partially or fully repaid, impacts of modifications, deconsolidation associated with beneficial interests in VIEs, and other items.
(h) All transfers into and/or out of level 3 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.
(i) Realized (gains)/losses due to DVA for fair value option elected liabilities are reported in principal transactions revenue. Unrealized (gains)/losses are reported in OCI. Unrealized gains were $65 million for the six months ended June 30, 2018. There were no realized gains for the six months ended June 30, 2018.
(j) The prior period amounts have been revised to conform with the current period presentation.

Level 3 analysis

Consolidated balance sheets changes

Level 3 assets (including assets measured at fair value on a nonrecurring basis) were 1.0% of total JPMorgan Chase Bank, N.A. assets and 4.2% of total assets measured at fair value at June 30, 2018, compared with 1.0% and 4.5%, respectively, at December 31, 2017. The following describes significant changes to level 3 assets since December 31, 2017, for those items measured at fair value on a recurring basis. For further information on changes impacting items measured at fair value on a nonrecurring basis, refer to Assets and liabilities measured at fair value on a nonrecurring basis on page 22.

Six months ended June 30, 2018

Level 3 assets at June 30, 2018 decreased by $242 million from December 31, 2017 with no movements that were individually significant.

Gains and losses

The following describes significant components of total realized/unrealized gains/(losses) for instruments measured at fair value on a recurring basis for the periods indicated. For further information on these instruments, refer to Changes in level 3 recurring fair value measurements rollforward tables on pages 18–21.

Six months ended June 30, 2018

$1.4 billion of net gains on assets and $681 million of net gains on liabilities, none of which were individually significant.

Six months ended June 30, 2017

$319 million of net losses on assets and $756 million of net losses on liabilities, none of which were individually significant.

Assets and liabilities measured at fair value on a nonrecurring basis

The following tables present the assets still held as of June 30, 2018 and 2017, respectively, for which a nonrecurring fair value adjustment was recorded during the six months ended June 30, 2018 and 2017, respectively, by major product category and fair value hierarchy.

	Fair value hierarchy			
June 30, 2018 (in millions)	Level 1	Level 2	Level 3	Total fair value
Loans	**$ –**	**$ 325**	**$ 210** [(a)]	**$ 535**
Other assets[(b)]	**–**	**213**	**387**	**600**
Total assets measured at fair value on a nonrecurring basis	**–**	**538**	**597**	**1,135**

	Fair value hierarchy			
June 30, 2017 (in millions)	Level 1	Level 2	Level 3	Total fair value
Loans	$ –	$ 292	$ 430	$ 722
Other assets	–	8	244	252
Total assets measured at fair value on a nonrecurring basis	–	300	674	974

(a) Of the $210 million in level 3 assets measured at fair value on a nonrecurring basis as of June 30, 2018, $166 million related to residential real estate loans carried at the net realizable value of the underlying collateral (e.g., collateral-dependent loans and other loans charged off in accordance with regulatory guidance). These amounts are classified as level 3 as they are valued using a broker's price opinion and discounted based upon JPMorgan Chase Bank, N.A.'s experience with actual liquidation values. These discounts to the broker price opinions ranged from 13% to 40% with a weighted average of 22%.

(b) Primarily includes equity securities without readily determinable fair values that were adjusted based on observable price changes in orderly transactions from an identical or similar investment of the same issuer (measurement alternative) as a result of the adoption of the recognition and measurement guidance. Of the $387 million in level 3 assets measured at fair value on a nonrecurring basis as of June 30, 2018, $301 million related to such equity securities. These equity securities are classified as level 3 due to the infrequency of the observable prices and/or the restrictions on the shares.

There were no material liabilities measured at fair value on a nonrecurring basis at June 30, 2018 and 2017.

Nonrecurring fair value changes

The following table presents the total change in value of assets and liabilities for which a fair value adjustment has been recognized for the six months ended June 30, 2018 and 2017, related to financial instruments held at those dates.

	Six months ended June 30,	
(in millions)	**2018**	2017
Loans	**$ (22)**	$ (109)
Other assets	**449** [(a)]	(44)
Accounts payable and other liabilities	**–**	(1)
Total nonrecurring fair value gains/ (losses)	**$ 427**	$ (154)

(a) Included $456 million of fair value gains as a result of the measurement alternative. For additional information, refer to Note 1.

For further information about the measurement of impaired collateral-dependent loans, and other loans where the carrying value is based on the fair value of the underlying collateral (e.g., residential mortgage loans charged off in accordance with regulatory guidance), refer to Note 13 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

Additional disclosures about the fair value of financial instruments that are not carried on the Consolidated balance sheets at fair value

The following table presents by fair value hierarchy classification the carrying values and estimated fair values at June 30, 2018, and December 31, 2017, of financial assets and liabilities, excluding financial instruments that are carried at fair value on a recurring basis, and their classification within the fair value hierarchy. For additional information regarding the financial instruments within the scope of this disclosure, and the methods and significant assumptions used to estimate their fair value, refer to Note 3 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

	June 30, 2018					December 31, 2017				
		Estimated fair value hierarchy					Estimated fair value hierarchy			
(in billions)	Carrying value	Level 1	Level 2	Level 3	Total estimated fair value	Carrying value	Level 1	Level 2	Level 3	Total estimated fair value
Financial assets										
Cash and due from banks	**$ 20.3**	**$ 20.3**	**$ –**	**$ –**	**$ 20.3**	$ 22.0	$ 22.0	$ –	$ –	$ 22.0
Deposits with banks	**415.0**	**369.6**	**45.4**	**–**	**415.0**	440.7	386.5	54.2	–	440.7
Accrued interest and accounts receivable	**52.2**	**–**	**52.1**	**0.1**	**52.2**	47.3	–	47.3	–	47.3
Federal funds sold and securities purchased under resale agreements	**164.8**	**–**	**164.8**	**–**	**164.8**	152.3	–	152.3	–	152.3
Securities borrowed	**33.1**	**–**	**33.1**	**–**	**33.1**	36.0	–	36.0	–	36.0
Securities, held-to-maturity	**31.0**	**–**	**30.9**	**–**	**30.9**	47.7	–	48.7	–	48.7
Loans, net of allowance for loan losses[(a)]	**839.8**	**–**	**227.1**	**608.0**	**835.1**	813.6	–	219.3	597.5	816.8
Other[(b)]	**41.4**	**–**	**40.6**	**0.8**	**41.4**	39.5	–	38.6	2.3	40.9
Financial liabilities										
Deposits	**$ 1,506.9**	**$ –**	**$ 1,506.9**	**$ –**	**$ 1,506.9**	$1,513.5	$ –	$ 1,513.6	$ –	$ 1,513.6
Federal funds purchased and securities loaned or sold under repurchase agreements	**96.4**	**–**	**96.4**	**–**	**96.4**	91.3	–	91.3	–	91.3
Short-term borrowings	**10.5**	**–**	**10.3**	**0.2**	**10.5**	3.4	–	3.2	0.2	3.4
Accounts payable and other liabilities	**69.4**	**–**	**66.9**	**2.3**	**69.2**	61.8	–	58.9	2.7	61.6
Beneficial interests issued by consolidated VIEs	**4.8**	**–**	**4.8**	**–**	**4.8**	4.9	–	4.9	–	4.9
Long-term debt and junior subordinated deferrable interest debentures	**74.4**	**–**	**71.5**	**2.8**	**74.3**	76.3	–	72.8	2.7	75.5

Effective January 1, 2018, JPMorgan Chase Bank, N.A. adopted several new accounting standards. Certain of the new accounting standards were applied retrospectively and, accordingly, prior period amounts were revised. For additional information, refer to Note 1.

(a) Fair value is typically estimated using a discounted cash flow model that incorporates the characteristics of the underlying loans (including principal, contractual interest rate and contractual fees) and other key inputs, including expected lifetime credit losses, interest rates, prepayment rates, and primary origination or secondary market spreads. For certain loans, the fair value is measured based on the value of the underlying collateral. The difference between the estimated fair value and carrying value of a financial asset or liability is the result of the different methodologies used to determine fair value as compared with carrying value. For example, credit losses are estimated for a financial asset's remaining life in a fair value calculation but are estimated for a loss emergence period in the allowance for loan loss calculation; future loan income (interest and fees) is incorporated in a fair value calculation but is generally not considered in the allowance for loan losses. For a further discussion of JPMorgan Chase Bank, N.A.'s methodologies for estimating the fair value of loans and lending-related commitments, refer to Valuation hierarchy on pages 21–24 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

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

The majority of JPMorgan Chase Bank, N.A.'s lending-related commitments are not carried at fair value on a recurring basis on the Consolidated balance sheets. The carrying value of the wholesale allowance for lending-related commitments and the estimated fair value of these wholesale lending-related commitments were as follows for the periods indicated.

	June 30, 2018					December 31, 2017				
		Estimated fair value hierarchy					Estimated fair value hierarchy			
(in billions)	Carrying value[(a)]	Level 1	Level 2	Level 3	Total estimated fair value	Carrying value[(a)]	Level 1	Level 2	Level 3	Total estimated fair value
Wholesale lending-related commitments	**$ 1.1**	**$ –**	**$ –**	**$ 1.7**	**$ 1.7**	$ 1.1	$ –	$ –	$ 1.6	$ 1.6

(a) Excludes the current carrying values of the guarantee liability and the offsetting asset, each of which is recognized at fair value at the inception of the guarantees.

JPMorgan Chase Bank, N.A. does not estimate the fair value of consumer lending-related commitments. In many cases, JPMorgan Chase Bank, N.A. can reduce or cancel these commitments by providing the borrower notice or, in some cases as permitted by law, without notice. For a further discussion of the valuation of lending-related commitments, refer to page 22 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

Equity securities without readily determinable fair values

As a result of the adoption of the recognition and measurement guidance and the election of the measurement alternative in the first quarter of 2018, JPMorgan Chase Bank, N.A. measures equity securities without readily determinable fair values at cost less impairment (if any), plus or minus observable price changes from an identical or similar investment of the same issuer, with such changes recognized in earnings.

In its determination of the new carrying values upon observable price changes, JPMorgan Chase Bank, N.A. may adjust the prices if deemed necessary to arrive at JPMorgan Chase Bank, N.A.'s estimated fair values. Such adjustments may include adjustments to reflect the different rights and obligations of similar securities, and other adjustments that are consistent with JPMorgan Chase Bank, N.A.'s valuation techniques for private equity direct investments.

The following table presents the carrying value of equity securities without readily determinable fair values still held as of June 30, 2018, that are measured under the measurement alternative and the related adjustments recorded during the period presented for those securities with observable price changes. These securities are included in the nonrecurring fair value tables when applicable price changes are observable.

As of or for the six months ended (in millions)	June 30, 2018
Other assets	
Carrying value	**$ 702**
Upward carrying value changes	**456**
Downward carrying value changes/impairment	**(7)**

Included in other assets above is JPMorgan Chase Bank, N.A.'s interest in approximately 4 million Visa Class B shares, recorded at a nominal carrying value. These shares are subject to certain transfer restrictions currently and will be converted into Visa Class A shares upon final resolution of certain litigation matters involving Visa. The conversion rate of Visa Class B shares into Visa Class A shares is 1.6298 at June 30, 2018, and may be adjusted by Visa depending on developments related to the litigation matters.

Note 4 – Fair value option

For a discussion of the primary financial instruments for which the fair value option was elected, including the basis for those elections and the determination of instrument-specific credit risk, where relevant, refer to Note 4 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

Changes in fair value under the fair value option election

The following table presents the changes in fair value included in the Consolidated statements of income for the six months ended June 30, 2018 and 2017 for items for which the fair value option was elected. The profit and loss information presented below only includes the financial instruments that were elected to be measured at fair value; related risk management instruments, which are required to be measured at fair value, are not included in the table.

	Six months ended June 30,					
	2018			2017		
(in millions)	Principal transactions	All other income	Total changes in fair value recorded[e]	Principal transactions	All other income	Total changes in fair value recorded[e]
Federal funds sold and securities purchased under resale agreements	**$ (15)**	**$ –**	**$ (15)**	$ 63	$ –	$ 63
Securities borrowed	**2**	**–**	**2**	90	–	90
Trading assets:						
Debt and equity instruments, excluding loans	**(612)**	**1** [c]	**(611)**	696	2 [c]	698
Loans reported as trading assets:						
Changes in instrument-specific credit risk	**334**	**4** [c]	**338**	225	15 [c]	240
Other changes in fair value	**69**	**(25)** [c]	**44**	83	352 [c]	435
Loans:						
Changes in instrument-specific credit risk	**(1)**	**–**	**(1)**	(1)	–	(1)
Other changes in fair value	**(2)**	**–**	**(2)**	1	3 [c]	4
Other assets	**–**	**–**	**–**	–	3 [d]	3
Deposits[a]	**339**	**–**	**339**	(249)	–	(249)
Federal funds purchased and securities loaned or sold under repurchase agreements	**7**	**–**	**7**	(85)	–	(85)
Short-term borrowings[a]	**(29)**	**–**	**(29)**	(633)	–	(633)
Trading liabilities	**(1)**	**–**	**(1)**	(1)	–	(1)
Beneficial interests issued by consolidated VIEs	**–**	**–**	**–**	–	–	–
Other liabilities	**–**	**–**	**–**	–	–	–
Long-term debt[a][b]	**699**	**–**	**699**	(486)	–	(486)

(a) Unrealized gains/(losses) due to instrument-specific credit risk (DVA) for liabilities for which the fair value option has been elected is recorded in OCI, while realized gains/(losses) are recorded in principal transactions revenue. Realized gains/(losses) due to instrument-specific credit risk recorded in principal transaction revenue were not material for the six months ended June 30, 2018 and 2017, respectively.

(b) Long-term debt measured at fair value predominantly relates to structured notes. Although the risk associated with the structured notes is actively managed, the gains/(losses) reported in this table do not include the income statement impact of the risk management instruments used to manage such risk.

(c) Reported in mortgage fees and related income.

(d) Reported in other income.

(e) Changes in fair value exclude contractual interest, which is included in interest income and interest expense for all instruments other than hybrid financial instruments. For further information regarding interest income and interest expense, refer to Note 7.

Difference between aggregate fair value and aggregate remaining contractual principal balance outstanding

The following table reflects the difference between the aggregate fair value and the aggregate remaining contractual principal balance outstanding as of June 30, 2018, and December 31, 2017, for loans, long-term debt and long-term beneficial interests for which the fair value option has been elected.

	June 30, 2018			December 31, 2017		
(in millions)	Contractual principal outstanding	Fair value	Fair value over/(under) contractual principal outstanding	Contractual principal outstanding	Fair value	Fair value over/(under) contractual principal outstanding
Loans[(a)]						
Nonaccrual loans						
Loans reported as trading assets	**$ 2,580**	**$ 868**	**$ (1,712)**	$ 2,703	$ 1,073	$ (1,630)
Loans	**—**	**—**	**—**	39	—	(39)
Subtotal	**2,580**	**868**	**(1,712)**	2,742	1,073	(1,669)
All other performing loans						
Loans reported as trading assets	**44,977**	**44,510**	**(467)**	36,637	36,338	(299)
Loans	**3,167**	**3,076**	**(91)**	2,539	2,508	(31)
Total loans	**$ 50,724**	**$ 48,454**	**$ (2,270)**	$ 41,918	$ 39,919	$ (1,999)
Long-term debt						
Principal-protected debt	**$ 8,794** [(c)]	**$ 8,572**	**$ (222)**	$ 6,253 [(c)]	$ 6,024	$ (229)
Nonprincipal-protected debt[(b)]	**—**	**14,289**	**NA**	—	15,377	NA
Total long-term debt	**—**	**$ 22,861**	**NA**	NA	$ 21,401	NA

(a) There were no performing loans that were ninety days or more past due as of June 30, 2018, and December 31, 2017, respectively.
(b) Remaining contractual principal is not applicable to nonprincipal-protected notes. Unlike principal-protected structured notes, for which JPMorgan Chase Bank, N.A. is obligated to return a stated amount of principal at the maturity of the note, nonprincipal-protected structured notes do not obligate JPMorgan Chase Bank, N.A. to return a stated amount of principal at maturity, but to return an amount based on the performance of an underlying variable or derivative feature embedded in the note. However, investors are exposed to the credit risk of JPMorgan Chase Bank, N.A. as issuer for both nonprincipal-protected and principal protected notes.
(c) Where JPMorgan Chase Bank, N.A. issues principal-protected zero-coupon or discount notes, the balance reflects the contractual principal payment at maturity or, if applicable, the contractual principal payment at JPMorgan Chase Bank, N.A.'s next call date.

At June 30, 2018, and December 31, 2017, the contractual amount of lending-related commitments for which the fair value option was elected was $10.9 billion and $7.4 billion, respectively, with a corresponding fair value of $(230) million and $(82) million, respectively. For further information regarding off-balance sheet lending-related financial instruments, refer to Note 25 of JPMorgan Chase Bank, N.A.'s 2017 Annual Report, and Note 21 of these Consolidated Financial Statements.

Note 5 – Derivative instruments

JPMorgan Chase Bank, N.A. makes markets in derivatives for clients and also uses derivatives to hedge or manage its own risk exposures. For a further discussion of JPMorgan Chase Bank, N.A.'s use of and accounting policies regarding derivative instruments, refer to Note 6 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

JPMorgan Chase Bank, N.A.'s disclosures are based on the accounting treatment and purpose of these derivatives. A limited number of JPMorgan Chase Bank, N.A.'s derivatives are designated in hedge accounting relationships and are disclosed according to the type of hedge (fair value hedge, cash flow hedge, or net investment hedge). Derivatives not designated in hedge accounting relationships include certain derivatives that are used to manage certain risks associated with specified assets or liabilities ("specified risk management" positions) as well as derivatives used in JPMorgan Chase Bank, N.A.'s market-making businesses or for other purposes.

Derivatives designated as hedges

The adoption of the new hedge accounting guidance in the first quarter of 2018 better aligns hedge accounting with the economics of JPMorgan Chase Bank, N.A.'s risk management activities. For additional information, refer to Note 1 and 18.

To qualify for hedge accounting, a derivative must be highly effective at reducing the risk associated with the exposure being hedged. In addition, for a derivative to be designated as a hedge, the risk management objective and strategy must be documented. Hedge documentation must identify the derivative hedging instrument, the asset or liability or forecasted transaction and type of risk to be hedged, and how the effectiveness of the derivative is assessed prospectively and retrospectively. To assess effectiveness, JPMorgan Chase Bank, N.A. uses statistical methods such as regression analysis, nonstatistical methods such as dollar-value comparisons of the change in the fair value of the derivative to the change in the fair value or cash flows of the hedged item, and qualitative comparisons of critical terms and the evaluation of any changes in those terms. The extent to which a derivative has been, and is expected to continue to be, highly effective at offsetting changes in the fair value or cash flows of the hedged item must be assessed and documented at least quarterly. If it is determined that a derivative is not highly effective at hedging the designated exposure, hedge accounting is discontinued.

For qualifying fair value hedges, changes in the fair value of the derivative, and in the value of the hedged item for the risk being hedged, are recognized in earnings. Certain amounts excluded from the assessment of effectiveness are recorded in OCI and recognized in earnings through an amortization approach over the life of the derivative. If the hedge relationship is terminated, then the adjustment to the hedged item continues to be reported as part of the basis of the hedged item, and for benchmark interest rate hedges, is amortized to earnings as a yield adjustment. Derivative amounts affecting earnings are recognized consistent with the classification of the hedged item - primarily net interest income and principal transactions revenue.

For qualifying cash flow hedges, changes in the fair value of the derivative are recorded in OCI and recognized in earnings as the hedged item affects earnings. Derivative amounts affecting earnings are recognized consistent with the classification of the hedged item - primarily interest income, interest expense, noninterest revenue and compensation expense. If the hedge relationship is terminated, then the change in value of the derivative recorded in AOCI is recognized in earnings when the cash flows that were hedged affect earnings. For hedge relationships that are discontinued because a forecasted transaction is not expected to occur according to the original hedge forecast, any related derivative values recorded in AOCI are immediately recognized in earnings.

For qualifying net investment hedges, changes in the fair value of the derivatives due to changes in spot foreign exchange rates are recorded in OCI as translation adjustments. Amounts excluded from the assessment of effectiveness are recorded directly in earnings.

The following table outlines JPMorgan Chase Bank, N.A.'s primary uses of derivatives and the related hedge accounting designation or disclosure category.

Type of Derivative	Use of Derivative	Designation and disclosure	Page reference
Manage specifically identified risk exposures in qualifying hedge accounting relationships:			
• Interest rate	Hedge fixed rate assets and liabilities	Fair value hedge	34
• Interest rate	Hedge floating-rate assets and liabilities	Cash flow hedge	35
• Foreign exchange	Hedge foreign currency-denominated assets and liabilities	Fair value hedge	34
• Foreign exchange	Hedge foreign currency-denominated forecasted revenue and expense	Cash flow hedge	35
• Foreign exchange	Hedge the value of JPMorgan Chase Bank, N.A.'s investments in non-U.S. dollar functional currency entities	Net investment hedge	36
• Commodity	Hedge commodity inventory	Fair value hedge	34
Manage specifically identified risk exposures not designated in qualifying hedge accounting relationships:			
• Interest rate	Manage the risk of the mortgage pipeline, warehouse loans and MSRs	Specified risk management	36
• Credit	Manage the credit risk of wholesale lending exposures	Specified risk management	36
• Interest rate and foreign exchange	Manage the risk of certain other specified assets and liabilities	Specified risk management	36
Market-making derivatives and other activities:			
• Various	Market-making and related risk management	Market-making and other	36
• Various	Other derivatives	Market-making and other	36

Notional amount of derivative contracts

The following table summarizes the notional amount of derivative contracts outstanding as of June 30, 2018, and December 31, 2017.

	Notional amounts[b]	
(in billions)	**June 30, 2018**	December 31, 2017
Interest rate contracts		
Swaps	**$ 25,652**	$ 21,371
Futures and forwards	**5,972**	4,519
Written options	**4,407**	3,582
Purchased options	**4,707**	4,003
Total interest rate contracts	**40,738**	33,475
Credit derivatives[a]	**1,499**	1,498
Foreign exchange contracts		
Cross-currency swaps	**3,946**	3,978
Spot, futures and forwards	**7,184**	5,962
Written options	**912**	788
Purchased options	**899**	777
Total foreign exchange contracts	**12,941**	11,505
Equity contracts		
Swaps	**520**	497
Futures and forwards	**82**	75
Written options	**585**	543
Purchased options	**563**	508
Total equity contracts	**1,750**	1,623
Commodity contracts		
Swaps	**443**	516
Spot, futures and forwards	**181**	173
Written options	**156**	113
Purchased options	**138**	106
Total commodity contracts	**918**	908
Total derivative notional amounts	**$ 57,846**	$ 49,009

(a) For more information on volumes and types of credit derivative contracts, refer to the Credit derivatives discussion on page 37.
(b) Represents the sum of gross long and gross short notional derivative contracts with third parties and JPMorgan Chase affiliates. For additional information on related party derivatives, refer to Note 17.

While the notional amounts disclosed above give an indication of the volume of JPMorgan Chase Bank, N.A.'s derivatives activity, the notional amounts significantly exceed, in JPMorgan Chase Bank, N.A.'s view, the possible losses that could arise from such transactions. For most derivative transactions, the notional amount is not exchanged; it is used simply as a reference to calculate payments.

Impact of derivatives on the Consolidated balance sheets

The tables below include derivative receivables and payables with affiliates on a net basis. Refer to Note 17 for information regarding our derivative activities with affiliates.

The following table summarizes information on derivative receivables and payables (before and after netting adjustments) that are reflected on JPMorgan Chase Bank, N.A.'s Consolidated balance sheets as of June 30, 2018, and December 31, 2017, by accounting designation (e.g., whether the derivatives were designated in qualifying hedge accounting relationships or not) and contract type.

Free-standing derivative receivables and payables[(a)]

	Gross derivative receivables				Gross derivative payables			
June 30, 2018 (in millions)	Not designated as hedges	Designated as hedges	Total derivative receivables	Net derivative receivables[(b)]	Not designated as hedges	Designated as hedges	Total derivative payables	Net derivative payables[(b)]
Trading assets and liabilities								
Interest rate	**$ 287,067**	**$ 699**	**$ 287,766**	**$ 22,816**	**$ 258,098**	**$ 1**	**$ 258,099**	**$ 8,290**
Credit	**19,955**	**–**	**19,955**	**525**	**19,823**	**–**	**19,823**	**1,317**
Foreign exchange	**197,114**	**962**	**198,076**	**16,748**	**187,953**	**180**	**188,133**	**12,479**
Equity	**62,840**	**–**	**62,840**	**10,131**	**66,012**	**–**	**66,012**	**11,466**
Commodity	**30,554**	**231**	**30,785**	**7,725**	**31,078**	**101**	**31,179**	**7,133**
Total fair value of trading assets and liabilities	**$ 597,530**	**$ 1,892**	**$ 599,422**	**$ 57,945**	**$ 562,964**	**$ 282**	**$ 563,246**	**$ 40,685**

	Gross derivative receivables				Gross derivative payables			
December 31, 2017 (in millions)	Not designated as hedges	Designated as hedges	Total derivative receivables	Net derivative receivables[(b)]	Not designated as hedges	Designated as hedges	Total derivative payables	Net derivative payables[(b)]
Trading assets and liabilities								
Interest rate	$ 319,178 [(c)]	$ 704 [(c)]	$ 319,882	$ 24,442	$ 289,746 [(c)]	$ 4 [(c)]	$ 289,750	$ 7,014
Credit	22,195	–	22,195	714	22,268	–	22,268	1,085
Foreign exchange	160,914	359	161,273	16,058	155,837	962	156,799	12,598
Equity	57,507	–	57,507	7,103	63,186	–	63,186	9,251
Commodity	40,085	19	40,104	6,308	40,433	403	40,836	6,321
Total fair value of trading assets and liabilities	$ 599,879 [(c)]	$ 1,082 [(c)]	$ 600,961	$ 54,625	$ 571,470 [(c)]	$ 1,369 [(c)]	$ 572,839	$ 36,269

(a) Balances exclude structured notes for which the fair value option has been elected. Refer to Note 4 for further information.
(b) As permitted under U.S. GAAP, JPMorgan Chase Bank, N.A. has elected to net derivative receivables and derivative payables and the related cash collateral receivables and payables when a legally enforceable master netting agreement exists.
(c) The prior period amounts have been revised to conform with the current period presentation.

Derivatives netting

The following tables present, as of June 30, 2018, and December 31, 2017, gross and net derivative receivables and payables by contract and settlement type. Derivative receivables and payables, as well as the related cash collateral from the same counterparty have been netted on the Consolidated balance sheets where JPMorgan Chase Bank, N.A. has obtained an appropriate legal opinion with respect to the master netting agreement. Where such a legal opinion has not been either sought or obtained, amounts are not eligible for netting on the Consolidated balance sheets, and those derivative receivables and payables are shown separately in the tables below.

In addition to the cash collateral received and transferred that is presented on a net basis with derivative receivables and payables, JPMorgan Chase Bank, N.A. receives and transfers additional collateral (financial instruments and cash). These amounts mitigate counterparty credit risk associated with JPMorgan Chase Bank, N.A.'s derivative instruments, but are not eligible for net presentation:

- collateral that consists of non-cash financial instruments (generally U.S. government and agency securities and other Group of Seven Nations ("G7") government securities) and cash collateral held at third party custodians, which are shown separately as "Collateral not nettable on the Consolidated balance sheets" in the tables below, up to the fair value exposure amount.
- the amount of collateral held or transferred that exceeds the fair value exposure at the individual counterparty level, as of the date presented, which is excluded from the tables below; and
- collateral held or transferred that relates to derivative receivables or payables where an appropriate legal opinion has not been either sought or obtained with respect to the master netting agreement, which is excluded from the tables below.

(in millions)	June 30, 2018			December 31, 2017		
	Gross derivative receivables	Amounts netted on the Consolidated balance sheets	Net derivative receivables	Gross derivative receivables	Amounts netted on the Consolidated balance sheets	Net derivative receivables
U.S. GAAP nettable derivative receivables						
Interest rate contracts:						
Over-the-counter ("OTC")	**$ 276,487**	**$ (257,152)**	**$ 19,335**	$ 309,464	$ (289,039)	$ 20,425
OTC-cleared	**7,619**	**(7,597)**	**22**	6,531	(6,318)	213
Exchange-traded[(a)]	**310**	**(201)**	**109**	185	(84)	101
Total interest rate contracts	**284,416**	**(264,950)**	**19,466**	316,180	(295,441)	20,739
Credit contracts:						
OTC	**11,621**	**(11,364)**	**257**	14,393	(14,311)	82
OTC-cleared	**8,137**	**(8,066)**	**71**	7,225	(7,170)	55
Total credit contracts	**19,758**	**(19,430)**	**328**	21,618	(21,481)	137
Foreign exchange contracts:						
OTC	**193,718**	**(180,899)**	**12,819**	156,415	(143,554)	12,861
OTC-cleared	**417**	**(408)**	**9**	1,696	(1,654)	42
Exchange-traded[(a)]	**39**	**(21)**	**18**	141	(7)	134
Total foreign exchange contracts	**194,174**	**(181,328)**	**12,846**	158,252	(145,215)	13,037
Equity contracts:						
OTC	**46,487**	**(43,408)**	**3,079**	43,606	(41,322)	2,284
Exchange-traded[(a)]	**11,522**	**(9,301)**	**2,221**	10,072	(9,081)	991
Total equity contracts	**58,009**	**(52,709)**	**5,300**	53,678	(50,403)	3,275
Commodity contracts:						
OTC	**20,380**	**(13,721)**	**6,659**	30,971	(25,096)	5,875
Exchange-traded[(a)]	**9,806**	**(9,339)**	**467**	8,853	(8,700)	153
Total commodity contracts	**30,186**	**(23,060)**	**7,126**	39,824	(33,796)	6,028
Derivative receivables with appropriate legal opinion	**586,543**	**(541,477)** [(b)]	**45,066**	589,552	(546,336) [(b)]	43,216
Derivative receivables where an appropriate legal opinion has not been either sought or obtained	**12,879**		**12,879**	11,409		11,409
Total derivative receivables recognized on the Consolidated balance sheets	**$ 599,422**		**$ 57,945**	$ 600,961		$ 54,625
Collateral not nettable on the Consolidated balance sheets[(c)(d)]			**(13,341)**			(13,234)
Net amounts			**$ 44,604**			$ 41,391

(in millions)	June 30, 2018 Gross derivative payables	June 30, 2018 Amounts netted on the Consolidated balance sheets	June 30, 2018 Net derivative payables	December 31, 2017 Gross derivative payables	December 31, 2017 Amounts netted on the Consolidated balance sheets	December 31, 2017 Net derivative payables
U.S. GAAP nettable derivative payables						
Interest rate contracts:						
OTC	**$ 249,032**	**$ (242,727)**	**$ 6,305**	$ 282,317	$ (276,723)	$ 5,594
OTC-cleared	**6,939**	**(6,881)**	**58**	6,005	(5,929)	76
Exchange-traded[(a)]	**210**	**(201)**	**9**	127	(84)	43
Total interest rate contracts	**256,181**	**(249,809)**	**6,372**	288,449	(282,736)	5,713
Credit contracts:						
OTC	**12,302**	**(11,128)**	**1,174**	15,209	(14,398)	811
OTC-cleared	**7,420**	**(7,378)**	**42**	6,801	(6,784)	17
Total credit contracts	**19,722**	**(18,506)**	**1,216**	22,010	(21,182)	828
Foreign exchange contracts:						
OTC	**184,534**	**(175,208)**	**9,326**	151,968	(142,641)	9,327
OTC-cleared	**450**	**(439)**	**11**	1,555	(1,553)	2
Exchange-traded[(a)]	**23**	**(7)**	**16**	98	(7)	91
Total foreign exchange contracts	**185,007**	**(175,654)**	**9,353**	153,621	(144,201)	9,420
Equity contracts:						
OTC	**50,003**	**(45,158)**	**4,845**	49,146	(44,861)	4,285
Exchange-traded[(a)]	**10,110**	**(9,388)**	**722**	9,560	(9,074)	486
Total equity contracts	**60,113**	**(54,546)**	**5,567**	58,706	(53,935)	4,771
Commodity contracts:						
OTC	**21,272**	**(14,779)**	**6,493**	31,614	(25,807)	5,807
Exchange-traded[(a)]	**9,388**	**(9,267)**	**121**	8,855	(8,709)	146
Total commodity contracts	**30,660**	**(24,046)**	**6,614**	40,469	(34,516)	5,953
Derivative payables with appropriate legal opinion	**551,683**	**(522,561)** [(b)]	**29,122**	563,255	(536,570) [(b)]	26,685
Derivative payables where an appropriate legal opinion has not been either sought or obtained	**11,563**		**11,563**	9,584		9,584
Total derivative payables recognized on the Consolidated balance sheets	**$ 563,246**		**$ 40,685**	$ 572,839		$ 36,269
Collateral not nettable on the Consolidated balance sheets[(c)(d)]			**(4,323)**			(4,180)
Net amounts			**$ 36,362**			$ 32,089

(a) Exchange-traded derivative balances that relate to futures contracts are settled daily.

(b) Net derivatives receivable included cash collateral netted of $60.8 billion and $55.9 billion at June 30, 2018 and December 31, 2017, respectively. Net derivatives payable included cash collateral netted of $41.9 billion and $46.1 billion related to OTC and OTC-cleared derivatives at June 30, 2018, and December 31, 2017, respectively.

(c) Represents liquid security collateral as well as cash collateral held at third party custodians related to derivative instruments where an appropriate legal opinion has been obtained. For some counterparties, the collateral amounts of financial instruments may exceed the derivative receivables and derivative payables balances. Where this is the case, the total amount reported is limited to the net derivative receivables and net derivative payables balances with that counterparty.

(d) Derivative collateral relates only to OTC and OTC-cleared derivative instruments.

Liquidity risk and credit-related contingent features

For a more detailed discussion of liquidity risk and credit-related contingent features related to JPMorgan Chase Bank, N.A.'s derivative contracts, refer to Note 6 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

The following table shows the aggregate fair value of net derivative payables related to OTC and OTC-cleared derivatives that contain contingent collateral or termination features that may be triggered upon a ratings downgrade, and the associated collateral JPMorgan Chase Bank, N.A. has posted in the normal course of business, at June 30, 2018, and December 31, 2017.

OTC and OTC-cleared derivative payables containing downgrade triggers

(in millions)	June 30, 2018	December 31, 2017
Aggregate fair value of net derivative payables	**$ 10,584**	$ 11,669
Collateral posted	**9,039**	9,947

The following table shows the impact of a single-notch and two-notch downgrade of the long-term issuer ratings of JPMorgan Chase Bank, N.A. and its subsidiaries at June 30, 2018, and December 31, 2017, related to OTC and OTC-cleared derivative contracts with contingent collateral or termination features that may be triggered upon a ratings downgrade. Derivatives contracts generally require additional collateral to be posted or terminations to be triggered when the predefined threshold rating is breached. A downgrade by a single rating agency that does not result in a rating lower than a preexisting corresponding rating provided by another major rating agency will generally not result in additional collateral, (except in certain instances in which additional initial margin may be required upon a ratings downgrade), nor in termination payments requirements. The liquidity impact in the table is calculated based upon a downgrade below the lowest current rating of the rating agencies referred to in the derivative contract.

Liquidity impact of downgrade triggers on OTC and OTC-cleared derivatives

	June 30, 2018		December 31, 2017	
(in millions)	Single-notch downgrade	Two-notch downgrade	Single-notch downgrade	Two-notch downgrade
Amount of additional collateral to be posted upon downgrade[a]	**$ 118**	**$ 2,024**	$ 79	$ 1,982
Amount required to settle contracts with termination triggers upon downgrade[b]	**242**	**860**	320	649

(a) Includes the additional collateral to be posted for initial margin.
(b) Amounts represent fair values of derivative payables, and do not reflect collateral posted.

Derivatives executed in contemplation of a sale of the underlying financial asset

In certain instances JPMorgan Chase Bank, N.A. enters into transactions in which it transfers financial assets but maintains the economic exposure to the transferred assets by entering into a derivative with the same counterparty in contemplation of the initial transfer. JPMorgan Chase Bank, N.A. generally accounts for such transfers as collateralized financing transactions as described in Note 11, but in limited circumstances they may qualify to be accounted for as a sale and a derivative under U.S. GAAP. The amount of such transfers accounted for as a sale where the associated derivative was outstanding at June 30, 2018 was not material, and there were no such transfers at December 31, 2017.

Impact of derivatives on the Consolidated statements of income

The following tables provide information related to gains and losses recorded on derivatives based on their hedge accounting designation or purpose. Refer to Note 17 for information regarding our derivative activities with affiliates.

Fair value hedge gains and losses

The following tables present derivative instruments, by contract type, used in fair value hedge accounting relationships, as well as pre-tax gains/(losses) recorded on such derivatives and the related hedged items for the six months ended June 30, 2018 and 2017, respectively. JPMorgan Chase Bank, N.A. includes gains/(losses) on the hedging derivative in the same line item in the Consolidated statements of income as the related hedged item.

	Gains/(losses) recorded in income			Income statement impact of excluded components[f]		OCI impact
Six months ended June 30, 2018 (in millions)	Derivatives	Hedged items	Income statement impact	Amortization approach	Changes in fair value	Derivatives - Gains/(losses) recorded in OCI[g]
Contract type						
Interest rate[a][b]	$ 1,274	$ (1,320)	$ (46)	$ –	$ (38)	$ –
Foreign exchange[c]	1,027	(794)	233	(35)	233	1
Commodity[d]	(18)	8	(10)	–	(10)	–
Total	$ 2,283	$ (2,106)	$ 177	$ (35)	$ 185	$ 1

	Gains/(losses) recorded in income			Income statement impact due to:	
Six months ended June 30, 2017 (in millions)	Derivatives	Hedged items	Income statement impact	Hedge ineffectiveness[e]	Excluded components[f]
Contract type					
Interest rate[a][b]	$ (240)	$ 139	$ (101)	$ 16	$ (117)
Foreign exchange[c]	(2,086)	2,243	157	–	157
Commodity[d]	(43)	51	8	–	8
Total	$ (2,369)	$ 2,433	$ 64	$ 16	$ 48

(a) Primarily consists of hedges of the benchmark (e.g., London Interbank Offered Rate ("LIBOR")) interest rate risk of fixed-rate AFS securities. Gains and losses were recorded in net interest income.
(b) Excludes the amortization expense associated with the inception hedge accounting adjustment applied to the hedged item . This expense is recorded in net interest income and substantially offsets the income statement impact of the excluded components. Also excludes the accrual of interest on interest rate swaps and the related hedged items.
(c) Primarily consists of hedges of the foreign currency risk of AFS securities for changes in spot foreign currency rates. Gains and losses related to the derivatives and the hedged items due to changes in foreign currency rates and the income statement impact of excluded components were recorded primarily in principal transactions revenue and net interest income.
(d) Consists of overall fair value hedges of physical commodities inventories that are generally carried at the lower of cost or net realizable value (net realizable value approximates fair value). Gains and losses were recorded in principal transactions revenue.
(e) Hedge ineffectiveness is the amount by which the gain or loss on the designated derivative instrument does not exactly offset the gain or loss on the hedged item attributable to the hedged risk.
(f) The assessment of hedge effectiveness excludes certain components of the changes in fair values of the derivatives and hedged items such as forward points on foreign exchange forward contracts, time values and cross-currency basis spreads. Under the new hedge accounting guidance, the initial amount of the excluded components may be amortized into income over the life of the derivative, or changes in fair value may be recognized in current period earnings.
(g) Represents the change in value of amounts excluded from the assessment of effectiveness under the amortization approach, predominantly cross-currency basis spreads. The amount excluded at inception of the hedge is recognized in earnings over the life of the derivative.

As of June 30, 2018, the following amounts were recorded on the Consolidated balance sheets related to certain cumulative fair value hedge basis adjustments that are expected to impact the income statement in future periods (e.g., as adjustments to yield or to securities gains/losses).

		Cumulative amount of fair value hedging adjustments included in the carrying amount of hedged items:		
June 30, 2018 (in millions)	Carrying amount of the hedged items[a][b]	Active hedging relationships	Discontinued hedging relationships[d]	Total
Assets				
Investment securities - AFS	$ 47,296 [c]	$ (1,861)	$ 487	$ (1,374)
Liabilities				
Long-term debt	2,520	160	(15)	145

(a) Excludes physical commodities with a carrying value of $6.2 billion to which JPMorgan Chase Bank, N.A. applies fair value hedge accounting. As a result of the application of hedge accounting, these inventories are carried at fair value, thus recognizing unrealized gains and losses in current periods. Given JPMorgan Chase Bank, N.A. exits these positions at fair value, there is no incremental impact to net income in future periods.
(b) Excludes hedged items where only foreign currency risk is the designated hedged risk, as basis adjustments related to foreign currency hedges generally will not impact the income statement in future periods. The carrying amount excluded for available-for-sale securities is $15.4 billion.
(c) Carrying amount represents the amortized cost.
(d) Represents hedged items no longer designated in qualifying fair value hedging relationships for which an associated basis adjustment exists at the balance sheet date.

Cash flow hedge gains and losses

The following tables present derivative instruments, by contract type, used in cash flow hedge accounting relationships, and the pre-tax gains/(losses) recorded on such derivatives, for the six months ended June 30, 2018 and 2017, respectively. JPMorgan Chase Bank, N.A. includes the gain/(loss) on the hedging derivative in the same line item in the Consolidated statements of income as the change in cash flows on the related hedged item.

Six months ended June 30, 2018 (in millions)	Derivatives gains/(losses) recorded in income and other comprehensive income/(loss)		
	Amounts reclassified from AOCI to income	Amounts recorded in OCI	Total change in OCI for period
Contract type			
Interest rate[(a)]	**$ 26**	**$ (111)**	**$ (137)**
Foreign exchange[(b)]	**45**	**(132)**	**(177)**
Total	**$ 71**	**$ (243)**	**$ (314)**

Six months ended June 30, 2017 (in millions)	Derivatives gains/(losses) recorded in income and other comprehensive income/(loss)		
	Amounts reclassified from AOCI to income	Amounts recorded in OCI[(c)]	Total change in OCI for period
Contract type			
Interest rate[(a)]	$ (17)	$ 12	$ 29
Foreign exchange[(b)]	(134)	71	205
Total	$ (151)	$ 83	$ 234

(a) Primarily consists of benchmark interest rate hedges of LIBOR-indexed floating-rate assets and floating-rate liabilities. Gains and losses were recorded in net interest income.

(b) Primarily consists of hedges of the foreign currency risk of non-U.S. dollar-denominated revenue and expense. The income statement classification of gains and losses follows the hedged item – primarily noninterest revenue and compensation expense.

(c) Represents the effective portion of changes in value of the related hedging derivative. Hedge ineffectiveness is the amount by which the cumulative gain or loss on the designated derivative instrument exceeds the present value of the cumulative expected change in cash flows on the hedged item attributable to the hedged risk. JPMorgan Chase Bank, N.A. did not recognize any ineffectiveness on cash flow hedges during the six months ended June 30, 2017.

JPMorgan Chase Bank, N.A. did not experience any forecasted transactions that failed to occur for the six months ended June 30, 2018 and 2017.

Over the next 12 months, JPMorgan Chase Bank, N.A. expects that approximately $(54) million (after-tax) of net losses recorded in AOCI at June 30, 2018, related to cash flow hedges will be recognized in income. For terminated cash flow hedges, the maximum length of time over which forecasted transactions are remaining is approximately five years. For open cash flow hedges, the maximum length of time over which forecasted transactions are hedged is approximately seven years. JPMorgan Chase Bank, N.A.'s longer-dated forecasted transactions relate to core lending and borrowing activities.

Net investment hedge gains and losses

The following table presents hedging instruments, by contract type, that were used in net investment hedge accounting relationships, and the pre-tax gains/(losses) recorded on such instruments for the six months ended June 30, 2018 and 2017.

	2018				2017			
Six months ended June 30 (in millions)	Amounts recorded in income[(a)(c)]		Amounts recorded in OCI		Amounts recorded in income[(a)(c)]		Amounts recorded in OCI[(b)]	
Foreign exchange derivatives	**$**	**(24)**	**$**	**665**	$	(107)	$	(614)

(a) Certain components of hedging derivatives are permitted to be excluded from the assessment of hedge effectiveness, such as forward points on foreign exchange forward contracts. JPMorgan Chase Bank, N.A. elects to record changes in fair value of these amounts directly in other income.

(b) Represents the effective portion of changes in value of the related hedging derivative. JPMorgan Chase Bank, N.A. did not recognize any ineffectiveness on net investment hedges directly in income during the six months ended June 30, 2017.

(c) Excludes amounts reclassified from AOCI to income on the sale or liquidation of hedged entities. For additional information, refer to Note 18.

Gains and losses on derivatives used for specified risk management purposes

The following table presents pre-tax gains/(losses) recorded on a limited number of derivatives, not designated in hedge accounting relationships, that are used to manage risks associated with certain specified assets and liabilities, including certain risks arising from the mortgage pipeline, warehouse loans, MSRs, wholesale lending exposures, and foreign currency-denominated assets and liabilities.

	Derivatives gains/(losses) recorded in income			
	Six months ended June 30,			
(in millions)	**2018**		2017	
Contract type				
Interest rate[(a)]	**$**	**(235)**	$	221
Credit[(b)]		**(11)**		(52)
Foreign exchange[(c)]		**100**		(38)
Total	**$**	**(146)**	$	131

(a) Primarily represents interest rate derivatives used to hedge the interest rate risk inherent in the mortgage pipeline, warehouse loans and MSRs, as well as written commitments to originate warehouse loans. Gains and losses were recorded predominantly in mortgage fees and related income.

(b) Relates to credit derivatives used to mitigate credit risk associated with lending exposures in JPMorgan Chase Bank, N.A.'s wholesale businesses. These derivatives do not include credit derivatives used to mitigate counterparty credit risk arising from derivative receivables, which is included in gains and losses on derivatives related to market-making activities and other derivatives. Gains and losses were recorded in principal transactions revenue.

(c) Primarily relates to derivatives used to mitigate foreign exchange risk of specified foreign currency-denominated assets and liabilities. Gains and losses were recorded in principal transactions revenue.

Gains and losses on derivatives related to market-making activities and other derivatives

JPMorgan Chase Bank, N.A. makes markets in derivatives in order to meet the needs of customers and uses derivatives to manage certain risks associated with net open risk positions from its market-making activities, including the counterparty credit risk arising from derivative receivables. All derivatives not included in the hedge accounting or specified risk management categories above are included in this category. Gains and losses on these derivatives are primarily recorded in principal transactions revenue. Refer to Note 6 for information on principal transactions revenue.

Credit derivatives

For a more detailed discussion of credit derivatives, refer to Note 6 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements. JPMorgan Chase Bank, N.A. does not use notional amounts of credit derivatives as the primary measure of risk management for such derivatives, because the notional amount does not take into account the probability of the occurrence of a credit event, the recovery value of the reference obligation, or related cash instruments and economic hedges, each of which reduces, in JPMorgan Chase Bank, N.A.'s view, the risks associated with such derivatives.

Total credit derivatives and credit-related notes

	Maximum payout/Notional amount			
June 30, 2018 (in millions)	Protection sold	Protection purchased with identical underlyings[(b)]	Net protection (sold)/purchased[(c)]	Other protection purchased[(d)]
Credit derivatives				
Credit default swaps	**$ (682,259)**	**$ 691,632**	**$ 9,373**	**$ 5,337**
Other credit derivatives[(a)]	**(55,128)**	**54,052**	**(1,076)**	**10,956**
Total credit derivatives	**(737,387)**	**745,684**	**8,297**	**16,293**
Credit-related notes	**(18)**	**–**	**(18)**	**7,510**
Total	**$ (737,405)**	**$ 745,684**	**$ 8,279**	**$ 23,803**

	Maximum payout/Notional amount			
December 31, 2017 (in millions)	Protection sold	Protection purchased with identical underlyings[(b)]	Net protection (sold)/purchased[(c)]	Other protection purchased[(d)]
Credit derivatives				
Credit default swaps	$ (676,017)	$ 686,171	$ 10,154	$ 4,948
Other credit derivatives[(a)]	(59,001)	60,595	1,594	11,747
Total credit derivatives	(735,018)	746,766	11,748	16,695
Credit-related notes	(18)	–	(18)	7,906
Total	$ (735,036)	$ 746,766	$ 11,730	$ 24,601

(a) Other credit derivatives largely consists of credit swap options.
(b) Represents the total notional amount of protection purchased where the underlying reference instrument is identical to the reference instrument on protection sold; the notional amount of protection purchased for each individual identical underlying reference instrument may be greater or lower than the notional amount of protection sold.
(c) Does not take into account the fair value of the reference obligation at the time of settlement, which would generally reduce the amount the seller of protection pays to the buyer of protection in determining settlement value.
(d) Represents protection purchased by JPMorgan Chase Bank, N.A. on referenced instruments (single-name, portfolio or index) where JPMorgan Chase Bank, N.A. has not sold any protection on the identical reference instrument.

The following tables summarize the notional amounts by the ratings, maturity profile, and total fair value, of credit derivatives and credit-related notes as of June 30, 2018, and December 31, 2017, where JPMorgan Chase Bank, N.A. is the seller of protection. The maturity profile is based on the remaining contractual maturity of the credit derivative contracts. The ratings profile is based on the rating of the reference entity on which the credit derivative contract is based. The ratings and maturity profile of credit derivatives and credit-related notes where JPMorgan Chase Bank, N.A. is the purchaser of protection are comparable to the profile reflected below.

Protection sold – credit derivatives and credit-related notes ratings[(a)]/maturity profile

June 30, 2018 (in millions)	<1 year	1–5 years	>5 years	Total notional amount	Fair value of receivables[(b)]	Fair value of payables[(b)]	Net fair value
Risk rating of reference entity							
Investment-grade	**$ (129,180)**	**$ (359,839)**	**$ (32,750)**	**$ (521,769)**	**$ 6,829**	**$ (1,720)**	**$ 5,109**
Noninvestment-grade	**(59,660)**	**(145,914)**	**(10,062)**	**(215,636)**	**6,924**	**(3,716)**	**3,208**
Total	**$ (188,840)**	**$ (505,753)**	**$ (42,812)**	**$ (737,405)**	**$ 13,753**	**$ (5,436)**	**$ 8,317**

December 31, 2017 (in millions)	<1 year	1–5 years	>5 years	Total notional amount	Fair value of receivables[(b)]	Fair value of payables[(b)]	Net fair value
Risk rating of reference entity							
Investment-grade	$ (163,593)	$ (320,201)	$ (30,463)	$ (514,257)	$ 8,516	$ (858)	$ 7,658
Noninvestment-grade	(73,687)	(134,156)	(12,936)	(220,779)	7,391	(4,638)	2,753
Total	$ (237,280)	$ (454,357)	$ (43,399)	$ (735,036)	$ 15,907	$ (5,496)	$ 10,411

(a) The ratings scale is primarily based on external credit ratings defined by S&P and Moody's.
(b) Amounts are shown on a gross basis, before the benefit of legally enforceable master netting agreements and cash collateral received by JPMorgan Chase Bank, N.A.

Note 6 – Noninterest revenue and noninterest expense

Noninterest revenue

For a discussion of the components of and accounting policies for JPMorgan Chase Bank, N.A.'s noninterest revenue, refer to Note 7 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

Investment banking fees

The following table presents the components of investment banking fees.

	Six months ended June 30,	
(in millions)	2018	2017
Underwriting		
Equity	**$ 230**	$ 278
Debt	**1,007**	1,103
Total underwriting	**1,237**	1,381
Advisory	**442**	341
Total investment banking fees	**$ 1,679**	$ 1,722

Principal transactions

The following table presents all realized and unrealized gains and losses recorded in principal transactions revenue. This table excludes interest income and interest expense on trading assets and liabilities, which are an integral part of the overall performance of JPMorgan Chase Bank, N.A.'s client-driven market-making activities. Refer to Note 7 for further information on interest income and interest expense. Trading revenue is presented primarily by instrument type. JPMorgan Chase Bank, N.A.'s client-driven market-making businesses generally utilize a variety of instrument types in connection with their market-making and related risk-management activities; accordingly, the trading revenue presented in the table below is not representative of the total revenue of any individual line of business.

	Six months ended June 30,	
(in millions)	2018	2017
Trading revenue by instrument type		
Interest rate	**$ 1,676**	$ 1,793
Credit	**781**	395
Foreign exchange	**2,006**	1,694
Equity	**2,331**	1,534
Commodity	**348**	201
Total trading revenue	**7,142**	5,617
Private equity gains	**(7)**	2
Principal transactions	**$ 7,135**	$ 5,619

Lending- and deposit-related fees

The following table presents the components of lending- and deposit-related fees.

	Six months ended June 30,	
(in millions)	2018	2017
Lending-related fees	**$ 557**	$ 548
Deposit-related fees	**2,418**	2,386
Total lending- and deposit-related fees	**$ 2,975**	$ 2,934

Asset management, administration and commissions

The following table presents the components of JPMorgan Chase Bank, N.A. asset management, administration and commissions.

	Six months ended June 30,	
(in millions)	2018	2017
Asset management fees		
Investment management fees[(a)]	**$ 1,020**	$ 1,004
All other asset management fees[(b)]	**24**	26
Total asset management fees	**1,044**	1,030
Total administration fees[(c)]	**1,116**	986
Commission and other fees		
Brokerage commissions	**690**	555
All other commissions and fees[(d)]	**3,533**	3,176
Total commissions and fees	**4,223**	3,731
Total asset management, administration and commissions	**$ 6,383**	$ 5,747

(a) Represents fees earned from managing assets on behalf of JPMorgan Chase Bank, N.A.'s clients, including investors in JPMorgan Chase Bank, N.A.-sponsored funds and owners of separately managed investment accounts.
(b) Represents fees for services that are ancillary to investment management services, such as commissions earned on the sales or distribution of mutual funds to clients.
(c) Predominantly includes fees for custody, securities lending, funds services and securities clearance.
(d) Includes fees earned by JPMorgan Chase Bank, N.A. for shared services provided to related party affiliates of $2.5 billion and $2.2 billion for the six months ended June 30, 2018 and 2017, respectively.

Card income

This revenue category includes interchange income from credit and debit cards and fees earned from processing card transactions for merchants, both of which are recognized when purchases are made by a cardholder. Card income also includes other lending fees and related costs. The card income earned by JPMorgan Chase Bank, N.A. results from activity in the merchant services business and from a participation arrangement with a bank affiliate of JPMorgan Chase Bank, N.A.

Other income

Other income on JPMorgan Chase Bank, N.A.'s Consolidated statements of income included the following:

	Six months ended June 30,	
(in millions)	2018	2017
Operating lease income	**$ 2,152**	$ 1,693

Noninterest expense

Other expense

Other expense on JPMorgan Chase Bank, N.A.'s Consolidated statements of income included the following:

	Six months ended June 30,	
(in millions)	2018	2017
Legal expense/(benefit)	**$ 83**	$ (87)
FDIC-related expense	**705**	708

Note 7 – Interest income and Interest expense

For a description of JPMorgan Chase Bank, N.A.'s accounting policies regarding interest income and interest expense, refer to Note 8 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

The following table presents the components of interest income and interest expense.

	Six months ended June 30,	
(in millions)	**2018**	2017
Interest income		
Loans[a]	**$ 17,271**	$ 14,539
Taxable securities	**2,693**	2,832
Nontaxable securities[b]	**755**	862
Total investment securities[a]	**3,448**	3,694
Trading assets	**2,533**	2,254
Federal funds sold and securities purchased under resale agreements	**852**	538
Securities borrowed	**49**	21
Deposits with banks	**2,784**	1,681
All other interest-earning assets	**355**	185
Total interest income	**27,292**	22,912
Interest expense		
Interest-bearing deposits	**2,948**	1,504
Federal funds purchased and securities loaned or sold under repurchase agreements	**515**	150
Trading liabilities - debt, short-term and other liabilities	**740**	674
Long-term debt	**819**	625
Beneficial interests issued by consolidated VIEs	**52**	51
Total interest expense	**5,074**	3,004
Net interest income	**22,218**	19,908
Provision for credit losses	**790**	869
Net interest income after provision for credit losses	**$ 21,428**	$ 19,039

(a) Includes the amortization/accretion of unearned income (e.g., purchase premiums/discounts, net deferred fees/costs, etc.).
(b) Represents securities which are tax-exempt for U.S. federal income tax purposes.

Note 8 – Pension and other postretirement employee benefit plans

For a discussion of JPMorgan Chase Bank, N.A.'s pension and OPEB plans, refer to Note 9 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

On March 21, 2018 JPMorgan Chase & Co. transferred its qualified U.S. defined benefit pension plan to JPMorgan Chase Bank, N.A. The transfer was accomplished via a non-cash capital contribution and was comprised of a net pension asset of $3.2 billion, accumulated other comprehensive income of $1.6 billion (net of taxes), and a deferred tax liability of $760 million. JPMorgan Chase & Co. transferred cash equal to the value of the deferred tax liability to JPMorgan Chase Bank, N.A.

The following table presents the components of net periodic benefit costs reported in the Consolidated statements of income for JPMorgan Chase Bank, N.A.'s significant defined benefit pension and defined contribution plans.

	Defined benefit pension plans	
Six months ended June 30, (in millions)	**2018**	2017
Components of net periodic benefit cost		
Benefits earned during the period	**$ 178**	$ 15
Interest cost on benefit obligations	**276**	41
Expected return on plan assets	**(494)**	(67)
Amortization:		
Net (gain)/loss	**49**	16
Prior service cost/(credit)	**(13)**	(1)
Settlement (gain)/loss	**–**	(3)
Net periodic defined benefit cost[a]	**(4)** [c]	1
Other defined benefit pension plans[b]	**9**	6
Total defined benefit plans	**5**	7
Total defined contribution plans	**372**	331
Total pension and OPEB cost included in noninterest expense	**$ 377**	$ 338

(a) Effective January 1, 2018, benefits earned during the period are reported in compensation expense; all other components of net periodic defined benefit costs are reported within other expense in the Consolidated statements of income. For additional information, refer to Note 1.
(b) Includes various defined benefit pension plans which are individually immaterial.
(c) Includes ($23) million that was charged by JPMorgan Chase Bank, N.A. to JPMorgan Chase and its non-bank subsidiaries for their share of the U.S. qualified defined benefit pension plan expense.

The following table presents the fair values of plan assets for the material U. S. and non-U.S. defined benefit pension plans.

(in billions)	**June 30, 2018**	December 31, 2017
Fair value of plan assets		
Defined benefit pension plans	**$ 19.2**	$ 3.9

Refer to Note 18 for further information on unrecognized amounts (i.e., net (gain)/loss and prior service costs/ (credit)) reflected in AOCI for the six month periods ended June 30, 2018 and 2017.

JPMorgan Chase charged JPMorgan Chase Bank, N.A. $98 million for the six months ended June 30, 2017, for its share of the U.S. qualified defined benefit pension plan expense. JPMorgan Chase charged JPMorgan Chase Bank, N.A. $0.1 million for both the six months ended June 30, 2018 and 2017, for its share of the U.S. OPEB plan expense.

Consolidated disclosures of information about the defined pension and OPEB plans of JPMorgan Chase are included in Note 8 of JPMorgan Chase's 2017 Annual Report on Form 10-K and in Note 7 of JPMorgan Chase's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2018.

Note 9 – Employee share-based incentives

Certain employees of JPMorgan Chase Bank, N.A. participate in JPMorgan Chase's long-term share-based incentive plans, which provide grants of common stock-based awards, including stock options, stock appreciation rights ("SARs"), restricted stock units ("RSUs") and performance share units ("PSUs"). For a discussion of the accounting policies and other information relating to employee share-based incentives, refer to Note 10 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements and Note 9 of JPMorgan Chase's 2017 Annual Report on Form 10-K.

JPMorgan Chase Bank, N.A. recognized the following compensation expense related to JPMorgan Chase's various employee share-based incentive plans in its Consolidated statements of income.

	Six months ended June 30,	
(in millions)	**2018**	2017
Cost of prior grants of RSUs, SARs and PSUs that are amortized over their applicable vesting periods	**$ 490**	$ 419
Accrual of estimated costs of share-based awards to be granted in future periods including those to full-career eligible employees	**402**	352
Total compensation expense related to employee share-based incentive plans	**$ 892**	$ 771

During the six month period ended June 30, 2018, in connection with its annual incentive grant for the 2017 performance year, JPMorgan Chase granted employees of JPMorgan Chase Bank, N.A. 12 million RSUs and 504 thousand PSUs with weighted-average grant date fair values of $110.73 per RSU and $110.42 per PSU.

Note 10 – Investment securities

Investment securities consist of debt securities that are classified as AFS or HTM. Debt securities classified as trading assets are discussed in Note 3. Predominantly all of JPMorgan Chase Bank, N.A.'s AFS and HTM securities are held by the corporate function in connection with its asset-liability management activities. At June 30, 2018, the investment securities portfolio consisted of debt securities with an average credit rating of AA+ (based upon external ratings where available, and where not available, based primarily upon internal ratings which correspond to ratings as defined by S&P and Moody's). For additional information regarding the investment securities portfolio, refer to Note 11 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

As a result of the adoption of the premium amortization accounting guidance in the first quarter of 2018, premiums on purchased callable debt securities must be amortized to the earliest call date for debt securities with call features that are explicit, noncontingent and callable at fixed prices and on preset dates. The guidance primarily impacts obligations of U.S. states and municipalities held in JPMorgan Chase Bank, N.A.'s investment securities portfolio. For additional information, refer to Note 1 and 18.

As permitted by the new hedge accounting guidance, JPMorgan Chase Bank, N.A. also elected to transfer U.S. government agency mortgage-backed securities ("MBS"), commercial MBS, and obligations of U.S. states and municipalities with a carrying value of $22.4 billion from HTM to AFS in the first quarter of 2018. The transfer of these investment securities resulted in the recognition of a net pre-tax unrealized gain of $221 million. This transfer was a non-cash transaction. For additional information, refer to Notes 1, 5 and 18.

The amortized costs and estimated fair values of the investment securities portfolio were as follows for the dates indicated.

	June 30, 2018				December 31, 2017			
(in millions)	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
Available-for-sale securities								
Mortgage-backed securities:								
U.S. government agencies[(a)]	**$ 62,595**	**$ 521**	**$ 1,194**	**$ 61,922**	$ 69,879	$ 736	$ 335	$ 70,280
Residential:								
U.S.	**6,996**	**152**	**30**	**7,118**	8,193	185	14	8,364
Non-U.S.	**2,457**	**107**	**2**	**2,562**	2,882	122	1	3,003
Commercial	**7,836**	**73**	**209**	**7,700**	4,791	94	5	4,880
Total mortgage-backed securities	**79,884**	**853**	**1,435**	**79,302**	85,745	1,137	355	86,527
U.S. Treasury and government agencies	**24,962**	**524**	**142**	**25,344**	22,510	266	31	22,745
Obligations of U.S. states and municipalities	**35,641**	**1,838**	**55**	**37,424**	28,444	1,764	33	30,175
Certificates of deposit	**75**	**—**	**—**	**75**	59	—	—	59
Non-U.S. government debt securities	**25,307**	**413**	**34**	**25,686**	26,900	426	32	27,294
Corporate debt securities	**2,078**	**58**	**3**	**2,133**	2,657	101	1	2,757
Asset-backed securities:								
Collateralized loan obligations	**21,145**	**22**	**21**	**21,146**	20,928	69	1	20,996
Other	**8,780**	**69**	**27**	**8,822**	8,725	72	24	8,773
Total available-for-sale debt securities	**197,872**	**3,777**	**1,717**	**199,932**	195,968	3,835	477	199,326
Available-for-sale equity securities[(b)]	**—**	**—**	**—**	**—**	38	—	—	38
Total available-for-sale securities	**197,872**	**3,777**	**1,717**	**199,932**	196,006	3,835	477	199,364
Held-to-maturity securities								
Mortgage-backed securities:								
U.S. government agencies[(c)]	**26,168**	**60**	**269**	**25,959**	27,577	558	40	28,095
Commercial	**—**	**—**	**—**	**—**	5,783	1	74	5,710
Total mortgage-backed securities	**26,168**	**60**	**269**	**25,959**	33,360	559	114	33,805
Obligations of U.S. states and municipalities	**4,838**	**96**	**20**	**4,914**	14,373	554	80	14,847
Total held-to-maturity securities	**31,006**	**156**	**289**	**30,873**	47,733	1,113	194	48,652
Total investment securities	**$ 228,878**	**$ 3,933**	**$ 2,006**	**$ 230,805**	$ 243,739	$ 4,948	$ 671	$ 248,016

(a) Includes total U.S. government-sponsored enterprise obligations with fair values of $39.1 billion and $45.8 billion at June 30, 2018, and December 31, 2017, respectively.

(b) Effective January 1, 2018, JPMorgan Chase Bank, N.A. adopted the recognition and measurement guidance. Equity securities that were previously reported as AFS securities were reclassified to other assets upon adoption.

(c) Included total U.S. government-sponsored enterprise obligations with amortized cost of $20.1 billion and $22.0 billion at June 30, 2018, and December 31, 2017, respectively.

Investment securities impairment

The following tables present the fair value and gross unrealized losses for investment securities by aging category at June 30, 2018, and December 31, 2017.

	Investment securities with gross unrealized losses					
	Less than 12 months		12 months or more			
June 30, 2018 (in millions)	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses	Total fair value	Total gross unrealized losses
Available-for-sale securities						
Mortgage-backed securities:						
U.S. government agencies	$ 36,060	$ 868	$ 6,309	$ 326	$ 42,369	$ 1,194
Residential:						
U.S.	1,345	23	455	7	1,800	30
Non-U.S.	513	1	157	1	670	2
Commercial	3,207	124	1,463	85	4,670	209
Total mortgage-backed securities	41,125	1,016	8,384	419	49,509	1,435
U.S. Treasury and government agencies	3,761	118	294	24	4,055	142
Obligations of U.S. states and municipalities	2,217	21	1,220	34	3,437	55
Certificates of deposit	–	–	–	–	–	–
Non-U.S. government debt securities	3,786	13	1,308	21	5,094	34
Corporate debt securities	191	3	–	–	191	3
Asset-backed securities:						
Collateralized loan obligations	7,379	21	–	–	7,379	21
Other	4,650	24	482	3	5,132	27
Total available-for-sale securities	63,109	1,216	11,688	501	74,797	1,717
Held-to-maturity securities						
Mortgage-backed securities						
U.S. government agencies	15,887	201	1,607	68	17,494	269
Commercial	–	–	–	–	–	–
Total mortgage-backed securities	15,887	201	1,607	68	17,494	269
Obligations of U.S. states and municipalities	546	4	683	16	1,229	20
Total held-to-maturity securities	16,433	205	2,290	84	18,723	289
Total investment securities with gross unrealized losses	$ 79,542	$ 1,421	$ 13,978	$ 585	$ 93,520	$ 2,006

December 31, 2017 (in millions)	Investment securities with gross unrealized losses					
	Less than 12 months		12 months or more			
	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses	Total fair value	Total gross unrealized losses
Available-for-sale securities						
Mortgage-backed securities:						
U.S. government agencies	$ 36,037	$ 139	$ 7,711	$ 196	$ 43,748	$ 335
Residential:						
U.S.	1,112	5	596	9	1,708	14
Non-U.S.	–	–	266	1	266	1
Commercial	528	4	335	1	863	5
Total mortgage-backed securities	37,677	148	8,908	207	46,585	355
U.S. Treasury and government agencies	1,834	11	373	20	2,207	31
Obligations of U.S. states and municipalities	931	7	1,652	26	2,583	33
Certificates of deposit	–	–	–	–	–	–
Non-U.S. government debt securities	6,500	15	811	17	7,311	32
Corporate debt securities	–	–	52	1	52	1
Asset-backed securities:						
Collateralized loan obligations	–	–	276	1	276	1
Other	3,521	20	720	4	4,241	24
Total available-for-sale securities	50,463	201	12,792	276	63,255	477
Held-to-maturity securities						
Mortgage-backed securities						
U.S. government agencies	4,070	38	205	2	4,275	40
Commercial	3,706	41	1,882	33	5,588	74
Total mortgage-backed securities	7,776	79	2,087	35	9,863	114
Obligations of U.S. states and municipalities	584	9	2,131	71	2,715	80
Total held-to-maturity securities	8,360	88	4,218	106	12,578	194
Total investment securities with gross unrealized losses	$ 58,823	$ 289	$ 17,010	$ 382	$ 75,833	$ 671

Gross unrealized losses

JPMorgan Chase Bank, N.A. has recognized unrealized losses on investment securities that it intends to sell as OTTI. JPMorgan Chase Bank, N.A. does not intend to sell any of the remaining investment securities with an unrealized loss in AOCI as of June 30, 2018, and it is not likely that JPMorgan Chase Bank, N.A. will be required to sell these securities before recovery of their amortized cost basis. Except for the securities for which credit losses have been recognized in income, JPMorgan Chase Bank, N.A. believes that the investment securities with an unrealized loss in AOCI as of June 30, 2018, are not other-than-temporarily impaired. For additional information on other-than-temporary impairment, refer to Note 16 of the JPMorgan Chase Bank, N.A. 2017 Annual Financial Statements.

Investment securities gains and losses

The following table presents realized gains and losses and OTTI from AFS securities that were recognized in income.

(in millions)	Six months ended June 30,	
	2018	2017
Realized gains	**$ 79**	$ 542
Realized losses	**(403)**	(572)
OTTI losses	**(1)**	(7)
Net securities losses	**$ (325)**	$ (37)
OTTI losses		
Credit-related losses recognized in income	**$ –**	$ –
Investment securities JPMorgan Chase Bank, N.A. intends to sell[(a)]	**(1)**	(7)
Total OTTI losses recognized in income	**$ (1)**	$ (7)

(a) Excludes realized losses on securities sold of $20 million and $5 million for the six months ended June 30, 2018 and 2017 that had been previously reported as an OTTI loss due to the intention to sell the securities.

Changes in the credit loss component of credit-impaired debt securities

The cumulative credit loss component, including any changes therein, of OTTI losses that have been recognized in income related to AFS securities that JPMorgan Chase Bank, N.A. does not intend to sell was not material as of and during the six month periods ended June 30, 2018 and 2017.

Contractual maturities and yields

The following table presents the amortized cost and estimated fair value at June 30, 2018, of JPMorgan Chase Bank, N.A.'s investment securities portfolio by contractual maturity.

By remaining maturity June 30, 2018 (in millions)	Due in one year or less	Due after one year through five years	Due after five years through 10 years	Due after 10 years[c]	Total
Available-for-sale securities					
Mortgage-backed securities[a]					
Amortized cost	$ 261	$ 429	$ 5,649	$ 73,545	$ 79,884
Fair value	264	433	5,727	72,878	79,302
Average yield[b]	1.81%	2.49%	3.49%	3.48%	3.47%
U.S. Treasury and government agencies					
Amortized cost	$ 79	$ –	$ 19,446	$ 5,437	$ 24,962
Fair value	79	–	19,516	5,749	25,344
Average yield[b]	1.99%	–%	3.53%	2.91%	3.39%
Obligations of U.S. states and municipalities					
Amortized cost	$ 148	$ 576	$ 2,236	$ 32,681	$ 35,641
Fair value	148	586	2,322	34,368	37,424
Average yield[b]	1.94%	2.80%	4.85%	4.85%	4.80%
Certificates of deposit					
Amortized cost	$ 75	$ –	$ –	$ –	$ 75
Fair value	75	–	–	–	75
Average yield[b]	0.49%	–%	–%	–%	0.49%
Non-U.S. government debt securities					
Amortized cost	$ 4,745	$ 14,565	$ 5,997	$ –	$ 25,307
Fair value	4,745	14,782	6,159	–	25,686
Average yield[b]	3.27%	1.61%	1.37%	–%	1.86%
Corporate debt securities					
Amortized cost	$ 70	$ 968	$ 901	$ 139	$ 2,078
Fair value	70	989	929	145	2,133
Average yield[b]	3.98%	4.34%	4.52%	3.45%	4.34%
Asset-backed securities					
Amortized cost	$ –	$ 4,295	$ 7,785	$ 17,845	$ 29,925
Fair value	–	4,271	7,790	17,907	29,968
Average yield[b]	–%	2.61%	3.25%	2.98%	3.00%
Total available-for-sale securities					
Amortized cost	$ 5,378	$ 20,833	$ 42,014	$ 129,647	$ 197,872
Fair value	5,381	21,061	42,443	131,047	199,932
Average yield[b]	3.11%	1.99%	3.26%	3.73%	3.43%
Held-to-maturity securities					
Mortgage-backed securities[a]					
Amortized cost	$ –	$ –	$ 2,083	$ 24,085	$ 26,168
Fair value	–	–	2,068	23,891	25,959
Average yield[b]	–%	–%	3.52%	3.33%	3.34%
Obligations of U.S. states and municipalities					
Amortized cost	$ –	$ –	$ –	$ 4,838	$ 4,838
Fair value	–	–	–	4,914	4,914
Average yield[b]	–%	–%	–%	4.12%	4.12%
Total held-to-maturity securities					
Amortized cost	$ –	$ –	$ 2,083	$ 28,923	$ 31,006
Fair value	–	–	2,068	28,805	30,873
Average yield[b]	–%	–%	3.52%	3.46%	3.46%

(a) As of June 30, 2018, mortgage-backed securities issued by Fannie Mae exceeded 10% of JPMorgan Chase Bank, N.A.'s total stockholder's equity; the amortized cost and fair value of such securities was $51.3 billion and $51.1 billion, respectively.

(b) Average yield is computed using the effective yield of each security owned at the end of the period, weighted based on the amortized cost of each security. The effective yield considers the contractual coupon, amortization of premiums and accretion of discounts, and the effect of related hedging derivatives. Taxable-equivalent amounts are used where applicable. The effective yield excludes unscheduled principal prepayments; and accordingly, actual maturities of securities may differ from their contractual or expected maturities as certain securities may be prepaid.

(c) Includes investment securities with no stated maturity. Substantially all of JPMorgan Chase Bank, N.A.'s residential MBS and collateralized mortgage obligations are due in 10 years or more, based on contractual maturity. The estimated weighted-average life, which reflects anticipated future prepayments, is approximately 7 years for agency residential MBS, 3 years for agency residential collateralized mortgage obligations and 3 years for nonagency residential collateralized mortgage obligations.

Note 11 – Securities financing activities

For a discussion of accounting policies relating to securities financing activities, refer to Note 12 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements. For further information regarding securities borrowed and securities lending agreements for which the fair value option has been elected, refer to Note 4. For further information regarding assets pledged and collateral received in securities financing agreements, refer to Note 22.

The table below summarizes the gross and net amounts of JPMorgan Chase Bank, N.A.'s securities financing agreements as of June 30, 2018 and December 31, 2017. When JPMorgan Chase Bank, N.A. has obtained an appropriate legal opinion with respect to the master netting agreement with a counterparty and where other relevant netting criteria under U.S. GAAP are met, JPMorgan Chase Bank, N.A. nets, on the Consolidated balance sheets, the balances outstanding under its securities financing agreements with the same counterparty. In addition, JPMorgan Chase Bank, N.A. exchanges securities and/or cash collateral with its counterparties; this collateral also reduces JPMorgan Chase Bank, N.A.'s the economic exposure with the counterparty. Such collateral, along with securities financing balances that do not meet all these relevant netting criteria under U.S. GAAP, is presented as "Amounts not nettable on the Consolidated balance sheets," and reduces the "Net amounts" presented below, if JPMorgan Chase Bank, N.A. has an appropriate legal opinion with respect to the master netting agreement with the counterparty. Where a legal opinion has not been either sought or obtained, the securities financing balances are presented gross in the "Net amounts" below, and related collateral does not reduce the amounts presented.

	June 30, 2018				
(in millions)	Gross amounts	Amounts netted on the Consolidated balance sheets	Amounts presented on the Consolidated balance sheets[b]	Amounts not nettable on the Consolidated balance sheets[c]	Net amounts[d]
Assets					
Securities purchased under resale agreements	**$ 380,934**	**$ (213,687)**	**$ 167,247**	**$ (159,091)**	**$ 8,156**
Securities borrowed	**37,888**	**(690)**	**37,198**	**(34,422)**	**2,776**
Liabilities					
Securities sold under repurchase agreements	**$ 304,040**	**$ (213,687)**	**$ 90,353**	**$ (87,373)**	**$ 2,980**
Securities loaned and other[a]	**18,266**	**(690)**	**17,576**	**(17,215)**	**361**

	December 31, 2017				
(in millions)	Gross amounts	Amounts netted on the Consolidated balance sheets	Amounts presented on the Consolidated balance sheets[b]	Amounts not nettable on the Consolidated balance sheets[c]	Net amounts[d]
Assets					
Securities purchased under resale agreements	$ 346,606	$ (191,712)	$ 154,894	$ (146,035)	$ 8,859
Securities borrowed	40,349	(1,340)	39,009	(36,386)	2,623
Liabilities					
Securities sold under repurchase agreements	$ 275,452	$ (191,712)	$ 83,740	$ (80,769)	$ 2,971
Securities loaned and other[a]	17,534	(1,340)	16,194	(16,017)	177

(a) Includes securities-for-securities lending transactions of $7.6 billion and $7.5 billion at June 30, 2018 and December 31, 2017, respectively, accounted for at fair value, where JPMorgan Chase Bank, N.A. is acting as lender. These amounts are presented within other liabilities in the Consolidated balance sheets.

(b) Includes securities financing agreements accounted for at fair value. At June 30, 2018 and December 31, 2017, included securities purchased under resale agreements of $3.5 billion and $2.9 billion, respectively and securities sold under agreements to repurchase of $4.7 billion and $3.4 billion, respectively. There were $4.1 billion and $3.0 billion of securities borrowed at June 30, 2018 and December 31, 2017, respectively. There were no securities loaned accounted for at fair value in either period.

(c) In some cases, collateral exchanged with a counterparty exceeds the net asset or liability balance with that counterparty. In such cases, the amounts reported in this column are limited to the related asset or liability with that counterparty.

(d) Includes securities financing agreements that provide collateral rights, but where an appropriate legal opinion with respect to the master netting agreement has not been either sought or obtained. At June 30, 2018 and December 31, 2017, included $5.1 billion and $6.9 billion, respectively, of securities purchased under resale agreements; $1.6 billion and $1.6 billion, respectively, of securities borrowed; $900 million and $441 million, respectively, of securities sold under agreements to repurchase; and $55 million and $2 million, respectively, of securities loaned and other.

The tables below present as of June 30, 2018 and December 31, 2017 the types of financial assets pledged in securities financing agreements and the remaining contractual maturity of the securities financing agreements.

	Gross liability balance			
	June 30, 2018		December 31, 2017	
(in millions)	Securities sold under repurchase agreements	Securities loaned and other[(a)]	Securities sold under repurchase agreements	Securities loaned and other[(a)]
Mortgage-backed securities:				
U.S. government agencies	**$ 3,864**	**$ –**	$ 3,046	$ –
Residential - nonagency	**–**	**–**	832	–
Commercial - nonagency	**2**	**–**	46	–
U.S. Treasury and government agencies	**90,046**	**7,384**	88,982	7,010
Non-U.S. government debt	**199,722**	**1,730**	172,197	2,585
Corporate debt securities	**10,054**	**456**	9,910	411
Asset-backed securities	**205**	–	439	1
Equity securities	**146**	**8,697**	–	7,527
Total	**$ 304,039**	**$ 18,267**	$ 275,452	$ 17,534

	Remaining contractual maturity of the agreements				
June 30, 2018 (in millions)	Overnight and continuous	Up to 30 days	30 - 90 days	Greater than 90 days	Total
Total securities sold under repurchase agreements	**$ 74,905**	**$ 149,881**	**$ 48,255**	**$ 30,999**	**$ 304,040**
Total securities loaned and other[(a)]	**15,261**	**462**	**196**	**2,347**	**18,266**

	Remaining contractual maturity of the agreements				
December 31, 2017 (in millions)	Overnight and continuous	Up to 30 days	30 - 90 days	Greater than 90 days	Total
Total securities sold under repurchase agreements	$ 65,759	$ 145,226	$ 43,892	$ 20,575	$ 275,452
Total securities loaned and other[(a)]	15,683	166	–	1,685	17,534

(a) Includes securities-for-securities lending transactions of $7.6 billion and $7.5 billion at June 30, 2018 and December 31, 2017, respectively, accounted for at fair value, where JPMorgan Chase Bank, N.A. is acting as lender. These amounts are presented within other liabilities on the Consolidated balance sheets.

Transfers not qualifying for sale accounting

At June 30, 2018 and December 31, 2017, JPMorgan Chase Bank, N.A. held $1.4 billion and $1.5 billion, respectively, of financial assets for which the rights have been transferred to third parties; however, the transfers did not qualify as a sale in accordance with U.S. GAAP. These transfers have been recognized as collateralized financing transactions. The transferred assets are recorded in trading assets and loans, and the corresponding liabilities are recorded predominantly in short-term borrowings on the Consolidated balance sheets.

Note 12 – Loans

Loan accounting framework

The accounting for a loan depends on management's strategy for the loan, and on whether the loan was credit-impaired at the date of acquisition. JPMorgan Chase Bank, N.A. accounts for loans based on the following categories:

- Originated or purchased loans held-for-investment (i.e., "retained"), other than PCI loans
- Loans held-for-sale
- Loans at fair value
- PCI loans held-for-investment

For a detailed discussion of loans, including accounting policies, refer to Note 13 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements. Refer to Note 4 of these Consolidated Financial Statements for further information on JPMorgan Chase Bank, N.A.'s elections of fair value accounting under the fair value option. Refer to Note 3 of these Consolidated Financial Statements for information on loans carried at fair value and classified as trading assets.

Loan portfolio

JPMorgan Chase Bank, N.A.'s loan portfolio is divided into three portfolio segments, which are the same segments used by JPMorgan Chase Bank, N.A. to determine the allowance for loan losses: Consumer, excluding credit card; Credit card; and Wholesale. Within each portfolio segment JPMorgan Chase Bank, N.A. monitors and assesses the credit risk in the following classes of loans, based on the risk characteristics of each loan class.

Consumer, excluding credit card(a)	Credit card	Wholesale(g)
Residential real estate – excluding PCI • Residential mortgage(b) • Home equity(c) Other consumer loans(d) • Auto • Consumer & business banking(e) Residential real estate – PCI • Home equity • Prime mortgage • Subprime mortgage • Option adjustable rate mortgages ("ARMs")	• Credit card loans(f)	• Commercial and industrial • Real estate • Financial institutions • Government agencies • Other(h)

(a) Includes loans held in the consumer & community banking business, prime mortgage and home equity loans held in the asset & wealth management business and prime mortgage loans held in the corporate function.
(b) Predominantly includes prime (including option ARMs) and subprime loans.
(c) Includes senior and junior lien home equity loans.
(d) 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 the consumer & community banking business, and therefore, for consistency in presentation, are included with the other consumer loan classes.
(e) Predominantly includes business banking loans.
(f) Predominantly includes credit card loans acquired pursuant to a participation agreement with Chase Bank USA, N.A., a related-party, and subsequent draws on revolving credit lines associated with the participation agreement.
(g) Includes loans held in the corporate & investment banking, commercial banking and asset & wealth management businesses and in the corporate function. Excludes prime mortgage and home equity loans held in the asset & wealth management businesses and prime mortgage loans held in the corporate function. Classes are internally defined and may not align with regulatory definitions.
(h) Includes loans to: individuals (predominantly wealth management clients within the asset & wealth management business); special purpose entities ("SPEs"); and private education and civic organizations. For more information on SPEs, refer to Note 15 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

The following tables summarize JPMorgan Chase Bank, N.A.'s loan balances by portfolio segment.

June 30, 2018 (in millions)	Consumer, excluding credit card	Credit card[(a)]	Wholesale	Total
Retained	$ 374,555	$ 43,449	$ 426,745	$ 844,749 [(b)]
Held-for-sale	110	34	4,754	4,898
At fair value	–	–	3,076	3,076
Total	**$ 374,665**	**$ 43,483**	**$ 434,575**	**$ 852,723**

December 31, 2017 (in millions)	Consumer, excluding credit card	Credit card[(a)]	Wholesale	Total
Retained	$ 372,517	$ 40,911	$ 406,926	$ 820,354 [(b)]
Held-for-sale	128	124	3,099	3,351
At fair value	–	–	2,508	2,508
Total	$ 372,645	$ 41,035	$ 412,533	$ 826,213

(a) Includes accrued interest and fees net of an allowance for the uncollectible portion of accrued interest and fee income.
(b) Loans (other than PCI loans and loans for which the fair value option has been elected) are presented net of unamortized discounts and premiums, and net deferred loan fees or costs. These amounts were not material as of June 30, 2018, and December 31, 2017.

The following table provides information about the carrying value of retained loans purchased, sold and reclassified to held-for-sale during the periods indicated. Reclassifications of loans to held-for sale are non-cash transactions. JPMorgan Chase Bank, N.A. manages its exposure to credit risk on an ongoing basis. Selling loans is one way that JPMorgan Chase Bank, N.A. reduces its credit exposures. Loans that were reclassified to held-for-sale and sold in a subsequent period are excluded from the sales line of this table.

	2018				2017			
Six months ended June 30, (in millions)	Consumer, excluding credit card	Credit card	Wholesale	Total	Consumer, excluding credit card	Credit card	Wholesale	Total
Purchases	$ 1,603 [(a)(b)]	$ –	$ 1,630	$ 3,233	$ 1,566 [(a)(b)]	$ –	$ 878	$ 2,444
Sales	2,872	–	8,632	11,504	1,353	–	4,824	6,177
Retained loans reclassified to held-for-sale	36	–	1,260	1,296	6,340 [(c)]	–	768	7,108

(a) Purchases predominantly represent JPMorgan Chase Bank, N.A.'s voluntary repurchase of certain delinquent loans from loan pools as permitted by Government National Mortgage Association ("Ginnie Mae") guidelines. JPMorgan Chase Bank, N.A. typically elects to repurchase these delinquent loans as it continues to service them and/or manage the foreclosure process in accordance with applicable requirements of Ginnie Mae, the Federal Housing Administration ("FHA"), Rural Housing Services ("RHS"), and/or the U.S. Department of Veterans Affairs ("VA").
(b) Excludes purchases of retained loans sourced through the correspondent origination channel and underwritten in accordance with JPMorgan Chase Bank, N.A.'s standards. Such purchases were \$8.9 billion and \$11.3 billion for the six months ended June 30, 2018 and 2017, respectively.
(c) Includes JPMorgan Chase Bank, N.A.'s student loan portfolio which was sold in 2017.

Gains and losses on sales of loans

Gains and losses on sales of loans (including adjustments to record loans held-for-sale at the lower of cost or fair value) recognized in other income were not material to JPMorgan Chase Bank, N.A. for the six months ended June 30, 2018 and 2017. In addition, the sale of loans may result in write downs, recoveries or changes in the allowance recognized in the provision for credit losses.

Consumer, excluding credit card loan portfolio

Consumer loans, excluding credit card loans, consist primarily of residential mortgages, home equity loans and lines of credit, auto loans and consumer and business banking loans, with a focus on serving the prime consumer credit market. The portfolio also includes home equity loans secured by junior liens, prime mortgage loans with an interest-only payment period, and certain payment-option loans that may result in negative amortization.

The following table provides information about retained consumer loans, excluding credit card, by class. In 2017, JPMorgan Chase Bank, N.A. sold its student loan portfolio.

(in millions)	June 30, 2018	December 31, 2017
Residential real estate – excluding PCI		
Residential mortgage	$ 225,838	$ 216,468
Home equity	30,454	33,442
Other consumer loans		
Auto	65,014	66,242
Consumer & business banking	26,272	25,789
Residential real estate – PCI		
Home equity	9,849	10,799
Prime mortgage	5,437	6,479
Subprime mortgage	2,249	2,609
Option ARMs	9,442	10,689
Total retained loans	**$ 374,555**	$ 372,517

For further information on consumer credit quality indicators, refer to Note 13 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

Residential real estate – excluding PCI loans

The following table provides information by class for residential real estate – excluding retained PCI loans.

Residential real estate – excluding PCI loans

(in millions, except ratios)	Residential mortgage		Home equity		Total residential real estate – excluding PCI	
	Jun 30, 2018	Dec 31, 2017	**Jun 30, 2018**	Dec 31, 2017	**Jun 30, 2018**	Dec 31, 2017
Loan delinquency[(a)]						
Current	**$ 219,715**	$ 208,692	**$ 29,658**	$ 32,383	**$ 249,373**	$ 241,075
30–149 days past due	**2,945**	4,230	**457**	671	**3,402**	4,901
150 or more days past due	**3,178**	3,546	**339**	388	**3,517**	3,934
Total retained loans	**$ 225,838**	$ 216,468	**$ 30,454**	$ 33,442	**$ 256,292**	$ 249,910
% of 30+ days past due to total retained loans[(b)]	**0.54%**	0.77%	**2.61%**	3.17%	**0.78%**	1.09%
90 or more days past due and government guaranteed[(c)]	**$ 3,177**	$ 4,170	**$ –**	$ –	**$ 3,177**	$ 4,170
Nonaccrual loans	**2,099**	2,172	**1,481**	1,610	**3,580**	3,782
Current estimated loan-to-value ("LTV") ratios[(d)(e)]						
Greater than 125% and refreshed FICO scores:						
Equal to or greater than 660	**$ 26**	$ 37	**$ 7**	$ 10	**$ 33**	$ 47
Less than 660	**16**	19	**2**	3	**18**	22
101% to 125% and refreshed FICO scores:						
Equal to or greater than 660	**24**	36	**165**	296	**189**	332
Less than 660	**61**	88	**51**	95	**112**	183
80% to 100% and refreshed FICO scores:						
Equal to or greater than 660	**3,323**	4,369	**1,180**	1,675	**4,503**	6,044
Less than 660	**316**	483	**392**	569	**708**	1,052
Less than 80% and refreshed FICO scores:						
Equal to or greater than 660	**206,154**	194,752	**23,603**	25,255	**229,757**	220,007
Less than 660	**6,599**	6,945	**3,602**	3,850	**10,201**	10,795
No FICO/LTV available	**1,252**	1,257	**1,452**	1,689	**2,704**	2,946
U.S. government-guaranteed	**8,067**	8,482	**–**	–	**8,067**	8,482
Total retained loans	**225,838**	216,468	**30,454**	33,442	**$ 256,292**	$ 249,910
Geographic region						
California	**$ 72,206**	$ 68,855	**$ 6,027**	$ 6,580	**$ 78,233**	$ 75,435
New York	**28,520**	27,470	**6,255**	6,864	**34,775**	34,334
Illinois	**14,976**	14,501	**2,289**	2,520	**17,265**	17,021
Texas	**13,428**	12,507	**1,895**	2,021	**15,323**	14,528
Florida	**10,195**	9,596	**1,668**	1,847	**11,863**	11,443
New Jersey	**7,304**	7,142	**1,768**	1,957	**9,072**	9,099
Washington	**7,635**	6,962	**937**	1,026	**8,572**	7,988
Colorado	**7,834**	7,335	**552**	631	**8,386**	7,966
Massachusetts	**6,360**	6,323	**263**	295	**6,623**	6,618
Arizona	**4,397**	4,109	**1,273**	1,438	**5,670**	5,547
All other[(f)]	**52,983**	51,668	**7,527**	8,263	**60,510**	59,931
Total retained loans	**$ 225,838**	$ 216,468	**$ 30,454**	$ 33,442	**$ 256,292**	$ 249,910

(a) Individual delinquency classifications include mortgage loans insured by U.S. government agencies as follows: current included $3.2 billion and $2.4 billion; 30–149 days past due included $2.3 billion and $3.2 billion; and 150 or more days past due included $2.6 billion and $2.9 billion at June 30, 2018, and December 31, 2017, respectively.

(b) At June 30, 2018, and December 31, 2017, residential mortgage loans excluded mortgage loans insured by U.S. government agencies of $4.9 billion and $6.1 billion, respectively, that are 30 or more days past due. These amounts have been excluded based upon the government guarantee.

(c) These balances, which are 90 days or more past due, were excluded from nonaccrual loans as the loans are guaranteed by U.S. government agencies. Typically, the principal balance of the loans is insured and interest is guaranteed at a specified reimbursement rate subject to meeting agreed-upon servicing guidelines. At June 30, 2018, and December 31, 2017, these balances included $1.3 billion and $1.5 billion, respectively, of loans that are no longer accruing interest based on the agreed-upon servicing guidelines. For the remaining balance, interest is being accrued at the guaranteed reimbursement rate. There were no loans that were not guaranteed by U.S. government agencies that are 90 or more days past due and still accruing interest at June 30, 2018, and December 31, 2017.

(d) Represents the aggregate unpaid principal balance of loans divided by the estimated current property value. Current property values are estimated, at a minimum, quarterly, based on home valuation models using nationally recognized home price index valuation estimates incorporating actual data to the extent available and forecasted data where actual data is not available. These property values do not represent actual appraised loan level collateral values; as such, the resulting ratios are necessarily imprecise and should be viewed as estimates. Current estimated combined LTV for junior lien home equity loans considers all available lien positions, as well as unused lines, related to the property.

(e) Refreshed FICO scores represent each borrower's most recent credit score, which is obtained by JPMorgan Chase Bank, N.A. on at least a quarterly basis.

(f) At June 30, 2018, and December 31, 2017, included mortgage loans insured by U.S. government agencies of $8.1 billion and $8.5 billion, respectively.

Approximately 37% of the home equity portfolio are senior lien loans; the remaining balance are junior lien HELOANs or HELOCs. The following table represents JPMorgan Chase Bank, N.A.'s delinquency statistics for junior lien home equity loans and lines of credit as of June 30, 2018, and December 31, 2017.

	Total loans		Total 30+ day delinquency rate	
(in millions, except ratios)	**Jun 30, 2018**	Dec 31, 2017	**Jun 30, 2018**	Dec 31, 2017
HELOCs:[(a)]				
Within the revolving period[(b)]	**$ 5,453**	$ 6,360	**0.26%**	0.50%
Beyond the revolving period	**12,627**	13,527	**2.72**	3.56
HELOANs	**1,190**	1,371	**2.77**	3.50
Total	**$ 19,270**	$ 21,258	**2.03%**	2.64%

(a) These HELOCs are predominantly revolving loans for a 10-year period, after which time the HELOC converts to a loan with a 20-year amortization period, but also include HELOCs that allow interest-only payments beyond the revolving period.
(b) JPMorgan Chase Bank, N.A. 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 experiencing financial difficulty.

Home equity lines of credit ("HELOCs") beyond the revolving period and home equity loans ("HELOANs") have higher delinquency rates than HELOCs within the revolving period. That is primarily because the fully-amortizing payment that is generally required for those products is higher than the minimum payment options available for HELOCs within the revolving period. The higher delinquency rates associated with amortizing HELOCs and HELOANs are factored into JPMorgan Chase Bank, N.A.'s allowance for loan losses.

Impaired loans

The table below sets forth information about JPMorgan Chase Bank, N.A.'s residential real estate impaired loans, excluding PCI loans. These loans are considered to be impaired as they have been modified in a troubled debt restructuring ("TDR"). All impaired loans are evaluated for an asset-specific allowance as described in Note 14 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

	Residential mortgage		Home equity		Total residential real estate - excluding PCI	
(in millions)	**Jun 30, 2018**	Dec 31, 2017	**Jun 30, 2018**	Dec 31, 2017	**Jun 30, 2018**	Dec 31, 2017
Impaired loans						
With an allowance	**$ 3,811**	$ 4,402	**$ 1,211**	$ 1,236	**$ 5,022**	$ 5,638
Without an allowance[(a)]	**1,206**	1,211	**881**	882	**2,087**	2,093
Total impaired loans[(b)(c)]	**$ 5,017**	$ 5,613	**$ 2,092**	$ 2,118	**$ 7,109**	$ 7,731
Allowance for loan losses related to impaired loans	**$ 94**	$ 62	**$ 62**	$ 111	**$ 156**	$ 173
Unpaid principal balance of impaired loans[(d)]	**6,861**	7,732	**3,603**	3,701	**10,464**	11,433
Impaired loans on nonaccrual status[(e)]	**1,727**	1,741	**1,041**	1,031	**2,768**	2,772

(a) Represents collateral-dependent residential real estate loans that are charged off to the fair value of the underlying collateral less cost to sell. JPMorgan Chase Bank, N.A. reports, in accordance with regulatory guidance, residential real estate loans that have been discharged under Chapter 7 bankruptcy and not reaffirmed by the borrower ("Chapter 7 loans") as collateral-dependent nonaccrual TDRs, regardless of their delinquency status. At June 30, 2018, Chapter 7 residential real estate loans included approximately 13% of residential mortgages and 9% of home equity that were 30 days or more past due.
(b) At June 30, 2018, and December 31, 2017, $4.2 billion and $3.8 billion, respectively, of loans modified subsequent to repurchase from Ginnie Mae in accordance with the standards of the appropriate government agency (i.e., FHA, VA, 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.
(c) Predominantly all residential real estate impaired loans, excluding PCI loans, are in the U.S.
(d) Represents the contractual amount of principal owed at June 30, 2018, and December 31, 2017. The unpaid principal balance differs from the impaired loan balances due to various factors, including charge-offs; net deferred loan fees or costs; and unamortized discounts or premiums on purchased loans.
(e) At both June 30, 2018, and December 31, 2017, nonaccrual loans included $2.2 billion of 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 refer to the Loan accounting framework in Note 13 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

The following table presents average impaired loans and the related interest income reported by JPMorgan Chase Bank, N.A.

Six months ended June 30,	Average impaired loans		Interest income on impaired loans[(a)]		Interest income on impaired loans on a cash basis[(a)]	
(in millions)	**2018**	2017	**2018**	2017	**2018**	2017
Residential mortgage	**$ 5,423**	$ 5,913	**$ 136**	$ 141	**$ 39**	$ 33
Home equity	**2,105**	2,245	**65**	61	**42**	38
Total residential real estate – excluding PCI	**$ 7,528**	$ 8,158	**$ 201**	$ 202	**$ 81**	$ 71

(a) Generally, interest income on loans modified in TDRs is recognized on a cash basis until the borrower has made a minimum of six payments under the new terms, unless the loan is deemed to be collateral-dependent.

Loan modifications

Modifications of residential real estate loans, excluding PCI loans, are generally accounted for and reported as TDRs. There were no additional commitments to lend to borrowers whose residential real estate loans, excluding PCI loans, have been modified in TDRs.

The following table presents new TDRs reported by JPMorgan Chase Bank, N.A.

	Six months ended June 30,	
(in millions)	**2018**	2017
Residential mortgage	**$ 246**	$ 168
Home equity	**186**	150
Total residential real estate – excluding PCI	**$ 432**	$ 318

Nature and extent of modifications

The U.S. Treasury's Making Home Affordable programs, as well as JPMorgan Chase Bank, N.A.'s proprietary modification programs, generally provide various concessions to financially troubled borrowers including, but not limited to, interest rate reductions, term or payment extensions and deferral of principal and/or interest payments that would otherwise have been required under the terms of the original agreement.

The following table provides information about how residential real estate loans, excluding PCI loans, were modified under JPMorgan Chase Bank, N.A.'s loss mitigation programs described above during the periods presented. This table excludes Chapter 7 loans where the sole concession granted is the discharge of debt.

	Residential mortgage		Home equity		Total residential real estate - excluding PCI	
Six months ended June 30,	**2018**	2017	**2018**	2017	**2018**	2017
Number of loans approved for a trial modification	**1,269**	845	**1,309**	1,308	**2,578**	2,153
Number of loans permanently modified	**1,655**	1,440	**3,066**	2,800	**4,721**	4,240
Concession granted:[(a)]						
Interest rate reduction	**27%**	76%	**51%**	71%	**42%**	72%
Term or payment extension	**35**	86	**54**	84	**48**	84
Principal and/or interest deferred	**54**	14	**26**	13	**36**	14
Principal forgiveness	**7**	19	**7**	9	**7**	12
Other[(b)]	**42**	27	**58**	13	**53**	18

(a) Represents concessions granted in permanent modifications as a percentage of the number of loans permanently modified. The sum of the percentages exceeds 100% because predominantly all of the modifications include more than one type of concession. Concessions offered on trial modifications are generally consistent with those granted on permanent modifications.

(b) Includes variable interest rate to fixed interest rate modifications for the six months ended June 30, 2018 and 2017. Also includes forbearances that meet the definition of a TDR for the six months ended June 30, 2018. Forbearances suspend or reduce monthly payments for a specific period of time to address a temporary hardship.

Financial effects of modifications and redefaults

The following table provides information about the financial effects of the various concessions granted in modifications of residential real estate loans, excluding PCI loans, under the loss mitigation programs described above and about redefaults of certain loans modified in TDRs for the periods presented. The following table presents only the financial effects of permanent modifications and does not include temporary concessions offered through trial modifications. This table also excludes Chapter 7 loans where the sole concession granted is the discharge of debt.

Six months ended June 30, (in millions, except weighted-average data and number of loans)	Residential mortgage		Home equity		Total residential real estate – excluding PCI	
	2018	2017	**2018**	2017	**2018**	2017
Weighted-average interest rate of loans with interest rate reductions – before TDR	**5.03%**	5.25%	**5.15%**	4.82%	**5.10%**	5.06%
Weighted-average interest rate of loans with interest rate reductions – after TDR	**3.28**	3.01	**3.16**	2.42	**3.21**	2.74
Weighted-average remaining contractual term (in years) of loans with term or payment extensions – before TDR	**25**	24	**19**	23	**21**	23
Weighted-average remaining contractual term (in years) of loans with term or payment extensions – after TDR	**37**	38	**38**	38	**37**	38
Charge-offs recognized upon permanent modification	**$ –**	$ 1	**$ 1**	$ 1	**$ 1**	$ 2
Principal deferred	**10**	7	**5**	7	**15**	14
Principal forgiven	**6**	11	**4**	5	**10**	16
Balance of loans that redefaulted within one year of permanent modification[(a)]	**$ 45**	$ 58	**$ 33**	$ 21	**$ 78**	$ 79

(a) Represents loans permanently modified in TDRs that experienced a payment default in the periods presented, and for which the payment default occurred within one year of the modification. The dollar amounts presented represent the balance of such loans at the end of the reporting period in which such loans defaulted. For residential real estate loans modified in TDRs, payment default is deemed to occur when the loan becomes two contractual payments past due. In the event that a modified loan redefaults, it is probable that the loan will ultimately be liquidated through foreclosure or another similar type of liquidation transaction. Redefaults of loans modified within the last 12 months may not be representative of ultimate redefault levels.

At June 30, 2018, the weighted-average estimated remaining lives of residential real estate loans, excluding PCI loans, permanently modified in TDRs were 9 years for residential mortgage and 8 years for home equity. The estimated remaining lives of these loans reflect estimated prepayments, both voluntary and involuntary (i.e., foreclosures and other forced liquidations).

Active and suspended foreclosure

At June 30, 2018, and December 31, 2017, JPMorgan Chase Bank, N.A. had non-PCI residential real estate loans, excluding those insured by U.S. government agencies, with a carrying value of $762 million and $787 million, respectively, that were not included in REO, but were in the process of active or suspended foreclosure.

Other consumer loans

The table below provides information for other consumer retained loan classes, including auto and business banking loans.

(in millions, except ratios)	Auto		Consumer & Business Banking		Total other consumer	
	Jun 30, 2018	Dec 31, 2017	**Jun 30, 2018**	Dec 31, 2017	**Jun 30, 2018**	Dec 31, 2017
Loan delinquency[(a)]						
Current	**$ 64,516**	$ 65,651	**$ 25,964**	$ 25,454	**$ 90,480**	$ 91,105
30–119 days past due	**487**	584	**197**	213	**684**	797
120 or more days past due	**11**	7	**111**	122	**122**	129
Total retained loans	**$ 65,014**	$ 66,242	**$ 26,272**	$ 25,789	**$ 91,286**	$ 92,031
% of 30+ days past due to total retained loans	**0.77%**	0.89%	**1.17%**	1.30%	**0.88%**	1.01%
Nonaccrual loans[(a)]	**124**	141	**273**	283	**397**	424
Geographic region						
California	**$ 8,512**	$ 8,445	**$ 5,299**	$ 5,032	**$ 13,811**	$ 13,477
Texas	**6,675**	7,013	**3,014**	2,916	**9,689**	9,929
New York	**3,901**	4,023	**4,222**	4,195	**8,123**	8,218
Illinois	**3,793**	3,916	**2,066**	2,017	**5,859**	5,933
Florida	**3,389**	3,350	**1,428**	1,424	**4,817**	4,774
Arizona	**2,103**	2,221	**1,422**	1,383	**3,525**	3,604
Ohio	**2,044**	2,105	**1,356**	1,380	**3,400**	3,485
Michigan	**1,417**	1,418	**1,304**	1,357	**2,721**	2,775
New Jersey	**1,978**	2,044	**738**	721	**2,716**	2,765
Louisiana	**1,602**	1,656	**885**	849	**2,487**	2,505
All other	**29,600**	30,051	**4,538**	4,515	**34,138**	34,566
Total retained loans	**$ 65,014**	$ 66,242	**$ 26,272**	$ 25,789	**$ 91,286**	$ 92,031
Loans by risk ratings[(b)]						
Noncriticized	**$ 15,150**	$ 15,604	**$ 18,387**	$ 17,938	**$ 33,537**	$ 33,542
Criticized performing	**261**	93	**759**	791	**1,020**	884
Criticized nonaccrual	**7**	9	**204**	213	**211**	222

(a) There were no loans that were 90 or more days past due and still accruing interest at June 30, 2018, and December 31, 2017.
(b) For risk-rated business banking and auto loans, the primary credit quality indicator is the risk rating of the loan, including whether the loans are considered to be criticized and/or nonaccrual.

Other consumer impaired loans and loan modifications

The table below sets forth information about JPMorgan Chase Bank, N.A.'s other consumer impaired loans, including risk-rated business banking and auto loans that have been placed on nonaccrual status, and loans that have been modified in TDRs.

(in millions)		June 30, 2018		December 31, 2017
Impaired loans				
With an allowance	**$**	**245**	$	272
Without an allowance[(a)]		**26**		26
Total impaired loans[(b)(c)]	**$**	**271**	$	298
Allowance for loan losses related to impaired loans	**$**	**70**	$	73
Unpaid principal balance of impaired loans[(d)]		**373**		402
Impaired loans on nonaccrual status		**246**		268

(a) When discounted cash flows, collateral value or market price equals or exceeds the recorded investment in the loan, the loan does not require an allowance. This typically occurs when the impaired loans have been partially charged off and/or there have been interest payments received and applied to the loan balance.
(b) Predominantly all other consumer impaired loans are in the U.S.
(c) Other consumer average impaired loans were $287 million and $501 million for the six months ended June 30, 2018 and 2017, respectively. The related interest income on impaired loans, including those on a cash basis, was not material for the six months ended June 30, 2018 and 2017.
(d) Represents the contractual amount of principal owed at June 30, 2018, and December 31, 2017. The unpaid principal balance differs from the impaired loan balances due to various factors, including charge-offs; interest payments received and applied to the principal balance; net deferred loan fees or costs; and unamortized discounts or premiums on purchased loans.

Loan modifications

Certain other consumer loan modifications are considered to be TDRs as they provide various concessions to borrowers who are experiencing financial difficulty. All of these TDRs are reported as impaired loans. Refer to Note 13 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements for further information on other consumer loans modified in TDRs.

At June 30, 2018 and December 31, 2017 other consumer loans modified in TDRs were $91 million and $102 million, respectively. New TDRs, as well as the impact of these modifications were not material to JPMorgan Chase Bank, N.A. for the six months ended June 30, 2018 and 2017. Additional commitments to lend to borrowers whose loans have been modified in TDRs as of June 30, 2018 and December 31, 2017 were not material. TDRs on nonaccrual status were $66 million and $72 million at June 30, 2018 and December 31, 2017, respectively.

Purchased credit-impaired loans

For a detailed discussion of PCI loans, including the related accounting policies, refer to Note 13 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

Residential real estate – PCI loans

The table below sets forth information about JPMorgan Chase Bank, N.A.'s consumer, excluding credit card, PCI loans.

	Home equity		Prime mortgage		Subprime mortgage		Option ARMs		Total PCI	
(in millions, except ratios)	Jun 30, 2018	Dec 31, 2017	Jun 30, 2018	Dec 31, 2017	Jun 30, 2018	Dec 31, 2017	Jun 30, 2018	Dec 31, 2017	Jun 30, 2018	Dec 31, 2017
Carrying value[(a)]	**$ 9,849**	$10,799	**$ 5,437**	$ 6,479	**$ 2,249**	$ 2,609	**$ 9,442**	$10,689	**$26,977**	$30,576
Loan delinquency (based on unpaid principal balance)										
Current	**$ 9,465**	$10,272	**$ 4,893**	$ 5,839	**$ 2,326**	$ 2,640	**$ 8,509**	$ 9,662	**$25,193**	$28,413
30–149 days past due	**248**	356	**271**	336	**295**	381	**446**	547	**1,260**	1,620
150 or more days past due	**310**	392	**296**	327	**163**	176	**585**	689	**1,354**	1,584
Total loans	**$10,023**	$11,020	**$ 5,460**	$ 6,502	**$ 2,784**	$ 3,197	**$ 9,540**	$10,898	**$27,807**	$31,617
% of 30+ days past due to total loans	**5.57%**	6.79%	**10.38%**	10.20%	**16.45%**	17.42%	**10.81%**	11.34%	**9.40%**	10.13%
Current estimated LTV ratios (based on unpaid principal balance)[(b)(c)]										
Greater than 125% and refreshed FICO scores:										
Equal to or greater than 660	**$ 22**	$ 33	**$ 2**	$ 4	**$ 1**	$ 2	**$ 4**	$ 6	**$ 29**	$ 45
Less than 660	**14**	21	**12**	16	**13**	20	**8**	9	**47**	66
101% to 125% and refreshed FICO scores:										
Equal to or greater than 660	**176**	274	**10**	16	**10**	20	**29**	43	**225**	353
Less than 660	**86**	132	**26**	42	**42**	75	**55**	71	**209**	320
80% to 100% and refreshed FICO scores:										
Equal to or greater than 660	**928**	1,195	**119**	221	**80**	119	**168**	316	**1,295**	1,851
Less than 660	**419**	559	**154**	230	**213**	309	**241**	371	**1,027**	1,469
Lower than 80% and refreshed FICO scores:										
Equal to or greater than 660	**5,844**	6,134	**3,022**	3,551	**824**	895	**5,613**	6,113	**15,303**	16,693
Less than 660	**2,011**	2,095	**1,827**	2,103	**1,467**	1,608	**3,006**	3,499	**8,311**	9,305
No FICO/LTV available	**523**	577	**288**	319	**134**	149	**416**	470	**1,361**	1,515
Total unpaid principal balance	**$10,023**	$11,020	**$ 5,460**	$ 6,502	**$ 2,784**	$ 3,197	**$ 9,540**	$10,898	**$27,807**	$31,617
Geographic region (based on unpaid principal balance)										
California	**$ 5,954**	$ 6,555	**$ 3,048**	$ 3,716	**$ 679**	$ 797	**$ 5,415**	$ 6,225	**$15,096**	$17,293
Florida	**1,053**	1,137	**374**	428	**264**	296	**794**	878	**2,485**	2,739
New York	**563**	607	**396**	457	**292**	330	**561**	628	**1,812**	2,022
Washington	**471**	532	**112**	135	**51**	61	**201**	238	**835**	966
Illinois	**252**	273	**176**	200	**142**	161	**221**	249	**791**	883
New Jersey	**225**	242	**157**	178	**97**	110	**293**	336	**772**	866
Massachusetts	**71**	79	**133**	149	**84**	98	**278**	307	**566**	633
Maryland	**53**	57	**109**	129	**113**	132	**199**	232	**474**	550
Arizona	**184**	203	**87**	106	**52**	60	**137**	156	**460**	525
Virginia	**59**	66	**100**	123	**43**	51	**245**	280	**447**	520
All other	**1,138**	1,269	**768**	881	**967**	1,101	**1,196**	1,369	**4,069**	4,620
Total unpaid principal balance	**$10,023**	$11,020	**$ 5,460**	$ 6,502	**$ 2,784**	$ 3,197	**$ 9,540**	$10,898	**$27,807**	$31,617

(a) Carrying value includes the effect of fair value adjustments that were applied to the consumer PCI portfolio at the date of acquisition.

(b) Represents the aggregate unpaid principal balance of loans divided by the estimated current property value. Current property values are estimated, at a minimum, quarterly, based on home valuation models using nationally recognized home price index valuation estimates incorporating actual data to the extent available and forecasted data where actual data is not available. These property values do not represent actual appraised loan level collateral values; as such, the resulting ratios are necessarily imprecise and should be viewed as estimates. Current estimated combined LTV for junior lien home equity loans considers all available lien positions, as well as unused lines, related to the property.

(c) Refreshed FICO scores represent each borrower's most recent credit score, which is obtained by JPMorgan Chase Bank, N.A. on at least a quarterly basis.

Approximately 25% of the PCI home equity portfolio are senior lien loans; the remaining balance are junior lien HELOANs or HELOCs. The following table represents JPMorgan Chase Bank, N.A. delinquency statistics for PCI junior lien home equity loans and lines of credit based on the unpaid principal balance as of June 30, 2018, and December 31, 2017.

	Total loans		Total 30+ day delinquency rate	
(in millions, except ratios)	**Jun 30, 2018**	Dec 31, 2017	**Jun 30, 2018**	Dec 31, 2017
HELOCs:[(a)]				
Within the revolving period[(b)]	**$ 7**	$ 51	**—%**	1.96%
Beyond the revolving period[(c)]	**7,175**	7,875	**3.74**	4.63
HELOANs	**315**	360	**3.81**	5.28
Total	**$ 7,497**	$ 8,286	**3.73%**	4.65%

(a) In general, these HELOCs are revolving loans for a 10-year period, after which time the HELOC converts to an interest-only loan with a balloon payment at the end of the loan's term.
(b) Substantially all undrawn HELOCs within the revolving period have been closed.
(c) Includes loans modified into fixed rate amortizing loans.

The table below sets forth the accretable yield activity for JPMorgan Chase Bank, N.A.'s PCI consumer loans for the six months ended June 30, 2018 and 2017, and represents JPMorgan Chase Bank, N.A.'s estimate of gross interest income expected to be earned over the remaining life of the PCI loan portfolios. The table excludes the cost to fund the PCI portfolios, and therefore the accretable yield does not represent net interest income expected to be earned on these portfolios.

	Total PCI	
	Six months ended June 30,	
(in millions, except ratios)	**2018**	2017
Beginning balance	**$ 11,159**	$ 11,768
Accretion into interest income	**(655)**	(716)
Changes in interest rates on variable-rate loans	**(268)**	167
Other changes in expected cash flows[(a)]	**(1,514)**	1,420
Balance at June 30	**$ 8,722**	$ 12,639
Accretable yield percentage	**4.86%**	4.45%

(a) Other changes in expected cash flows may vary from period to period as JPMorgan Chase Bank, N.A. continues to refine its cash flow model, for example cash flows expected to be collected due to the impact of modifications and changes in prepayment assumptions.

Active and suspended foreclosure

At June 30, 2018, and December 31, 2017, JPMorgan Chase Bank, N.A. had PCI residential real estate loans with an unpaid principal balance of $1.2 billion and $1.3 billion, respectively, that were not included in REO, but were in the process of active or suspended foreclosure.

Credit card loan portfolio

The credit card portfolio predominantly includes credit card loans acquired pursuant to a participation agreement with Chase Bank USA, N.A., a related-party, and subsequent draws on revolving credit lines associated with the participation agreement. The table below sets forth information about JPMorgan Chase Bank, N.A.'s credit card loans.

(in millions, except ratios)		June 30, 2018		December 31, 2017
Loan delinquency				
Current and less than 30 days past due and still accruing	**$**	**42,679**	$	40,092
30–89 days past due and still accruing		**376**		397
90 or more days past due and still accruing		**394**		422
Total retained credit card loans	**$**	**43,449**	$	40,911
Loan delinquency ratios				
% of 30+ days past due to total retained loans		**1.77%**		2.00%
% of 90+ days past due to total retained loans		**0.91**		1.03
Credit card loans by geographic region				
California	**$**	**6,768**	$	6,428
Texas		**4,363**		4,121
New York		**3,884**		3,689
Florida		**2,702**		2,581
Illinois		**2,460**		2,294
New Jersey		**1,850**		1,762
Ohio		**1,355**		1,268
Pennsylvania		**1,327**		1,256
Colorado		**1,244**		1,141
Michigan		**1,055**		992
All other		**16,441**		15,379
Total retained credit card loans	**$**	**43,449**	$	40,911
Percentage of portfolio based on carrying value with estimated refreshed FICO scores				
Equal to or greater than 660		**84.2%**		84.2%
Less than 660		**14.4**		14.4
No FICO available		**1.4**		1.4

Credit card impaired loans and loan modifications

For a detailed discussion of impaired credit card loans, including credit card loan modifications, refer to Note 13 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

The table below sets forth information about JPMorgan Chase Bank, N.A.'s impaired credit card loans. All of these loans are considered to be impaired as they have been modified in TDRs.

(in millions)		June 30, 2018		December 31, 2017
Impaired credit card loans with an allowance[(a)(b)]				
Credit card loans with modified payment terms[(c)]	**$**	**333**	$	297
Modified credit card loans that have reverted to pre-modification payment terms[(d)]		**12**		16
Total impaired credit card loans[(e)]	**$**	**345**	$	313
Allowance for loan losses related to impaired credit card loans	**$**	**110**	$	99

(a) The carrying value and the unpaid principal balance are the same for credit card impaired loans.
(b) There were no impaired loans without an allowance.
(c) Represents credit card loans outstanding to borrowers enrolled in a credit card modification program as of the date presented.
(d) Represents credit card loans that were modified in TDRs but that have subsequently reverted back to the loans' pre-modification payment terms. At June 30, 2018, and December 31, 2017, $6 million and $10 million, respectively, of loans have reverted back to the pre-modification payment terms of the loans due to noncompliance with the terms of the modified loans. The remaining $6 million and $7 million at June 30, 2018, and December 31, 2017, respectively, of these loans are to borrowers who have successfully completed a short-term modification program. JPMorgan Chase Bank, N.A. continues to report these loans as TDRs since the borrowers' credit lines remain closed.
(e) Predominantly all impaired credit card loans are in the U.S.

The following table presents average balances of impaired credit card loans and interest income recognized on those loans.

(in millions)	Six months ended June 30, 2018	2017
Average impaired credit card loans	**$ 330**	$ 291
Interest income on impaired credit card loans	**8**	7

Loan modifications

JPMorgan Chase Bank, N.A. may offer one of a number of loan modification programs to credit card borrowers who are experiencing financial difficulty. Most of these loans have been modified under long-term programs for borrowers who are experiencing financial difficulties. Modifications under long-term programs involve placing the customer on a fixed payment plan, generally for 60 months. Substantially all modifications are considered to be TDRs. New enrollments in these loan modification programs were $113 million and $85 million, for the six months ended June 30, 2018 and 2017, respectively. For additional information about credit card loan modifications, refer to Note 13 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

Financial effects of modifications and redefaults

The following table provides information about the financial effects of the concessions granted on credit card loans modified in TDRs and redefaults for the periods presented.

(in millions, except weighted-average data)	Six months ended June 30, 2018	2017
Weighted-average interest rate of loans – before TDR	**17.61%**	16.35%
Weighted-average interest rate of loans – after TDR	**5.13**	4.78
Loans that redefaulted within one year of modification(a)	**$ 14**	$ 11

(a) Represents loans modified in TDRs that experienced a payment default in the periods presented, and for which the payment default occurred within one year of the modification. The amounts presented represent the balance of such loans as of the end of the quarter in which they defaulted.

For credit card loans modified in TDRs, payment default is deemed to have occurred when the borrower misses two consecutive contractual payments. A substantial portion of these loans are expected to be charged-off in accordance with JPMorgan Chase Bank, N.A.'s standard charge-off policy. Based on historical experience, the estimated weighted-average default rate for modified credit card loans was expected to be 31.91% and 31.54% as of June 30, 2018, and December 31, 2017, respectively.

Wholesale loan portfolio

Wholesale loans include loans made to a variety of clients, ranging from large corporate and institutional clients to high-net-worth individuals. The primary credit quality indicator for wholesale loans is the risk rating assigned to each loan. For further information on these risk ratings, refer to Note 13 and Note 14 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

The table below provides information by class of receivable for the retained loans in the Wholesale portfolio segment.

	Commercial and industrial		Real estate		Financial institutions		Government agencies		Other(d)		Total retained loans	
(in millions, except ratios)	**Jun 30, 2018**	Dec 31, 2017	**Jun 30, 2018**	Dec 31, 2017	**Jun 30, 2018**	Dec 31, 2017	**Jun 30, 2018**	Dec 31, 2017	**Jun 30, 2018**	Dec 31, 2017	**Jun 30, 2018**	Dec 31, 2017
Loans by risk ratings												
Investment-grade	**$ 69,697**	$ 67,378	**$ 98,684**	$ 98,467	**$37,168**	$32,559	**$14,727**	$14,440	**$108,199**	$103,186	**$328,475**	$316,030
Noninvestment-grade:												
Noncriticized	**50,114**	46,499	**13,947**	14,329	**14,768**	12,880	**141**	342	**14,086**	10,066	**93,056**	84,116
Criticized performing	**3,131**	3,933	**566**	710	**130**	206	**—**	—	**231**	259	**4,058**	5,108
Criticized nonaccrual	**813**	1,296	**138**	136	**2**	2	**—**	—	**203**	238	**1,156**	1,672
Total noninvestment-grade	**54,058**	51,728	**14,651**	15,175	**14,900**	13,088	**141**	342	**14,520**	10,563	**98,270**	90,896
Total retained loans	**$123,755**	$119,106	**$113,335**	$113,642	**$52,068**	$45,647	**$14,868**	$14,782	**$122,719**	$113,749	**$426,745**	$406,926
% of total criticized exposure to total retained loans	**3.19%**	4.39%	**0.62%**	0.74%	**0.25%**	0.46%	**—%**	—%	**0.35%**	0.44%	**1.22%**	1.67%
% of criticized nonaccrual to total retained loans	**0.66**	1.09	**0.12**	0.12	**—**	—	**—**	—	**0.17**	0.21	**0.27**	0.41
Loans by geographic distribution(a)												
Total non-U.S.	**$ 30,725**	$ 28,470	**$ 2,668**	$ 3,101	**$17,502**	$16,786	**$ 2,966**	$ 2,905	**$ 49,812**	$ 44,111	**$103,673**	$ 95,373
Total U.S.	**93,030**	90,636	**110,667**	110,541	**34,566**	28,861	**11,902**	11,877	**72,907**	69,638	**323,072**	311,553
Total retained loans	**$123,755**	$119,106	**$113,335**	$113,642	**$52,068**	$45,647	**$14,868**	$14,782	**$122,719**	$113,749	**$426,745**	$406,926
Loan delinquency(b)												
Current and less than 30 days past due and still accruing	**$122,726**	$117,486	**$112,501**	$113,251	**$52,047**	$45,615	**$14,861**	$14,770	**$121,726**	$112,612	**$423,861**	$403,734
30–89 days past due and still accruing	**188**	216	**675**	242	**11**	15	**3**	8	**788**	898	**1,665**	1,379
90 or more days past due and still accruing(c)	**28**	108	**21**	13	**8**	15	**4**	4	**2**	1	**63**	141
Criticized nonaccrual	**813**	1,296	**138**	136	**2**	2	**—**	—	**203**	238	**1,156**	1,672
Total retained loans	**$123,755**	$119,106	**$113,335**	$113,642	**$52,068**	$45,647	**$14,868**	$14,782	**$122,719**	$113,749	**$426,745**	$406,926

(a) The U.S. and non-U.S. distribution is determined based predominantly on the domicile of the borrower.
(b) The credit quality of wholesale loans is assessed primarily through ongoing review and monitoring of an obligor's ability to meet contractual obligations rather than relying on the past due status, which is generally a lagging indicator of credit quality. For a further discussion, refer to Note 13 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.
(c) Represents loans that are considered well-collateralized and therefore still accruing interest.
(d) Other includes individuals (predominantly wealth management clients within the asset & wealth management business), SPEs, and private education and civic organizations. For more information on exposures to SPEs, refer to Note 15 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

The following table presents additional information on the real estate class of loans within the Wholesale portfolio for the periods indicated. For further information on real estate loans, refer to Note 13 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

	Multifamily		Other commercial		Total real estate loans	
(in millions, except ratios)	**Jun 30, 2018**	Dec 31, 2017	**Jun 30, 2018**	Dec 31, 2017	**Jun 30, 2018**	Dec 31, 2017
Real estate retained loans	**$ 78,093**	$ 77,597	**$ 35,242**	$ 36,045	**$ 113,335**	$ 113,642
Criticized exposure	**437**	491	**267**	355	**704**	846
% of total criticized exposure to total real estate retained loans	**0.56%**	0.63%	**0.76%**	0.98%	**0.62%**	0.74%
Criticized nonaccrual	**$ 53**	$ 44	**$ 85**	$ 92	**$ 138**	$ 136
% of criticized nonaccrual loans to total real estate retained loans	**0.07%**	0.06%	**0.24%**	0.26%	**0.12%**	0.12%

Wholesale impaired retained loans and loan modifications

Wholesale impaired retained loans consist of loans that have been placed on nonaccrual status and/or that have been modified in a TDR. All impaired loans are evaluated for an asset-specific allowance as described in Note 14 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

The table below sets forth information about JPMorgan Chase Bank, N.A.'s wholesale impaired loans.

	Commercial and industrial		Real estate		Financial institutions		Government agencies		Other		Total retained loans	
(in millions)	**Jun 30, 2018**	Dec 31, 2017	**Jun 30, 2018**	Dec 31, 2017	**Jun 30, 2018**	Dec 31, 2017	**Jun 30, 2018**	Dec 31, 2017	**Jun 30, 2018**	Dec 31, 2017	**Jun 30, 2018**	Dec 31, 2017
Impaired loans												
With an allowance	**$ 773**	$ 1,111	**$ 85**	$ 79	**$ 89**	$ 93	**$ –**	$ –	**$ 162**	$ 168	**$ 1,109**	$ 1,451
Without an allowance[(a)]	**110**	227	**53**	60	**–**	–	**–**	–	**55**	70	**218**	357
Total impaired loans	**$ 883**	$ 1,338	**$ 138**	$ 139	**$ 89**	$ 93	**$ –**	$ –	**$ 217**	$ 238	**$ 1,327** [(c)]	$ 1,808 [(c)]
Allowance for loan losses related to impaired loans	**$ 251**	$ 372	**$ 16**	$ 11	**$ 4**	$ 4	**$ –**	$ –	**$ 47**	$ 43	**$ 318**	$ 430
Unpaid principal balance of impaired loans[(b)]	**1,067**	1,604	**205**	201	**89**	94	**–**	–	**428**	255	**1,789**	2,154

(a) When the discounted cash flows, collateral value or market price equals or exceeds the recorded investment in the loan, the loan does not require an allowance. This typically occurs when the impaired loans have been partially charged-off and/or there have been interest payments received and applied to the loan balance.
(b) Represents the contractual amount of principal owed at June 30, 2018, and December 31, 2017. The unpaid principal balance differs from the impaired loan balances due to various factors, including charge-offs; interest payments received and applied to the carrying value; net deferred loan fees or costs; and unamortized discount or premiums on purchased loans.
(c) Based upon the domicile of the borrower, largely consists of loans in the U.S.

The following table presents JPMorgan Chase Bank, N.A.'s average impaired loans for the periods indicated.

	Six months ended June 30,	
(in millions)	**2018**	2017
Commercial and industrial	**$ 1,189**	$ 1,321
Real estate	**143**	179
Financial institutions	**91**	13
Government agencies	**–**	–
Other	**218**	254
Total[(a)(b)]	**$ 1,641**	$ 1,767

(a) The related interest income on accruing impaired loans and interest income recognized on a cash basis were not material for the six months ended June 30, 2018 and 2017.
(b) The prior period amounts have been revised to conform with the current period presentation.

Certain loan modifications are considered to be TDRs as they provide various concessions to borrowers who are experiencing financial difficulty. All TDRs are reported as impaired loans in the table above. TDRs were $865 million and $614 million as of June 30, 2018, and December 31, 2017, respectively.

Note 13 – Allowance for credit losses

For a detailed discussion of the allowance for credit losses and the related accounting policies, refer to Note 14 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

Allowance for credit losses and related information

The table below summarizes information about the allowances for loan losses and lending-related commitments, and includes a breakdown of loans and lending-related commitments by impairment methodology.

	2018				2017			
Six months ended June 30 (in millions)	Consumer, excluding credit card	Credit card	Wholesale	Total	Consumer, excluding credit card	Credit card	Wholesale	Total
Allowance for loan losses								
Beginning balance at January 1,	**$ 4,577**	**$ 1,421**	**$ 4,083**	**$ 10,081**	$ 5,195	$ 1,042	$ 4,478	$ 10,715
Gross charge-offs	**539**	**766**	**202**	**1,507**	1,104	600	100	1,804
Gross recoveries	**(451)**	**(72)**	**(77)**	**(600)**	(306)	(52)	(70)	(428)
Net charge-offs/(recoveries)	**88**	**694**	**125**	**907**	798	548	30	1,376
Write-offs of PCI loans[(a)]	**93**	**–**	**–**	**93**	46	–	–	46
Provision for loan losses	**90**	**751**	**(100)**	**741**	449	713	(332)	830
Other	**–**	**40**	**(1)**	**39**	(1)	–	1	–
Ending balance at June 30,	**$ 4,486**	**$ 1,518**	**$ 3,857**	**$ 9,861**	$ 4,799	$ 1,207	$ 4,117	$ 10,123
Allowance for loan losses by impairment methodology								
Asset-specific[(b)]	**$ 226**	**$ 110** [(c)]	**$ 318**	**$ 654**	$ 296	$ 89 [(c)]	$ 345	$ 730
Formula-based	**2,128**	**1,408**	**3,539**	**7,075**	2,238	1,118	3,772	7,128
PCI	**2,132**	**–**	**–**	**2,132**	2,265	–	–	2,265
Total allowance for loan losses	**$ 4,486**	**$ 1,518**	**$ 3,857**	**$ 9,861**	$ 4,799	$ 1,207	$ 4,117	$ 10,123
Loans by impairment methodology								
Asset-specific	**$ 7,380**	**$ 345**	**$ 1,327**	**$ 9,052**	$ 8,333	$ 291	$ 1,760	$ 10,384
Formula-based	**340,198**	**43,104**	**425,415**	**808,717**	323,678	36,767	395,887	756,332
PCI	**26,977**	**–**	**3**	**26,980**	33,064	–	3	33,067
Total retained loans	**$ 374,555**	**$ 43,449**	**$ 426,745**	**$ 844,749**	$ 365,075	$ 37,058	$ 397,650	$ 799,783
Impaired collateral-dependent loans								
Net charge-offs	**$ 14**	**$ –**	**$ –**	**$ 14**	$ 37	$ –	$ 16	$ 53
Loans measured at fair value of collateral less cost to sell	**2,123**	**–**	**300**	**2,423**	2,233	–	296	2,529
Allowance for lending-related commitments								
Beginning balance at January 1,	**$ 33**	**$ –**	**$ 1,035**	**$ 1,068**	$ 26	$ –	$ 1,052	$ 1,078
Provision for lending-related commitments	**–**	**–**	**49**	**49**	6	–	33	39
Ending balance at June 30,	**$ 33**	**$ –**	**$ 1,084**	**$ 1,117**	$ 32	$ –	$ 1,085	$ 1,117
Allowance for lending-related commitments by impairment methodology								
Asset-specific	**$ –**	**$ –**	**$ 139**	**$ 139**	$ –	$ –	$ 211	$ 211
Formula-based	**33**	**–**	**945**	**978**	32	–	874	906
Total allowance for lending-related commitments	**$ 33**	**$ –**	**$ 1,084**	**$ 1,117**	$ 32	$ –	$ 1,085	$ 1,117
Lending-related commitments by impairment methodology								
Asset-specific	**$ –**	**$ –**	**$ 712**	**$ 712**	$ –	$ –	$ 750	$ 750
Formula-based	**51,784**	**10,826**	**399,819**	**462,429**	54,078 [(d)]	11,470	362,965	428,513 [(d)]
Total lending-related commitments	**$ 51,784**	**$ 10,826**	**$ 400,531**	**$ 463,141**	$ 54,078 [(d)]	$ 11,470	$ 363,715	$ 429,263 [(d)]

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

(b) Includes risk-rated loans that have been placed on nonaccrual status and loans that have been modified in a TDR.

(c) The asset-specific credit card allowance for loan losses is related to loans that have been modified in a TDR; such allowance is calculated based on the loans' original contractual interest rates and does not consider any incremental penalty rates.

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

Note 14 – Variable interest entities

For a further description of JPMorgan Chase Bank, N.A.'s accounting policies regarding consolidation of VIEs, refer to Note 1 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

The following table summarizes the most significant types of JPMorgan Chase Bank, N.A.-sponsored VIEs by business.

JPMorgan Chase Bank, N.A. business	*Transaction Type*	*Activity*	*Consolidated Financial Statements page reference*
Consumer & community banking	Mortgage securitization trusts	Servicing and securitization of both originated and purchased residential mortgages	62-64
Corporate & investment banking	Mortgage and other securitization trusts	Securitization of both originated and purchased residential and commercial mortgages, and student loans	62-64
	Multi-seller conduits	Assist clients in accessing the financial markets in a cost-efficient manner and structures transactions to meet investor needs	64
	Municipal bond vehicles	Financing municipal bond investments	64

JPMorgan Chase Bank, N.A. also invests in and provides financing and other services to VIEs sponsored by third parties. Refer to page 65 of this Note for more information on the VIEs sponsored by third parties.

Significant JPMorgan Chase Bank, N.A.-sponsored variable interest entities

Mortgage and other securitization trusts

JPMorgan Chase Bank, N.A. securitizes (or has securitized) originated and purchased residential mortgages, commercial mortgages and other consumer loans primarily in its consumer & community banking and corporate & investment banking businesses. Depending on the particular transaction, as well as the respective business involved, JPMorgan Chase Bank, N.A. may act as the servicer of the loans and/or retain certain beneficial interests in the securitization trusts.

For a detailed discussion of JPMorgan Chase Bank, N.A.'s involvement with JPMorgan Chase Bank, N.A.-sponsored mortgage and other securitization trusts, as well as the accounting treatment relating to such trusts, refer to Note 15 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

The following table presents the total unpaid principal amount of assets held in JPMorgan Chase Bank, N.A.-sponsored private-label securitization entities, including those in which JPMorgan Chase Bank, N.A. has continuing involvement, and those that are consolidated by JPMorgan Chase Bank, N.A. Continuing involvement includes servicing the loans, holding senior interests or subordinated interests (including amounts required to be held pursuant to credit risk retention rules), recourse or guarantee arrangements, and derivative transactions. In certain instances, JPMorgan Chase Bank, N.A.'s only continuing involvement is servicing the loans. Refer to Securitization activity on page 66 of this Note for further information regarding JPMorgan Chase Bank, N.A.'s cash flows associated with and interests retained in nonconsolidated VIEs, and page 66 of this Note for information on JPMorgan Chase Bank, N.A.'s loan sales to U.S. government agencies.

	Principal amount outstanding			JPMorgan Chase Bank, N.A. interest in securitized assets in nonconsolidated VIEs[c][d]			
June 30, 2018 (in millions)	Total assets held by securitization VIEs	Assets held in consolidated securitization VIEs	Assets held in nonconsolidated securitization VIEs with continuing involvement	Trading assets	Investment securities	Other financial assets	Total interests held by JPMorgan Chase Bank, N.A
Securitization-related[a]							
Residential mortgage:							
Prime/Alt-A and option ARMs	**$ 49,012**	**$ 3,414**	**$ 39,489**	**$ 238**	**$ 724**	**$ –**	**$ 962**
Subprime	**11,990**	**–**	**11,293**	**–**	**–**	**–**	**–**
Commercial and other[b]	**98,476**	**–**	**25,222**	**60**	**961**	**217**	**1,238**
Total	**$ 159,478**	**$ 3,414**	**$ 76,004**	**$ 298**	**$ 1,685**	**$ 217**	**$ 2,200**

	Principal amount outstanding			JPMorgan Chase Bank, N.A. interest in securitized assets in nonconsolidated VIEs[c][d]			
December 31, 2017 (in millions)	Total assets held by securitization VIEs	Assets held in consolidated securitization VIEs	Assets held in nonconsolidated securitization VIEs with continuing involvement	Trading assets	Investment securities	Other financial assets	Total interests held by JPMorgan Chase Bank, N.A.
Securitization-related[a]							
Residential mortgage:							
Prime/Alt-A and option ARMs	$ 48,599	$ 3,615	$ 39,370	$ 215	$ 845	$ –	$ 1,060
Subprime	12,716	–	11,978	–	–	–	–
Commercial and other[b]	92,278	63	23,604	61	1,042	157	1,260
Total	$ 153,593	$ 3,678	$ 74,952	$ 276	$ 1,887	$ 157	$ 2,320

(a) Excludes U.S. government agency securitizations, which are not JPMorgan Chase Bank, N.A.-sponsored. Refer to page 66 of this Note for information on JPMorgan Chase Bank, N.A.'s loan sales to U.S. government agencies.

(b) Consists of securities backed by commercial loans (predominantly real estate) and non-mortgage-related consumer receivables purchased from third parties.

(c) Excludes the following: retained servicing (Refer to Note 15 for a discussion of MSRs); securities retained from loan sales to U.S. government agencies; and interest rate and foreign exchange derivatives primarily used to manage interest rate and foreign exchange risks of securitization entities (Refer to Note 5 for further information on derivatives). There were no senior and subordinated securities purchased in connection with the corporate & investment banking business's secondary market-making activities at June 30, 2018, and December 31, 2017, respectively.

(d) As of June 30, 2018, and December 31, 2017, 63% and 67%, respectively, of JPMorgan Chase Bank, N.A.'s retained securitization interests, which are predominantly carried at fair value and include amounts required to be held pursuant to credit risk retention rules, were risk-rated "A" or better, on an S&P-equivalent basis. The retained interests in prime residential mortgages consisted of $940 million and $1.0 billion of investment-grade and $23 million and $23 million of noninvestment-grade retained interests at June 30, 2018, and December 31, 2017, respectively. The retained interests in commercial and other securitizations trusts consisted of $966 million and $1.0 billion of investment-grade and $272 million and $212 million of noninvestment-grade retained interests at June 30, 2018 and December 31, 2017 respectively.

Residential mortgage
JPMorgan Chase Bank, N.A. securitizes residential mortgage loans originated by consumer & community banking business, as well as residential mortgage loans purchased from third parties by either consumer & community banking or corporate & investment banking business. For a more detailed description of JPMorgan Chase Bank, N.A.'s involvement with residential mortgage securitizations, refer to Note 15 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements. Refer to the table on page 65 of this Note for more information on the consolidated residential mortgage securitizations, and the table on the previous page of this Note for further information on interests held in nonconsolidated residential mortgage securitizations.

Commercial mortgages and other consumer securitizations
The corporate & investment banking business originates and securitizes commercial mortgage loans, and engages in underwriting and trading activities involving the securities issued by securitization trusts. For a more detailed description of JPMorgan Chase Bank, N.A.'s involvement with commercial mortgage and other consumer securitizations, refer to Note 15 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements. Refer to the table on page 65 of this Note for more information on the consolidated commercial mortgage securitizations, and the table on the previous page of this Note for further information on interests held in nonconsolidated securitizations.

Multi-seller conduits
For a more detailed description of JPMorgan Chase Bank, N.A.'s principal involvement with JPMorgan Chase Bank, N.A.-administered multi-seller conduits, refer to Note 15 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

In the normal course of business, JPMorgan Chase Bank, N.A. makes markets in and invests in commercial paper issued by JPMorgan Chase Bank, N.A.-administered multi-seller conduits. JPMorgan Chase Bank, N.A. held $20.5 billion and $20.4 billion of the commercial paper issued by JPMorgan Chase Bank, N.A.-administered multi-seller conduits at June 30, 2018, and December 31, 2017, respectively, which have been eliminated in consolidation. JPMorgan Chase Bank, N.A.'s investments reflect JPMorgan Chase Bank, N.A.'s funding needs and capacity and were not driven by market illiquidity. Other than the amounts required to be held pursuant to credit risk retention rules, JPMorgan Chase Bank, N.A. is not obligated under any agreement to purchase the commercial paper issued by JPMorgan Chase Bank, N.A.-administered multi-seller conduits.

JPMorgan Chase Bank, N.A. provides deal-specific liquidity as well as program-wide liquidity and credit enhancement to its administered multi-seller conduits, which have been eliminated in consolidation. The administered multi-seller conduits then provide certain of their clients with lending-related commitments. The unfunded commitments were $9.7 billion and $8.8 billion at June 30, 2018, and December 31, 2017, respectively, and are reported as off-balance sheet lending-related commitments. For more information on off-balance sheet lending-related commitments, refer to Note 21.

Municipal bond vehicles
Municipal bond vehicles or tender option bond ("TOB") trusts allow institutions to finance their municipal bond investments at short-term rates. TOB transactions are known as Customer TOB trusts and Non-Customer TOB trusts. Customer TOB trusts are sponsored by a third party; refer to page 65 of this Note for further information. JPMorgan Chase Bank, N.A. serves as sponsor for all Non-Customer TOB transactions. For a more detailed description of JPMorgan Chase Bank, N.A.'s Municipal bond vehicles, refer to Note 15 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements. JPMorgan Chase Bank, N.A. had no exposure to nonconsolidated JPMorgan Chase Bank, N.A.-sponsored municipal bond vehicles at June 30, 2018 and December 31, 2017, respectively.

Refer to page 65 of this Note for further information on consolidated municipal bond vehicles.

Consolidated VIE assets and liabilities

The following table presents information on assets and liabilities related to VIEs consolidated by JPMorgan Chase Bank, N.A. as of June 30, 2018, and December 31, 2017.

	Assets				Liabilities		
June 30, 2018 (in millions)	Trading assets	Loans	Other[b]	Total assets[c]	Beneficial interests in VIE assets[d]	Other[e]	Total liabilities
VIE program type							
JPMorgan Chase Bank, N.A.-administered multi-seller conduits	**$ 2**	**$ 23,128**	**$ 49**	**$ 23,179**	**$ 2,969**	**$ 47**	**$ 3,016**
Municipal bond vehicles	**1,369**	**—**	**3**	**1,372**	**1,401**	**2**	**1,403**
Mortgage securitization entities[a]	**—**	**3,460**	**48**	**3,508**	**296**	**181**	**477**
Other	**131**	**—**	**1,451**	**1,582**	**152**	**—**	**152**
Total	**$ 1,502**	**$ 26,588**	**$ 1,551**	**$ 29,641**	**$ 4,818**	**$ 230**	**$ 5,048**

	Assets				Liabilities		
December 31, 2017 (in millions)	Trading assets	Loans	Other[b]	Total assets[c]	Beneficial interests in VIE assets[d]	Other[e]	Total liabilities
VIE program type							
JPMorgan Chase Bank, N.A.-administered multi-seller conduits	$ —	$ 23,411	$ 48	$ 23,459	$ 3,045	$ 53	$ 3,098
Municipal bond vehicles	1,278	—	3	1,281	1,360	2	1,362
Mortgage securitization entities[a]	—	3,661	55	3,716	314	199	513
Other	102	—	1,592	1,694	134	—	134
Total	$ 1,380	$ 27,072	$ 1,698	$ 30,150	$ 4,853	$ 254	$ 5,107

(a) Includes residential and commercial mortgage securitizations.
(b) Includes assets classified as cash, and other assets on the Consolidated balance sheets.
(c) The assets of the consolidated VIEs included in the program types above are used to settle the liabilities of those entities. The assets and liabilities include third-party assets and liabilities of consolidated VIEs and exclude intercompany balances that eliminate in consolidation.
(d) The interest-bearing beneficial interest liabilities issued by consolidated VIEs are classified in the line item on the Consolidated balance sheets titled, “Beneficial interests issued by consolidated variable interest entities.” The holders of these beneficial interests generally do not have recourse to the general credit of JPMorgan Chase Bank, N.A. For conduits program-wide credit enhancements, Refer to Note 15 of JPMorgan Chase Bank, N.A.’s 2017 Consolidated Annual Financial Statements. Included in beneficial interests in VIE assets are long-term beneficial interests of $448 million and $447 million at June 30, 2018, and December 31, 2017, respectively.
(e) Includes liabilities classified as accounts payable and other liabilities on the Consolidated balance sheets.

VIEs sponsored by third parties

JPMorgan Chase Bank, N.A. enters into transactions with VIEs structured by other parties. These include, for example, acting as a derivative counterparty, liquidity provider and investor. These transactions are conducted at arm’s-length, and individual credit decisions are based on the analysis of the specific VIE, taking into consideration the quality of the underlying assets. Where JPMorgan Chase Bank, N.A. does not have the power to direct the activities of the VIE that most significantly impact the VIE’s economic performance, or a variable interest that could potentially be significant, JPMorgan Chase Bank, N.A. generally does not consolidate the VIE, but it records and reports these positions on its Consolidated balance sheets in the same manner it would record and report positions in respect of any other third-party transaction.

Tax credit vehicles

JPMorgan Chase Bank, N.A. holds investments in unconsolidated tax credit vehicles, which are limited partnerships and similar entities that construct, own and operate affordable housing and wind projects. These entities are primarily considered VIEs. A third party is typically the general partner or managing member and has control over the significant activities of the tax credit vehicles, and accordingly JPMorgan Chase Bank, N.A. does not consolidate tax credit vehicles. JPMorgan Chase Bank, N.A. generally invests in these partnerships as a limited partner and earns a return primarily through the receipt of tax credits allocated to the projects. The maximum loss exposure, represented by equity investments and funding commitments, was $7.5 billion and $7.8 billion, as of June 30, 2018 and December 31, 2017, of which $2.1 billion and $2.4 billion was unfunded, respectively. In order to reduce the risk of loss, JPMorgan Chase Bank, N.A. assesses each project and withholds varying amounts of its capital investment until qualification of the project for tax credits. For further information on affordable housing tax credits, refer to Note 22 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements. For more information on off-balance sheet lending-related commitments, refer to Note 21 of these Consolidated Financial Statements.

Customer municipal bond vehicles (TOB trusts)
JPMorgan Chase Bank, N.A. may provide various services to Customer TOB trusts, including liquidity or tender option provider. In certain Customer TOB transactions, JPMorgan Chase Bank, N.A. as liquidity provider, has entered into a reimbursement agreement with the Residual holder.

In those transactions, upon the termination of the vehicle, JPMorgan Chase Bank, N.A. has recourse to the third party Residual holders for any shortfall. JPMorgan Chase Bank, N.A. does not have any intent to protect Residual holders from potential losses on any of the underlying municipal bonds. JPMorgan Chase Bank, N.A. does not consolidate Customer TOB trusts, since JPMorgan Chase Bank, N.A. does not have the power to make decisions that significantly impact the economic performance of the municipal bond vehicle. JPMorgan Chase Bank, N.A. maximum exposure as a liquidity provider to Customer TOB trusts at June 30, 2018 and December 31, 2017, was $5.2 billion and $5.3 billion, respectively. The fair value of assets held by such VIEs at June 30, 2018 and December 31, 2017 was $8.4 billion and $9.0 billion, respectively. For more information on off-balance sheet lending-related commitments, refer to Note 21.

Loan securitizations

JPMorgan Chase Bank, N.A. has securitized and sold a variety of loans, including residential mortgage, credit card, and commercial mortgage. For a further description of the JPMorgan Chase Bank, N.A.'s accounting policies regarding securitizations, refer to Note 15 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

Securitization activity

The following table provides information related to JPMorgan Chase Bank, N.A.'s securitization activities for the six months ended June 30, 2018 and 2017, related to assets held in JPMorgan Chase Bank, N.A.-sponsored securitization entities that were not consolidated by JPMorgan Chase Bank, N.A., and where sale accounting was achieved at the time of the securitization.

	Six months ended June 30,			
	2018		2017	
(in millions)	Residential mortgage[c]	Commercial and other[d]	Residential mortgage[c]	Commercial and other[d]
Principal securitized	**$ 4,459**	**$ 5,173**	$ 2,049	$ 3,312
All cash flows during the period:				
Proceeds received from loan sales as financial instruments	**4,460**	**5,187**	2,083	3,377
Servicing fees collected[a]	**91**	**1**	102	1
Purchases of previously transferred financial assets (or the underlying collateral)[b]	**—**	**—**	1	—
Cash flows received on interests	**137**	**70**	224	416

(a) The prior period amounts have been revised to conform with the current period presentation.
(b) Includes cash paid by JPMorgan Chase Bank, N.A. to reacquire assets from off-balance sheet, nonconsolidated entities – for example, loan repurchases due to representation and warranties and servicer "clean-up" calls.
(c) Includes prime, Alt-A, subprime, and option ARMs. Excludes loan securitization transactions entered into with Ginnie Mae, Fannie Mae and Freddie Mac.
(d) Includes commercial mortgage and other consumer loans.

Loans and excess MSRs sold to U.S. government-sponsored enterprises, loans in securitization transactions pursuant to Ginnie Mae guidelines, and other third-party-sponsored securitization entities

In addition to the amounts reported in the securitization activity tables above, JPMorgan Chase Bank, N.A., in the normal course of business, sells originated and purchased mortgage loans and certain originated excess MSRs on a nonrecourse basis, predominantly to U.S. government-sponsored enterprises ("U.S. GSEs"). These loans and excess MSRs are sold primarily for the purpose of securitization by the U.S. GSEs, who provide certain guarantee provisions (e.g., credit enhancement of the loans). JPMorgan Chase Bank, N.A. also sells loans into securitization transactions pursuant to Ginnie Mae guidelines; these loans are typically insured or guaranteed by another U.S. government agency. JPMorgan Chase Bank, N.A. does not consolidate the securitization vehicles underlying these transactions as it is not the primary beneficiary. For a limited number of loan sales, JPMorgan Chase Bank, N.A. is obligated to share a portion of the credit risk associated with the sold loans with the purchaser. Refer to Note 21 of these Consolidated Financial Statements, and Note 25 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements for additional information about JPMorgan Chase Bank, N.A.'s loan sales- and securitization-related indemnifications. Refer to Note 15 for additional information about the impact of JPMorgan Chase Bank, N.A.'s sale of certain excess MSRs. The following table summarizes the activities related to loans sold to the U.S. GSEs, loans in securitization transactions pursuant to Ginnie Mae guidelines, and other third-party-sponsored securitization entities.

(in millions)	Six months ended June 30, 2018	2017
Carrying value of loans sold	$ 16,836	$ 28,880
Proceeds received from loan sales as cash	–	13
Proceeds received from loans sales as securities[(a)]	16,578	28,589
Total proceeds received from loan sales[(b)]	$ 16,578	$ 28,602
Gains on loan sales[(c)(d)]	$ 23	$ 73

(a) Predominantly includes securities from U.S. GSEs and Ginnie Mae that are generally sold shortly after receipt.
(b) Excludes the value of MSRs retained upon the sale of loans.
(c) Gains on loan sales include the value of MSRs.
(d) The carrying value of the loans accounted for at fair value approximated the proceeds received upon loan sale.

Options to repurchase delinquent loans

In addition to JPMorgan Chase Bank, N.A.'s obligation to repurchase certain loans due to material breaches of representations and warranties as discussed in Note 21, JPMorgan Chase Bank, N.A. also has the option to repurchase delinquent loans that it services for Ginnie Mae loan pools, as well as for other U.S. government agencies under certain arrangements. JPMorgan Chase Bank, N.A. typically elects to repurchase delinquent loans from Ginnie Mae loan pools as it continues to service them and/or manage the foreclosure process in accordance with the applicable requirements, and such loans continue to be insured or guaranteed. When JPMorgan Chase Bank, N.A.'s repurchase option becomes exercisable, such loans must be reported on the Consolidated balance sheets as a loan with a corresponding liability. For additional information, refer to Note 12 of these Consolidated Financial Statements.

The following table presents loans JPMorgan Chase Bank, N.A. repurchased or had an option to repurchase, real estate owned, and foreclosed government-guaranteed residential mortgage loans recognized on JPMorgan Chase Bank, N.A.'s balance sheet as of June 30, 2018 and December 31, 2017. Substantially all of these loans and real estate are insured or guaranteed by U.S. government agencies.

(in millions)	June 30, 2018	Dec 31, 2017
Loans repurchased or option to repurchase[(a)]	$ 8,184	$ 8,617
Real estate owned	84	95
Foreclosed government-guaranteed residential mortgage loans[(b)]	455	527

(a) Predominantly all of these amounts relate to loans that have been repurchased from Ginnie Mae loan pools.
(b) Relates to voluntary repurchases of loans, which are included in accrued interest and accounts receivable.

Loan delinquencies and liquidation losses

The table below includes information about components of nonconsolidated securitized financial assets held in JPMorgan Chase Bank, N.A.-sponsored private-label securitization entities, in which JPMorgan Chase Bank, N.A. has continuing involvement, and delinquencies as of June 30, 2018, and December 31, 2017.

	Securitized assets		90 days past due		Net liquidation losses[(a)] Six months ended June 30,	
(in millions)	Jun 30, 2018	Dec 31, 2017	Jun 30, 2018	Dec 31, 2017	2018	2017
Securitized loans						
Residential mortgage:						
Prime / Alt-A & option ARMs	$ 39,489	$ 39,370	$ 2,663	$ 3,178	$ 142	$ 270
Subprime	11,293	11,978	1,819	2,070	(566)	235
Commercial and other	25,222	23,604	60	78	–	1
Total loans securitized	$ 76,004	$ 74,952	$ 4,542	$ 5,326	$ (424)	$ 506

(a) Includes liquidation gains as a result of private label mortgage settlement payments during the first half of 2018, which were reflected as asset recoveries by trustees.

Note 15 – Goodwill and Mortgage servicing rights

For a discussion of the accounting policies related to goodwill and mortgage servicing rights, refer to Note 16 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

Goodwill

The following table presents changes in the carrying amount of goodwill.

	Six months ended June 30,	
(in millions)	**2018**	2017
Balance at beginning of period[(a)]	**$ 27,350**	$ 27,130
Changes during the period from:		
Other[(b)]	**(18)**	12
Balance at June 30,[(a)]	**$ 27,332**	$ 27,142

(a) Reflects gross goodwill balances as JPMorgan Chase Bank, N.A. has not recognized any impairment losses to date.
(b) Includes foreign currency remeasurement.

Impairment testing

Goodwill was not impaired at June 30, 2018, or December 31, 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 JPMorgan Chase Bank, N.A., or its 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.

Mortgage servicing rights

MSRs represent the fair value of expected future cash flows for performing servicing activities for others. The fair value considers estimated future servicing fees and ancillary revenue, offset by estimated costs to service the loans, and generally declines over time as net servicing cash flows are received, effectively amortizing the MSR asset against contractual servicing and ancillary fee income. MSRs are either purchased from third parties or recognized upon sale or securitization of mortgage loans if servicing is retained. For a further description of the MSR asset, interest rate risk management, and the valuation of MSRs, refer to Notes 3 and 16 of JPMorgan Chase Bank, N.A. Chase's 2017 Annual Financial Statements.

The following table summarizes MSR activity for the six months ended June 30, 2018 and 2017.

	As of or for the six months ended June 30,	
(in millions, except where otherwise noted)	**2018**	2017
Fair value at beginning of period	**$ 6,030**	$ 6,096
MSR activity:		
Originations of MSRs	**333**	371
Purchase of MSRs	**146**	–
Disposition of MSRs[(a)]	**(399)**	(138)
Net additions	**80**	233
Changes due to collection/realization of expected cash flows	**(347)**	(419)
Changes in valuation due to inputs and assumptions:		
Changes due to market interest rates and other[(b)]	**485**	(121)
Changes in valuation due to other inputs and assumptions:		
Projected cash flows (e.g., cost to service)	**–**	14
Discount rates	**24**	(19)
Prepayment model changes and other[(c)]	**(31)**	(31)
Total changes in valuation due to other inputs and assumptions	**(7)**	(36)
Total changes in valuation due to inputs and assumptions	**478**	(157)
Fair value at June 30,	**$ 6,241**	$ 5,753
Change in unrealized gains/(losses) included in income related to MSRs held at June 30,	**$ 478**	$ (157)
Contractual service fees, late fees and other ancillary fees included in income	**$ 911**	$ 964
Third-party mortgage loans serviced at June 30, (in billions)	**$ 534**	$ 569
Net servicer advances at June 30, (in billions)[(d)]	**$ 3.3**	$ 4.1

(a) Includes excess MSRs transferred to agency-sponsored trusts in exchange for stripped mortgage backed securities ("SMBS"). In each transaction, a portion of the SMBS was acquired by third parties at the transaction date; JPMorgan Chase Bank, N.A. acquired the remaining balance of those SMBS as trading securities.
(b) Represents both the impact of changes in estimated future prepayments due to changes in market interest rates, and the difference between actual and expected prepayments.

(c) Represents changes in prepayments other than those attributable to changes in market interest rates.
(d) Represents amounts JPMorgan Chase Bank, N.A. pays as the servicer (e.g., scheduled principal and interest, taxes and insurance), which will generally be reimbursed within a short period of time after the advance from future cash flows from the trust or the underlying loans. JPMorgan Chase Bank, N.A.'s credit risk associated with these servicer advances is minimal because reimbursement of the advances is typically senior to all cash payments to investors. In addition, JPMorgan Chase Bank, N.A. maintains the right to stop payment to investors if the collateral is insufficient to cover the advance. However, certain of these servicer advances may not be recoverable if they were not made in accordance with applicable rules and agreements.

The table below outlines the key economic assumptions used to determine the fair value of JPMorgan Chase Bank, N.A.'s MSRs at June 30, 2018, and December 31, 2017, and outlines hypothetical sensitivities of those fair values to immediate adverse changes in those assumptions, as defined below.

(in millions, except rates)		**Jun 30, 2018**		Dec 31, 2017
Weighted-average prepayment speed assumption ("CPR")		**8.43%**		9.35%
Impact on fair value of 10% adverse change	**$**	**(195)**	$	(221)
Impact on fair value of 20% adverse change		**(379)**		(427)
Weighted-average option adjusted spread		**8.72%**		9.04%
Impact on fair value of a 100 basis point adverse change	**$**	**(245)**	$	(250)
Impact on fair value of a 200 basis point adverse change		**(472)**		(481)

CPR: Constant prepayment rate.

Changes in fair value based on variation in assumptions generally cannot be easily extrapolated, because the relationship of the change in the assumptions to the change in fair value are often highly interrelated and may not be linear. In this table, the effect that a change in a particular assumption may have on the fair value is calculated without changing any other assumption. In reality, changes in one factor may result in changes in another, which would either magnify or counteract the impact of the initial change.

Note 16 – Deposits

For further information on deposits, refer to Note 18 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

At June 30, 2018, and December 31, 2017, noninterest-bearing and interest-bearing deposits were as follows.

(in millions)		**June 30, 2018**		December 31, 2017
U.S. offices				
Noninterest-bearing	**$**	**389,144**	$	397,080
Interest-bearing (included **$15,709** and $15,006 at fair value)[(a)]		**884,947**		874,806
Total deposits in U.S. offices		**1,274,091**		1,271,886
Non-U.S. offices				
Noninterest-bearing		**17,351**		16,282
Interest-bearing (included **$4,154** and $6,374 at fair value)[(a)]		**235,313**		246,739
Total deposits in non-U.S. offices		**252,664**		263,021
Total deposits	**$**	**1,526,755**	$	1,534,907

(a) Includes structured notes classified as deposits for which the fair value option has been elected. For further discussion, refer to Note 4 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

Note 17 – Related party transactions

JPMorgan Chase Bank, N.A. regularly enters into transactions with JPMorgan Chase and its various subsidiaries.

Significant revenue- and expense-related transactions with related parties are listed below.

(in millions)	Six months ended June 30, 2018	2017
Interest income	$ 765	$ 431
Interest expense	946	565
Net interest income	**(181)**	(134)
Noninterest revenue[(a)]		
Principal transactions	3,205	(1,561)
All other income	3,325	2,996
Total noninterest revenue	**6,530**	1,435
Noninterest expense	**3,243**	2,932
Total net revenue	**$ 3,106**	$ (1,631)

Significant balances with related parties are listed below.

(in millions)	June 30, 2018	December 31, 2017
Assets		
Deposits with banks[(b)]	$ 41,963	$ 51,001
Federal funds sold and securities purchased under resale agreements	37,090	41,014
Accrued interest and accounts receivable	15,177	13,479
All other assets	13,483	11,990
Liabilities		
Deposits[(c)]	74,794	92,385
Federal funds purchased and securities loaned or sold under repurchase agreements	27,237	19,213
Accounts payable and other liabilities	11,396	11,826
Long-term debt	20,610	20,716

(a) The prior period amounts have been revised to confirm with the current presentation.
(b) Primarily includes deposits placed with Chase Bank USA, N.A.
(c) At both June 30, 2018 and December 31, 2017, includes $20 billion pledged to support extensions of credit and other transactions requiring collateral with affiliates as defined by Section 23A under the Federal Reserve Act, which defines the constraints that apply to U.S. banks in certain of their interactions with affiliates.

Derivative transactions

In addition to the information presented in the tables above, JPMorgan Chase Bank, N.A. executes derivative transactions with affiliates as part of its client driven market-making activities and to facilitate hedging certain risks for its affiliates. To accomplish this, JPMorgan Chase Bank, N.A. enters into substantially offsetting derivative transactions with third-parties and records both the third party and related-party gains and losses in principal transactions revenue. The following table summarizes information on derivative receivables and payables with affiliates before and after netting adjustments for legally enforceable master netting agreements as of June 30, 2018 and December 31, 2017.

	June 30, 2018		December 31, 2017	
(in millions)	Gross derivative receivable/payable	Net derivative receivable/payable	Gross derivative receivable/payable	Net derivative receivable/payable
Derivative receivables from affiliates	**$ 40,657**	**$ 166**	$ 48,110	$ 140
Derivative payables to affiliates	**36,915**	**103**	48,115	94

Servicing agreements and fee arrangements

Through servicing agreements, JPMorgan Chase Bank, N.A. provides and receives operational support and services to and from JPMorgan Chase and its subsidiaries. These servicing agreements cover certain occupancy, marketing, communication and technology services, and other shared corporate service costs. JPMorgan Chase Bank, N.A. is allocated or allocates a share of the cost of the services over the relevant service period based on the agreed methodology. Fees earned by JPMorgan Chase Bank, N.A. for services provided to affiliates are recorded in all other income. Fees incurred by JPMorgan Chase Bank, N.A. for services from affiliates are recorded in noninterest expense.

Note 18 – Accumulated other comprehensive income/(loss)

AOCI includes the after-tax change in unrealized gains and losses on investment securities, foreign currency translation adjustments (including the impact of related derivatives), fair value changes of excluded components on fair value hedges, cash flow hedging activities, net loss and prior service costs/(credit) related to JPMorgan Chase Bank, N.A.'s defined benefit pension and OPEB plans.

As of or for the six months ended June 30, 2018 (in millions)	Unrealized gains/(losses) on investment securities	Translation adjustments, net of hedges	Fair value hedges(b)	Cash flow hedges	Defined benefit pension and OPEB plans	DVA on fair value option elected liabilities	Accumulated other comprehensive income/(loss)
Balance at January 1, 2018	**$ 2,083**	**$ (345)**	$ –	**$ 76**	**$ (344)**	**$ (95)**	**$ 1,375**
Cumulative effect of change in accounting principle:[a]							
Premium amortization on purchased callable debt securities	**252**	**–**	**–**	**–**	**–**	**–**	**252**
Hedge accounting	**169**	**–**	**(1)**	**–**	**–**	**–**	**168**
Reclassification of certain tax effects from AOCI	**449**	**(193)**	**–**	**16**	**(65)**	**(21)**	**186**
Net change	**(1,427)**	**117**	1	**(239)**	**(1,631)**	**137**	**(3,042)**
Balance at June 30, 2018	**$ 1,526**	**$ (421)**	$ –	**$ (147)**	**$ (2,040)**	**$ 21**	**$ (1,061)**

As of or for the six months ended June 30, 2017 (in millions)	Unrealized gains/(losses) on investment securities	Translation adjustments, net of hedges	Fair value hedges	Cash flow hedges	Defined benefit pension and OPEB plans	DVA on fair value option elected liabilities	Accumulated other comprehensive income/(loss)
Balance at January 1, 2017	$ 1,396	$ (36)	NA	$ (100)	$ (355)	$ (40)	$ 865
Net change	708	(7)	NA	146	(41)	(14)	792
Balance at June 30, 2017	$ 2,104	$ (43)	NA	$ 46	$ (396)	$ (54)	$ 1,657

(a) Represents the adjustment to AOCI as a result of the new accounting standards adopted during the first half of 2018. For additional information, refer to Note 1.

(b) Represents changes in fair value of cross-currency swaps attributable to changes in cross-currency basis spreads, which are excluded from the assessment of hedge effectiveness and recorded in other comprehensive income. The initial cost of cross-currency basis spreads is recognized in earnings as part of the accrual of interest on the cross currency swap.

The following table presents the pre-tax and after-tax changes in the components of OCI.

	2018			2017		
Six months ended June 30, (in millions)	Pre-tax	Tax effect	After-tax	Pre-tax	Tax effect	After-tax
Unrealized gains/(losses) on investment securities:						
Net unrealized gains/(losses) arising during the period	**$ (2,190)**	**$ 515**	**$ (1,675)**	$ 1,082	$ (397)	$ 685
Reclassification adjustment for realized (gains)/losses included in net income[(a)]	**325**	**(77)**	**248**	37	(14)	23
Net change	**(1,865)**	**438**	**(1,427)**	1,119	(411)	708
Translation adjustments:[(b)]						
Translation	**(516)**	**108**	**(408)**	612	(233)	379
Hedges	**688**	**(163)**	**525**	(614)	228	(386)
Net change	**172**	**(55)**	**117**	(2)	(5)	(7)
Fair value hedges, net change[(c)]	**$ 1**	**$ –**	**$ 1**	NA	NA	NA
Cash flow hedges:						
Net unrealized gains/(losses) arising during the period	**(243)**	**58**	**(185)**	83	(31)	52
Reclassification adjustment for realized (gains)/losses included in net income[(d)]	**(71)**	**17**	**(54)**	151	(57)	94
Net change	**(314)**	**75**	**(239)**	234	(88)	146
Defined benefit pension and OPEB plans:						
Net gains/(losses) arising during the period	**(3)**	**1**	**(2)**	(45)	17	(28)
Reclassification adjustments included in net income[(e)]:						
Amortization of net loss	**37**	**(9)**	**28**	16	(6)	10
Prior service costs/(credits)	**(9)**	**2**	**(7)**	(1)	–	(1)
Settlement (gain)/loss	**–**	**–**	**–**	(3)	1	(2)
Foreign exchange and other[(f)]	**(2,157)**	**507**	**(1,650)**	(30)	10	(20)
Net change	**(2,132)**	**501**	**(1,631)**	(63)	22	(41)
DVA on fair value option elected liabilities, net change:	**$ 178**	**$ (41)**	**$ 137**	$ (21)	$ 7	$ (14)
Total other comprehensive income/(loss)	**$ (3,960)**	**$ 918**	**$ (3,042)**	$ 1,267	$ (475)	$ 792

(a) The pre-tax amount is reported in investment securities losses in the Consolidated statements of income.
(b) Reclassifications of pre-tax realized gains/(losses) on translation adjustments and related hedges are reported in other income/expense in the Consolidated statements of income. During the six months ended June 30, 2018, JPMorgan Chase Bank, N.A. reclassified a net pre-tax loss of $174 million to other expense related to the liquidation of a legal entity, comprised of $23 million related to net investment hedge losses and $151 million related to cumulative translation adjustments. There were no such reclassifications during the six months ended June 30, 2017.
(c) Represents changes in fair value of cross-currency swaps attributable to changes in cross-currency basis spreads, which are excluded from the assessment of hedge effectiveness and recorded in other comprehensive income. The initial cost of cross-currency basis spreads is recognized in earnings as part of the accrual of interest on the cross currency swap.
(d) The pre-tax amounts are predominantly recorded in noninterest revenue, net interest income and compensation expense in the Consolidated statements of income.
(e) The pre-tax amount is reported in other expense in the Consolidated statements of income.
(f) The pre-tax amount includes a $2.1 billion net loss that was transferred from JPMorgan Chase related to the qualified U.S. defined benefit pension plan. The transfer included $12 million of net loss amortization and $4 million of prior service credit amortization for January and February. For additional information refer to Note 8.

Note 19 – Restricted cash and other restricted assets

For a detailed discussion of JPMorgan Chase Bank, N.A.'s restricted cash and other restricted assets, refer to Note 23 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

As a result of the adoption of the restricted cash accounting guidance, restricted cash is included with unrestricted cash when reconciling the beginning and ending cash balances on the Consolidated statements of cash flows.

The following table presents the components of JPMorgan Chase Bank, N.A.'s restricted cash :

(in billions)	June 30, 2018	December 31, 2017
Cash reserves – Federal Reserve Banks	**$ 22.8**	$ 25.7
Segregated for the benefit of securities and futures brokerage customers	**7.1**	8.9
Cash reserves at non-U.S. central banks and held for other general purposes	**2.8**	2.8
Total restricted cash[a]	**$ 32.7**	$ 37.4

(a) Comprises $31.4 billion and $36.4 billion in deposits with banks, and $1.3 billion and $1.0 billion in cash and due from banks on the Consolidated balance sheets as of June 30, 2018 and December 31, 2017, respectively.

Also, as of June 30, 2018 and December 31, 2017, JPMorgan Chase Bank, N.A. had cash pledged with clearing organizations for the benefit of customers of $3.6 billion and $3.1 billion, respectively.

Note 20 – Regulatory capital

JPMorgan Chase Bank, N.A.'s banking regulator, the OCC, establishes capital requirements, including well-capitalized standards for national banks.

For a detailed discussion on regulatory capital, refer to Note 24 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

Risk-based capital regulatory minimums

The Basel III rules require JPMorgan Chase Bank, N.A. to maintain a certain level of capital that is subject to phase-in periods through the end of 2018. While this required capital remains subject to the transitional rules during 2018, as of January 1, 2018, JPMorgan Chase Bank, N.A.'s capital in the form of CET1 and Tier 1, and JPMorgan Chase Bank, N.A.'s risk-weighted assets were equivalent whether calculated on a transitional basis or on a fully phased-in basis.

Under the risk-based capital guidelines of the OCC, JPMorgan Chase Bank, N.A. 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 OCC to take action.

The following table represents the minimum and well-capitalized ratios to which JPMorgan Chase Bank, N.A. is subject as of June 30, 2018.

	Minimum capital ratios[a][c]	Well-capitalized ratios[b]
Capital ratios		
CET1	6.375%	6.5%
Tier 1	7.875	8.0
Total	9.875	10.0
Tier 1 leverage	4.0	5.0
SLR	6.0	6.0

Note: The table above is as defined by the regulations issued by the OCC and FDIC and to which JPMorgan Chase Bank, N.A. and its IDI subsidiaries are subject.

(a) Represents requirements for JPMorgan Chase Bank, N.A. and its 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 IDI subsidiaries.

(b) Represents requirements for IDI subsidiaries pursuant to regulations issued under the FDIC Improvement Act.

(c) For the period ended December 31, 2017, the CET1, Tier 1, Total and Tier 1 leverage minimum capital ratios applicable to JPMorgan Chase Bank, N.A. were 5.75%, 7.25%, 9.25% and 4.0% respectively.

The following table presents the risk-based and leverage-based capital metrics for JPMorgan Chase Bank, N.A. under both the Basel III Standardized and Basel III Advanced Approaches. As of June 30, 2018, and December 31, 2017, JPMorgan Chase Bank, N.A. was well-capitalized and met all capital requirements to which it was subject.

	Basel III Standardized Transitional		Basel III Advanced Transitional	
(in millions, except ratios)	**Jun 30, 2018**	Dec 31, 2017	**Jun 30, 2018**	Dec 31, 2017
Regulatory capital				
CET1 capital	**$ 188,784**	$ 184,375	**$ 188,784**	$ 184,375
Tier 1 capital	**188,784**	184,375	**188,784**	184,375
Total capital	**200,065**	195,839	**193,844**	189,510 (d)
Assets				
Risk-weighted	**1,356,526**	1,338,970 (d)	**1,216,608**	1,241,916 (d)
Adjusted average[a]	**2,153,804**	2,116,031	**2,153,804**	2,116,031
Capital ratios[b]				
CET1	**13.9%**	13.8%	**15.5%**	14.8% (d)
Tier 1	**13.9**	13.8	**15.5**	14.8 (d)
Total	**14.7**	14.6 (d)	**15.9**	15.3 (d)
Tier 1 leverage[c]	**8.8**	8.7	**8.8**	8.7

(a) 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.
(b) For each of the risk-based capital ratios, the capital adequacy of JPMorgan Chase Bank, N.A. 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").
(c) The Tier 1 leverage ratio is not a risk-based measure of capital.
(d) The prior period amounts have been revised to conform with the current period presentation.

	June 30, 2018	December 31, 2017
(in millions, except ratios)	Basel III Advanced Fully Phased-in	Basel III Advanced Transitional
Total leverage exposure[a]	**$ 2,799,458**	$ 2,775,041
SLR[a]	**6.7%**	6.6%

(a) Effective January 1, 2018, the SLR was fully phased-in under Basel III. The December 31, 2017, amounts were calculated under the Basel III Transitional rules.

Note 21 – Off–balance sheet lending-related financial instruments, guarantees, and other commitments

JPMorgan Chase Bank, N.A. provides lending-related financial instruments (e.g., commitments and guarantees) to address the financing needs of its customers and clients. The contractual amount of these financial instruments represents the maximum possible credit risk to JPMorgan Chase Bank, N.A. should the customer or client draw upon the commitment or JPMorgan Chase Bank, N.A. be required to fulfill its obligation under the guarantee, and should the customer or client subsequently fail to perform according to the terms of the contract. Most of these commitments and guarantees are refinanced, extended, cancelled, or expire without being drawn or a default occurring. As a result, the total contractual amount of these instruments is not, in JPMorgan Chase Bank, N.A.'s view, representative of its expected future credit exposure or funding requirements. For a further discussion of lending-related commitments and guarantees, and JPMorgan Chase Bank, N.A.'s related accounting policies, refer to Note 25 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

To provide for probable credit losses inherent in wholesale and certain consumer lending-related commitments, an allowance for credit losses on lending-related commitments is maintained. Refer to Note 13 for further information regarding the allowance for credit losses on lending-related commitments. The following table summarizes the contractual amounts and carrying values of off-balance sheet lending-related financial instruments, guarantees and other commitments at June 30, 2018, and December 31, 2017. The amounts in the table below for credit card and home equity lending-related commitments represent the total available credit for these products. JPMorgan Chase Bank, N.A. has not experienced, and does not anticipate, that all available lines of credit for these products will be utilized at the same time. JPMorgan Chase Bank, N.A. can reduce or cancel credit card lines of credit by providing the borrower notice or, in some cases as permitted by law, without notice. In addition, JPMorgan Chase Bank, N.A. typically closes credit card lines when the borrower is 60 days or more past due. JPMorgan Chase Bank, N.A. may reduce or close HELOCs when there are significant decreases in the value of the underlying property, or when there has been a demonstrable decline in the creditworthiness of the borrower.

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

	Contractual amount						Carrying value[h]	
	June 30, 2018					Dec 31, 2017	Jun 30, 2018	Dec 31, 2017
By remaining maturity (in millions)	Expires in 1 year or less	Expires after 1 year through 3 years	Expires after 3 years through 5 years	Expires after 5 years	Total	Total		
Lending-related								
Consumer, excluding credit card:								
Home equity	**$ 1,202**	**$ 1,163**	**$ 1,559**	**$ 16,606**	**$ 20,530**	$ 20,360	**$ 12**	$ 12
Residential mortgage[a]	**8,342**	**—**	**—**	**12**	**8,354**	5,736	**—**	—
Auto	**7,770**	**949**	**187**	**153**	**9,059**	9,255	**2**	2
Consumer & business banking	**12,410**	**796**	**110**	**525**	**13,841**	13,202	**19**	19
Total consumer, excluding credit card	**29,724**	**2,908**	**1,856**	**17,296**	**51,784**	48,553	**33**	33
Credit card	**10,826**	**—**	**—**	**—**	**10,826**	12,127	**—**	—
Total consumer[b]	**40,550**	**2,908**	**1,856**	**17,296**	**62,610**	60,680	**33**	33
Wholesale:								
Other unfunded commitments to extend credit[c][d]	**85,077**	**130,638**	**140,327**	**9,395**	**365,437**	330,305	**941**	840
Standby letters of credit and other financial guarantees[c]	**14,484**	**8,744**	**7,042**	**1,708**	**31,978**	35,242	**593**	636
Other letters of credit[c]	**2,914**	**54**	**148**	**—**	**3,116**	3,712	**4**	3
Total wholesale	**102,475**	**139,436**	**147,517**	**11,103**	**400,531**	369,259	**1,538**	1,479
Total lending-related	**$ 143,025**	**$ 142,344**	**$ 149,373**	**$ 28,399**	**$ 463,141**	$ 429,939	**$ 1,571**	$ 1,512
Other guarantees and commitments								
Securities lending indemnification agreements and guarantees[e]	**$ 209,915**	**$ —**	**$ —**	**$ —**	**$ 209,915**	$ 191,302	**$ —**	$ —
Derivatives qualifying as guarantees	**5,032**	**417**	**12,415**	**40,235**	**58,099**	57,761	**483**	310
Unsettled reverse repurchase and securities borrowing agreements	**85,796**	**—**	**—**	**—**	**85,796**	61,610	—	—
Unsettled repurchase and securities lending agreements	**73,517**	—	—	—	**73,517**	32,750	—	—
Loan sale and securitization-related indemnifications:								
Mortgage repurchase liability	**NA**	**NA**	**NA**	**NA**	**NA**	NA	**123**	111
Loans sold with recourse	**NA**	**NA**	**NA**	**NA**	**713**	766	**8**	8
Other guarantees and commitments[f]	**8,400**	**1,349**	**196**	**17,143**	**27,088**	38,686 [g]	**(230)**	(82)

(a) Includes certain commitments to purchase loans from correspondents.
(b) Predominantly all consumer lending-related commitments are in the U.S.
(c) At June 30, 2018, and December 31, 2017, reflected the contractual amount net of risk participations totaling $287 million and $334 million, respectively, for other unfunded commitments to extend credit; $9.8 billion and $10.4 billion, respectively, for standby letters of credit and other financial guarantees; and $407 million and $405 million, respectively, for other letters of credit. In regulatory filings with the Federal Reserve these commitments are shown gross of risk participations.
(d) At June 30, 2018 and December 31, 2017, included commitments to affiliates of $15 million and $16 million respectively.
(e) At June 30, 2018, and December 31, 2017, collateral held by JPMorgan Chase Bank, N.A. in support of securities lending indemnification agreements was $221.0 billion and $200.9 billion, respectively. Securities lending collateral primarily consists of cash and securities issued by governments that are members of G7 and U.S. government agencies.
(f) At June 30, 2018, and December 31, 2017, included guarantees of the obligations of affiliates of $15.0 billion and $30.0 billion, which predominantly relate to obligations arising under the affiliates' borrowing facilities at the FHLBs; and unfunded equity investment commitments of $50 million and $32 million, at June 30, 2018, and December 31, 2017, respectively. In addition, at June 30, 2018, and December 31, 2017, included letters of credit hedged by derivative transactions and managed on a market risk basis of $4.3 billion and $4.5 billion, respectively.
(g) The prior period amounts have been revised to conform with the current period presentation.
(h) For lending-related products, the carrying value represents the allowance for lending-related commitments and the guarantee liability; for derivative-related products, the carrying value represents the fair value.

Other unfunded commitments to extend credit

Other unfunded commitments to extend credit generally consist of commitments for working capital and general corporate purposes, extensions of credit to support commercial paper facilities and bond financings in the event that those obligations cannot be remarketed to new investors, as well as committed liquidity facilities to clearing organizations. JPMorgan Chase Bank, N.A. also issues commitments under multipurpose facilities which could be drawn upon in several forms, including the issuance of a standby letter of credit.

JPMorgan Chase Bank, N.A. acts as a settlement and custody bank in the U.S. tri-party repurchase transaction market. In its role as settlement and custody bank, JPMorgan Chase Bank, N.A. in part is exposed to the intra-day credit risk of its cash borrower clients, usually broker-dealers. This exposure arises under secured clearance advance facilities that JPMorgan Chase Bank, N.A. extended to its clients (i.e., cash borrowers); these facilities contractually limit JPMorgan Chase Bank, N.A.'s intra-day credit risk to the facility amount and must be repaid by the end of the day. As of June 30, 2018, and December 31, 2017, the secured clearance advance facility maximum outstanding commitment amount was $2.0 billion and $3.5 billion, respectively.

Standby letters of credit and other financial guarantees

Standby letters of credit and other financial guarantees are conditional lending commitments issued by JPMorgan Chase Bank, N.A. to guarantee the performance of a client or customer to a third party under certain arrangements, such as commercial paper facilities, bond financings, acquisition financings, trade and similar transactions.

The following table summarizes the standby letters of credit and other letters of credit arrangements as of June 30, 2018, and December 31, 2017.

Standby letters of credit, other financial guarantees and other letters of credit

	June 30, 2018		December 31, 2017	
(in millions)	Standby letters of credit and other financial guarantees	Other letters of credit	Standby letters of credit and other financial guarantees	Other letters of credit
Investment-grade[(a)]	**$ 25,512**	**$ 2,267**	$ 28,492	$ 2,646
Noninvestment-grade[(a)]	**6,466**	**849**	6,750	1,066
Total contractual amount	**$ 31,978**	**$ 3,116**	$ 35,242	$ 3,712
Allowance for lending-related commitments	**$ 139**	**$ 4**	$ 192	$ 3
Guarantee liability	**454**	**–**	444	–
Total carrying value	**$ 593**	**$ 4**	$ 636	$ 3
Commitments with collateral	**$ 16,326**	**$ 597**	$ 17,421	$ 878

(a) The ratings scale is based on JPMorgan Chase Bank, N.A.'s internal ratings which generally correspond to ratings as defined by S&P and Moody's.

Derivatives qualifying as guarantees

JPMorgan Chase Bank, N.A. transacts certain derivative contracts that have the characteristics of a guarantee under U.S. GAAP. For further information on these derivatives, refer to Note 25 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

The following table summarizes the derivatives qualifying as guarantees as of June 30, 2018, and December 31, 2017.

(in millions)		June 30, 2018		December 31, 2017
Notional amounts				
Derivative guarantees	**$**	**58,099**	$	57,761
Stable value contracts with contractually limited exposure		**28,487**		29,104
Maximum exposure of stable value contracts with contractually limited exposure		**2,946**		3,053
Fair value				
Derivative payables		**483**		310
Derivative receivables		**–**		–

In addition to derivative contracts that meet the characteristics of a guarantee, JPMorgan Chase Bank, N.A. is both a purchaser and seller of credit protection in the credit derivatives market. For a further discussion of credit derivatives, refer to Note 5.

Loan sales- and securitization indemnification

In connection with JPMorgan Chase Bank, N.A.'s mortgage loan sale and securitization activities with GSEs and in certain private label transactions, JPMorgan Chase Bank, N.A. has made representations and warranties that the loans sold meet certain requirements, and that may require JPMorgan Chase Bank, N.A. to repurchase mortgage loans and/or indemnify the loan purchaser if such representations and warranties are breached by JPMorgan Chase Bank, N.A.' Further, although JPMorgan Chase Bank, N.A.'s securitizations are predominantly nonrecourse, JPMorgan Chase Bank, N.A. does provide recourse servicing in certain limited cases where it agrees to share credit risk with the owner of the mortgage loans. For additional information, refer to Note 25 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

The liability related to repurchase demands associated with private label securitizations is separately evaluated by the JPMorgan Chase Bank, N.A. in establishing its litigation reserves. For additional information regarding litigation, refer to Note 23 of these Consolidated Financial Statements and Note 27 of JPMorgan Chase Bank, N.A. 2017 Annual Financial Statements.

Note 22 – Pledged assets and collateral

For a discussion of JPMorgan Chase Bank, N.A.'s pledged assets and collateral, refer to Note 26 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

Pledged assets

JPMorgan Chase Bank, N.A. may pledge financial assets that it owns to maintain potential borrowing capacity with central banks and for other purposes, including to secure borrowings and public deposits, collateralize repurchase and other securities financing agreements, and cover customer short sales and borrowings of affiliates. Certain of these pledged assets may be sold or repledged or otherwise used by the secured parties and are parenthetically identified on the Consolidated balance sheets as assets pledged.

The following table presents JPMorgan Chase Bank, N.A.'s pledged assets.

(in billions)		June 30, 2018		December 31, 2017
Assets that may be sold or repledged or otherwise used by secured parties	**$**	**75.3**	$	74.6
Assets that may not be sold or repledged or otherwise used by secured parties		**41.6**		39.0
Assets pledged at Federal Reserve banks and FHLBs		**422.9**		434.3
Total assets pledged	**$**	**539.8**	$	547.9

Total assets pledged do not include assets of consolidated VIEs; these assets are used to settle the liabilities of those entities. Refer to Note 14 for additional information on assets and liabilities of consolidated VIEs. For additional information on JPMorgan Chase Bank, N.A.'s securities financing activities, refer to Note 11. For additional information on JPMorgan Chase Bank, N.A.'s long-term debt, refer to Note 19 of JPMorgan Chase Bank, N.A.'s 2017 Annual Financial Statements.

Collateral

JPMorgan Chase Bank, N.A. accepts financial assets as collateral that it is permitted to sell or repledge, deliver or otherwise use. This collateral is generally obtained under resale agreements, securities borrowing agreements, customer margin loans and derivative agreements. Collateral is generally used under repurchase agreements, securities lending agreements or to cover customer short sales and to collateralize deposits and derivative agreements.

The following table presents the fair value of collateral accepted.

(in billions)		June 30, 2018		December 31, 2017
Collateral permitted to be sold or repledged, delivered, or otherwise used	**$**	**629.9**	$	590.8
Collateral sold, repledged, delivered or otherwise used		**531.8**		484.9

Certain prior period amounts for both collateral and pledged assets (including the corresponding pledged assets parenthetical disclosure for trading assets and other assets on the Consolidated balance sheets) have been revised to conform with the current period presentation.

Note 23 – Litigation

Contingencies

As of June 30, 2018, JPMorgan Chase and its subsidiaries, including but not limited to JPMorgan Chase Bank, N.A., are defendants or putative defendants in numerous legal proceedings, including private, civil litigations and regulatory/government investigations. The litigations range from individual actions involving a single plaintiff to class action lawsuits with potentially millions of class members. Investigations involve both formal and informal proceedings, by both governmental agencies and self-regulatory organizations. These legal proceedings are at varying stages of adjudication, arbitration or investigation, and involve each of JPMorgan Chase's lines of business and geographies and a wide variety of claims (including common law tort and contract claims and statutory antitrust, securities and consumer protection claims), some of which present novel legal theories.

JPMorgan Chase believes the estimate of the aggregate range of reasonably possible losses, in excess of reserves established, for JPMorgan Chase's legal proceedings is from $0 to approximately $1.7 billion at June 30, 2018. This estimated aggregate range of reasonably possible losses was based upon currently available information for those proceedings in which JPMorgan Chase believes that an estimate of reasonably possible loss can be made. For certain matters, JPMorgan Chase does not believe that such an estimate can be made, as of that date. JPMorgan Chase's estimate of the aggregate range of reasonably possible losses involves significant judgment, given:

- the number, variety and varying stages of the proceedings, including the fact that many are in preliminary stages,
- the existence in many such proceedings of multiple defendants, including JPMorgan Chase and JPMorgan Chase Bank, N.A., whose share of liability (if any) has yet to be determined,
- the numerous yet-unresolved issues in many of the proceedings, including issues regarding class certification and the scope of many of the claims, and
- the attendant uncertainty of the various potential outcomes of such proceedings, including where JPMorgan Chase has made assumptions concerning future rulings by the court or other adjudicator, or about the behavior or incentives of adverse parties or regulatory authorities, and those assumptions prove to be incorrect.

In addition, the outcome of a particular proceeding may be a result which JPMorgan Chase did not take into account in its estimate because JPMorgan Chase had deemed the likelihood of that outcome to be remote. Accordingly, JPMorgan Chase's estimate of the aggregate range of reasonably possible losses will change from time to time, and actual losses may vary significantly.

Set forth below are descriptions of JPMorgan Chase's material legal proceedings in which JPMorgan Chase and its subsidiaries (which in certain instances include JPMorgan Chase Bank, N.A.) are involved or have been named as parties.

American Depositary Receipts Pre-Release Inquiry. The Staff of the U.S. Securities and Exchange Commission's Enforcement Division has been investigating depositary banks and broker-dealers, including JPMorgan Chase, in connection with activity relating to pre-released American Depositary Receipts. The Staff's investigation focuses on the period of 2011 to 2015. JPMorgan Chase has been cooperating with this investigation.

Foreign Exchange Investigations and Litigation. JPMorgan Chase previously reported settlements with certain government authorities relating to its foreign exchange ("FX") sales and trading activities and controls related to those activities. FX-related investigations and inquiries by government authorities, including competition authorities, are ongoing, and JPMorgan Chase is cooperating with and working to resolve those matters. In May 2015, JPMorgan Chase pleaded guilty to a single violation of federal antitrust law. In January 2017, JPMorgan Chase was sentenced, with judgment entered thereafter and a term of probation ending in January 2020. The Department of Labor has granted JPMorgan Chase a five-year exemption of disqualification that allows JPMorgan Chase and its affiliates to continue to rely on the Qualified Professional Asset Manager exemption under the Employee Retirement Income Security Act ("ERISA") until January 2023. JPMorgan Chase will need to reapply in due course for a further exemption to cover the remainder of the ten-year disqualification period. Separately, in February 2017 the South Africa Competition Commission referred its FX investigation of JPMorgan Chase and other banks to the South Africa Competition Tribunal, which is conducting civil proceedings concerning that matter.

JPMorgan Chase is also one of a number of foreign exchange dealers defending a class action filed in the United States District Court for the Southern District of New York by U.S.-based plaintiffs, principally alleging violations of federal antitrust laws based on an alleged conspiracy to manipulate foreign exchange rates (the "U.S. class action"). In January 2015, JPMorgan Chase entered into a settlement agreement in the U.S. class action. Following this settlement, a number of additional putative class actions were filed seeking damages for persons who transacted FX futures and options on futures (the "exchanged-based actions"), consumers who purchased foreign currencies at allegedly inflated rates (the "consumer action"), participants or beneficiaries of qualified ERISA plans (the "ERISA actions"), and purported indirect purchasers of FX instruments (the "indirect purchaser action"). Since then, JPMorgan Chase has entered into a revised settlement agreement to resolve the consolidated U.S. class action, including the exchange-based actions. The Court granted final approval of that settlement agreement in May 2018. Certain members of the settlement class have filed requests to the Court to be excluded from the class. The District Court has dismissed one of the ERISA actions, and the United States Court of Appeals for the Second Circuit affirmed that dismissal in July 2018. The District Court has also dismissed the indirect purchaser action, and the plaintiffs have sought leave to replead their complaint. The consumer action and a second ERISA action remain pending in the District Court.

General Motors Litigation. JPMorgan Chase Bank, N.A. participated in, and was the Administrative Agent on behalf of a syndicate of lenders on, a $1.5 billion syndicated Term Loan facility ("Term Loan") for General Motors Corporation ("GM"). In July 2009, in connection with the GM bankruptcy proceedings, the Official Committee of Unsecured Creditors of Motors Liquidation Company ("Creditors Committee") filed a lawsuit against JPMorgan Chase Bank, N.A., in its individual capacity and as Administrative Agent for other lenders on the Term Loan, seeking to hold the underlying lien invalid based on the filing of a UCC-3 termination statement relating to the Term Loan. In January 2015, following several court proceedings, the United States Court of Appeals for the Second Circuit reversed the Bankruptcy Court's dismissal of the Creditors Committee's claim and remanded the case to the Bankruptcy Court with instructions to enter partial summary judgment for the Creditors Committee as to the termination statement. The proceedings in the Bankruptcy Court continue with respect to, among other things, additional defenses asserted by JPMorgan Chase Bank, N.A. and the value of additional collateral on the Term Loan that was unaffected by the filing of the termination statement at issue. In connection with that additional collateral, a trial in the Bankruptcy Court regarding the value of certain representative assets concluded in May 2017, and a ruling was issued in September 2017. The Bankruptcy Court found that 33 of the 40 representative assets are fixtures and that these fixtures generally should be valued on a "going concern" basis. The Creditors Committee is seeking leave to appeal the Bankruptcy Court's ruling that the fixtures should be valued on a "going concern" basis rather than on a liquidation basis. In addition, certain Term Loan lenders filed cross-claims in the Bankruptcy Court against JPMorgan Chase Bank, N.A. seeking indemnification and asserting various claims. The parties have engaged in mediation concerning, among other things, the characterization and value of the remaining additional collateral, in light of the Bankruptcy Court's ruling regarding the representative assets, as well as other issues, including the cross-claims. In July 2018, the parties informed the Bankruptcy Court that, at this time, they do not believe that they will be able to reach a global settlement of the adversary proceeding through mediation, and that they intend to present the Bankruptcy Court with a proposed schedule for ongoing litigation. The parties will continue to mediate specific disputes involving certain issues, principally relating to whether certain of the additional collateral should be characterized as fixtures.

Interchange Litigation. A group of merchants and retail associations filed a series of class action complaints alleging that Visa and MasterCard, as well as certain banks, conspired to set the price of credit and debit card interchange fees and enacted respective rules in violation of antitrust laws. The parties settled the cases for a cash payment, a temporary reduction of credit card interchange, and modifications to certain credit card network rules. In December 2013, the District Court granted final approval of the settlement.

A number of merchants appealed the settlement to the United States Court of Appeals for the Second Circuit, which, in June 2016, vacated the District Court's certification of the class action and reversed the approval of the class settlement. In March 2017, the U.S. Supreme Court declined petitions seeking review of the decision of the Court of Appeals. The case was remanded to the District Court for further proceedings consistent with the appellate decision. The original class action was divided into two separate actions, one seeking primarily monetary relief and the other seeking primarily injunctive relief. The parties to the class action seeking monetary relief have reached a settlement agreement in principle, subject to documentation and court approval, and are engaged in ongoing negotiations.

In addition, certain merchants have filed individual actions raising similar allegations against Visa and MasterCard, as well as against JPMorgan Chase and other banks, and those actions are proceeding.

LIBOR and Other Benchmark Rate Investigations and Litigation. JPMorgan Chase has received subpoenas and requests for documents and, in some cases, interviews, from federal and state agencies and entities, including the U.S. Commodity Futures Trading Commission ("CFTC") and various state attorneys general, as well as the European Commission ("EC"), the Swiss Competition Commission ("ComCo") and other regulatory authorities and banking associations around the world relating primarily to the process by which interest rates were submitted to the British Bankers Association ("BBA") in connection with the setting of the BBA's London Interbank Offered Rate ("LIBOR") for various currencies, principally in 2007 and 2008. Some of the inquiries also relate to similar processes by which information on rates was submitted to the European Banking Federation ("EBF") in connection with the setting of the EBF's Euro Interbank Offered Rates ("EURIBOR") and to the Japanese Bankers' Association for the setting of Tokyo Interbank Offered Rates ("TIBOR") during similar time periods, as well as processes for the setting of U.S. dollar ISDAFIX rates and other reference rates in various parts of the world during similar time periods, including through 2012. JPMorgan Chase continues to cooperate with these investigations to the extent that they are ongoing. JPMorgan Chase has recently reached a resolution with the CFTC concerning the CFTC's U.S. dollar ISDAFIX-related investigation. As previously reported, JPMorgan Chase has resolved EC inquiries relating to Yen LIBOR and Swiss Franc LIBOR. In December 2016, JPMorgan

Chase resolved ComCo inquiries relating to these same rates. ComCo's investigation relating to EURIBOR, to which JPMorgan Chase and other banks are subject, continues. In December 2016, the EC issued a decision against JPMorgan Chase and other banks finding an infringement of European antitrust rules relating to EURIBOR. JPMorgan Chase has filed an appeal of that decision with the European General Court, and that appeal is pending.

In addition, JPMorgan Chase has been named as a defendant along with other banks in a series of individual and putative class actions filed in various United States District Courts. These actions have been filed, or consolidated for pre-trial purposes, in the United States District Court for the Southern District of New York. In these actions, plaintiffs make varying allegations that in various periods, starting in 2000 or later, defendants either individually or collectively manipulated various benchmark rates by submitting rates that were artificially low or high. Plaintiffs allege that they transacted in loans, derivatives or other financial instruments whose values are affected by changes in these rates and assert a variety of claims including antitrust claims seeking treble damages. These matters are in various stages of litigation.

JPMorgan Chase has agreed to settle putative class actions related to exchange-traded Eurodollar futures contracts, Swiss franc LIBOR, the Singapore Interbank Offered Rate, the Singapore Swap Offer Rate and the Australian Bank Bill Swap Reference Rate. Those settlements are all subject to further documentation and court approval.

In an action related to EURIBOR, the District Court dismissed all claims except a single antitrust claim and two common law claims, and dismissed all defendants except JPMorgan Chase and Citibank.

In actions related to U.S. dollar LIBOR, the District Court dismissed certain claims, including antitrust claims brought by some plaintiffs whom the District Court found did not have standing to assert such claims, and permitted antitrust claims, claims under the Commodity Exchange Act and common law claims to proceed. The plaintiffs whose antitrust claims were dismissed for lack of standing have filed an appeal. In February 2018, the District Court (i) granted class certification with respect to certain antitrust claims related to bonds and interest rate swaps sold directly by the defendants, (ii) denied class certification with respect to state common law claims brought by the holders of those bonds and swaps and (iii) denied class certification with respect to two other putative class actions related to exchange-traded Eurodollar futures contracts and LIBOR-based loans held by plaintiff lending institutions. JPMorgan Chase and another defendant have petitioned for leave to appeal the class certification of the antitrust claims related to bonds and swaps, and plaintiffs have petitioned for leave to appeal the denial of class certification as to exchange-traded Eurodollar futures contracts. In July 2018, the United States Court of Appeals for the Second Circuit denied the plaintiff lending institutions' petition for leave to appeal the denial of their motion for class certification.

In an action related to the Singapore Interbank Offered Rate and the Singapore Swap Offer Rate, the District Court dismissed without prejudice all claims except a single antitrust claim, and dismissed without prejudice all defendants except JPMorgan Chase, Bank of America and Citibank. The plaintiffs filed an amended complaint in September 2017, which JPMorgan Chase and other defendants have moved to dismiss.

JPMorgan Chase is one of the defendants in a number of putative class actions alleging that defendant banks and ICAP conspired to manipulate the U.S. dollar ISDAFIX rates. In April 2016, JPMorgan Chase settled this litigation, along with certain other banks. Those settlements have been preliminarily approved by the Court.

Municipal Derivatives Litigation. Several civil actions were commenced in New York and Alabama courts against JPMorgan Chase relating to certain Jefferson County, Alabama (the "County") warrant underwritings and swap transactions. The claims in the civil actions generally alleged that JPMorgan Chase made payments to certain third parties in exchange for being chosen to underwrite more than $3.0 billion in warrants issued by the County and to act as the counterparty for certain swaps executed by the County. The County filed for bankruptcy in November 2011. In June 2013, the County filed a Chapter 9 Plan of Adjustment, as amended (the "Plan of Adjustment"), which provided that all the above-described actions against JPMorgan Chase would be released and dismissed with prejudice. In November 2013, the Bankruptcy Court confirmed the Plan of Adjustment, and in December 2013, certain sewer rate payers filed an appeal challenging the confirmation of the Plan of Adjustment. All conditions to the Plan of Adjustment's effectiveness, including the dismissal of the actions against JPMorgan Chase, were satisfied or waived and the transactions contemplated by the Plan of Adjustment occurred in December 2013. Accordingly, all the above-described actions against JPMorgan Chase have been dismissed pursuant to the terms of the Plan of Adjustment. The appeal of the Bankruptcy Court's order confirming the Plan of Adjustment remains pending.

Petters Bankruptcy and Related Matters. JPMorgan Chase and certain of its affiliates, including One Equity Partners ("OEP"), were named as defendants in several actions filed in connection with the receivership and bankruptcy proceedings pertaining to Thomas J. Petters and certain affiliated entities (collectively, "Petters") and the Polaroid Corporation. The principal actions against JPMorgan Chase and its affiliates were brought by a court-appointed receiver for Petters and the trustees in bankruptcy proceedings for three Petters entities. These actions generally sought to avoid certain putative transfers in connection with (i) the 2005 acquisition by Petters of Polaroid, which at the time was majority-owned by OEP; (ii) two credit facilities that JPMorgan Chase and other financial institutions entered into with Polaroid; and (iii) a credit line and investment accounts held by Petters. In January 2017, the Court substantially denied the defendants' motion to dismiss an amended complaint filed by the plaintiffs. In October 2017, JPMorgan Chase and its affiliates reached an agreement to settle the litigation brought by the Petters bankruptcy trustees, or their successors, and the receiver for Thomas J. Petters. The settlement has received Court approval.

Wendel. Since 2012, the French criminal authorities have been investigating a series of transactions entered into by senior managers of Wendel Investissement ("Wendel") during the period from 2004 through 2007 to restructure their shareholdings in Wendel. JPMorgan Chase Bank, N.A., Paris branch provided financing for the transactions to a number of managers of Wendel in 2007. JPMorgan Chase has cooperated with the investigation. The investigating judges issued an *ordonnance de renvoi* in November 2016, referring JPMorgan Chase Bank, N.A. to the French *tribunal correctionnel* for alleged complicity in tax fraud. No date for trial has been set by the court. JPMorgan Chase has been successful in legal challenges made to the Court of Cassation, France's highest court, with respect to the criminal proceedings. In January 2018, the Paris Court of Appeal issued a decision cancelling the *mise en examen* of JPMorgan Chase Bank, N.A. JPMorgan Chase is requesting clarification from the Court of Cassation concerning the Court of Appeal's decision before seeking direction on next steps in the criminal proceedings. In addition, a number of the managers have commenced civil proceedings against JPMorgan Chase Bank, N.A. The claims are separate, involve different allegations and are at various stages of proceedings.

* * *

In addition to the various legal proceedings discussed above, JPMorgan Chase and its subsidiaries, including in certain cases, JPMorgan Chase Bank, N.A., are named as defendants or are otherwise involved in a substantial number of other legal proceedings. JPMorgan Chase and JPMorgan Chase Bank, N.A. each believes it has meritorious defenses to the claims asserted against it in its currently outstanding legal proceedings and it intends to defend itself vigorously. Additional legal proceedings may be initiated from time to time in the future.

JPMorgan Chase Bank, N.A. has established reserves for several hundred of its currently outstanding legal proceedings. In accordance with the provisions of U.S. GAAP for contingencies, JPMorgan Chase Bank, N.A. accrues for a litigation-related liability when it is probable that such a liability has been incurred and the amount of the loss can be reasonably estimated. JPMorgan Chase Bank, N.A. evaluates its outstanding legal proceedings each quarter to assess its litigation reserves, and makes adjustments in such reserves, upwards or downward, as appropriate, based on management's best judgment after consultation with counsel. JPMorgan Chase Bank N.A.'s legal expense for litigation and investigations was $83 million and a benefit of $(87) million for the six months ended June 30, 2018 and 2017, respectively. Where a particular litigation matter involves one or more subsidiaries or affiliates of JPMorgan Chase, JPMorgan Chase determines the appropriate allocation of legal expense among those subsidiaries or affiliates (including, where applicable, JPMorgan Chase Bank, N.A.). There is no assurance that JPMorgan Chase Bank, N.A.'s litigation reserves will not need to be adjusted in the future.

In view of the inherent difficulty of predicting the outcome of legal proceedings, particularly where the claimants seek very large or indeterminate damages, or where the matters present novel legal theories, involve a large number of parties or are in early stages of discovery, JPMorgan Chase and JPMorgan Chase Bank, N.A. cannot state with confidence what will be the eventual outcomes of the currently pending matters, the timing of their ultimate resolution or the eventual losses, fines, penalties or consequences related to those matters. JPMorgan Chase Bank, N.A. believes, based upon its current knowledge and after consultation with counsel, consideration of the material legal proceedings described above and after taking into account its current litigation reserves and its estimated aggregate range of possible losses, that the other legal proceedings currently pending against it should not have a material adverse effect on JPMorgan Chase's Bank, N.A.'s consolidated financial condition. JPMorgan Chase Bank, N.A. notes, however, that in light of the uncertainties involved in such proceedings, there is no assurance that the ultimate resolution of these matters will not significantly exceed the reserves it has currently accrued or that a matter will not have material reputational consequences. As a result, the outcome of a particular matter may be material to JPMorgan Chase Bank, N.A.'s operating results for a particular period, depending on, among other factors, the size of the loss or liability imposed and the level of JPMorgan Chase Bank, N.A.'s income for that period.

Note 24 – Business changes and developments

Subsequent events

JPMorgan Chase Bank, N.A. has performed an evaluation of events that have occurred subsequent to June 30, 2018, and through August 1, 2018 (the date of the filing of this report). There have been no material subsequent events that occurred during such period that would require disclosure or recognition in JPMorgan Chase Bank, N.A.'s Consolidated Financial Statements as of June 30, 2018.

2017 Annual Financial Statements: Consolidated Financial Statements for the year ended December 31, 2017

ABS: Asset-backed securities

Active foreclosures: Loans referred to foreclosure where formal foreclosure proceedings are ongoing. Includes both judicial and non-judicial states.

AFS: Available-for-sale

AOCI: Accumulated other comprehensive income/(loss)

ARM(s): Adjustable rate mortgage(s)

Beneficial interests issued by consolidated VIEs: represents the interest of third-party holders of debt, equity securities, or other obligations, issued by VIEs that JPMorgan Chase Bank, N.A. consolidates.

Benefit obligation: refers to the projected benefit obligation for pension plans and the accumulated postretirement benefit obligation for OPEB plans.

CDS: Credit default swaps

CET1 Capital: Common equity Tier 1 Capital

CFTC: Commodity Futures Trading Commission

CLO: Collateralized loan obligations

CLTV: Combined loan-to-value

Collateral-dependent: A loan is considered to be collateral-dependent when repayment of the loan is expected to be provided solely by the underlying collateral, rather than by cash flows from the borrower's operations, income or other resources.

Credit derivatives: Financial instruments whose value is derived from the credit risk associated with the debt of a third party issuer (the reference entity) which allow one party (the protection purchaser) to transfer that risk to another party (the protection seller). Upon the occurrence of a credit event by the reference entity, which may include, among other events, the bankruptcy or failure to pay its obligations, or certain restructurings of the debt of the reference entity, neither party has recourse to the reference entity. The protection purchaser has recourse to the protection seller for the difference between the face value of the CDS contract and the fair value at the time of settling the credit derivative contract. The determination as to whether a credit event has occurred is generally made by the relevant International Swaps and Derivatives Association ("ISDA") Determinations Committee.

Criticized: Criticized loans, lending-related commitments and derivative receivables that are classified as special mention, substandard and doubtful categories for regulatory purposes and are generally consistent with a rating of CCC+/Caa1 and below, as defined by S&P and Moody's.

DVA: Debit valuation adjustment

EC: European Commission

FASB: Financial Accounting Standards Board

Fannie Mae: Federal National Mortgage Association

FDIC: Federal Deposit Insurance Corporation

Federal Reserve: The Board of the Governors of the Federal Reserve System

FHA: Federal Housing Administration

FHLB: Federal Home Loan Bank

FICO score: A measure of consumer credit risk based on information in consumer credit reports produced by Fair Isaac Corporation. Because certain aged data is excluded from credit reports based on rules in the Fair Credit Reporting Act, FICO scores may not reflect all historical information about a consumer.

Free-standing derivatives: is a derivative contract entered into either separate and apart from any of the JPMorgan Chase Bank, N.A.'s other financial instruments or equity transactions. Or, in conjunction with some other transaction and is legally detachable and separately exercisable.

FX: Foreign exchange

G7: "Group of Seven nations": Countries in the G7 are Canada, France, Germany, Italy, Japan, the U.K. and the U.S.

G7 government securities: Securities issued by the government of one of the G7 nations.

Ginnie Mae: Government National Mortgage Association

GSE: Fannie Mae and Freddie Mac

HELOAN: Home equity loan

HELOC: Home equity line of credit

Home equity – senior lien: represents loans and commitments where JPMorgan Chase Bank, N.A. holds the first security interest on the property.

Home equity – junior lien: represents loans and commitments where JPMorgan Chase Bank, N.A. holds a security interest that is subordinate in rank to other liens.

HTM: Held-to-maturity

IDI: Insured depository institutions

Impaired loan: Impaired loans are loans measured at amortized cost, for which it is probable that JPMorgan Chase Bank, N.A. will be unable to collect all amounts due, including principal and interest, according to the contractual terms of the agreement. Impaired loans include the following:

- All wholesale nonaccrual loans
- All TDRs (both wholesale and consumer), including ones that have returned to accrual status

Investment-grade: An indication of credit quality based on JPMorgan Chase Bank, N.A.'s internal risk assessment system. "Investment grade" generally represents a risk profile similar to a rating of a "BBB-"/"Baa3" or better, as defined by independent rating agencies.

ISDA: International Swaps and Derivatives Association

JPMorgan Chase: JPMorgan Chase & Co.

JPMorgan Chase Bank, N.A.: JPMorgan Chase Bank, National Association

LIBOR: London Interbank Offered Rate

LTV: "Loan-to-value ratio" For residential real estate loans, the relationship, expressed as a percentage, between the principal amount of a loan and the appraised value of the collateral (i.e., residential real estate) securing the loan.

Current estimated LTV ratio

An estimate of the LTV as of a certain date. The current estimated LTV ratios are calculated using estimated collateral values derived from a nationally recognized home price index measured at the metropolitan statistical area ("MSA") level. These MSA-level home price indices consist of actual data to the extent available and forecasted data where actual data is not available. As a result, the estimated collateral values used to calculate these ratios do not represent actual appraised loan-level collateral values; as such, the resulting LTV ratios are necessarily imprecise and should therefore be viewed as estimates.

Combined LTV ratio

The LTV ratio considering all available lien positions, as well as unused lines, related to the property. Combined LTV ratios are used for junior lien home equity products.

Master netting agreement: A single agreement with a counterparty that permits multiple transactions governed by that agreement to be terminated or accelerated and settled through a single payment in a single currency in the event of a default (e.g., bankruptcy, failure to make a required payment or securities transfer or deliver collateral or margin when due).

Measurement alternative: Measures equity securities without readily determinable fair values at cost less impairment (if any), plus or minus observable price changes from an identical or similar investment of the same issuer.

MBS: Mortgage-backed securities

Moody's: Moody's Investor Services

Mortgage product types:

Alt-A

Alt-A loans are generally higher in credit quality than subprime loans but have characteristics that would disqualify the borrower from a traditional prime loan. Alt-A lending characteristics may include one or more of the following: (i) limited documentation; (ii) a high CLTV ratio; (iii) loans secured by non-owner occupied properties; or (iv) a debt-to-income ratio above normal limits. A substantial proportion of JPMorgan Chase Bank, N.A.'s Alt-A loans are those where a borrower does not provide complete documentation of his or her assets or the amount or source of his or her income.

Option ARMs

The option ARM real estate loan product is an adjustable-rate mortgage loan that provides the borrower with the option each month to make a fully amortizing, interest-only or minimum payment. The minimum payment on an option ARM loan is based on the interest rate charged during the introductory period. This introductory rate is usually significantly below the fully indexed rate. The fully indexed rate is calculated using an index rate plus a margin. Once the introductory period ends, the contractual interest rate charged on the loan increases to the fully indexed rate and adjusts monthly to reflect movements in the index. The minimum payment is typically insufficient to cover interest accrued in the prior month, and any unpaid interest is deferred and added to the principal balance of the loan. Option ARM loans are subject to payment recast, which converts the loan to a variable-rate fully amortizing loan upon meeting specified loan balance and anniversary date triggers.

Prime

Prime mortgage loans are made to borrowers with good credit records who meet specific underwriting requirements, including prescriptive requirements related to income and overall debt levels. New prime mortgage borrowers provide full documentation and generally have reliable payment histories.

Subprime

Subprime loans are loans that, prior to mid-2008, were offered to certain customers with one or more high risk characteristics, including but not limited to: (i) unreliable or poor payment histories; (ii) a high LTV ratio of greater than 80% (without borrower-paid mortgage insurance); (iii) a high debt-to-income ratio; (iv) an occupancy type for the loan is other than the borrower's primary residence; or (v) a history of delinquencies or late payments on the loan.

MSA: Metropolitan statistical areas

MSR: Mortgage servicing rights

NA: Data is not applicable or available for the period presented.

Nonaccrual loans: Loans for which interest income is not recognized on an accrual basis. Loans (other than credit card loans and certain consumer loans insured by U.S. government agencies) are placed on nonaccrual status when full payment of principal and interest is not expected, regardless of delinquency status, or when principal and interest has been in default for a period of 90 days or more unless the loan is both well-secured and in the process of collection. Collateral-dependent loans are typically maintained on nonaccrual status.

OCC: Office of the Comptroller of the Currency

OCI: Other comprehensive income/(loss)

OEP: One Equity Partners

OPEB: Other postretirement employee benefit

OTC: "Over-the-counter derivatives": Derivative contracts that are negotiated, executed and settled bilaterally between two derivative counterparties, where one or both counterparties is a derivatives dealer.

OTC cleared: "Over-the-counter cleared derivatives": Derivative contracts that are negotiated and executed bilaterally, but subsequently settled via a central clearing house, such that each derivative counterparty is only exposed to the default of that clearing house.

OTTI: Other-than-temporary impairment

PCA: Prompt corrective action

Principal transactions revenue: Principal transactions revenue is driven by many factors, including the bid-offer spread, which is the difference between the price at which JPMorgan Chase Bank, N.A. is willing to buy a financial or other instrument and the price at which JPMorgan Chase Bank, N.A. is willing to sell that instrument. It also consists of realized (as a result of closing out or termination of transactions, or interim cash payments) and unrealized (as a result of changes in valuation) gains and losses on financial and other instruments (including those accounted for under the fair value option) primarily used in client-driven market-making activities and on private equity investments. In connection with its client-driven market-making activities, JPMorgan Chase Bank, N.A. transacts in debt and equity instruments, derivatives and commodities (including physical commodities inventories and financial instruments that reference commodities). Principal transactions revenue also includes certain realized and unrealized gains and losses related to hedge accounting and specified risk-management activities, including: (a) certain derivatives designated in qualifying hedge accounting relationships (primarily fair value hedges of commodity and foreign exchange risk), (b) certain derivatives used for specific risk management purposes, primarily to mitigate credit risk and foreign exchange risk, and (c) other derivatives.

PCI: "Purchased credit-impaired" loans represents certain loans that were acquired and deemed to be credit-impaired on the acquisition date in accordance with the guidance of the FASB. The guidance allows purchasers to aggregate credit-impaired loans acquired in the same fiscal quarter into one or more pools, provided that the loans have common risk characteristics (e.g., product type, LTV ratios, FICO scores, past due status, geographic location). A pool is then accounted for as a single asset with a single composite interest rate and an aggregate expectation of cash flows.

PSU(s): Performance share units

Retained loans: Loans that are held-for-investment (i.e. excludes loans held-for-sale and loans at fair value).

RHS: Rural Housing Service of the U.S. Department of Agriculture

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

RSU(s): Restricted stock units

S&P: Standard and Poor's 500 Index

SAR(s): Stock appreciation rights

SEC: U.S. Securities and Exchange Commission

Single-name: Single reference-entities

SLR: Supplementary leverage ratio

SPEs: Special purpose entities

Structured notes: Structured notes are predominantly financial instruments containing embedded derivatives. Where present, the embedded derivative is the primary driver of risk.

Suspended foreclosures: Loans referred to foreclosure where formal foreclosure proceedings have started but are currently on hold, which could be due to bankruptcy or loss mitigation. Includes both judicial and non-judicial states.

TDR: "Troubled debt restructuring" is deemed to occur when JPMorgan Chase Bank, N.A. modifies the original terms of a loan agreement by granting a concession to a borrower that is experiencing financial difficulty.

U.K.: United Kingdom

Unaudited: Financial statements and information that have not been subjected to auditing procedures sufficient to permit an independent certified public accountant to express an opinion.

U.S.: United States of America

U.S. GAAP: Accounting principles generally accepted in the United States of America.

U.S. GSE(s): "U.S. government-sponsored enterprises": In the U.S., GSEs are quasi-governmental, privately-held entities established by Congress to improve the flow of credit to specific sectors of the economy and provide certain essential services to the public. U.S. GSEs include Fannie Mae and Freddie Mac, but do not include Ginnie Mae, which is directly owned by the U.S. Department of Housing and Urban Development. U.S. GSE obligations are not explicitly guaranteed as to the timely payment of principal and interest by the full faith and credit of the U.S. government.

U.S. Treasury: U.S. Department of the Treasury

VA: U.S. Department of Veterans Affairs

VIEs: Variable interest entities

Warehouse loans: consist of prime mortgages originated with the intent to sell that are accounted for at fair value and classified as trading assets.

Statutory consents

As a national banking association organised under the federal laws of the United States of America, the guarantor is empowered to give guarantees. Each issue of structured products will have the benefit of the guarantee.

No material adverse change and litigation

Save as disclosed in the listing documents, there has been no material adverse change in our or the guarantor's financial position since the date of the most recently published audited financial statements of us or of the guarantor on a consolidated basis respectively, as the case may be, that would have a material adverse effect on our ability to perform our obligations, or the guarantor's ability to perform its obligations respectively in the context of any issue of structured products.

Save as disclosed in the listing documents, we and the guarantor are not aware, to the best of our and the guarantor's knowledge and belief, of any litigation or claims of material importance in the context of any issue of structured products pending or threatened against us or the guarantor.

Credit ratings of the guarantor

As of the day immediately preceding the date of this supplemental disclosure document, the guarantor's long-term debt credit ratings are A+ (stable outlook) by S&P Global Ratings and Aa3 (review for upgrade) by Moody's Investors Service, Inc.

Financial information about the issuer and the guarantor

Mazars Paardekooper Hoffman Accountants N.V., our auditor, has given and has not withdrawn its written consent to the inclusion in the first supplemental disclosure document of its audit report dated 16 April 2018 (which relates to our annual financial statements for the year ended 31 December 2017) in the form and context in which it is included. Its report was not prepared exclusively for incorporation in the first supplemental disclosure document.

PricewaterhouseCoopers LLP, auditor of the guarantor, has given and has not withdrawn its written consent to the inclusion in the base listing document of its audit report dated 27 February 2018 (which relates to the guarantor's audited financial statements for the year ended 31 December 2017 comprising consolidated balance sheets at 31 December 2017 and 2016 and the related consolidated statements of income, changes in stockholder's equity, comprehensive income and cash flows for each of the three years ended 31 December 2017) in the form and context in which they are included. Its report was not prepared exclusively for incorporation in the base listing document.

Neither Mazars Paardekooper Hoffman Accountants N.V. nor PricewaterhouseCoopers LLP has any shareholding in us or any member of our group nor of our group nor do they have the right (whether legally enforceable or not) to subscribe for or to nominate persons to subscribe for our securities or securities of any member of our group.

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