

Quarterly Report on Bank Trading and Derivatives Activities

First Quarter 2018

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About This Report

The Office of the Comptroller of the Currency's (OCC) quarterly report on bank trading and derivatives activities is based on call report information provided by all insured U.S. commercial banks (including trust companies) and savings associations; reports filed by U.S. financial holding companies; and other published data. A total of 1,357¹ insured U.S. commercial banks and savings associations reported trading and derivatives activities at the end of the first quarter of 2018. A small group of large financial institutions continues to dominate trading and derivatives activity in the U.S. commercial banking system. During the first quarter of 2018, four large commercial banks represented 89.8 percent of the total banking industry notional amounts and 86.5 percent of industry net current credit exposure (NCCE) (see table 4 in the appendix).

The OCC and other supervisors have dedicated examiners at the largest banks to continuously evaluate the credit, market, operational, reputation, and compliance risks of bank trading and derivatives activities. In addition to the OCC's supervisory activities, the OCC works with other financial supervisors and major market participants to address infrastructure, clearing, and margining issues in over-the-counter (OTC) derivatives. OCC activities include development of objectives and milestones for stronger trade processing and improved market transparency across derivative categories, migration of certain highly liquid products to clearinghouses, and requirements for posting and collecting margin.

This is the 90th edition of the OCC's *Quarterly Report on Bank Trading and Derivatives Activities*. The first report was published in 1995. In our continuous efforts to improve this report, we now incorporate an entity's Legal Entity Identifier (LEI), if available, in the supplementary tables in the appendix. Please send any comments or feedback on the structure and content of this report to the OCC by email: QuarterlyDerivatives@occ.treas.gov.

Executive Summary

- Insured U.S. commercial banks and savings associations (collectively, banks) reported trading revenue of \$8.2 billion in the first quarter of 2018, \$3.2 billion more (62.8 percent) than in the previous quarter and \$1.1 billion more (15.0 percent) than a year earlier (see page 4).
- Credit exposure from derivatives increased in the first quarter of 2018 as compared to the fourth quarter of 2017. NCCE increased \$34.3 billion, or 10.2 percent, to \$371.4 billion (see page 8).
- Trading risk, as measured by daily value-at-risk (VaR), increased in the first quarter of 2018. Total VaR² across the top five dealer banking companies increased \$49.0 million, or 18.8 percent, to \$309.0 million (see page 11).
- Derivative notional amounts increased in the first quarter of 2018 by \$31.8 trillion, or 18.5 percent, to \$203.8 trillion (see page 14).
- Derivative contracts remained concentrated in interest rate products, which represented 76.3 percent of total derivative notional amounts (see page 14).

¹ Beginning March 31, 2017, institutions with total assets of less than \$1 billion have the option to file the FFIEC 051 call report. Due to the limited amount of derivatives data provided by FFIEC 051 call report filers, this report provides this information separately and distinctly in table 13 in the appendix.

² Average daily VaR as reported by the firms 10Q and 10K U.S. Securities and Exchange Commission Reports.

Revenue

Insured U.S. Commercial Banks and Savings Associations' Trading Revenue

Insured U.S. commercial banks and savings associations reported \$8.2 billion in trading revenue in the first quarter of 2018, \$3.2 billion more (62.8 percent) than in the previous quarter and \$1.1 billion more (15.0 percent) than a year earlier (see table 1). The quarter-over-quarter increase in trading revenue was due to increases across all trading revenue products. For a historical view of quarterly bank trading revenue by instrument, see graph 9a in the appendix.

Table 1. Quarterly Bank Trading Revenue, in Millions of Dollars

	1Q2018	4Q2017	Q/Q Change	Q/Q % Change	1Q2017	Y/Y Change	Y/Y % Change
Interest Rate & FX	\$5,544	\$4,034	\$1,510	37.4%	\$5,549	-\$6	-0.1%
Equity	\$1,866	\$990	\$876	88.5%	\$922	\$943	102.2%
Commodity & Other	\$368	\$251	\$118	46.9%	\$328	\$41	12.4%
Credit	\$421	-\$237	\$659	277.4%	\$330	\$91	27.7%
Total Trading Revenue	\$8,198	\$5,037	\$3,162	62.8%	\$7,129	\$1,070	15.0%

Source: Call reports, Schedule RI

Holding Company Trading Revenue

Consolidated bank holding company (BHC) trading performance provides a more complete picture of trading revenue in the banking system. As shown in table 2, consolidated holding company trading revenue of \$18.7 billion in the first quarter of 2018 was \$8.9 billion (89.7 percent) higher than in the previous quarter. The quarter-over-quarter increase in trading revenue was due to increases across all trading revenue products. Year-over-year holding company trading revenue increased by \$1.7 billion (9.9 percent). For a historical view of quarterly holding company trading revenue by instrument, see graph 9b in the appendix.

Table 2. Quarterly Holding Company Trading Revenue, in Millions of Dollars

	1Q2018	4Q2017	Q/Q Change	Q/Q % Change	1Q2017	Y/Y Change	Y/Y % Change
Interest Rate & FX	\$9,973	\$6,606	\$3,367	51.0%	\$8,453	\$1,520	18.0%
Equity	\$6,258	\$3,096	\$3,161	102.1%	\$4,902	\$1,356	27.7%
Commodity & Other	\$1,195	\$523	\$672	128.4%	\$399	\$796	199.7%
Credit	\$1,296	-\$356	\$1,652	464.3%	\$3,274	-\$1,978	-60.4%
Total HC Trading Revenue	\$18,721	\$9,870	\$8,851	89.7%	\$17,028	\$1,692	9.9%

Source: Consolidated Financial Statements for Holding Companies—FR Y-9C, Schedule HI

Bank Trading Revenue as a Percentage of Consolidated Holding Company Trading Revenue

Before the financial crisis, trading revenue at banks typically ranged from 60 percent to 80 percent of consolidated BHC trading revenue. Since the financial crisis and the adoption of bank charters by the former investment banks, the percentage of bank trading revenue to consolidated BHC trading revenue has fallen and is now typically between 30 percent and 50 percent. This decline reflects the significant amount of trading activity by the former investment banks that, while included in BHC results, remains outside insured commercial banks. More generally, insured U.S. commercial banks and savings associations have more limited legal authorities than their holding companies, particularly in the trading of commodity and equity products.

In the first quarter of 2018, banks generated 56.5 percent of consolidated holding company trading revenue, up from 51.0 percent in the previous quarter (see figure 1).

Figure 1. Bank Trading Revenue as a Percentage of Consolidated Holding Company Trading Revenue



Source: Consolidated Financial Statements for Holding Companies—FR Y-9C (Schedule HI) and call report (Schedule RI)

Counterparty Credit Risk

Counterparty credit risk is a significant risk in bank derivative trading activities. The notional amount of a derivative contract is a reference amount that determines contractual payments, but it is generally not an amount at risk. The credit risk in a derivative contract is a function of a number of variables, such as whether counterparties exchange notional principal, the volatility of the underlying market factors (interest rate, currency, commodity, equity, or corporate reference entity), the maturity and liquidity of the contract, and the creditworthiness of the counterparty.

Credit risk in derivatives differs from credit risk in loans because of the more uncertain nature of the potential credit exposure. Because the credit exposure is a function of movements in market factors, banks do not know, and can only estimate, how much the value of the derivative contract might be at various points in the future.

The credit exposure is bilateral in most derivative transactions, such as swaps (which make up the bulk of bank derivative contracts). Each party to the contract may (and, if the contract has a long enough tenor, probably will) have a credit exposure to the other party at various times during the contract's life. With a funded traditional loan, the amount at risk is the amount advanced to the borrower. The credit risk is unilateral as the bank faces the credit exposure of the borrower.

Measuring credit exposure in derivative contracts involves identifying those contracts on which a bank would lose value if the counterparty to a contract defaulted. The total of all contracts with positive value (i.e., derivative receivables) to the bank is the gross positive fair value (GPFV) and represents an initial measurement of credit exposure. The total of all contracts with negative value (i.e., derivative payables) to the bank is the gross negative fair value (GNFV) and represents a measurement of the exposure the bank poses to its counterparties.

GPFV decreased by \$18.8 billion (1.0 percent) in the first quarter of 2018 to \$1.8 trillion, driven by a \$40.7 billion (3.5 percent) decrease in receivables from interest rate contracts as well as a \$8.6 billion (16.4 percent) decrease in receivables from commodity contracts (see table 3).

Because banks mostly hedge the market risk of their derivative portfolios with other derivatives, a similar decrease in GNFVs generally matched the change in GPFV. Derivative payables, GNFV, decreased \$52.9 billion (3.0 percent) to \$1.7 trillion during the quarter, driven by a decrease in payables on interest rate contracts as well as commodity contracts.

GPFV and GNFV interest rate contracts declined 35.3 percent and 35.9 percent, respectively year-over-year. Part of the decline is a result of the continued implementation of settled-to-market (STM) treatment for variation margin. STM allows for the characterization of variation margin for OTC derivatives that are cleared through central clearing parties (CCP) to constitute a settlement of the exposure, as opposed to collateralization.

Table 3. Gross Positive Fair Values and Gross Negative Fair Values, in Billions of Dollars

	1Q2018	4Q2017	Q/Q Change	Q/Q % Change	1Q2017	Y/Y Change	Y/Y % Change
Interest Rate	\$1,132	\$1,173	-\$41	-3.5%	\$1,750	-\$618	-35.3%
Foreign Exchange	\$454	\$441	\$14	3.1%	\$476	-\$22	-4.5%
Equity	\$125	\$108	\$17	16.0%	\$95	\$30	31.6%
Commodities	\$44	\$53	-\$9	-16.4%	\$46	-\$2	-4.7%
Credit	\$59	\$59	\$0	-0.3%	\$69	-\$10	-14.5%
Gross Positive Fair Value	\$1,814	\$1,833	-\$19	-1.0%	\$2,436	-\$622	-25.5%

	1Q2018	4Q2017	Q/Q Change	Q/Q % Change	1Q2017	Y/Y Change	Y/Y % Change
Interest Rate	\$1,081	\$1,124	-\$43	-3.8%	\$1,685	-\$604	-35.9%
Foreign Exchange	\$426	\$430	-\$4	-0.9%	\$474	-\$48	-10.1%
Equity	\$118	\$115	\$3	2.7%	\$100	\$18	18.5%
Commodities	\$45	\$54	-\$9	-16.0%	\$46	-\$1	-2.6%
Credit	\$60	\$60	\$0	-0.4%	\$69	-\$9	-12.6%
Gross Negative Fair Value	\$1,730	\$1,783	-\$53	-3.0%	\$2,373	-\$643	-27.1%

Source: Call reports, Schedule RC-L

A legally enforceable netting agreement between a bank and a counterparty creates a single legal obligation for all transactions (called a “netting set”) under the agreement. Therefore, when banks have such agreements with their counterparties, contracts with negative values (an amount a bank would pay to its counterparty) can offset contracts with positive values (an amount owed by the counterparty to the bank), leaving an NCCE as shown in table 4.

Table 4. Netting Contract Examples

Bank A Portfolio With Counterparty B	Number of Contracts	Value of Contracts	Credit Measure/Metric
Contracts With Positive Value to Bank A	6	\$500	Gross Positive Fair Value
Contracts With Negative Value to Bank A	4	-\$350	Gross Negative Fair Value
Total Contracts	10	\$150	NCCE to Bank A From Counterparty B

Most, but not necessarily all, derivative transactions that a bank has with an individual counterparty are subject to a legally enforceable netting agreement. Some transactions may be subject to the laws of a jurisdiction that does not provide legal certainty of netting agreements, in which case banks must regard such transactions as separate from the netting set. Other transactions may involve nonstandard contractual documentation. Transactions that are not subject to the same legally enforceable netting agreement have distinct values that cannot be netted and for which the appropriate current credit measure is the gross exposure to the bank, if that amount is positive. While banks can net exposures within a netting set under the same netting agreement, they cannot net exposures across netting sets without a separate legally enforceable netting agreement. As a result, a bank’s NCCE to a particular counterparty equals the sum of the GPFV of contracts less the dollar amount of netting benefits with that counterparty. A bank’s NCCE across all counterparties equals the sum of its NCCE to each of its counterparties.

NCCE is the primary metric the OCC uses to evaluate credit risk in bank derivative activities. NCCE for insured U.S. commercial banks and saving associations increased by \$34.3 billion (10.2 percent) to \$371.4 billion in the first quarter of 2018 (see table 5).³ Legally enforceable netting agreements allowed banks to reduce GPFV exposures by 79.5 percent (\$1.4 trillion) in the first quarter of 2018, compared with 81.6 percent (\$1.5 trillion) in the previous quarter.

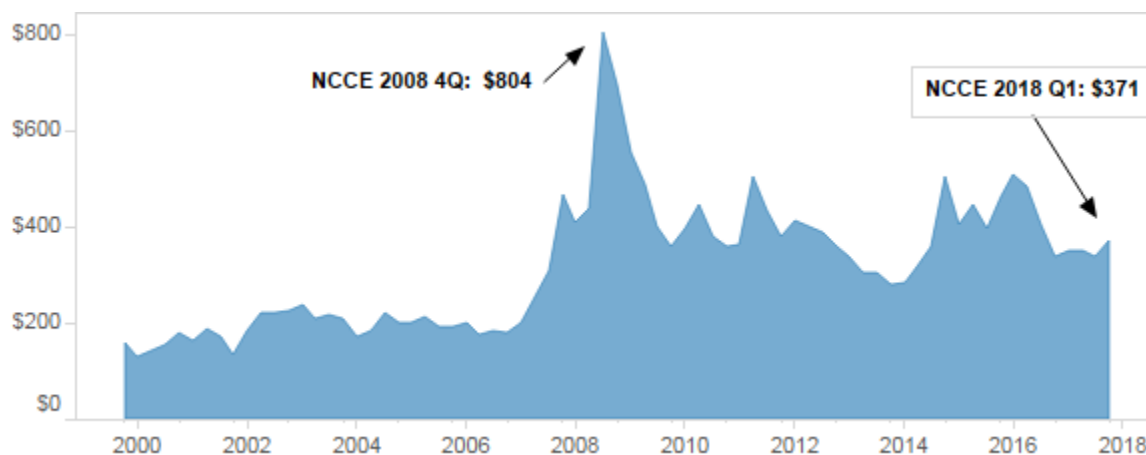
Table 5. Net Current Credit Exposure, in Billions of Dollars

	1Q2018	4Q2017	Q/Q Change	Q/Q % Change
Gross Positive Fair Value	\$1,814	\$1,833	-\$19	-1.0%
NCCE RC-R	\$371	\$337	\$34	10.2%
Netting Benefit RC-R	\$1,442	\$1,495	-\$53	-3.5%
Netting Benefit % RC-R	79.5%	81.6%		2.1%

Source: Call reports, Schedules RC-L and RC-R

NCCE peaked at \$804.1 billion at the end of 2008, during the financial crisis, when interest rates had plunged and credit spreads were very high (see figure 2). The significant decline in NCCE since 2008 has largely resulted from declines in the GPFV of interest rate and credit contracts. GPFV from interest rate contracts has fallen from \$5.1 trillion at the end of 2008 to \$1.1 trillion at the end of the first quarter of 2018. On March 31, 2018, exposure from credit contracts was \$58.6 billion (see table 3), which is \$1.0 trillion lower (94.7 percent) than the \$1.1 trillion on December 31, 2008.

Figure 2. Net Current Credit Exposure, in Billions of Dollars



Source: Call reports, Schedule RC-R

The bulk of NCCE in the financial system is concentrated in banks and securities firms (39.7 percent) and in corporations and other counterparties (47.4 percent) (see table 6).

The combined exposure to hedge funds, sovereign governments, and monoline financial firms was small (13.0 percent in total). The sheer size of aggregate counterparty exposures, however,

³ Banks report NCCE on two different schedules (RC-R and RC-L) of the call report, and the amounts reported are not the same because of differences in the scope of coverage. Neither measure comprehensively captures NCCE. RC-L includes exposure only from OTC derivative transactions; it excludes exchange-traded transactions. RC-R excludes transactions not subject to capital requirements. This report uses RC-R to measure NCCE.

results in the potential for major losses, even in sectors where credit exposure is a small percentage of the total. For example, notwithstanding the minimal share of NCCE to monoline financial firms, banks suffered material losses on these exposures during the credit crisis. Sovereign credit exposures were also a small component (7.5 percent) of NCCE during the quarter and, like monoline exposures before the financial crisis, are largely unsecured.

Table 6. Net Current Credit Exposure by Counterparty Type as a Percentage of Total Net Current Credit Exposure

	Banks & Securities Firms	Monoline Financial Guarantors	Hedge Funds	Sovereign Governments	Corp & All Other Counterparties
2018 Q1	39.7%	0.1%	5.4%	7.5%	47.4%
2017 Q4	41.7%	0.1%	3.1%	7.9%	47.3%
2016 Q4	48.5%	0.1%	2.0%	6.5%	43.0%
2015 Q4	53.3%	0.1%	2.1%	6.0%	38.5%

Source: Call reports, Schedule RC-L

A more risk-sensitive measure of credit exposure would consider the value of collateral held against counterparty exposures. Commercial banks and savings associations with total assets greater than \$10 billion report the fair value of collateral held against various classifications of counterparty exposure.

Reporting banks held collateral valued at 111.9 percent of their total NCCE at the end of the first quarter of 2018, up from 111.4 percent in the fourth quarter of 2017 (see table 7). Collateral held against hedge fund exposures decreased in the first quarter, but coverage remains very high at 336.8 percent. Bank exposures to hedge funds are secured, because banks take initial margin on transactions with hedge funds, in addition to fully securing any current credit exposure. Collateral coverage of corporate, monoline, and sovereign exposures is much less than coverage of financial institutions and hedge funds, although coverage of corporate exposures has been increasing over the past several years because of increases in the volume of trades cleared at central counterparties.

Table 7. Ratio of Fair Value Collateral to Net Current Credit Exposure

	FV Banks & Securities Firms	FV Monoline Financial Guarantors	FV Hedge Funds	FV Sovereign Governments	FV Corp and All Other Counterparties	FV/NCCE%
2018 Q1	124.6%	0.0%	336.8%	23.3%	89.7%	111.9%
2017 Q4	124.4%	0.0%	495.5%	25.1%	89.8%	111.4%
2016 Q4	119.0%	0.0%	491.5%	34.2%	67.1%	98.5%
2015 Q4	101.6%	5.2%	435.5%	15.6%	66.2%	89.6%

Source: Call reports, Schedule RC-L

Collateral quality held by banks was very high and liquid during the quarter, with 63.1 percent held in cash (both U.S. dollar and non-dollar) and an additional 12.3 percent held in U.S. Treasuries and government agency securities (see table 8). Supervisors assess changes in the quality of collateral held as a key early indicator of potential easing in credit terms. Examiners review the collateral management practices of derivative dealers as a regular part of their supervision activities.

Table 8. Composition of Collateral

	Cash U.S. Dollar	Cash Other Currencies	U.S. Treasury Securities	U.S. Gov't Agency	Corp Bonds	Equity Securities	All Other Collateral
2018 Q1	37.7%	25.4%	10.5%	1.8%	2.1%	8.5%	14.0%
2017 Q4	37.6%	25.5%	10.3%	1.9%	2.5%	5.7%	16.4%
2016 Q4	40.1%	31.5%	8.1%	1.7%	1.6%	5.0%	12.0%
2015 Q4	43.7%	31.7%	4.6%	1.6%	1.4%	5.3%	11.7%

Source: Call reports, Schedule RC-L

Credit quality metrics for derivative exposures improved in the first quarter of 2018, as banks reported net recoveries of \$1.1 million, compared with net charge-offs of \$10.3 million in the fourth quarter of 2017 (see graph 7 in the appendix). The number of banks reporting charge-offs decreased from 14 to 12 banks. Net recoveries in the first quarter of 2018 represented 0.003 percent of the NCCE from derivative contracts. For comparison purposes, commercial and industrial (C&I) loan net charge-offs decreased \$727.2 million, or 34.5 percent, to \$1.4 billion during the quarter and were 0.07 percent of total C&I loans. Charge-offs of derivative exposures typically are associated with problem commercial lending exposures, in which the borrower has an associated swap transaction.

Market Risk**Value-at-Risk**

Banks primarily control market risk in trading operations by establishing limits against potential losses. Banks use VaR to quantify the maximum expected loss over a specified time period and at a certain confidence level under relevant market conditions. Since VaR does not measure the maximum potential loss, banks stress test trading portfolios to assess the potential for loss beyond the VaR measure. Banks and supervisors have been working to expand the use of stress testing to complement the VaR risk measurement process that banks typically use to assess a bank's exposure to market risk.

The large trading banks disclose average VaR data in published financial reports. Comparing the VaR numbers over time to equity capital and net income provides perspective on the market risk of trading activities. As shown in table 9, market risk reported by the five largest banking companies, as measured by VaR, is small as a percentage of their equity capital.

Table 9. Value-at-Risk at Major Bank Holding Companies, in Millions of Dollars

	JPMORGAN CHASE & CO.	CITIGROUP INC.	BANK OF AMERICA CORPORATION	THE GOLDMAN SACHS GROUP, INC.	MORGAN STANLEY	TOTAL
2018 Q1	\$43	\$102	\$45	\$73	\$46	\$309
2017 Q4	\$34	\$93	\$41	\$54	\$38	\$260
Q/Q Change	\$9	\$9	\$4	\$19	\$8	\$49
Q/Q % Change	26.5%	9.7%	9.8%	35.2%	21.1%	18.8%
2018 Q1 Equity Capital	\$256,201	\$201,915	\$266,224	\$83,579	\$78,034	\$885,953
2018 Q1 Net Income	\$8,712	\$4,620	\$6,918	\$2,832	\$2,668	\$25,750

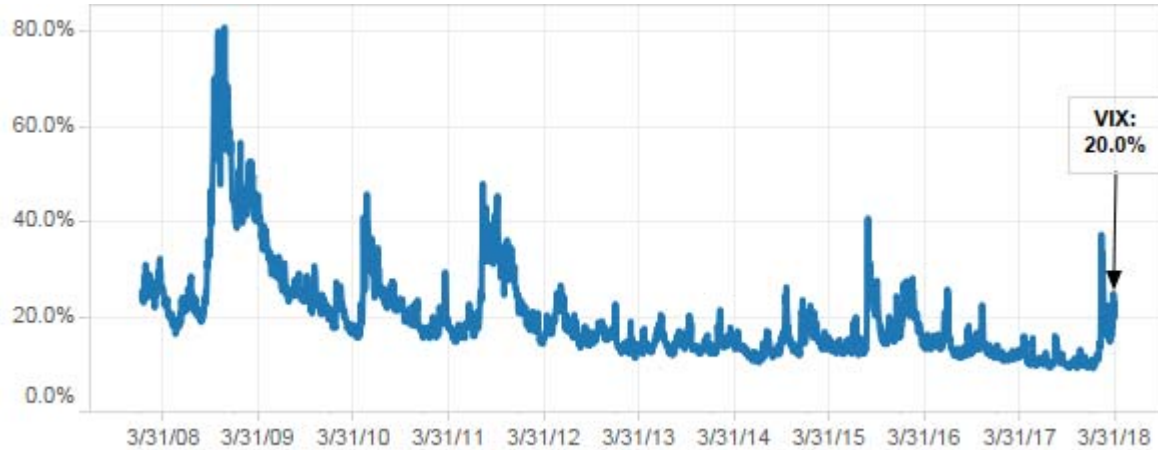
Source: 10K and 10Q U.S. Securities and Exchange Commission reports

VaR measures are not comparable across firms because of methodological differences in calculating VaR, as well as differences in the scope of coverage. These differences can result in materially different VaR estimates across firms, even for the same portfolios. When assessing trading risk in the banking system, it is therefore appropriate to review the trend in VaR at individual firms, not in aggregate across firms.

Because of methodological differences in calculating VaR, readers are cautioned that a higher VaR figure at a particular bank may not necessarily imply that the bank has more trading risk than another bank with a lower VaR. For example, JPMorgan, Goldman Sachs, and Morgan Stanley calculate VaR using a 95 percent confidence interval. If those firms used a 99 percent confidence interval, as Bank of America and Citigroup do, their VaR estimates would be meaningfully higher. The data series used to measure risk also is an important factor in the calculated risk. VaR for a single portfolio of exposures will differ if the historical period used to measure risk differs. The scope of coverage of the VaR measure is also important when reviewing risks across institutions. Some firms disclose VaR based only on their trading and intermediation activity, while others also include risks from hedging mortgage-servicing assets, fair value option portfolios, and asset and liability management activities. Graph 16 in the appendix illustrates the historic trend in average VaR at each of the top five large banking companies.

Figure 3 shows the VIX, a volatility index,⁴ which measures the market’s expectation of stock market volatility in the S&P 500 index over the next 30-day period. The chart illustrates that there has been an extended period of low volatility since the end of the financial crisis.

Figure 3. Volatility Index (VIX)



Source: Bloomberg

Level 3 Trading Assets

Another measure used to assess market risk is the volume of and changes in level 3 trading assets. Level 3 trading assets are assets whose fair value cannot be determined by using observable inputs, such as market prices. Since the peak of the financial crisis at the end of 2008, major dealers have reduced the volume of level 3 trading assets. Because banks cannot observe inputs into the models that determine the fair value of these illiquid exposures, banks use their own assumptions in determining their fair values. Level 3 assets peaked at \$204.1 billion at the end of 2008 (see figure 4). At the end of the first quarter of 2018, banks held \$30.4 billion of level 3 trading assets, up 4.6 percent from the previous quarter, and 4.4 percent lower than a year ago. Level 3 assets are \$173.7 billion (85.1 percent) lower than the peak level from 2008.

Figure 4. Level 3 Trading Assets, in Billions of Dollars



Source: Call reports, Schedule RC-Q

⁴ VIX is the trademarked ticker symbol for the Chicago Board Options Exchange SPX Volatility Index.

Credit Derivatives

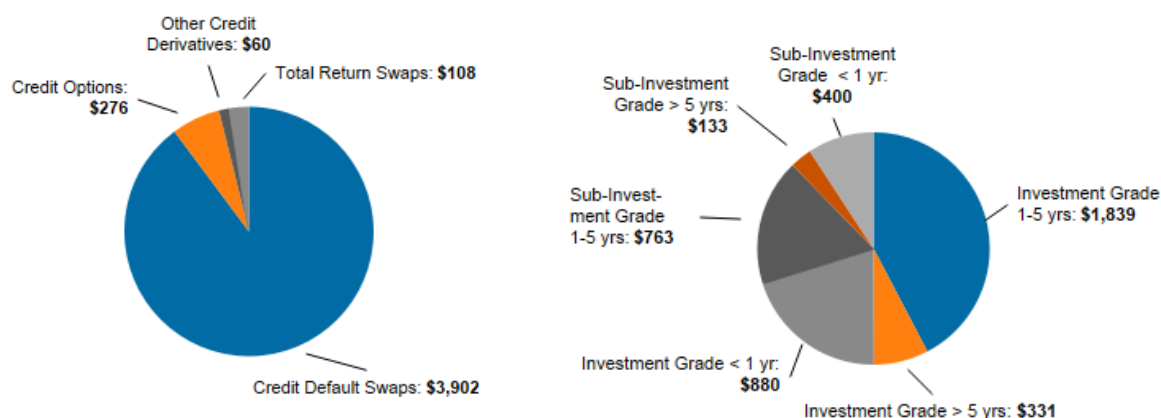
The notional amounts outstanding of credit derivatives increased \$159.4 billion (3.8 percent), to \$4.3 trillion, in the first quarter of 2018 (see table 10). Contracts referencing sub-investment-grade firms increased \$125.6 billion in the first quarter, while contracts referencing investment-grade firms increased \$33.9 billion. Credit derivatives outstanding remained well below the peak of \$16.4 trillion in the first quarter of 2008 (see graphs 1 and 14 in the appendix). As shown in figure 5, credit default swaps are the dominant product, at \$3.9 trillion (89.8 percent) of all credit derivative notional amounts (see also tables 11 and 12 in the appendix).

Contracts referencing investment-grade entities with maturities from one to five years, which decreased by \$57.3 billion (3.0 percent) in the quarter, represented the largest segment of the market at 42.3 percent of all credit derivative notional amounts. Contracts of all tenors that reference investment-grade entities are 70.2 percent of the market (see chart on right in figure 5 and graph 14 in the appendix).

Figure 5. 2018 Q1 Credit Derivative Composition, in Billions of Dollars

By Product Type

By Maturity and Quality of Underlying Reference Entity



Source: Call reports, Schedule RC-L

The notional amount for the 76 banks that net sold credit protection (i.e., assumed credit risk) was \$2.1 trillion, up \$74.5 billion (3.6 percent) from the fourth quarter of 2017. The notional amount for the 57 banks that net purchased credit protection (i.e., hedged credit risk) was \$2.2 trillion, \$84.9 billion higher (4.0 percent) than in the fourth quarter of 2017 (see table 12 in the appendix).

Notional Amounts

Changes in notional amounts are generally reasonable reflections of business activity and can provide insight into potential revenue and operational issues. The notional amount of derivative contracts, however, does not provide a useful measure of market or credit risk.

The notional amount of derivative contracts held by banks in the first quarter increased by \$31.8 trillion (18.5 percent) to \$203.8 trillion from the previous quarter (see table 10). The increase in the notional amount of derivative contracts by underlying risk exposure was primarily driven by a \$25.1 trillion increase in interest rate notional amounts. Interest rate notional

amounts continued to represent the majority of banks' derivative holdings at \$155.5 trillion, or 76.3 percent of total derivatives during the first quarter of 2018 (see table 10).

The increase in the notional amount of derivative contracts by contract type was driven by an increase across all contract types (see table 11). Swap contracts remained the leading derivatives contract type at 51.6 percent of all notional amounts.

The four banks with the most derivative activity hold 89.8 percent of all bank derivatives, while the largest 25 banks account for nearly 100 percent of all contracts (see tables 3 and 5 and graph 4 in the appendix).

Table 10. Derivative Notional Amounts by Underlying Risk Exposure Quarter-Over-Quarter, in Billions of Dollars

	1Q2018	4Q2017	Q/Q Change	Q/Q % Change	1Q2017	Y/Y Change	Y/Y % Change
Interest Rate	\$155,469	\$130,416	\$25,053	19.2%	\$132,695	\$22,774	17.2%
Foreign Exchange	\$38,839	\$32,903	\$5,936	18.0%	\$36,161	\$2,678	7.4%
Equity	\$3,467	\$3,080	\$387	12.6%	\$2,826	\$640	22.7%
Commodity	\$1,631	\$1,373	\$258	18.8%	\$1,350	\$281	20.8%
Credit Derivatives	\$4,345	\$4,186	\$159	3.8%	\$5,304	-\$958	-18.1%
Total Notional	\$203,751	\$171,958	\$31,794	18.5%	\$178,335	\$25,416	14.3%

Source: Call reports, Schedule RC-L

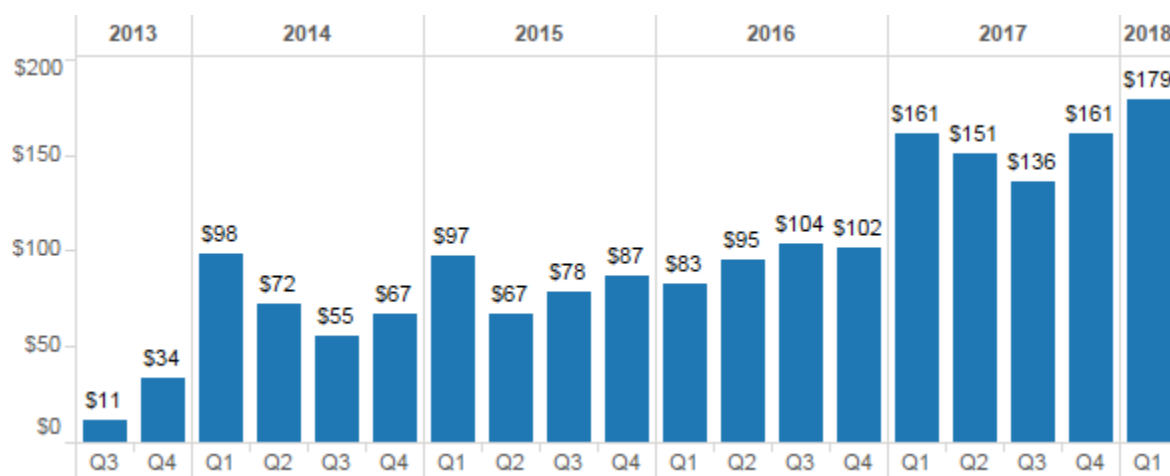
Table 11. Derivative Notional Amounts by Contract Type Quarter-Over-Quarter, in Billions of Dollars

	1Q2018	4Q2017	Q/Q Change	Q/Q % Change	1Q2017	Y/Y Change	Y/Y % Change
Futures & Forwards	\$45,497	\$34,407	\$11,090	32.2%	\$39,863	\$5,635	14.1%
Swaps	\$105,094	\$94,524	\$10,570	11.2%	\$99,183	\$5,912	6.0%
Options	\$48,814	\$38,841	\$9,974	25.7%	\$33,986	\$14,828	43.6%
Credit Derivatives	\$4,345	\$4,186	\$159	3.8%	\$5,304	-\$958	-18.1%
Total Notional	\$203,751	\$171,958	\$31,794	18.5%	\$178,335	\$25,416	14.3%

Source: Call reports, Schedule RC-L

Compression Activity

Notional amounts of banks' derivative contracts have generally declined since 2011 because of trade compression efforts, leading to less need for risk management products. Trade compression continues to be a significant factor in reducing the amount of notional derivatives outstanding. Trade compression aggregates a large number of swap contracts with similar factors, such as risk or cash flows, into fewer trades. Compression removes economic redundancy in a derivative book and reduces operational risk and capital costs for large banks. Trade compression activities increased in the first quarter of 2018, as shown in figure 6.

Figure 6. Quarterly Compression Activity, in Trillions of Dollars


Source: LCH.Clearnet

In the first quarter of 2015, banks began reporting their volumes of cleared and non-cleared derivative transactions, as well as risk weights for counterparties in each of these categories. In the first quarter of 2018, 39.8 percent of banks' derivative holdings were centrally cleared (see table 12). From a market factor perspective, 49.6 percent of interest rate derivative contracts' notional amounts outstanding were centrally cleared, while very little of the FX derivative market was centrally cleared. The bank-held credit derivative market remained largely uncleared, as 30.3 percent of investment grade and 26.0 percent of non-investment-grade transactions were centrally cleared (see graph 15 in the appendix).

Centrally cleared derivative transactions were heavily concentrated at qualified central counterparties, with 91.7 percent of notional amounts reflecting the 2 percent risk weight applicable to such counterparties.

Table 12. Centrally Cleared Derivative Contracts as a Percentage of Total Derivative Contracts

	Interest Rate	Foreign Exchange	Equity	Precious Metals	Credit	Other	Total
2018 Q1	49.6%	1.5%	27.9%	8.5%	28.9%	14.9%	39.8%
2017 Q4	47.8%	1.0%	25.7%	7.8%	25.8%	15.0%	38.0%
2017 Q3	50.2%	1.3%	28.6%	4.3%	26.2%	15.5%	39.6%
2017 Q2	50.8%	1.1%	27.3%	4.9%	23.6%	15.5%	40.3%
2017 Q1	49.8%	1.2%	25.1%	5.0%	22.3%	16.0%	39.2%
2016 Q4	49.1%	1.0%	23.5%	5.1%	20.4%	15.0%	38.8%
2016 Q3	49.2%	0.7%	24.3%	6.4%	21.2%	14.9%	39.0%
2016 Q2	49.1%	0.5%	22.1%	5.5%	18.3%	13.7%	39.1%
2016 Q1	45.4%	0.5%	21.4%	4.4%	19.4%	13.6%	36.5%
2015 Q4	46.2%	0.5%	20.0%	3.7%	16.8%	14.0%	36.9%
2015 Q3	44.6%	0.5%	14.5%	5.0%	20.4%	12.5%	36.0%
2015 Q2	43.1%	0.3%	13.6%	2.6%	19.6%	10.7%	35.0%
2015 Q1	44.7%	0.2%	13.6%	1.6%	19.7%	16.0%	36.5%

Source: Call reports, Schedule RC-R

Glossary of Terms

Bilateral netting: A legally enforceable arrangement between a bank and a counterparty that creates a single legal obligation covering all included individual contracts. This arrangement means that a bank's receivables or payables, in the event of the default or insolvency of one of the parties, would be the net sum of all positive and negative fair values of contracts included in the bilateral netting arrangement.

Centrally cleared derivative contract: A standardized derivative contract that is transacted bilaterally but submitted for clearing to a central counterparty, with the central counterparty becoming the ultimate counterparty to both the buyer and the seller.

Credit derivative: A financial contract that allows a party to take on or reduce credit exposure (generally on a bond, loan, or index). The OCC's derivatives survey includes OTC credit derivatives, such as credit default swaps, total return swaps, and credit spread options.

Derivative: A financial contract in which the value is derived from the performance of underlying market factors, such as interest rates, currency exchange rates, and commodity, credit, and equity prices. Derivative transactions include a wide assortment of financial contracts, such as structured debt obligations and deposits, swaps, futures, options, caps, floors, collars, forwards, and various combinations thereof.

Gross negative fair value (GNFV): The sum total of the fair values of contracts when the bank owes money to its counterparties, without taking into account netting. This amount represents the maximum losses the bank's counterparties would incur if the bank defaulted and there was no netting of contracts, and the counterparties held no bank collateral. GNFVs associated with credit derivatives are included.

Gross positive fair value (GPFV): The sum total of the fair values of contracts when the bank is owed money by its counterparties, without taking into account netting. This amount represents the maximum losses a bank would incur if all its counterparties defaulted and there was no netting of contracts, and the bank held no counterparty collateral. GPFVs associated with credit derivatives are included.

Net current credit exposure (NCCE): For a portfolio of derivative contracts, NCCE is the GPFV of contracts less the dollar amount of netting benefits. On any individual contract, current credit exposure (CCE) is the fair value of the contract if positive, and zero when the fair value is negative or zero. NCCE is also the net amount owed to banks if all contracts were immediately liquidated.

Notional amount: The nominal or face amount that is used to calculate payments made on swaps and other risk management products. This amount generally does not change hands and is thus referred to as notional.

OTC derivative contracts: Privately negotiated derivative contracts that are transacted off of organized exchanges.

Potential future exposure (PFE): An estimate of what the CCE could be over time, based on a supervisory formula in the agencies' risk-based capital rules. PFE is generally determined by multiplying the notional amount of the contract by a credit conversion factor that is based on the underlying market factor (e.g., interest rates, commodity prices, or equity prices) and the contract's remaining maturity. The risk-based capital rules, however, permit banks to adjust the

formulaic PFE measure by the net-to-gross ratio, which proxies the risk-reduction benefits attributable to a valid bilateral netting contract. PFE data in this report use the amounts on which banks hold risk-based capital.

Qualified central counterparty: Qualified central counterparties are defined in 12 CFR 3.2 as either a CCP that the Financial Stability Oversight Council has designated systemically important under Title VIII of the Dodd-Frank Wall Street Reform and Consumer Protection Act or meets a series of standards. See 12 CFR 3.2 for full definition.

Total credit exposure (TCE): The sum total of NCCE and PFE.

Total risk-based capital: The sum of tier 1 plus tier 2 capital. Tier 1 capital generally consists of common shareholders' equity, perpetual preferred shareholders' equity with noncumulative dividends, retained earnings, and tier 1 capital of consolidated subsidiaries that is not owned by the bank (minority interest), less regulatory adjustments and deductions. Tier 2 capital generally consists of subordinated debt, intermediate-term preferred stock, cumulative and long-term preferred stock, tier 2 capital of consolidated subsidiaries that is not owned by the bank (minority interest), and a portion of a bank's allowance for loan and lease losses less regulatory adjustments and deductions.

Trade compression: A significant factor in reducing the amount of notional derivatives outstanding. Trade compression aggregates a large number of swap contracts with similar factors, such as risk or cash flows, into fewer trades. Compression removes economic redundancy in a derivative book and reduces operational risks and capital costs for large banks.

Volatility index (VIX): A measure of the market's expectation of stock market volatility of S&P 500 index options over the next 30-day period.

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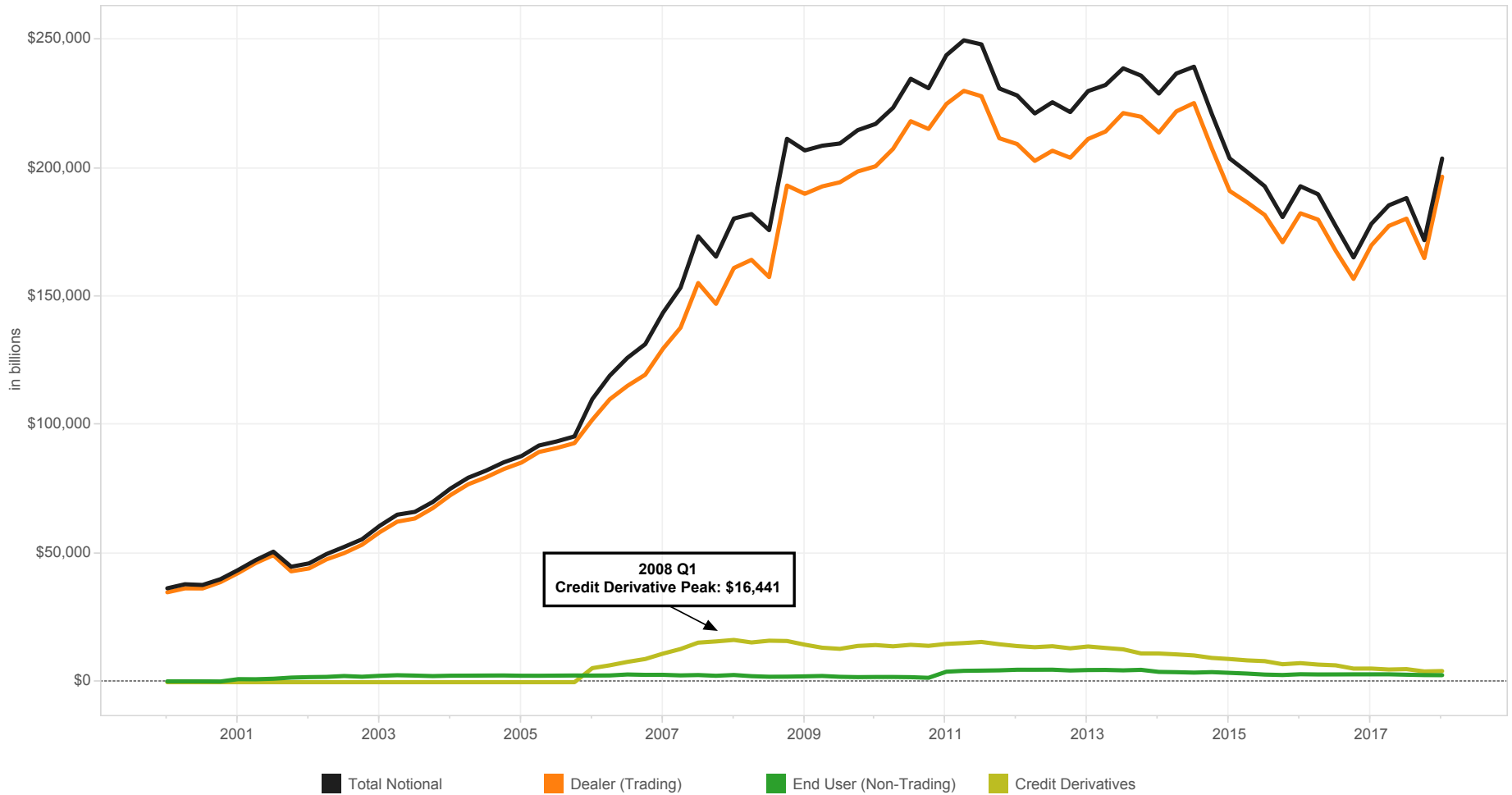
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Table 13. Derivatives Data Reported By FFIEC 051 Filers

Graph 1
Derivative Notional Amounts by Type
Insured U.S. Commercial Banks and Savings Associations

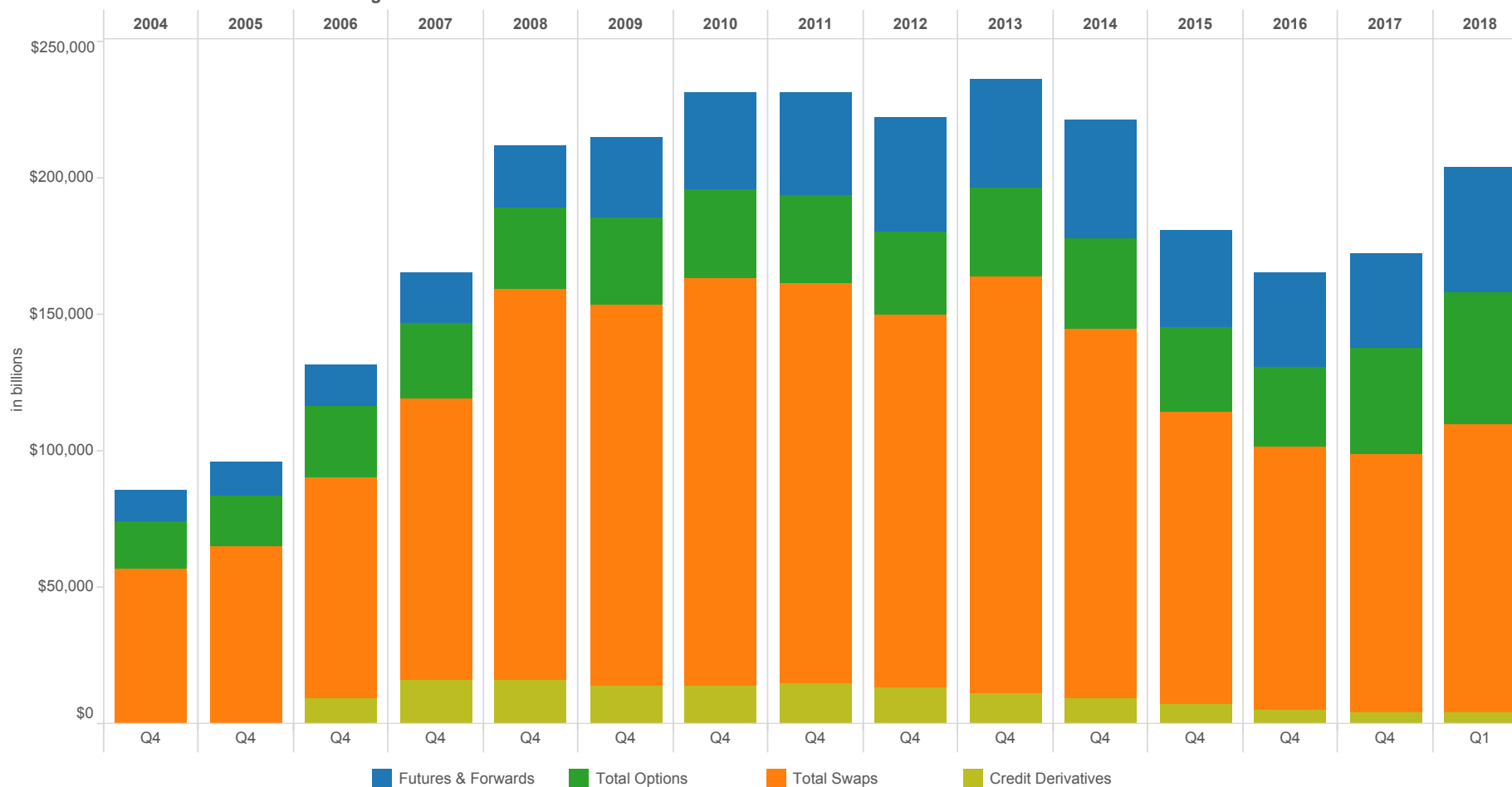


In billions of dollars

	2013				2014				2015				2016				2017				2018
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Total Notional	\$229,987	\$232,342	\$238,827	\$235,992	\$229,011	\$236,808	\$239,459	\$221,078	\$203,777	\$198,530	\$192,942	\$180,959	\$192,952	\$189,842	\$177,466	\$165,252	\$178,335	\$185,522	\$188,351	\$171,958	\$203,751
Dealer (Trading)	211,353	214,240	221,425	219,990	213,838	222,078	225,318	207,711	191,123	186,686	181,777	171,172	182,437	179,971	167,873	156,901	169,971	177,519	180,344	164,998	196,670
End User (Non-Trading)	4,733	4,776	4,610	4,812	4,008	3,903	3,732	3,918	3,637	3,356	2,968	2,800	3,097	3,018	3,030	3,057	3,061	3,069	2,917	2,774	2,735
Credit Derivatives	13,901	13,327	12,793	11,191	11,165	10,827	10,408	9,449	9,017	8,488	8,198	6,986	7,418	6,853	6,562	5,293	5,304	4,935	5,090	4,186	4,345

Note: Numbers may not add up to total due to rounding. Total derivative notionals are now reported including credit derivatives, for which regulatory reporting does not differentiate between trading and non-trading.
 Source: Call reports

Graph 2
Derivative Contracts by Product*
Insured U.S. Commercial Banks and Savings Associations



In billions of dollars

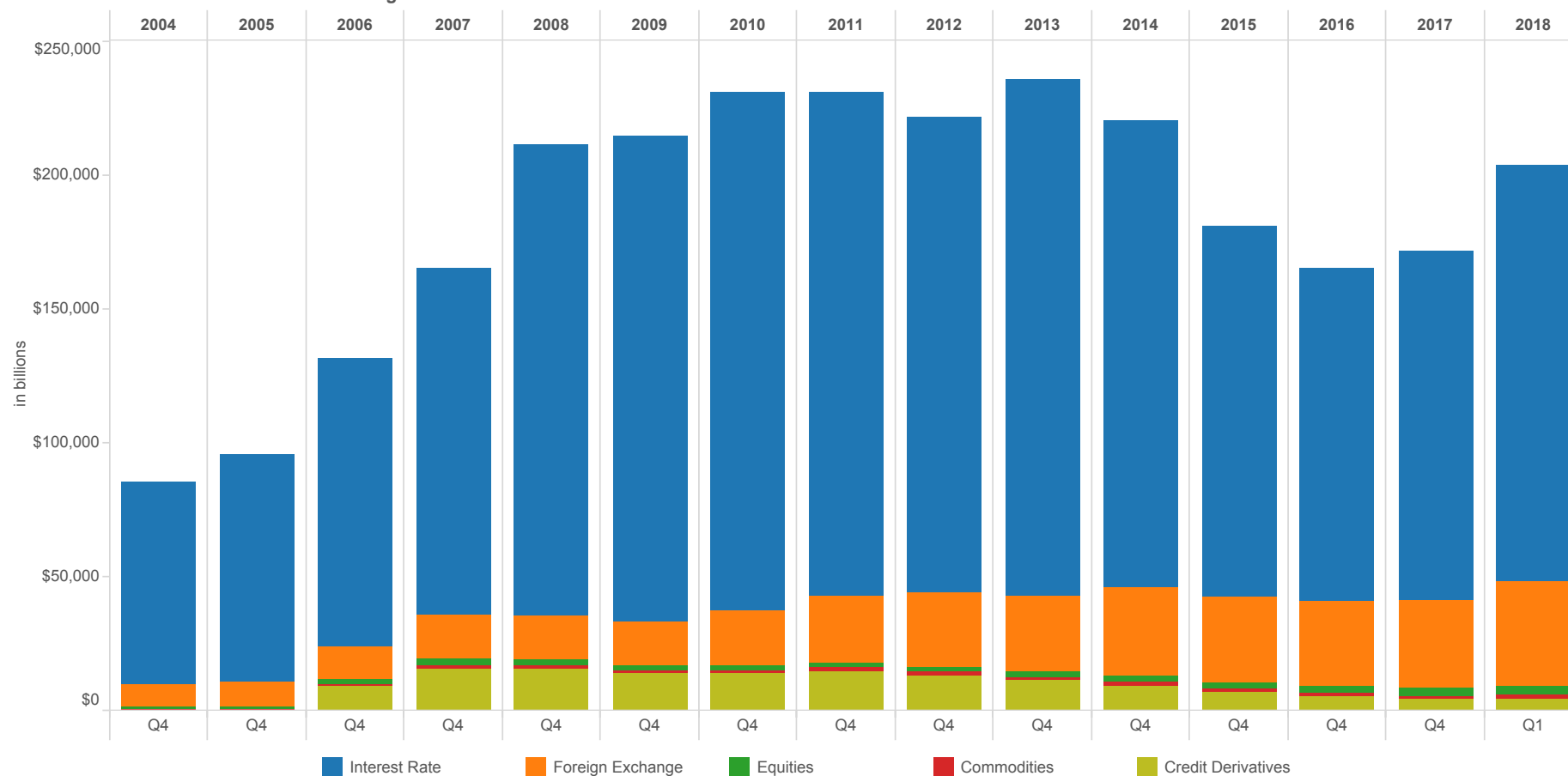
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q1
Futures & Forwards	\$11,370	\$12,057	\$14,882	\$18,867	\$22,529	\$29,652	\$35,539	\$37,469	\$41,621	\$40,027	\$43,380	\$35,691	\$34,201	\$34,407	\$45,497
Total Options	17,754	18,858	26,277	27,727	29,747	31,884	32,078	32,505	30,375	32,305	33,081	30,889	29,373	38,841	48,814
Total Swaps	56,411	64,712	81,340	103,102	143,111	139,138	149,331	146,266	136,608	152,469	135,169	107,392	96,384	94,524	105,094
Credit Derivatives	0	0	9,020	15,863	16,029	14,112	14,151	14,759	13,190	11,191	9,449	6,986	5,293	4,186	4,345
Total Notional	85,536	95,627	131,519	165,559	211,416	214,786	231,099	230,998	221,794	235,992	221,078	180,959	165,252	171,958	203,751

*Notional amount of total: futures, exchange-traded options, over the counter options, forwards and swaps.

Note: Numbers may not add up to total due to rounding.

Source: Call reports

Graph 3
Derivative Contracts by Type*
Insured U.S. Commercial Banks and Savings Associations

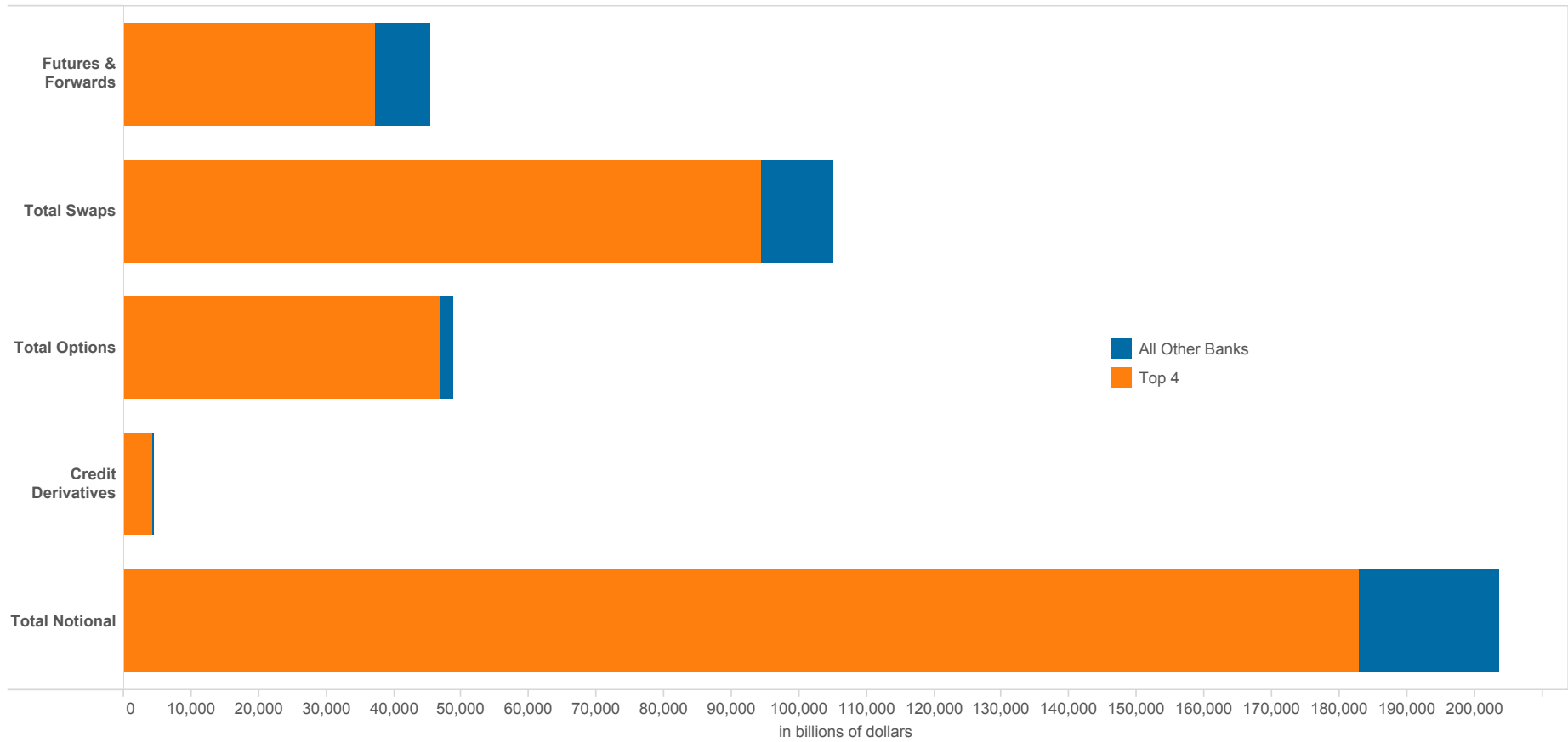


In billions of dollars

	2004 Q4	2005 Q4	2006 Q4	2007 Q4	2008 Q4	2009 Q4	2010 Q4	2011 Q4	2012 Q4	2013 Q4	2014 Q4	2015 Q4	2016 Q4	2017 Q4	2018 Q1
Interest Rate	\$75,533	\$84,530	\$107,435	\$129,491	\$175,895	\$181,454	\$193,399	\$187,866	\$177,650	\$193,084	\$174,687	\$138,369	\$124,488	\$130,416	\$155,469
Foreign Exchange	8,607	9,289	11,900	16,614	16,224	16,555	20,990	25,436	27,587	28,480	33,183	32,100	31,737	32,903	38,839
Equities	1,112	1,255	2,271	2,524	2,207	1,685	1,364	1,606	1,970	2,028	2,537	2,395	2,475	3,080	3,467
Commodities	284	552	893	1,067	1,061	979	1,195	1,330	1,397	1,209	1,222	1,108	1,257	1,373	1,631
Credit Derivatives	0	0	9,020	15,863	16,029	14,112	14,151	14,759	13,190	11,191	9,449	6,986	5,293	4,186	4,345
Total Notional	85,536	95,627	131,519	165,559	211,416	214,786	231,099	230,998	221,794	235,992	221,078	180,959	165,252	171,958	203,751

Note: As of 2006 Q2 equities and commodities types are shown as separate categories. They were previously shown as "Other Derivs."
 Numbers may not add up to total due to rounding.
 Source: Call reports

Graph 4
Four Banks Dominate in Derivatives*
Insured U.S. Commercial Banks and Savings Associations

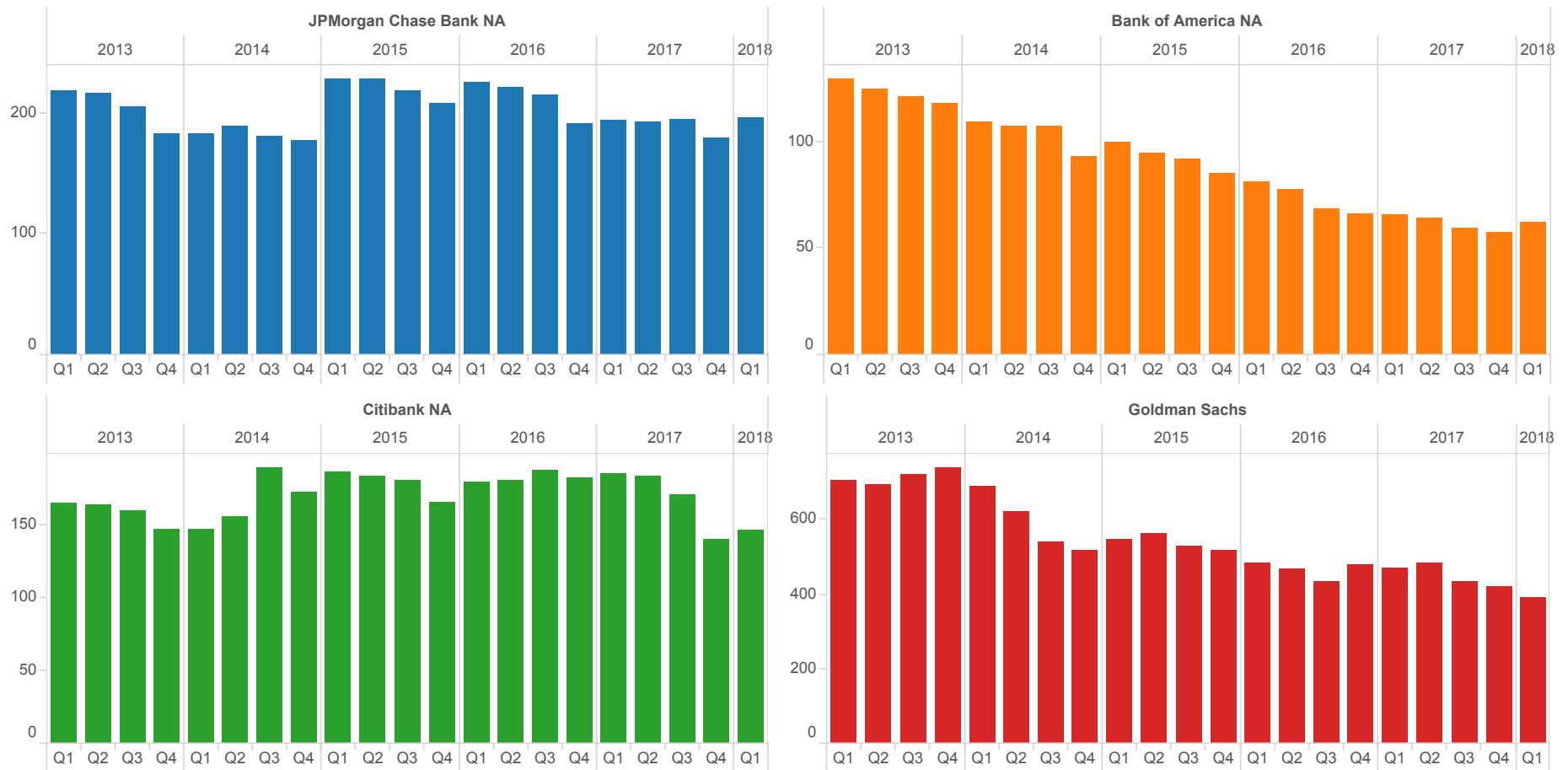


In billions of dollars

	Top 4	All Other Banks	Grand Total
Futures & Forwards	\$37,366	\$8,131	\$45,497
Total Swaps	94,579	10,515	105,094
Total Options	46,861	1,953	48,814
Credit Derivatives	4,188	157	4,345
Total Notional	182,995	20,757	203,751

*Notional amount of total: futures, exchange-traded options, over-the-counter options, forwards, and swaps.
 Source: Call reports

Graph 5
Credit Exposure to Risk-Based Capital (in Percentage)
Top 4 Insured U.S. Commercial Banks and Savings Associations by Derivative Holdings

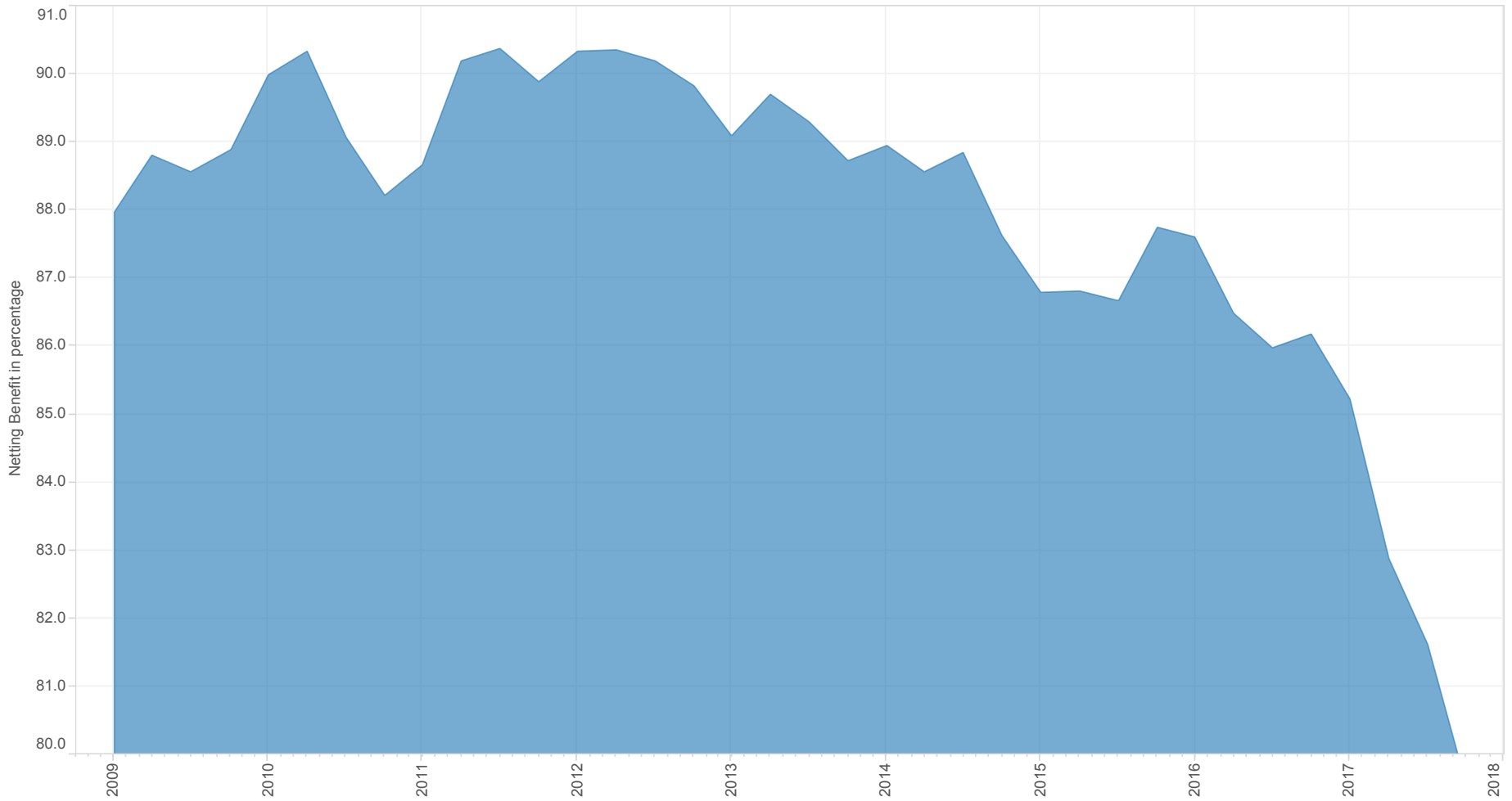


	2013				2014				2015				2016				2017				2018
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
JPMorgan Chase Bank NA	219	216	205	183	183	189	181	177	229	228	219	209	225	221	216	192	194	193	195	179	197
Bank of America NA	129	125	121	117	109	107	107	93	100	95	91	85	81	77	68	66	66	64	59	57	62
Citibank NA	165	164	161	148	147	156	190	173	187	184	181	166	180	181	188	183	186	184	171	140	146
Goldman Sachs	703	693	719	741	689	620	539	516	547	563	530	516	482	467	433	481	472	484	433	420	389
TOTAL	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
	261	258	262	262	248	240	224	211	238	242	232	223	226	222	217	217	217	218	205	191	195

Note: The methodology to calculate the credit risk exposure to capital ratio for the Top 4 category uses a weighted average of total current credit exposure.
Source: Call reports

Graph 6

Netting Benefit*: Amount of Gross Credit Exposure Eliminated Through Bilateral Netting Insured U.S. Commercial Banks and Savings Associations by Derivative Holdings



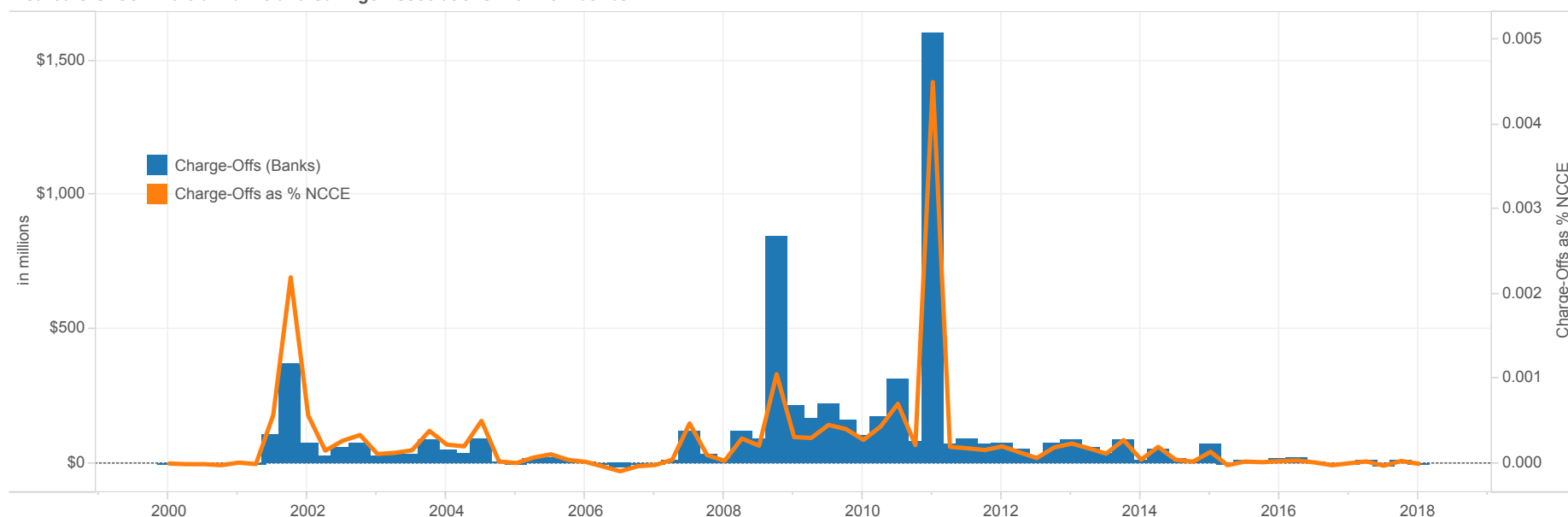
Netting Benefit (in percentage)

2009			2010				2011				2012				2013				2014				2015				2016				2017				2018
Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1				
88.0	88.8	88.5	88.9	90.0	90.3	89.1	88.2	88.6	90.2	90.4	89.9	90.3	90.3	90.2	89.8	89.1	89.7	89.3	88.7	88.9	88.6	88.8	87.6	86.8	86.8	86.7	87.7	87.6	86.5	86.0	86.2	85.2	82.9	81.6	79.5

*The netting benefit is defined as: \$ amount of netting benefits/gross positive fair value.
Source: Call reports, beginning the first quarter of 2015 RC-R; otherwise RC-L

Graph 7

**Quarterly Charge-Offs/(Recoveries) From Derivatives - Bank
Insured U.S. Commercial Banks and Savings Associations with Derivatives**



In millions of dollars

	2000				2001				2002				2003			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Charge-Offs (Banks)	0.0	-1.0	-1.0	-3.0	2.0	-1.0	107.3	370.0	75.8	28.2	59.0	73.7	25.3	29.9	32.3	83.7
	2004				2005				2006				2007			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Charge-Offs (Banks)	46.7	34.9	92.2	5.4	1.3	14.2	23.0	8.3	3.6	-7.0	-16.0	-5.8	-3.1	9.1	119.5	30.7
	2008				2009				2010				2011			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Charge-Offs (Banks)	15	120	92	847	217	168	221	162	100	173	313	83	1,601	72	91	69
	2012				2013				2014				2015			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Charge-Offs (Banks)	76.35	54.34	26.12	73.44	84.28	60.72	35.77	83.45	12.78	55.90	14.53	7.91	69.31	-7.93	10.44	6.40
	2016				2017				2018							
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1							
Charge-Offs (Banks)	13.30	18.56	6.48	-7.84	1.22	8.71	-8.77	10.26	-1.14							

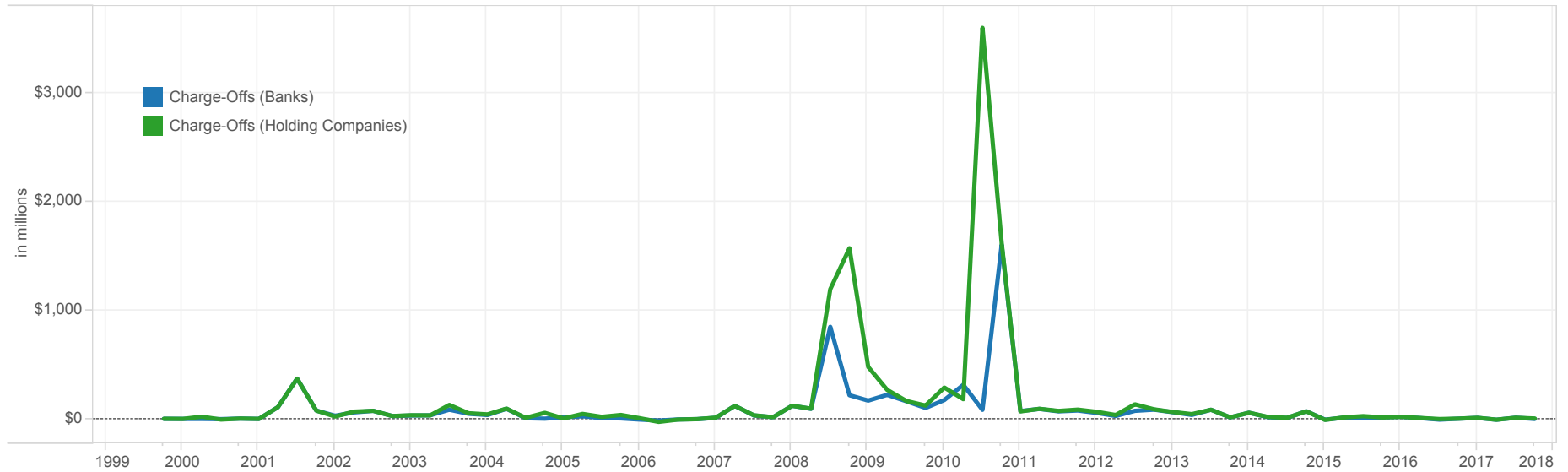
Note: The figures are for each quarter alone, not year-to-date.

NCCE: Pre 2009 Q2 (RC-R); 2009 Q2 - 2014 Q4 (RC-L); 2015 Q1 onward (RC-R)

Source: Call reports

Graph 8

Quarterly Charge-Offs/(Recoveries) From Derivatives - Holding Company
Insured U.S. Commercial Banks and Savings Associations with Derivatives Compared with Holding Companies

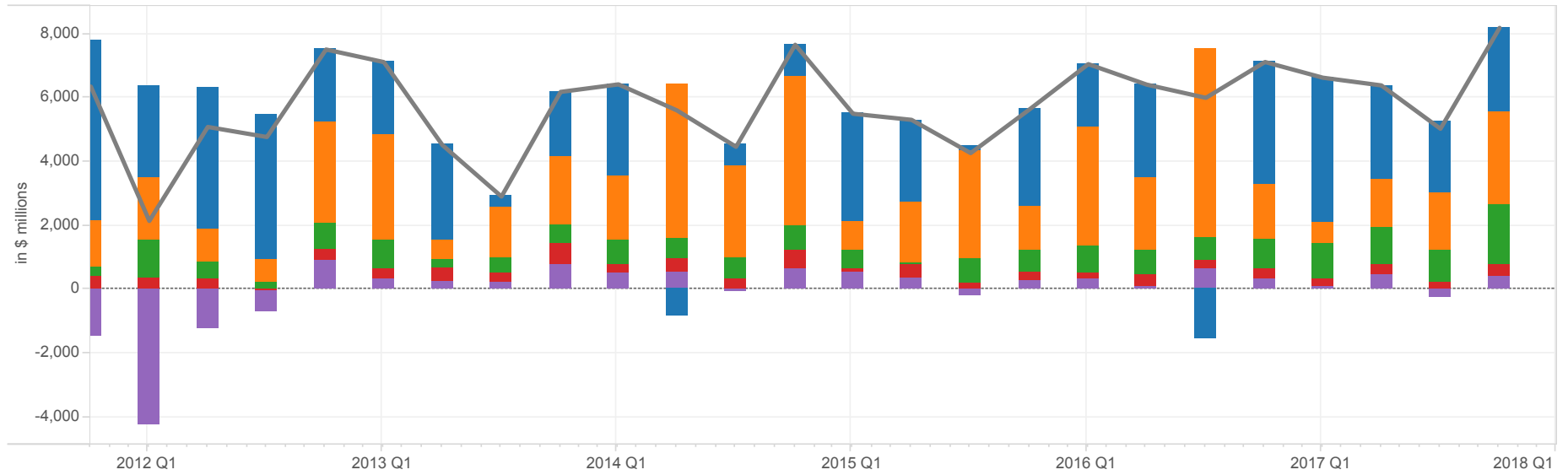


In millions of dollars

	2000				2001				2002				2003												
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4									
Charge-Offs (Banks)	0.0	-1.0	-1.0	-3.0	2.0	-1.0	107.3	370.0	75.8	28.2	59.0	73.7	25.3	29.9	32.3	83.7									
Charge-Offs (Holding Companies)	0.1	-1.0	19.3	-7.0	2.0	-1.0	107.3	369.6	75.8	21.2	66.0	73.7	25.3	32.9	31.4	127.8									
	2004				2005				2006				2007												
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4									
Charge-Offs (Banks)	46.7	34.9	92.2	5.4	1.3	14.2	23.0	8.3	3.6	-7.0	-16.0	-5.8	-3.1	9.1	119.5	30.7									
Charge-Offs (Holding Companies)	51.2	40.4	94.2	9.0	54.9	3.6	45.1	18.1	35.4	5.4	-28.1	-7.2	-3.1	10.4	119.4	32.2									
	2008				2009				2010				2011												
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4									
Charge-Offs (Banks)	15	120	92	847	217	168	221	162	100	173	313	83	1,601	72	91	69									
Charge-Offs (Holding Companies)	15	120	93	1,192	1,570	477	266	164	122	288	181	3,598	1,617	68	92	73									
	2012				2013				2014				2015				2016				2017		2018		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Charge-Offs (Banks)	76.3	54.3	26.1	73.4	84.3	60.7	35.8	83.5	12.8	55.9	14.5	7.9	69.3	-7.9	10.4	6.4	13.3	18.6	6.5	-7.8	1.2	8.7	-8.8	10.3	-1.1
Charge-Offs (Holding Companies)	84.6	64.0	34.9	133.4	87.2	62.6	42.9	83.4	13.6	55.6	17.2	9.1	69.0	-10.2	12.9	24.5	12.8	18.0	7.5	-2.5	1.4	8.9	-8.3	9.6	2.6

Note: The figures are for each quarter alone, not year-to-date.
 Source: Call reports and Y-9

Graph 9a
Quarterly Trading Revenue (Cash and Derivative Positions)* - Bank
Insured U.S. Commercial Banks and Savings Associations



- Interest Rate
- Foreign Exchange
- Equity
- Commodity & Other
- Credit
- Total Trading Revenue

In millions of dollars

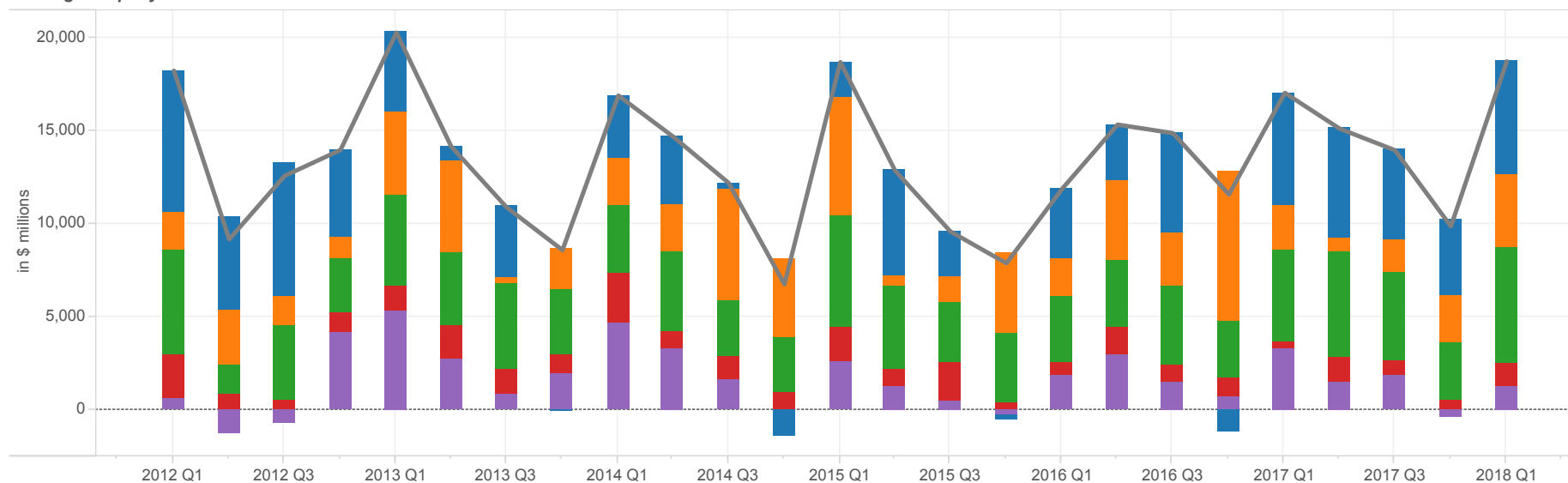
	1Q2018	Average Past 12 Q1's	Past 8 Quarter Average	Past 8 Quarter High	Past 8 Quarter Low	Since 2000 Average	Max Since 2000	Min Since 2000
Interest Rate	2,649	2,624	2,507	4,520	-5,282	1,731	9,291	-1,547
Foreign Exchange	2,895	2,677	2,442	5,941	-1,069	1,857	5,941	681
Equity	1,865	1,063	1,004	1,865	-1,059	597	1,865	668
Commodity & Other	368	389	280	368	-307	229	789	161
Credit	421	410	272	634	-10,237	-165	2,727	-237
Total Trading Revenue	8,198	7,162	6,504	8,198	-10,580	4,249	10,217	5,037

In millions of dollars

	2013				2014				2015				2016				2017				2018
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Interest Rate	2,243	2,268	3,002	360	2,015	2,883	-819	664	958	3,406	2,578	154	3,023	1,973	2,920	-1,547	3,865	4,520	2,918	2,238	2,649
Foreign Exchange	3,185	3,303	588	1,550	2,137	2,026	4,830	2,902	4,703	855	1,931	3,401	1,424	3,719	2,294	5,941	1,685	681	1,540	1,796	2,895
Equity	838	924	233	491	612	726	654	650	797	587	49	742	668	867	734	681	922	1,122	1,183	990	1,865
Commodity & Other	364	292	481	265	672	293	411	335	587	129	402	198	271	161	353	296	328	206	284	251	368
Credit	890	339	222	245	756	500	535	-79	624	530	357	-222	263	342	118	634	330	108	470	-237	421
Total Trading Revenue	7,520	7,125	4,527	2,911	6,192	6,428	5,612	4,471	7,669	5,507	5,316	4,273	5,650	7,062	6,420	6,006	7,129	6,637	6,396	5,037	8,198

*The trading revenue figures are for cash and derivative activities. Revenue figures are for each quarter alone, not year-to-date.
 Note: Numbers may not add up to total due to rounding.
 Source: Call reports

Graph 9b
Quarterly Trading Revenue (Cash and Derivative Positions)*
Holding Company



- Interest Rate
- Foreign Exchange
- Equity
- Commodity & Other
- Credit
- Total Trading Revenue

In millions of dollars

	2013				2014				2015				2016				2017				2018
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Interest Rate	4,272	823	3,811	-94	3,395	3,645	353	-1,396	1,893	5,662	2,403	-243	3,808	2,965	5,359	-1,193	6,013	5,884	4,780	4,022	6,039
Foreign Exchange	4,414	4,890	320	2,205	2,472	2,521	5,985	4,243	6,329	552	1,393	4,338	2,025	4,318	2,899	8,007	2,440	721	1,766	2,584	3,934
Equity	4,960	3,936	4,561	3,484	3,682	4,296	2,938	2,947	6,022	4,481	3,196	3,696	3,441	3,612	4,159	3,021	4,902	5,682	4,705	3,096	6,258
Commodity & Other	1,324	1,746	1,347	1,052	2,617	924	1,242	954	1,833	871	2,146	412	738	1,491	969	1,003	399	1,330	784	523	1,195
Credit	5,292	2,761	855	1,949	4,718	3,292	1,687	14	2,603	1,294	452	-317	1,880	2,940	1,482	742	3,274	1,493	1,917	-356	1,296
Total Trading Revenue	20,262	14,156	10,893	8,595	16,885	14,679	12,205	6,762	18,680	12,860	9,590	7,887	11,892	15,327	14,868	11,579	17,028	15,111	13,953	9,870	18,721

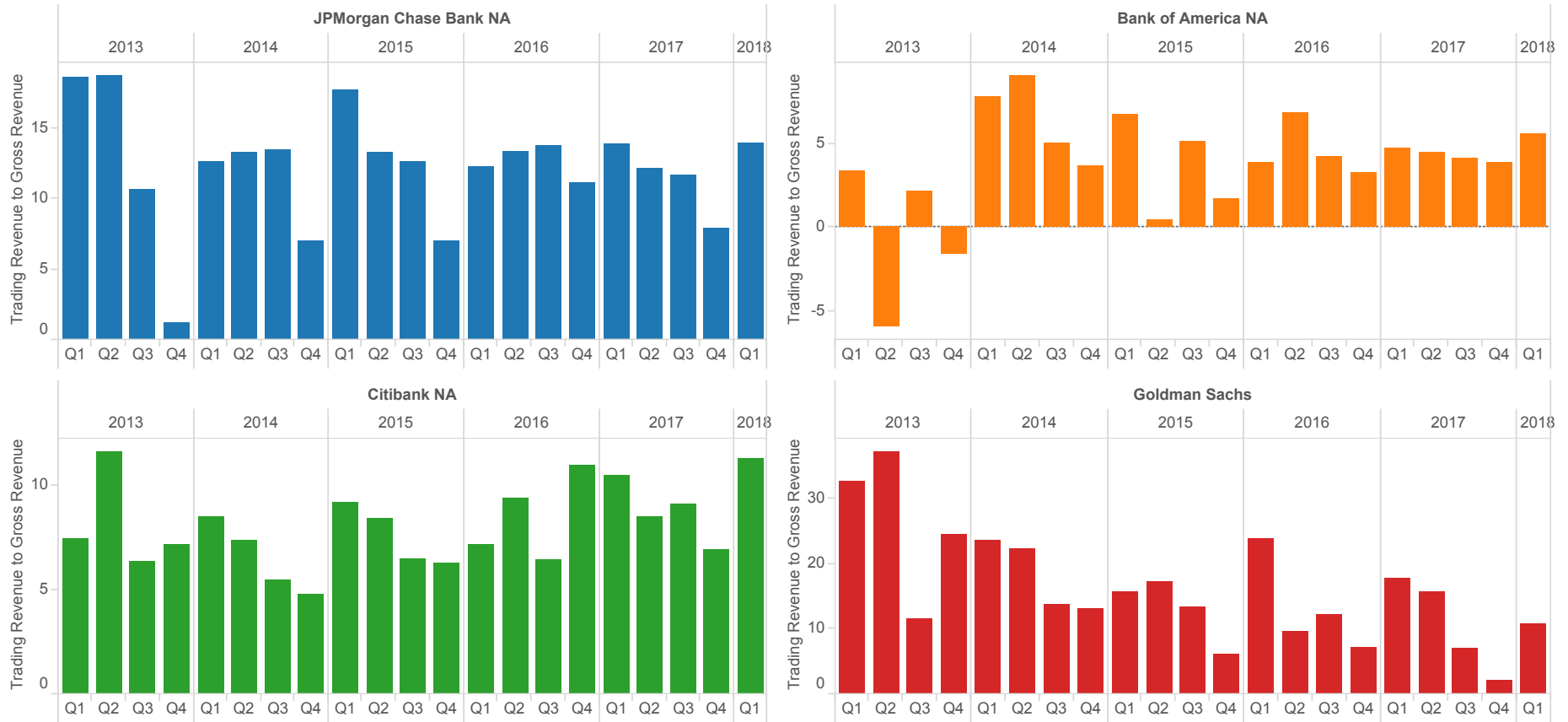
*The trading revenue figures are for cash and derivative activities. Revenue figures are for each quarter alone, not year-to-date.

Note: Numbers may not add up to total due to rounding.

Source: Y9

Graph 10

Quarterly Trading Revenue (Cash and Derivative Positions) as a Percentage of Gross Revenue (in Percentage)
Top 4 Insured U.S. Commercial Banks and Savings Associations by Derivative Holdings



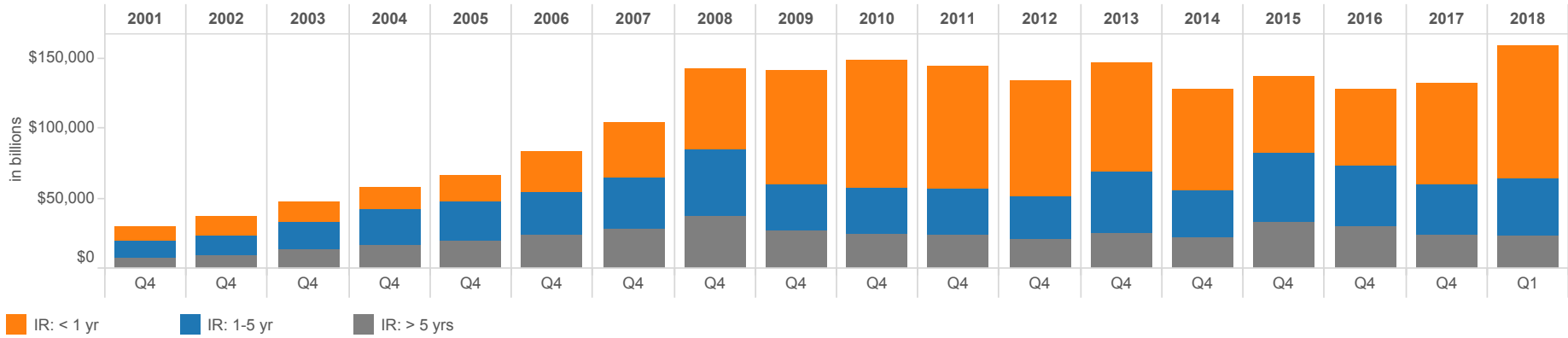
Trading Revenue to Gross Revenue (in percentage)*

	2013				2014				2015				2016				2017				2018
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
JPMorgan Chase Bank NA	18.65	18.73	10.67	1.24	12.63	13.31	13.47	6.97	17.73	13.25	12.65	7.03	12.26	13.34	13.83	11.17	13.84	12.16	11.64	7.94	13.97
Bank of America NA	3.39	-5.97	2.14	-1.58	7.80	9.11	5.11	3.68	6.78	0.49	5.19	1.72	3.90	6.87	4.18	3.28	4.70	4.49	4.09	3.87	5.62
Citibank NA	7.45	11.71	6.39	7.20	8.51	7.43	5.48	4.78	9.17	8.41	6.54	6.30	7.19	9.41	6.47	10.97	10.47	8.50	9.12	6.94	11.33
Goldman Sachs	32.65	37.30	11.54	24.45	23.67	22.21	13.74	13.06	15.85	17.32	13.32	6.16	23.78	9.54	12.16	7.22	17.71	15.66	7.10	2.15	10.71
TOTAL	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
	10.42	9.56	6.72	2.77	10.06	10.45	8.53	5.35	11.68	7.62	8.41	5.03	8.45	10.14	8.51	8.51	10.10	8.74	8.47	6.20	10.57

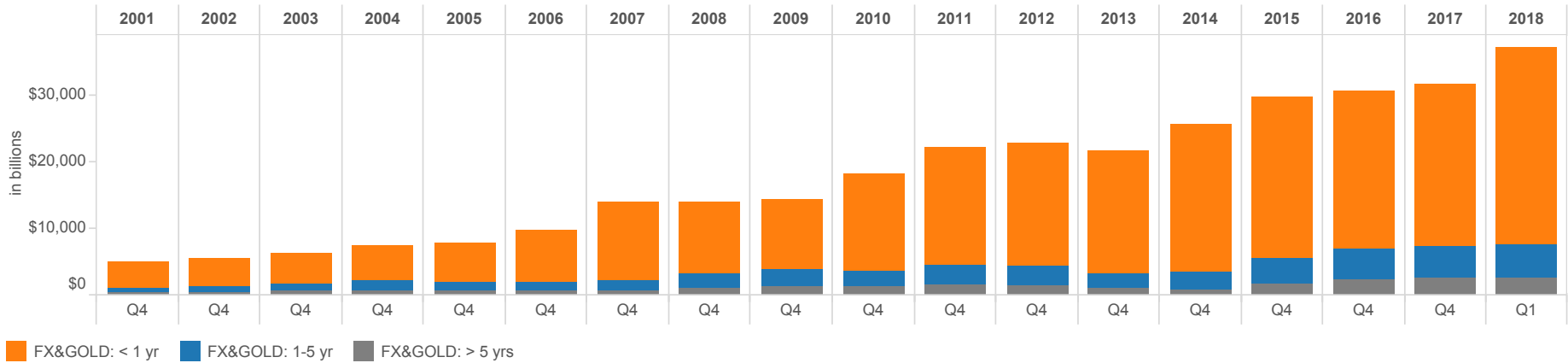
*The trading revenue figures are for cash and derivative activities. Revenue figures are quarterly, not year-to-date numbers.
 Note: Gross revenue equals interest income plus non-interest income.
 Source: Call reports

Graph 11
Notional Amounts of Interest Rate and FX + Gold Contracts by Maturity
Insured U.S. Commercial Banks and Savings Associations

Interest Rate



FX & Gold



In billions of dollars

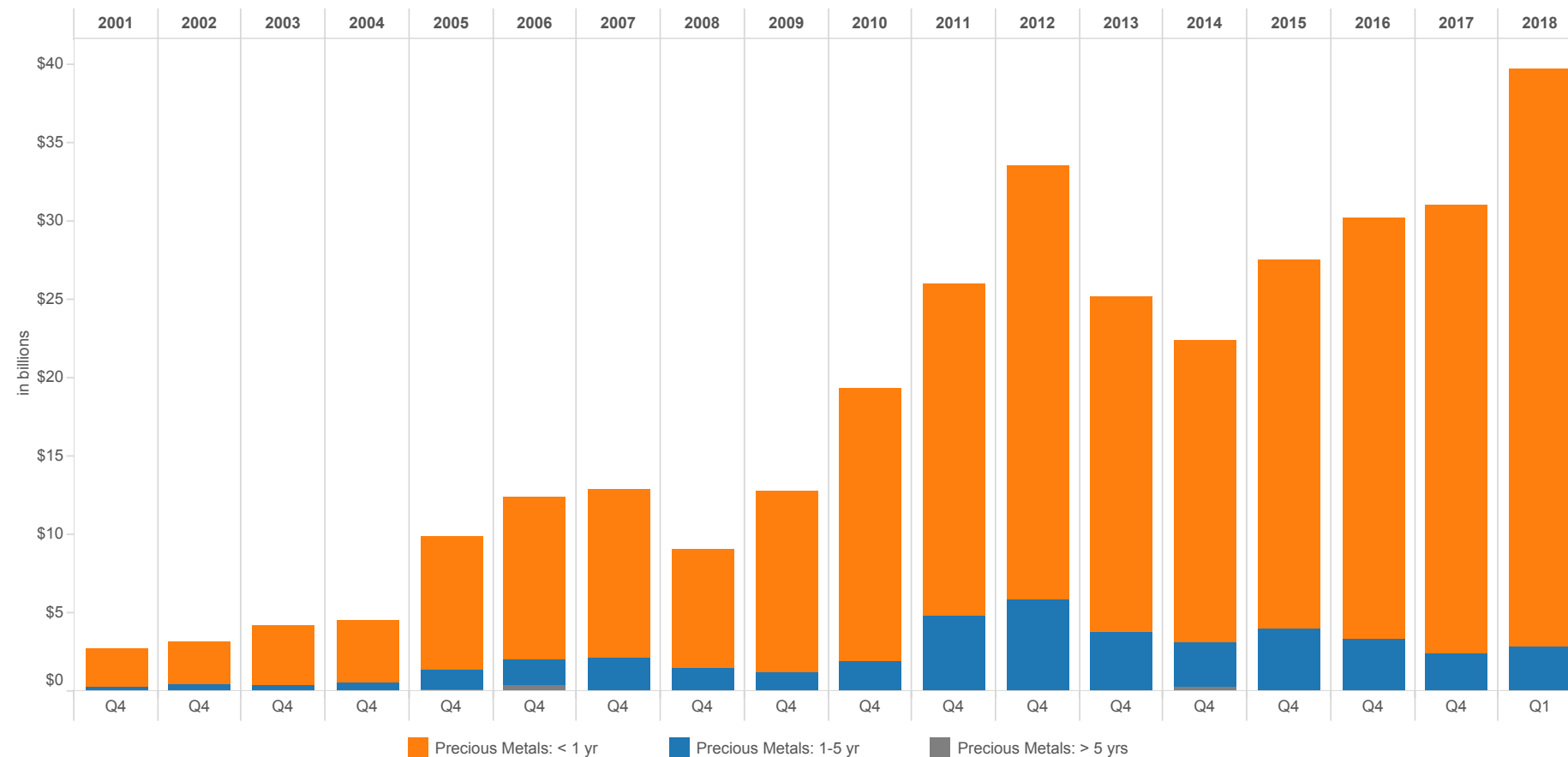
	2001 Q4	2002 Q4	2003 Q4	2004 Q4	2005 Q4	2006 Q4	2007 Q4	2008 Q4	2009 Q4	2010 Q4	2011 Q4	2012 Q4	2013 Q4	2014 Q4	2015 Q4	2016 Q4	2017 Q4	2018 Q1
IR: < 1 yr	\$10,379	\$12,982	\$13,581	\$15,921	\$18,483	\$29,552	\$39,085	\$58,618	\$81,236	\$90,843	\$87,812	\$82,948	\$77,758	\$71,808	\$55,054	\$55,061	\$72,589	\$95,437
IR: 1-5 yr	11,709	14,328	20,404	25,893	27,683	31,386	37,222	47,456	33,970	33,497	32,750	30,191	44,157	33,727	49,406	43,261	36,154	40,334
IR: > 5 yrs	7,451	9,735	13,117	16,492	19,825	23,273	27,724	36,868	26,374	24,307	24,168	21,175	24,630	22,214	32,981	29,762	23,565	23,686
FX&GOLD: < 1 yr	3,816	4,078	4,510	5,384	5,728	7,730	11,660	10,640	10,490	14,629	17,632	18,386	18,372	22,145	24,130	23,911	24,380	29,696
FX&GOLD: 1-5 yr	686	857	1,146	1,317	1,381	1,452	1,639	2,195	2,473	2,462	3,117	2,910	2,341	2,587	3,986	4,453	4,805	5,022
FX&GOLD: > 5 yrs	499	439	582	762	689	594	622	1,082	1,347	1,290	1,503	1,480	1,029	969	1,648	2,420	2,525	2,630

Note: Figures above exclude FX contracts with an original maturity of 14 days or less, written options, basis swaps, and any other contracts not subject to risk-based capital requirements. Effective Q1 2015, the reporting form and call report instructions changed. Schedule RC-R now requires banks to report gold and FX notionals in aggregate, rather than separately. Source: Call reports

Graph 12

**Notional Amounts of Precious Metal Contracts by Maturity
Insured U.S. Commercial Banks and Savings Associations**

Precious Metals



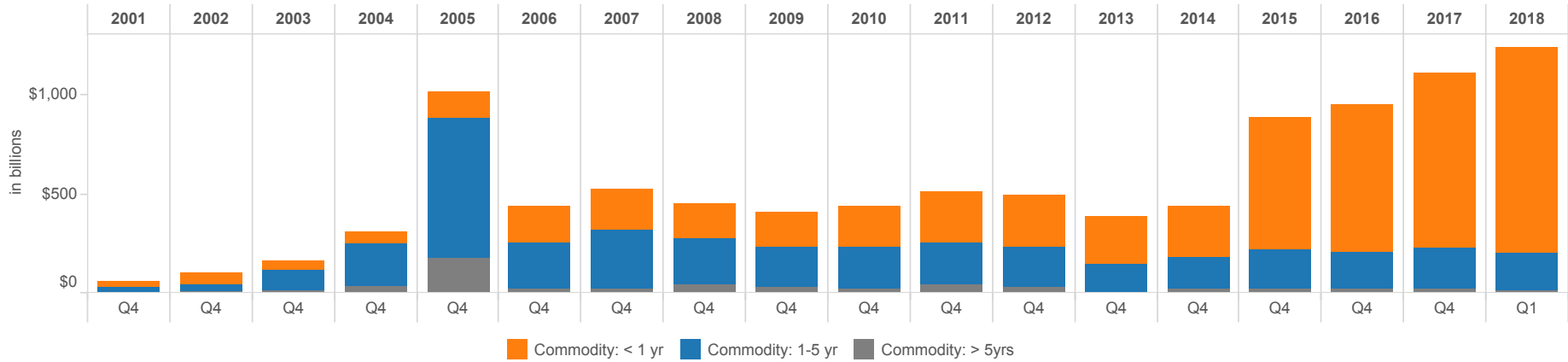
In billions of dollars

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q1
Precious Metals: < 1 yr	2.44	2.72	3.87	4.04	8.59	10.35	10.72	7.55	11.55	17.47	21.12	27.68	21.41	19.29	23.51	26.87	28.62	36.84
Precious Metals: 1-5 yr	0.23	0.46	0.33	0.51	1.29	1.75	2.10	1.51	1.24	1.89	4.74	5.82	3.80	2.84	3.92	3.27	2.38	2.82
Precious Metals: > 5 yrs	0.00	0.00	0.00	0.00	0.06	0.33	0.01	0.00	0.00	0.03	0.10	0.03	0.00	0.29	0.07	0.02	0.01	0.01

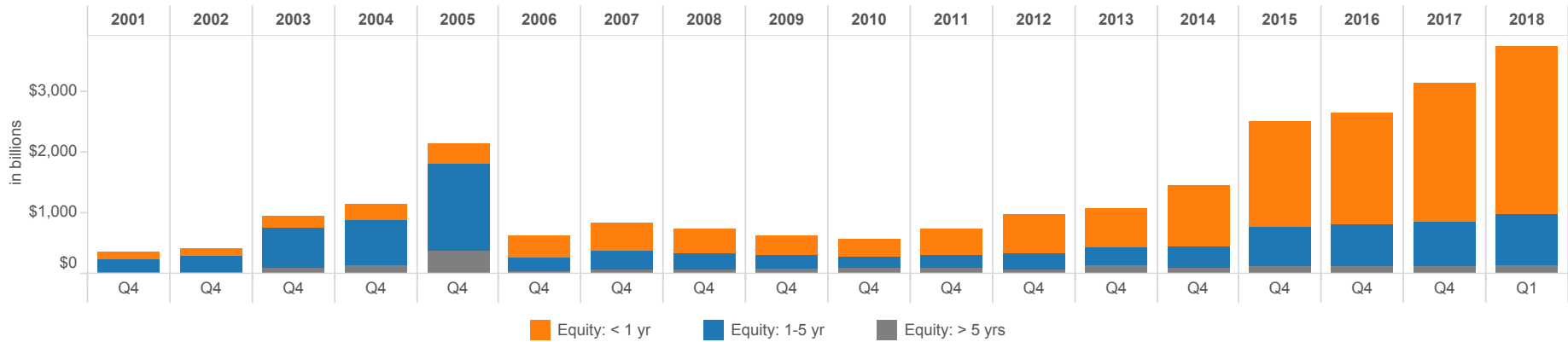
Note: Figures exclude FX contracts with an original maturity of 14 days or less, written options, basis swaps, and any other contracts not subject to risk-based capital requirements.
Source: Call reports

Graph 13
Notional Amounts of Commodity and Equity Contracts by Maturity
Insured U.S. Commercial Banks and Savings Associations

Commodity



Equity



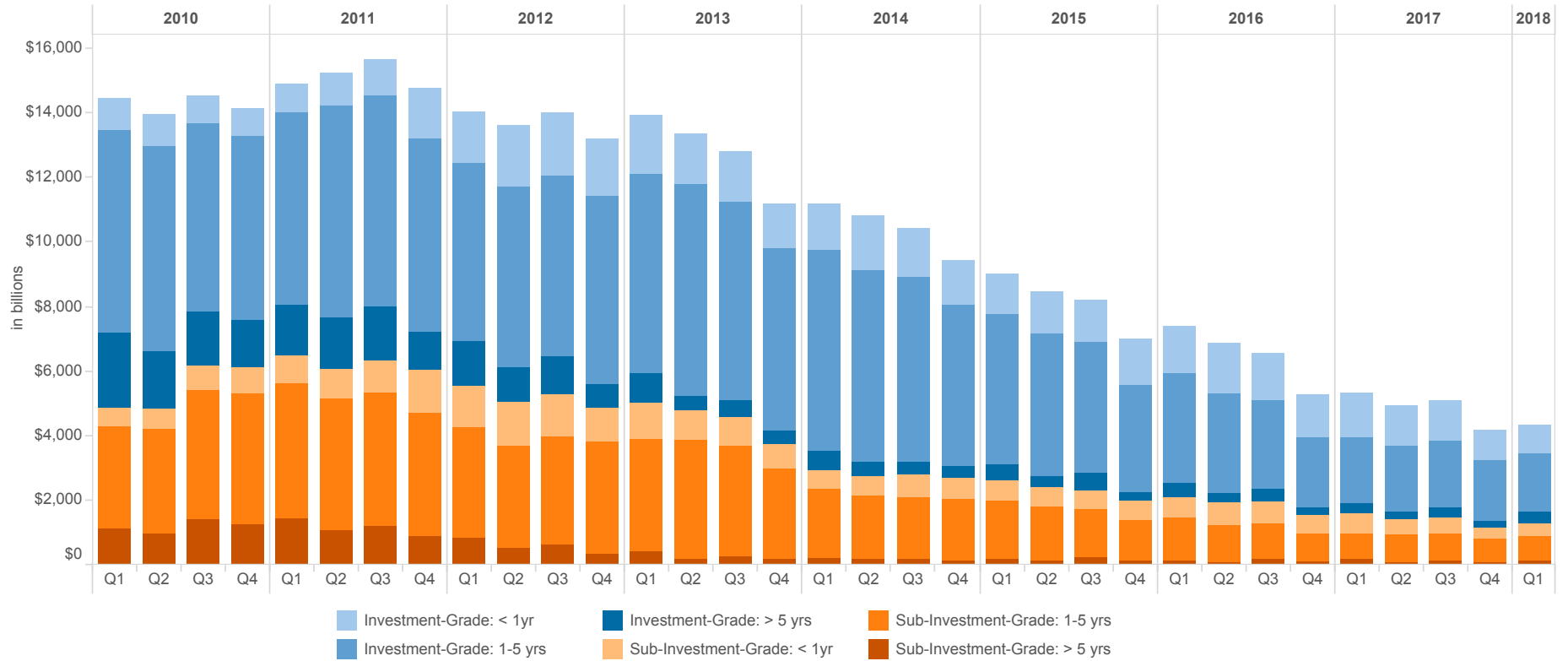
In billions of dollars

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q1
Commodity: < 1 yr	\$31	\$55	\$43	\$64	\$133	\$185	\$206	\$179	\$176	\$203	\$261	\$261	\$235	\$257	\$668	\$750	\$883	\$1,043
Commodity: 1-5 yr	25	35	103	205	707	235	297	233	198	209	209	208	144	164	197	179	202	193
Commodity: > 5yrs	2	9	14	40	175	20	25	43	33	25	46	28	6	20	22	23	25	11
Equity: < 1 yr	121	127	197	273	321	341	473	409	312	296	427	627	645	996	1,743	1,842	2,296	2,747
Equity: 1-5 yr	209	249	674	736	1,428	221	297	256	228	191	210	262	291	352	628	677	733	843
Equity: > 5 yrs	18	25	84	140	383	45	70	72	82	85	94	82	136	101	130	123	113	139

Note: Figures above exclude foreign exchange contracts with an original maturity of 14 days or less, written options, basis swaps, and any other contracts not subject to risk-based capital requirements.
Source: Call reports

Graph 14

**Notional Amounts of Credit Derivative Contracts by Credit Quality and Maturity
Insured U.S. Commercial Banks and Savings Associations**



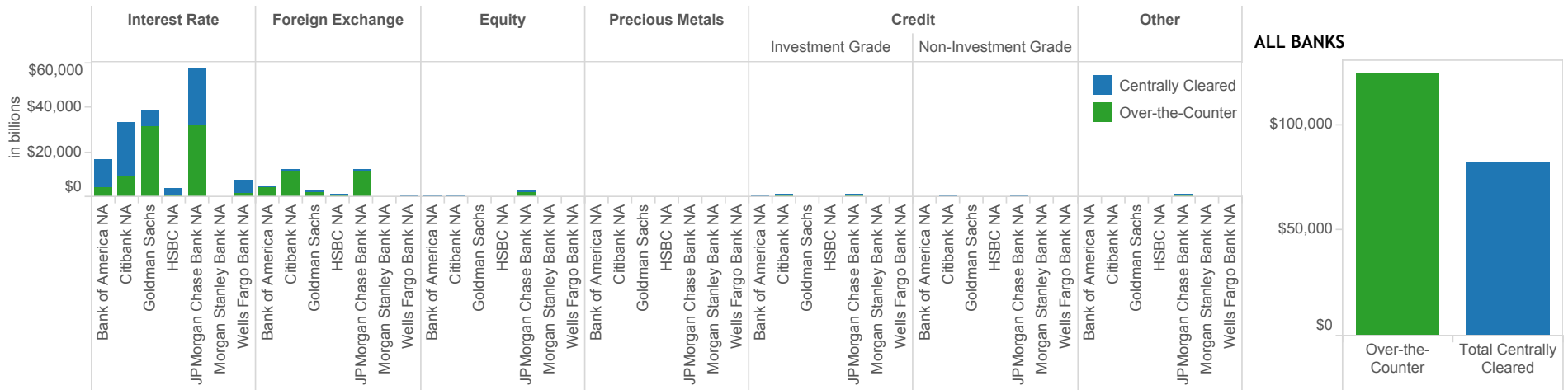
In billions of dollars

	2013				2014				2015				2016				2017				2018
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Investment-Grade: < 1yr	\$1,790	\$1,550	\$1,548	\$1,384	\$1,414	\$1,707	\$1,478	\$1,375	\$1,256	\$1,292	\$1,270	\$1,380	\$1,471	\$1,549	\$1,451	\$1,348	\$1,343	\$1,234	\$1,216	\$934	\$880
Investment-Grade: 1-5 yrs	6,168	6,536	6,127	5,661	6,227	5,909	5,722	5,007	4,649	4,450	4,108	3,328	3,400	3,101	2,765	2,170	2,072	2,073	2,085	1,897	1,839
Investment-Grade: > 5 yrs	948	455	552	409	577	448	433	382	508	359	520	281	457	262	385	214	309	195	345	186	331
Total Investment Grade	\$8,906	\$8,541	\$8,228	\$7,455	\$8,218	\$8,064	\$7,633	\$6,764	\$6,413	\$6,101	\$5,898	\$4,990	\$5,328	\$4,911	\$4,601	\$3,732	\$3,724	\$3,502	\$3,647	\$3,016	\$3,050

	2013				2014				2015				2016				2017				2018
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Sub-Investment-Grade: < 1yr	\$1,090	\$933	\$879	\$765	\$619	\$642	\$671	\$658	\$596	\$562	\$569	\$607	\$622	\$683	\$683	\$581	\$582	\$509	\$480	\$375	\$400
Sub-Investment-Grade: 1-5 yrs	3,491	3,656	3,424	2,792	2,127	1,960	1,948	1,887	1,813	1,673	1,518	1,271	1,313	1,159	1,122	869	838	830	814	718	763
Sub-Investment-Grade: > 5 yrs	414	197	262	179	200	160	157	140	194	152	213	119	155	101	157	111	159	93	149	77	133
Total Sub-Investment Grade	\$4,995	\$4,786	\$4,565	\$3,736	\$2,946	\$2,763	\$2,775	\$2,685	\$2,604	\$2,387	\$2,299	\$1,997	\$2,090	\$1,943	\$1,962	\$1,561	\$1,579	\$1,432	\$1,443	\$1,170	\$1,296

Note: Figures exclude FX contracts with an original maturity of 14 days or less, written options, basis swaps, and any other contracts not subject to risk-based capital requirements.
Source: Call reports

Graph 15
2018 Q1 Notional Amounts of Over-the-Counter and Centrally Cleared Derivative Contracts
Insured U.S. Commercial Banks and Savings Associations



In billions of dollars

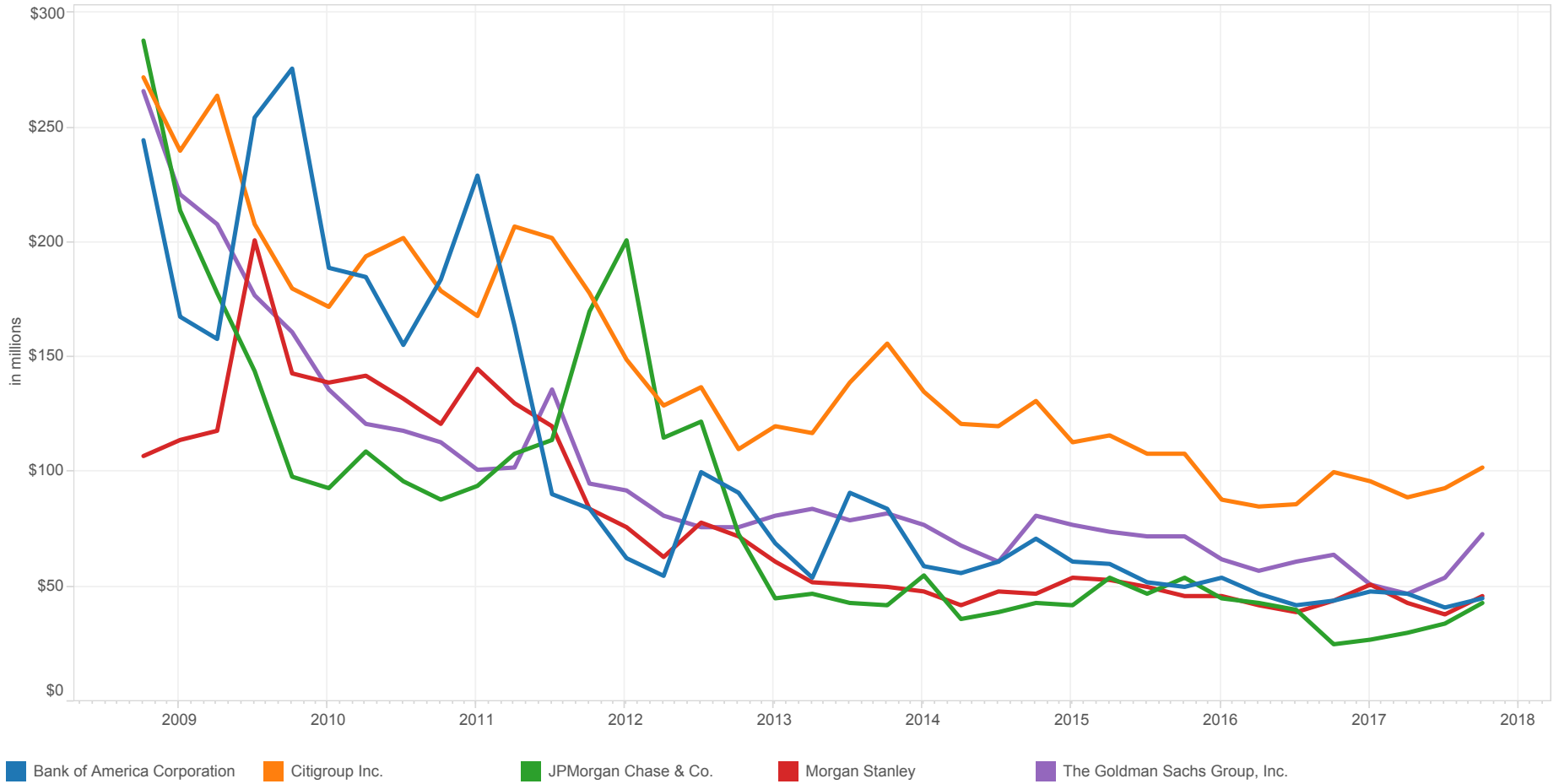
Bank Name	Interest Rate		Foreign Exchange		Equity		Precious Metals		Credit				Other		Total Centrally Cleared	Over-the-Counter	Total Notional	
	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Investment Grade		Non-Investment Grade		Centrally Cleared	Over-the-Counter				
									Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter						
JPMorgan Chase Bank NA	25,714	31,979	161	12,256	851	1,715	0	18	372	601	216	435	76	859	27,390	47,863	75,253	
Citibank NA	23,930	9,286	290	11,983	61	498	3	8	239	1,071	67	357	78	100	24,669	23,302	47,972	
Bank of America NA	12,086	4,302	68	5,079	95	272	0	0	291	293	82	146	0	19	12,622	10,110	22,733	
Goldman Sachs	7,092	31,228	0	2,436	0	39	0	0	0	97	0	62	0	7	7,092	33,870	40,962	
HSBC NA	3,235	568	27	1,130	0	46	0	9	4	11	3	21	0	1	3,269	1,785	5,054	
Wells Fargo Bank NA	5,447	1,899	0	397	34	87	0	2	1	1	1	16	32	23	5,514	2,424	7,939	
Morgan Stanley Bank NA	0	1	0	194	0	0	0	0	0	8	0	2	0	0	0	0	205	205
Grand Total	77,504	79,261	546	33,475	1,041	2,659	3	36	907	2,081	370	1,037	185	1,010	80,557	119,559	200,117	
ALL OTHER	1,586	1,106	0	3,326	0	30	0	0	0	8	0	14	1	51	1,588	4,536	6,123	
TOTAL	79,090	80,367	546	36,802	1,041	2,689	3	36	907	2,089	370	1,052	186	1,061	82,145	124,095	206,240	

% of Total

Bank Name	Interest Rate		Foreign Exchange		Equity		Precious Metals		Credit				Other		Total Centrally Cleared as a % of Total Notional	Total Over-the-Counter as a % of Total Notional
	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Investment Grade		Non-Investment Grade		Centrally Cleared	Over-the-Counter		
									Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter				
JPMorgan Chase Bank NA	45%	55%	1%	99%	33%	67%	0%	100%	38%	62%	33%	67%	8%	92%	36%	64%
Citibank NA	72%	28%	2%	98%	11%	89%	30%	70%	18%	82%	16%	84%	44%	56%	51%	49%
Bank of America NA	74%	26%	1%	99%	26%	74%	0%	100%	50%	50%	36%	64%	0%	100%	56%	44%
Goldman Sachs	19%	81%	0%	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	100%	17%	83%
HSBC NA	85%	15%	2%	98%	0%	100%	0%	100%	26%	74%	13%	87%	0%	100%	65%	35%
Wells Fargo Bank NA	74%	26%	0%	100%	28%	72%	0%	100%	47%	53%	7%	93%	57%	43%	69%	31%
Morgan Stanley Bank NA	1%	99%	0%	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	100%

Source: Call reports, Schedule RC-R

Graph 16
Value-at-Risk (VaR)



In millions of dollars

	2012				2013				2014				2015				2016				2017				2018
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Bank of America Corporation	\$84	\$63	\$55	\$100	\$91	\$69	\$54	\$91	\$84	\$59	\$56	\$61	\$71	\$61	\$60	\$52	\$50	\$54	\$47	\$42	\$44	\$48	\$47	\$41	\$45
Citigroup Inc.	178	149	129	137	110	120	117	139	156	135	121	120	131	113	116	108	108	88	85	86	100	96	89	93	102
JPMorgan Chase & Co.	170	201	115	122	73	45	47	43	42	55	36	39	43	42	54	47	54	45	43	40	25	27	30	34	43
Morgan Stanley	84	76	63	78	72	61	52	51	50	48	42	48	47	54	53	50	46	46	42	39	44	51	43	38	46
The Goldman Sachs Group, Inc.	95	92	81	76	76	81	84	79	82	77	68	61	81	77	74	72	72	62	57	61	64	51	47	54	73
Total	611	581	443	513	422	376	354	403	414	374	323	329	373	347	357	329	330	295	274	268	277	273	256	260	309

Source: 10Q, 10k U.S. Securities and Exchange Commission Reports

TABLE 1

**NOTIONAL AMOUNTS OF DERIVATIVE CONTRACTS
TOP 25 COMMERCIAL BANKS, SAVINGS ASSOCIATIONS AND TRUST COMPANIES IN DERIVATIVES
MARCH 31, 2018, MILLIONS OF DOLLARS**

RANK	BANK NAME	LEGAL ENTITY IDENTIFIER	TOTAL ASSETS	TOTAL DERIVATIVES	TOTAL FUTURES (EXCH TR)	TOTAL OPTIONS (EXCH TR)	TOTAL FORWARDS (OTC)	TOTAL SWAPS (OTC)	TOTAL OPTIONS (OTC)	TOTAL CREDIT DERIVATIVES (OTC)	SPOT FX
1	JPMORGAN CHASE BANK NA	7H6GLXDRUGQFU57RNE97	\$2,198,296	\$55,487,226	\$2,191,047	\$2,461,402	\$11,334,694	\$28,745,177	\$9,178,396	\$1,576,510	\$660,582
2	CITIBANK NATIONAL ASSN	E57ODZWZ7FF32TWFA76	1,406,778	54,680,837	3,937,490	3,262,120	6,185,715	30,398,729	9,151,171	1,745,612	818,877
3	GOLDMAN SACHS BANK USA	KD3XUN7C6T14HNAYLU02	171,731	51,715,002	3,455,855	9,737,445	3,175,894	23,891,690	11,293,558	160,560	21,338
4	BANK OF AMERICA NA	B4TYDEB6GKMZO031MB27	1,765,242	21,111,702	1,278,570	123,270	5,806,857	11,543,822	1,653,722	705,461	482,193
5	WELLS FARGO BANK NA	KB1H1DSPRFMYMCUFXT09	1,716,532	8,540,658	235,429	186,291	2,768,722	4,313,151	1,009,208	27,857	8,818
6	HSBC NA	11E8VN30JCEQV1H4R804	179,972	5,566,068	285,484	3,336	1,274,051	3,581,694	340,944	80,558	33,374
7	STATE STREET BANK&TRUST CO	571474TGEMMWANRLN572	247,203	2,167,119	1,823	0	2,133,162	4,921	27,212	0	94,999
8	BANK OF NEW YORK MELLON	HPFHU00Q28E4NONFVK49	297,107	1,037,608	37,115	40	594,747	381,362	24,164	180	95,970
9	PNC BANK NATIONAL ASSN	AD6GFRVSDT01YPT1CS68	368,067	444,035	55,151	4,030	26,195	326,622	25,474	6,563	545
10	U S BANK NATIONAL ASSN	6BYL5QZYBDK8S7L73M02	452,256	398,762	24,859	100	61,648	223,645	82,817	5,692	626
11	NORTHERN TRUST CO	6PTKHDJ8HDUF78PFWH30	129,223	330,146	0	0	312,702	16,386	1,058	0	1,547
12	MORGAN STANLEY BANK NA	G1MLHISON32I3QPILB75	136,730	278,524	8	0	39,191	202,651	27,172	9,502	3,406
13	SUNTRUST BANK	IYDOJBGJWY9T8XKCSX06	199,970	242,703	13,334	12,712	16,376	147,965	48,397	3,919	114
14	TD BANK NATIONAL ASSN	03D0JEWFFDFUS0SEKKG89	294,830	198,454	0	0	2,835	194,625	634	359	3
15	CAPITAL ONE NATIONAL ASSN	207ALC1P1YM0OVDVOK75	289,878	139,234	233	0	2,468	132,700	486	3,347	13
16	REGIONS BANK	EQTWLK1G7ODGC2MGLV11	121,865	108,158	3,792	85	40,062	55,158	5,610	3,452	25
17	MUFG UNION BANK NA	OX3PU53ZLPQKJ4700D47	120,913	101,782	2,335	0	26,829	68,336	4,206	76	516
18	CITIZENS BANK NATIONAL ASSN	DRMSV1QOQKMXLAU1P80	122,429	101,380	0	0	4,076	84,826	9,661	2,817	147
19	KEYBANK NATIONAL ASSN	HUX2X73FUCYHUVH1BK78	135,188	100,780	3,244	0	8,559	81,991	6,650	336	155
20	FIFTH THIRD BANK	QFROUN1UWUYUODVIWD51	139,445	84,609	1,078	458	6,093	56,974	15,986	4,020	374
21	BRANCH BANKING&TRUST CO	JJKC32MCHWDI71265Z06	215,012	66,028	414	0	6,704	48,579	10,331	0	22
22	MANUFACTURERS&TRADERS TR CO	WWB2V0FCW3A0EE3ZJN75	118,089	51,320	0	0	2,064	30,580	18,676	0	81
23	COMPASS BANK	C90VT034M03BN29IRA40	86,612	45,248	1,754	0	1,453	31,960	9,917	164	58
24	CAPITAL ONE BANK USA NA	LKE37K2B8CFZUR7F9816	114,098	44,732	0	0	8,120	36,612	0	0	7
25	BOKF NATIONAL ASSN	FU7RSW4CQOY98A2O7J66	33,227	39,604	678	360	32,746	4,287	1,530	3	8
TOP 25 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			\$11,060,693	\$203,081,718	\$11,529,693	\$15,791,648	\$33,871,964	\$104,604,443	\$32,946,980	\$4,336,990	\$2,223,798
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			4,648,488	669,598	6,424	3,009	89,395	489,737	72,529	8,504	1,417
TOTAL COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,709,181	203,751,317	11,536,117	15,794,657	33,961,359	105,094,180	33,019,509	4,345,494	2,225,215

Note: Credit derivatives have been included in the sum of total derivatives. Credit derivatives have been included as an "over the counter" category, although the call report does not differentiate by market currently.

Note: Before the first quarter of 1995 total derivatives included spot FX. Beginning in that quarter, spot FX has been reported separately.

Note: Numbers may not add up to total due to rounding.

Source: Call reports, Schedule RC-L

TABLE 2

**NOTIONAL AMOUNTS OF DERIVATIVE CONTRACTS (HOLDING COMPANIES)
TOP 25 HOLDING COMPANIES IN DERIVATIVES
MARCH 31, 2018, MILLIONS OF DOLLARS**

RANK	HOLDING COMPANY	LEGAL ENTITY IDENTIFIER	TOTAL ASSETS	TOTAL DERIVATIVES	FUTURES (EXCH TR)	OPTIONS (EXCH TR)	FORWARDS (OTC)	SWAPS (OTC)	OPTIONS (OTC)	CREDIT DERIVATIVES (OTC)	SPOT FX
1	GOLDMAN SACHS GROUP, INC., THE	784F5XWPLTWKTBV3E584	\$973,546	\$59,188,733	\$5,006,623	\$11,032,890	\$7,079,606	\$21,996,053	\$12,783,211	\$1,290,350	\$382,373
2	CITIGROUP INC.	6SHG14ZSSLCXQOSB395	1,922,104	56,598,981	3,994,256	5,820,542	7,629,310	28,836,019	8,787,020	1,531,834	810,906
3	JPMORGAN CHASE & CO.	815DZWZKVSZI11NUHU748	2,609,785	54,764,898	2,171,560	2,670,616	11,684,315	27,791,014	8,842,358	1,605,035	652,294
4	BANK OF AMERICA CORPORATION	9DJT3UXIJIJZI4WXO774	2,328,754	36,054,728	2,040,854	890,160	8,894,692	19,766,519	3,388,255	1,074,248	424,708
5	MORGAN STANLEY	IGJSJL3JD5P3016NJZ34	858,495	35,509,867	3,502,174	2,149,132	3,377,795	18,328,320	7,622,357	530,089	55,268
6	WELLS FARGO & COMPANY	PBLD0EJDB5FWOLXP3B76	1,915,388	8,653,138	242,789	212,691	3,003,400	4,162,275	1,005,387	26,596	8,818
7	HSBC NORTH AMERICA HOLDINGS INC.	213800JCL1FHBQK3M654	289,643	8,166,632	702,133	288,047	1,274,476	5,471,873	349,544	80,558	33,374
8	MIZUHO AMERICAS LLC		40,010	5,803,600	9,941	3,245	506,480	5,235,484	47,551	899	890
9	STATE STREET CORPORATION	549300ZFEEJ2IP5VME73	250,286	2,175,061	1,991	0	2,133,443	12,414	27,212	0	94,999
10	RBC USA HOLDCO CORPORATION		116,791	1,045,426	174,614	586,165	211,806	72,023	460	358	306
11	BANK OF NEW YORK MELLON CORPORATION, THE	WFLLPEPC7FZXENRZV188	373,597	1,032,012	38,310	2,150	611,793	355,416	24,163	180	95,986
12	CREDIT SUISSE HOLDINGS (USA), INC.	549300YHT5NGRKJD1R94	139,637	893,607	11,811	2,929	709,769	77,295	11,553	80,250	0
13	BARCLAYS US LLC	213800H14XVWVOV87OI72	166,157	882,118	72,425	280,757	416,972	27,252	0	84,712	21
14	PNC FINANCIAL SERVICES GROUP, INC., THE	CFGNEKWOP8842LEUIA51	379,754	440,964	55,829	4,030	28,010	321,058	25,474	6,563	545
15	U.S. BANCORP	N1GZ7BBF3NP8GI976H15	460,119	400,882	24,859	100	61,011	226,403	82,817	5,692	627
16	NORTHERN TRUST CORPORATION	549300GLF98S992BC502	129,672	329,396	0	0	312,702	15,636	1,058	0	1,547
17	TD GROUP US HOLDINGS LLC	549300ARWZ5E3L64UH29	382,198	286,551	44,419	13,500	24,874	202,745	634	379	3
18	DB USA CORPORATION	529900RO45LRDMWLR157	133,302	251,848	2,705	174,880	42,409	19,181	0	12,673	0
19	SUNTRUST BANKS, INC.	7E1PDLW1JL6TS0BS1G03	205,430	239,677	13,334	12,712	16,376	145,939	47,397	3,919	114
20	CAPITAL ONE FINANCIAL CORPORATION	ZUE8T73ROZOF6FLBAR73	362,857	204,873	233	0	10,734	190,073	486	3,347	20
21	BNP PARIBAS USA, INC.	549300QVEGJN81E8T563	146,266	181,650	1	105	153,686	25,478	2,380	0	23
22	MUFG AMERICAS HOLDINGS CORPORATION		157,310	132,692	10,574	8,280	41,037	68,519	4,206	76	516
23	CITIZENS FINANCIAL GROUP, INC.	2138004JDDA4ZQUPFW65	153,851	113,582	0	0	4,076	95,444	10,786	3,277	147
24	REGIONS FINANCIAL CORPORATION	CW05CS5KW59QTCODG824	123,042	106,058	3,792	85	40,062	53,058	5,610	3,452	25
25	KEYCORP	RKPI3RZGV1V1FJTH5T61	137,486	105,778	3,244	0	9,785	84,707	7,710	331	155
TOP 25 HOLDING COMPANIES WITH DERIVATIVES			\$14,755,480	\$273,562,751	\$18,128,472	\$24,153,015	\$48,278,618	\$133,580,197	\$43,077,631	\$6,344,819	\$2,563,664

Note: Currently, the Y-9 report does not differentiate credit derivatives by contract type. Credit derivatives have been included in the sum of total derivatives.

Note: Before to the first quarter of 2005, total derivatives included spot FX. Beginning in that quarter, spot FX has been reported separately.

Note: Numbers may not add up to total due to rounding.

Source: Consolidated Financial Statements for Bank Holding Companies, FR Y- 9, Schedule HC-L

TABLE 3

DISTRIBUTION OF DERIVATIVE CONTRACTS
TOP 25 COMMERCIAL BANKS, SAVINGS ASSOCIATIONS AND TRUST COMPANIES IN DERIVATIVES
MARCH 31, 2018, MILLIONS OF DOLLARS

RANK	BANK NAME	LEGAL ENTITY IDENTIFIER	TOTAL ASSETS	TOTAL DERIVATIVES	PERCENT EXCH TRADED CONTRACTS	PERCENT OTC CONTRACTS	PERCENT INT RATE CONTRACTS	PERCENT FOREIGN EXCH CONTRACTS	PERCENT EQUITY CONTRACTS	PERCENT OTHER CONTRACTS	PERCENT CREDIT DERIVATIVES
					(%)	(%)	(%)	(%)	(%)	(%)	(%)
1	JPMORGAN CHASE BANK NA	7H6GLXDRUGOFU57RNE97	\$2,198,296	\$55,487,226	8.4	91.6	69.8	22.3	3.2	1.9	2.8
2	CITIBANK NATIONAL ASSN	E570DZWZ7F32TWEFA76	1,406,778	54,680,837	13.2	86.8	69.4	25.0	1.7	0.7	3.2
3	GOLDMAN SACHS BANK USA	KD3XUN7C6T14HNAYLU02	171,731	51,715,002	25.5	74.5	94.7	4.8	0.1	0.0	0.3
4	BANK OF AMERICA NA	B4TYDEB6GKMZO031MB27	1,765,242	21,111,702	6.6	93.4	70.5	24.4	1.7	0.1	3.3
5	WELLS FARGO BANK NA	KB1H1DSPRFMYMCFXT09	1,716,532	8,540,658	4.9	95.1	91.5	4.9	2.5	0.8	0.3
6	HSBC NA	11E8VN3QJCEQV1H4R804	179,972	5,566,068	5.2	94.8	75.4	20.8	1.4	0.9	1.4
7	STATE STREET BANK&TRUST CO	571474TGEMMWANRLN572	247,203	2,167,119	0.1	99.9	0.2	98.6	0.0	1.2	0.0
8	BANK OF NEW YORK MELLON	HPFHU00Q28E4N0NFVK49	297,107	1,037,608	3.6	96.4	31.8	68.0	0.1	0.0	0.0
9	PNC BANK NATIONAL ASSN	AD6GFRVSDT01YPT1CS68	368,067	444,035	13.3	86.7	91.5	4.9	0.9	1.2	1.5
10	U S BANK NATIONAL ASSN	6BYL5QZYBDK8S7L73M02	452,256	398,762	6.3	93.7	82.5	15.8	0.0	0.3	1.4
11	NORTHERN TRUST CO	6PTKHDJ8HDUF78PFVWH30	129,223	330,146	0.0	100.0	4.1	95.7	0.1	0.0	0.0
12	MORGAN STANLEY BANK NA	G1MLHISON3213QPILB75	136,730	278,524	0.0	100.0	1.4	95.0	0.1	0.0	3.4
13	SUNTRUST BANK	IYDOJBGJWY9T8XKCSX06	199,970	242,703	10.7	89.3	79.3	3.2	15.3	0.6	1.6
14	TD BANK NATIONAL ASSN	03DOJEWFDUSOSEEKG89	294,830	198,454	0.0	100.0	97.0	2.9	0.0	0.0	0.2
15	CAPITAL ONE NATIONAL ASSN	207ALC1P1YMO0GDVOK75	289,878	139,234	0.2	99.8	90.1	1.0	0.0	6.5	2.4
16	REGIONS BANK	EQTWKL1G7ODGC2MGLV11	121,865	108,158	3.6	96.4	94.4	1.5	0.0	0.9	3.2
17	MUFG UNION BANK NA	OX3PU53ZLPOKJ4700D47	120,913	101,782	2.3	97.7	90.6	7.8	0.8	0.7	0.1
18	CITIZENS BANK NATIONAL ASSN	DRMSV1QOEKMEFLAU1P80	122,429	101,380	0.0	100.0	87.8	9.4	0.0	0.0	2.8
19	KEYBANK NATIONAL ASSN	HUX2X73FUCYHUVH1BK78	135,188	100,780	3.2	96.8	90.1	8.7	0.0	0.9	0.3
20	FIFTH THIRD BANK	QFROUN1UWUYUODVIWD51	139,445	84,609	1.8	98.2	73.6	13.6	2.4	5.7	4.8
21	BRANCH BANKING&TRUST CO	JJKC32MCHWDI71265Z06	215,012	66,028	0.6	99.4	99.3	0.7	0.0	0.0	0.0
22	MANUFACTURERS&TRADERS TR CO	WWB2V0FCW3A0EE3ZJN75	118,089	51,320	0.0	100.0	99.1	0.9	0.0	0.0	0.0
23	COMPASS BANK	C90VT034M03BN29IRA40	86,612	45,248	3.9	96.1	93.4	2.8	3.4	0.0	0.4
24	CAPITAL ONE BANK USA NA	LKE37K2B8CFZUR7F9816	114,098	44,732	0.0	100.0	81.8	18.2	0.0	0.0	0.0
25	BOKF NATIONAL ASSN	FU7RSW4CQQY98A2O7J66	33,227	39,604	2.6	97.4	92.3	0.8	0.5	6.4	0.0
TOP 25 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			\$11,060,693	\$203,081,718	\$27,321,341	\$175,760,377	\$154,849,297	\$38,809,828	\$3,461,573	\$1,624,031	\$4,336,990
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			4,648,488	669,598	9,433	660,165	619,635	29,145	5,326	6,989	8,504
TOTAL FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,709,181	203,751,317	27,330,774	176,420,542	155,468,931	38,838,973	3,466,899	1,631,020	4,345,494
				(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
TOP 25 COMMERCIAL BANKS, SAs & TCs: % OF TOTAL COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES				99.7	13.4	86.3	76.0	19.0	1.7	0.8	2.1
OTHER COMMERCIAL BANKS, SAs & TCs: % OF TOTAL COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES				0.3	0.0	0.3	0.3	0.0	0.0	0.0	0.0
TOTAL FOR COMMERCIAL BANKS, SAs & TCs: % OF TOTAL COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES				100.0	13.4	86.6	76.3	19.1	1.7	0.8	2.1
Note: Currently, the call report does not differentiate credit derivatives by over the counter or exchange traded. Credit derivatives have been included in the "over the counter" category as well as in the sum of total derivatives here.											
Note: "FX" does not include spot FX.											
Note: "Other" is defined as the sum of commodity and equity contracts.											
Note: Numbers may not add up to total due to rounding.											
Source: Call reports, Schedule RC-L											

TABLE 4

CREDIT EQUIVALENT EXPOSURES
TOP 25 COMMERCIAL BANKS, SAVINGS ASSOCIATIONS AND TRUST COMPANIES IN DERIVATIVES
MARCH 31, 2018, MILLIONS OF DOLLARS

RANK	BANK NAME	LEGAL ENTITY IDENTIFIER	TOTAL ASSETS	TOTAL DERIVATIVES	TOTAL RISK-BASED CAPITAL	BILATERALLY NETTED CURRENT CREDIT EXPOSURE		TOTAL CREDIT EXPOSURE (%)	
						POTENTIAL FUTURE EXPOSURE	FROM ALL CONTRACTS	TOTAL CREDIT EXPOSURE TO CAPITAL	
1	JPMORGAN CHASE BANK NA	7H6GLXDRUGQFU57RNE97	\$2,198,296	\$55,487,226	\$199,271	\$139,975	\$252,086	\$392,061	197
2	CITIBANK NATIONAL ASSN	E57ODZWZ7FF32TWEFA76	1,406,778	54,680,837	152,431	78,393	144,435	222,828	146
3	GOLDMAN SACHS BANK USA	KD3XUN7C6T14HNAYLU02	171,731	51,715,002	30,700	57,734	61,807	119,541	389
4	BANK OF AMERICA NA	B4TYDEB6GKMZ0031MB27	1,765,242	21,111,702	160,158	45,299	53,941	99,240	62
5	WELLS FARGO BANK NA	KB1H1DSPRFMYMCUFXT09	1,716,532	8,540,658	163,259	15,139	27,648	42,787	26
6	HSBC NA	11E8VN30JCEQV1H4R804	179,972	5,566,068	24,996	7,654	15,674	23,328	93
7	STATE STREET BANK&TRUST CO	571474TGEMMWANRLN572	247,203	2,167,119	17,329	4,636	12,982	17,618	102
8	BANK OF NEW YORK MELLON	HPFHU0OQ28E4N0NFVK49	297,107	1,037,608	21,215	4,727	5,449	10,176	48
9	PNC BANK NATIONAL ASSN	AD6GFRVSDT01YPT1CS68	368,067	444,035	34,130	2,844	1,338	4,182	12
10	U S BANK NATIONAL ASSN	6BYL5QZYBDK8S7L73M02	452,256	398,762	44,534	1,319	5,316	6,635	15
11	NORTHERN TRUST CO	6PTKHDJ8HDUF78PFWH30	129,223	330,146	9,749	1,057	2,520	3,577	37
12	MORGAN STANLEY BANK NA	G1MLHISON32I3QPILB75	136,730	278,524	15,785	287	3,003	3,290	21
13	SUNTRUST BANK	IYDOJBGJWY9T8XKCSX06	199,970	242,703	22,303	1,148	2,624	3,772	17
14	TD BANK NATIONAL ASSN	03DOJEWVDFUS0SEKKG89	294,830	198,454	26,273	2,429	1,205	3,634	14
15	CAPITAL ONE NATIONAL ASSN	207ALC1P1YM0OVDVOK75	289,878	139,234	26,755	1,155	2,414	3,569	13
16	REGIONS BANK	EQTWVK1G7ODGC2MGLV11	121,865	108,158	14,372	204	405	609	4
17	MUFG UNION BANK NA	OX3PU53ZLPQKJ4700D47	120,913	101,782	15,564	717	332	1,048	7
18	CITIZENS BANK NATIONAL ASSN	DRMSV1Q0EKMEXLAU1P80	122,429	101,380	14,017	334	683	1,017	7
19	KEYBANK NATIONAL ASSN	HUX2X73FUCYHUVH1BK78	135,188	100,780	14,995	490	350	839	6
20	FIFTH THIRD BANK	QFROUN1UWUYU0DVIWD51	139,445	84,609	16,443	574	1,271	1,844	11
21	BRANCH BANKING&TRUST CO	JJKC32MCHWD171265Z06	215,012	66,028	23,036	189	216	405	2
22	MANUFACTURERS&TRADERS TR CO	WWB2V0FCW3A0EE3ZJN75	118,089	51,320	12,487	79	203	282	2
23	COMPASS BANK	C90VT034M03BN29IRA40	86,612	45,248	9,208	174	191	365	4
24	CAPITAL ONE BANK USA NA	LKE37K2B8CFZUR7F9816	114,098	44,732	17,659	190	161	351	2
25	BOKF NATIONAL ASSN	FU7RSW4CQQY98A207J66	33,227	39,604	3,206	237	258	495	15
TOP 25 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			\$11,060,693	\$203,081,718	\$1,089,876	\$366,982	\$596,511	\$963,493	88
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			4,648,488	669,598	505,437	4,409	5,256	9,664	2
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,709,181	203,751,317	1,595,313	371,391	601,767	973,157	61

Note: Total credit exposure is defined as the credit equivalent amount from derivative contracts (RC-R column B lines 20 and 21), which is the sum of netted current credit exposure and PFE.

Note: The total credit exposure to capital ratio is calculated using risk based capital (tier 1 plus tier 2 capital).

Note: Currently, the call report does not differentiate credit derivatives by contract type. Credit derivatives have been included in the sum of total derivatives here.

Note: Numbers may not add up to total due to rounding.

Source: Call reports, Schedule RC-R.

TABLE 5

**NOTIONAL AMOUNTS OF DERIVATIVE CONTRACTS HELD FOR TRADING
TOP 4 COMMERCIAL BANKS, SAVINGS ASSOCIATIONS AND TRUST COMPANIES IN DERIVATIVES
MARCH 31, 2018, MILLIONS OF DOLLARS**

RANK	BANK NAME	LEGAL ENTITY IDENTIFIER	TOTAL ASSETS	TOTAL DERIVATIVES	TOTAL HELD FOR TRADING & MTM	% HELD FOR TRADING & MTM	TOTAL NOT FOR TRADING MTM	% NOT FOR TRADING MTM
1	JPMORGAN CHASE BANK NA	7H6GLXDRUGQFU57RNE97	\$2,198,296	\$55,487,226	\$53,641,449	99.5	\$269,267	0.5
2	CITIBANK NATIONAL ASSN	E57ODZWZ7FF32TWEFA76	1,406,778	54,680,837	52,839,852	99.8	95,373	0.2
3	GOLDMAN SACHS BANK USA	KD3XUN7C6T14HNAYLU02	171,731	51,715,002	51,528,815	100.0	25,627	0.0
4	BANK OF AMERICA NA	B4TYDEB6GKMZO031MB27	1,765,242	21,111,702	19,660,472	96.3	745,769	3.7
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			\$5,542,047	\$182,994,767	\$177,670,588	99.4	\$1,136,036	0.6
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			10,167,134	20,756,550	18,999,903	92.2	1,599,295	7.8
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,709,181	203,751,317	196,670,491	98.6	2,735,331	1.4
<p>Note: Currently, the call report does not differentiate between traded and not-traded credit derivatives. Credit derivatives have been excluded from the sum of total derivatives here</p> <p>Note: Numbers may not add up to total due to rounding.</p> <p>Source: Call reports, Schedule RC-L</p>								

TABLE 6

**GROSS FAIR VALUES OF DERIVATIVE CONTRACTS
TOP 4 COMMERCIAL BANKS, SAVINGS ASSOCIATIONS AND TRUST COMPANIES IN DERIVATIVES
MARCH 31, 2018, MILLIONS OF DOLLARS**

RANK	BANK NAME	LEGAL ENTITY IDENTIFIER	TOTAL ASSETS	TOTAL DERIVATIVES	TRADING		NOT FOR TRADING		CREDIT DERIVATIVES	
					GROSS POSITIVE FAIR VALUE*	GROSS NEGATIVE FAIR VALUE**	GROSS POSITIVE FAIR VALUE*	GROSS NEGATIVE FAIR VALUE**	GROSS POSITIVE FAIR VALUE*	GROSS NEGATIVE FAIR VALUE**
1	JPMORGAN CHASE BANK NA	7H6GLXDRUGQFU57RNE97	\$2,198,296	\$55,487,226	\$567,424	\$528,317	\$2,650	\$1,802	\$22,488	\$22,506
2	CITIBANK NATIONAL ASSN	E57ODZWZ7FF32TWEFA76	1,406,778	54,680,837	379,831	363,738	945	1,415	21,896	22,155
3	GOLDMAN SACHS BANK USA	KD3XUN7C6T14HNAYLU02	171,731	51,715,002	510,762	494,342	106	247	3,210	3,257
4	BANK OF AMERICA NA	B4TYDEB6GKMZ0031MB27	1,765,242	21,111,702	165,314	147,802	14,588	20,104	9,686	10,567
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			\$5,542,047	\$182,994,767	\$1,623,331	\$1,534,199	\$18,289	\$23,568	\$57,280	\$58,485
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			10,167,134	20,756,550	103,435	102,641	10,100	9,685	1,320	1,390
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,709,181	203,751,317	1,726,766	1,636,840	28,389	33,253	58,600	59,875

Note: Currently, the call report does not differentiate between traded and non-traded credit derivatives. Credit derivatives have been included in the sum of total derivatives here. Numbers may not sum due to rounding.

*Market value of contracts that have a positive fair value as of the end of the quarter.

**Market value of contracts that have a negative fair value as of the end of the quarter.

Source: Call reports, Schedule RC-L

TABLE 7

TRADING REVENUES FROM CASH INSTRUMENTS AND DERIVATIVES
TOP 4 COMMERCIAL BANKS, SAVINGS ASSOCIATIONS AND TRUST COMPANIES IN DERIVATIVES
MARCH 31, 2018, MILLIONS OF DOLLARS
NOTE: REVENUE FIGURES ARE FOR THE QUARTER (NOT YEAR-TO-DATE)

RANK	BANK NAME	LEGAL ENTITY IDENTIFIER	TOTAL ASSETS	TOTAL DERIVATIVES	TOTAL TRADING REV FROM CASH & OFF BAL SHEET POSITIONS	TRADING REV FROM INT RATE POSITIONS	TRADING REV FROM FOREIGN EXCH POSITIONS	TRADING REV FROM EQUITY POSITIONS	TRADING REV FROM COMMOD & OTH POSITIONS	TRADING REV FROM CREDIT POSITIONS
1	JPMORGAN CHASE BANK NA	7H6GLXDRUGOFU57RNE97	\$2,198,296	\$55,487,226	\$3,478	\$797	\$1,131	\$1,099	\$179	\$272
2	CITIBANK NATIONAL ASSN	E57ODZWZ7FF32WEFA76	1,406,778	54,680,837	2,009	1,217	515	257	(11)	31
3	GOLDMAN SACHS BANK USA	KD3XUN7C6T14HNAYLU02	171,731	51,715,002	201	62	84	33	0	22
4	BANK OF AMERICA NA	B4TYDEB6GKMZO031MB27	1,765,242	21,111,702	1,117	241	320	414	24	118
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			\$5,542,047	\$182,994,767	\$6,805	\$2,317	\$2,050	\$1,803	\$192	\$443
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			10,167,134	20,756,550	1,393	332	845	62	176	(22)
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,709,181	203,751,317	8,198	2,649	2,895	1,865	368	421

Note: Effective in the first quarter of 2007, trading revenues from credit exposures are reported separately, along with the four other types of exposures. The total derivatives column includes credit exposures.

Note: Trading revenue is defined here as "trading revenue from cash instruments and off-balance-sheet derivative instruments."

Note: Numbers may not add up to total due to rounding.

Source: Call reports, Schedule RI

TABLE 8

**NOTIONAL AMOUNTS OF DERIVATIVE CONTRACTS BY CONTRACT TYPE AND MATURITY (INTEREST RATE, FX AND GOLD)
TOP 4 COMMERCIAL BANKS, SAVINGS ASSOCIATIONS AND TRUST COMPANIES IN DERIVATIVES
MARCH 31, 2018, MILLIONS OF DOLLARS**

RANK	BANK NAME	LEGAL ENTITY IDENTIFIER	TOTAL ASSETS	TOTAL DERIVATIVES	INT RATE MATURITY < 1 YR	INT RATE MATURITY 1 - 5 YRS	INT RATE MATURITY > 5 YRS	INT RATE ALL MATURITIES	FX and GOLD MATURITY < 1 YR	FX and GOLD MATURITY 1 - 5 YRS	FX and GOLD MATURITY > 5 YRS	FX and GOLD ALL MATURITIES
1	JPMORGAN CHASE BANK NA	7H6GLXDRUGOFU57RNE97	\$2,198,296	\$55,487,226	\$29,711,574	\$18,842,742	\$9,138,091	\$57,692,407	\$8,964,864	\$2,305,626	\$1,146,445	\$12,416,935
2	CITIBANK NATIONAL ASSN	E57ODZWZ7FF32TWEFA76	1,406,778	54,680,837	25,264,190	4,849,757	3,102,003	33,215,950	10,552,948	1,193,064	527,025	12,273,037
3	GOLDMAN SACHS BANK USA	KD3XUN7C6T14HNAVLU02	171,731	51,715,002	25,944,261	6,482,128	5,893,918	38,320,307	1,119,313	693,805	623,102	2,436,220
4	BANK OF AMERICA NA	B4TYDEB6GKMZO031MB27	1,765,242	21,111,702	8,094,852	5,413,955	2,878,848	16,387,655	4,379,637	552,506	214,778	5,146,921
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			\$5,542,047	\$182,994,767	\$89,014,877	\$35,588,582	\$21,012,860	\$145,616,319	\$25,016,762	\$4,745,001	\$2,511,350	\$32,273,113
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			10,167,134	20,756,550	6,422,370	4,744,922	2,673,492	13,840,784	4,679,649	276,616	118,663	5,074,928
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,709,181	203,751,317	95,437,247	40,333,504	23,686,352	159,457,103	29,696,411	5,021,617	2,630,013	37,348,041

Note: Figures above exclude any contracts not subject to risk-based capital requirements, such as FX contracts with an original maturity of 14 days or less, futures contracts, written options, and basis swaps. Therefore, the total notional amount of derivatives by maturity will not add to the total derivatives figure in this table.

Note: Numbers may not add up to total due to rounding.

Note: Effective 2015 Q1, the reporting form and call report instructions changed. Schedule RC-R now requires banks to report FX and gold notional amounts in aggregate, rather than separately.

Source: Call reports, Schedule RC-R

TABLE 9

**NOTIONAL AMOUNTS OF DERIVATIVE CONTRACTS BY CONTRACT TYPE & MATURITY (PRECIOUS METALS)
TOP 4 COMMERCIAL BANKS, SAVINGS ASSOCIATIONS AND TRUST COMPANIES IN DERIVATIVES
MARCH 31, 2018, MILLIONS OF DOLLARS**

RANK	BANK NAME	LEGAL ENTITY IDENTIFIER	TOTAL ASSETS	TOTAL DERIVATIVES	PREC METALS MATURITY < 1 YR	PREC METALS MATURITY 1 - 5 YRS	PREC METALS MATURITY > 5 YRS	PREC METALS ALL MATURITIES
1	JPMORGAN CHASE BANK NA	7H6GLXDRUGOFU57RNE97	\$2,198,296	\$55,487,226	\$17,534	\$591	\$0	\$18,125
2	CITIBANK NATIONAL ASSN	E57ODZWZ7FF32TWEFA76	1,406,778	54,680,837	9,801	1,567	0	11,368
3	GOLDMAN SACHS BANK USA	KD3XUN7C6T14HNAYLU02	171,731	51,715,002	0	0	0	0
4	BANK OF AMERICA NA	B4TYDEB6GKMZO031MB27	1,765,242	21,111,702	0	0	0	0
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			\$5,542,047	\$182,994,767	\$27,335	\$2,158	\$0	\$29,493
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			10,167,134	20,756,550	9,506	658	12	10,175
TOTAL FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,709,181	203,751,317	36,841	2,816	12	39,668
<p>Note: Figures above exclude any contracts not subject to risk-based capital requirements, such as FX contracts with an original maturity of 14 days or less, futures contracts, written options, and basis swaps. Therefore, the total notional amount of derivatives by maturity will not add to the total derivatives figure in this table.</p> <p>Note: Numbers may not add up to total due to rounding.</p> <p>Source: Call reports, Schedule RC-R</p>								

TABLE 10

**NOTIONAL AMOUNTS OF DERIVATIVE CONTRACTS BY CONTRACT TYPE AND MATURITY (OTHER COMMODITY AND EQUITY
TOP 4 COMMERCIAL BANKS, SAVINGS ASSOCIATIONS AND TRUST COMPANIES IN DERIVATIVE!
MARCH 31, 2018, MILLIONS OF DOLLARS**

RANK	BANK NAME	LEGAL ENTITY IDENTIFIER	TOTAL		OTHER COMM	OTHER COMM	OTHER COMM	OTHER COMM	EQUITY	EQUITY	EQUITY	EQUITY
			ASSETS	DERIVATIVES	MATURITY < 1 YR	MATURITY 1 - 5 YRS	MATURITY > 5 YRS	ALL MATURITIES	MATURITY < 1 YR	MATURITY 1 - 5 YRS	MATURITY > 5 YRS	ALL MATURITIES
1	JPMORGAN CHASE BANK NA	7H6GLXDRUGOFU57RNE97	\$2,198,296	\$55,487,226	\$840,716	\$87,370	\$6,990	\$935,076	\$1,901,487	\$562,698	\$101,909	\$2,566,094
2	CITIBANK NATIONAL ASSN	E57ODZWZ7FF32TWFA76	1,406,778	54,680,837	137,318	37,060	3,685	178,063	394,167	138,116	27,059	559,342
3	GOLDMAN SACHS BANK USA	KD3XUN7C6T14HNAYLU02	171,731	51,715,002	3,572	3,689	0	7,261	22,188	13,483	3,667	39,338
4	BANK OF AMERICA NA	B4TYDEB6GKMZO031MB27	1,765,242	21,111,702	16,774	2,284	45	19,103	297,460	68,147	1,518	367,125
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			\$5,542,047	\$182,994,767	\$998,380	\$130,403	\$10,720	\$1,139,503	\$2,615,302	\$782,444	\$134,153	\$3,531,899
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			10,167,134	20,756,550	44,700	62,538	532	107,770	131,888	60,815	5,279	197,983
TOTAL FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,709,181	203,751,317	1,043,080	192,941	11,252	1,247,273	2,747,190	843,259	139,432	3,729,882

Note: Figures above exclude any contracts not subject to risk-based capital requirements, such as FX contracts with an original maturity of 14 days or less, futures contracts, written options, and basis swaps. Therefore, the total notional amount of derivatives by maturity will not add to the total derivatives figure in this table.

Note: Numbers may not add up to total due to rounding.

Source: Call reports, Schedule RC-R

TABLE 11

**NOTIONAL AMOUNTS OF CREDIT DERIVATIVE CONTRACTS BY CONTRACT TYPE AND MATURITY (INVESTMENT GRADE AND SUB-INVESTMENT GRADE)
TOP 4 COMMERCIAL BANKS, SAVINGS ASSOCIATIONS AND TRUST COMPANIES IN DERIVATIVES
MARCH 31, 2018, MILLIONS OF DOLLARS**

RANK	BANK NAME	LEGAL ENTITY IDENTIFIER	TOTAL ASSETS	TOTAL DERIVATIVES	TOTAL CREDIT DERIVATIVES	CREDIT DERIVATIVES INVESTMENT GRADE				CREDIT DERIVATIVES SUB-INVESTMENT GRADE			
						MATURITY < 1 YR	MATURITY 1 - 5 YRS	MATURITY > 5 YRS	ALL MATURITIES	MATURITY < 1 YR	MATURITY 1 - 5 YRS	MATURITY > 5 YRS	ALL MATURITIES
1	JPMORGAN CHASE BANK NA	7H6GLXDRUGOFU57RNE97	\$2,198,296	\$55,487,226	\$1,576,510	\$318,919	\$609,507	\$132,823	\$1,061,249	\$161,980	\$290,308	\$62,973	\$515,261
2	CITIBANK NATIONAL ASSN	E570DZWZ7FF32TWFA76	1,406,778	54,680,837	1,745,612	334,784	859,376	123,791	1,317,951	135,299	266,355	26,007	427,661
3	GOLDMAN SACHS BANK USA	KD3XUN7C6T14HNAVLU02	171,731	51,715,002	160,560	18,923	58,892	20,244	98,059	16,726	34,649	11,126	62,501
4	BANK OF AMERICA NA	B4TYDEB6GKMZO031MB27	1,765,242	21,111,702	705,461	197,477	264,123	45,407	507,007	73,864	107,657	16,933	198,454
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			\$5,542,047	\$182,994,767	\$4,188,143	\$870,103	\$1,791,898	\$322,265	\$2,984,266	\$387,869	\$698,969	\$117,039	\$1,203,877
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			10,167,134	20,756,550	157,351	9,566	47,591	8,328	65,485	12,313	63,592	15,962	91,866
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,709,181	203,751,317	4,345,494	879,669	1,839,489	330,593	3,049,751	400,182	762,561	133,001	1,295,743

Note: Figures above exclude any contracts not subject to risk-based capital requirements, such as FX contracts with an original maturity of 14 days or less, futures contracts, written options, and basis swaps.

Therefore, the total notional amount of derivatives by maturity will not add to the total derivatives figure in this table.

Note: Numbers may not add up to total due to rounding.

Source: Call reports, Schedule RC-L and RC-R

TABLE 12

**DISTRIBUTION OF CREDIT DERIVATIVE CONTRACTS HELD FOR TRADING
TOP 25 COMMERCIAL BANKS, SAVINGS ASSOCIATIONS AND TRUST COMPANIES IN DERIVATIVES
MARCH 31, 2018, MILLIONS OF DOLLARS**

RANK	BANK NAME	LEGAL ENTITY IDENTIFIER	TOTAL ASSETS	TOTAL DERIVATIVES	TOTAL CREDIT DERIVATIVES	TOTAL CREDIT DERIVATIVES		PURCHASED				SOLD			
						PURCHASED	SOLD	CREDIT DEFAULT SWAPS	TOTAL RETURN SWAPS	CREDIT OPTIONS	OTHER CREDIT DERIVATIVES	CREDIT DEFAULT SWAPS	TOTAL RETURN SWAPS	CREDIT OPTIONS	OTHER CREDIT DERIVATIVES
1	JPMORGAN CHASE BANK NA	7H6GLXDRUGGFU57RNE97	\$2,198,296	\$53,910,716	\$1,576,510	\$798,408	\$778,102	\$727,005	\$20,531	\$46,780	\$4,092	\$715,268	\$13,588	\$49,119	\$127
2	CITIBANK NATIONAL ASSN	E57ODZWZ7F32TWEFA76	1,406,778	52,935,225	1,745,612	892,766	852,846	810,558	23,207	59,001	0	789,532	12,829	50,485	0
3	GOLDMAN SACHS BANK USA	KD3XUN7CGT14HNAYLU02	171,731	51,554,442	160,560	88,790	71,770	84,178	2,635	1,850	127	67,285	2,635	1,850	0
4	BANK OF AMERICA NA	B4TYDEB6GKMZO031MB27	1,765,242	20,406,241	705,461	361,145	344,316	314,618	10,253	36,274	0	301,876	12,351	30,089	0
5	WELLS FARGO BANK NA	KB1H1DSPRFMYMCFXT09	1,716,532	8,512,801	27,857	18,404	9,453	3,237	0	100	15,067	2,695	0	0	6,758
6	HSBC NA	1IE8VN30JCEQV1H4R804	179,972	5,485,509	80,558	42,961	37,597	38,369	4,592	0	0	36,026	1,571	0	0
7	STATE STREET BANK&TRUST CO	571474TGEMMWANRLN572	247,203	2,167,119	0	0	0	0	0	0	0	0	0	0	0
8	BANK OF NEW YORK MELLON	HPFHU00Q28E4NONFVK49	297,107	1,037,428	180	180	0	180	0	0	0	0	0	0	0
9	PNC BANK NATIONAL ASSN	AD6GFRVSDT01YPT1CS68	368,067	437,472	6,563	2,692	3,871	15	0	0	2,677	0	0	0	3,871
10	U S BANK NATIONAL ASSN	6BYL5QZYBCK8S7L73M02	452,256	393,070	5,692	1,812	3,880	0	0	0	1,812	0	0	0	3,880
11	NORTHERN TRUST CO	6PTKHJ8HDUF78PFWH30	129,223	330,146	0	0	0	0	0	0	0	0	0	0	0
12	MORGAN STANLEY BANK NA	G1MLHISON32I3QPLB75	136,730	269,022	9,502	9,492	10	9,492	0	0	0	10	0	0	0
13	SUNTRUST BANK	IYDOJBGJWY9T8XKCSX06	199,970	238,785	3,919	2,246	1,673	585	1,656	0	5	0	1,656	0	17
14	TD BANK NATIONAL ASSN	03DOJEWFDUS0SEKCG89	294,830	198,095	359	354	5	354	0	0	0	5	0	0	0
15	CAPITAL ONE NATIONAL ASSN	207ALC1P1YMOVDVQK75	289,878	135,887	3,347	969	2,378	0	0	0	969	0	0	0	2,378
16	REGIONS BANK	EQTWLK1G7ODGC2MGLV11	121,865	104,706	3,452	1,184	2,268	43	0	0	1,141	43	0	0	2,226
17	MUFG UNION BANK NA	OX3PU53ZLPQKJ4700D47	120,913	101,706	76	76	0	76	0	0	0	0	0	0	0
18	CITIZENS BANK NATIONAL ASSN	DRMSV1Q0EKMEXLAU1P80	122,429	98,563	2,817	0	2,817	0	0	0	0	0	0	0	2,817
19	KEYBANK NATIONAL ASSN	HUX2X73FUCYHUVH1BK78	135,188	100,444	336	205	131	205	0	0	0	38	93	0	0
20	FIFTH THIRD BANK	QFROUN1UWUYU00V1WD51	139,445	80,589	4,020	650	3,370	0	0	0	650	0	0	0	3,370
21	BRANCH BANKING&TRUST CO	JJKC32MCHWDI71265Z06	215,012	66,028	0	0	0	0	0	0	0	0	0	0	0
22	MANUFACTURERS&TRADERS TR CO	VWB2V0FCW3A0EE3ZJN75	118,089	51,320	0	0	0	0	0	0	0	0	0	0	0
23	COMPASS BANK	C90VT034M03BN29IRA40	86,612	45,084	164	0	164	0	0	0	0	164	0	0	0
24	CAPITAL ONE BANK USA NA	LKE37K2B8CFZUR7F9816	114,098	44,732	0	0	0	0	0	0	0	0	0	0	0
25	BOKF NATIONAL ASSN	FU7RSW4CQY98A2O7J66	33,227	39,600	3	3	1	3	0	0	0	1	0	0	0
TOP 25 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			\$11,060,693	\$198,744,728	\$4,336,990	\$2,222,338	\$2,114,652	\$1,988,918	\$62,874	\$144,005	\$26,541	\$1,912,943	\$44,723	\$131,543	\$25,444
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			4,648,488	661,094	8,504	3,927	4,577	16	79	0	3,832	386	2	0	4,189
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,709,181	199,405,823	4,345,494	2,226,265	2,119,229	1,988,934	62,953	144,005	30,373	1,913,329	44,725	131,543	29,632
TOP 25 COMMERCIAL BANKS, SAs & TCs: % OF TOTAL COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES					(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
OTHER COMMERCIAL BANKS, SAs & TCs: % OF TOTAL COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES					99.8	51.1	48.7	45.8	1.4	3.3	0.6	44.0	1.0	3.0	0.6
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs: % OF TOTAL COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES					0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
					100.0	51.2	48.8	45.8	1.4	3.3	0.7	44.0	1.0	3.0	0.7

Note: Credit derivatives have been excluded from the sum of total derivatives here.
 Note: Numbers may not add up to total due to rounding.
 Source: Call reports, Schedule RC-L

TABLE 13

DERIVATIVES DATA REPORTED BY FFIEC 051 FILERS
COMMERCIAL BANKS, SAVINGS ASSOCIATIONS AND TRUST COMPANIES IN DERIVATIVES
MARCH 31, 2018, MILLIONS OF DOLLARS

Call Report Schedule SU	1Q18	4Q17	1Q17
A. Gross Notional Amount of Derivatives			
Total gross notional amount of interest rate derivatives held for trading	\$728	\$542	\$678
Total gross notional amount of all other derivatives held for trading	\$7	\$5	\$10
Total gross notional amount of interest rate derivatives not held for trading	\$8,491	\$6,092	\$7,210
Total gross notional amount of all other derivatives not held for trading	\$530	\$86	\$162

Call Report Schedule RC-R			
A. Notional principal amounts of over-the-counter derivative contracts covered by the regulatory capital rules:			
a. Interest rate	\$4,474	\$3,845	\$4,792
b. Foreign exchange rate and gold	\$429	\$0	\$0
c. Credit (investment grade reference asset)	\$14	\$13	\$4
d. Credit (non-investment grade reference asset)	\$11	\$11	\$11
e. Equity	\$0	\$0	\$0
g. Other	\$5	\$5	\$5
f. Precious metals (except gold)	\$0	\$0	\$0
B. Notional principal amounts of centrally cleared derivative contracts covered by the regulatory capital rules:			
a. Interest rate	\$129	\$249	\$158
b. Foreign exchange rate and gold	\$0	\$0	\$0
c. Credit (investment grade reference asset)	\$0	\$0	\$4
d. Credit (non-investment grade reference asset)	\$0	\$0	\$0
e. Equity	\$0	\$0	\$0
f. Precious metals (except gold)	\$0	\$0	\$0
g. Other	\$0	\$0	\$0
C. Current credit exposure across all derivative contracts covered by the regulatory capital rules	\$59	\$44	\$39

Source: Call reports, Schedule SU and Schedule RC-R