Office of the Comptroller of the Currency

Quarterly Report on Bank Trading and Derivatives Activities

First Quarter 2017

Office of the Comptroller of the Currency
Washington, D.C.

July 2017

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Executive Summary

- Insured U.S. commercial banks and savings associations (collectively, banks) reported trading revenue of $7.1 billion in the first quarter of 2017, $1.1 billion more (18.0 percent) than in the previous quarter and $1.5 billion higher (25.9 percent) than a year earlier (see page 4).
- Credit exposure from derivatives decreased in the first quarter of 2017 as compared to the fourth quarter of 2016. Net current credit exposure (NCCE) decreased $44.4 billion, or 11.0 percent, to $357.8 billion (see page 8).
- Trading risk, as measured by value-at-risk (VaR), increased in the first quarter of 2017. Total average VaR across the top five dealer banking companies increased $10.0 million, or 3.7 percent, to $277.0 million (see page 11).
- Derivative notional amounts increased in the first quarter of 2017 by $13.1 trillion, or 7.9 percent, to $178.3 trillion (see page 14).
- Derivative contracts remained concentrated in interest rate products, which represented 74.4 percent of total derivative notional amounts (see page 14).

The Office of the Comptroller of the Currency's (OCC) quarterly report on bank trading and derivative 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.[1] A total of 1,414[2] insured U.S. commercial banks and savings associations reported derivative activities at the end of the first quarter of 2017. A small group of large financial institutions continues to dominate derivative activity in the U.S. commercial banking system. During the first quarter of 2017, four large commercial banks represented 89.2 percent of the total banking industry notional amounts and 87.0 percent of industry NCCE (see table 4 in the appendix).

The OCC and other supervisors have dedicated examiners at the largest banks to evaluate continuously the credit, market, operational, reputation, and compliance risks of bank derivative 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 all OTC derivative categories, migration of certain highly liquid products to clearinghouses, and requirements for posting and collecting margin.

[1] The derivatives activities covered by this report are permissible for national banks as part of or incidental to the business of banking under 12 U.S.C. § 24(Seventh).

[2] Beginning March 31, 2017, institutions with total assets 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 in a separate and distinct table in the appendix (see table 13).

Revenue

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

Insured U.S. commercial banks and savings associations reported $7.1 billion in trading revenue in the first quarter of 2017, $1.1 billion more (18.0 percent) than in the previous quarter and $1.5 billion more (25.9 percent) than a year earlier (see table 1). The largest driver of the year-over-year increase in trading revenue was interest rate and foreign exchange (FX) trading.

Combined interest rate and FX revenue led the quarterly increase, with revenue increasing $1.0 billion to $5.6 billion. Since dealers often use interest rate contracts to hedge exposures in FX derivatives, it is useful to view these categories collectively. 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

	2017 Q1	2016 Q4	Q/Q Change	Q/Q % Change	2016 Q1	Y/Y Change	Y/Y % Change
Interest Rate & FX	$5,590	$4,566	$1,024	22.4%	$4,478	$1,112	24.8%
Equity	$922	$575	$347	60.4%	$674	$248	36.9%
Commodity & Other	$328	$296	$32	10.7%	$271	$56	20.7%
Credit	$223	$550	-$327	-59.5%	$185	$38	20.2%
Total Trading Revenue	$7,062	$5,987	$1,075	18.0%	$5,608	$1,454	25.9%

Source: Call report, 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 $16.9 billion in the first quarter of 2017 was $5.5 billion (48.6 percent) higher than in the previous quarter. A $2.3 billion increase in combined interest rate and FX revenue and a $2.7 billion increase in credit revenue drove the increase in trading revenue from the previous quarter. Year-over-year holding company trading results improved by $5.1 billion (43.2 percent), with combined interest rate and FX trading revenue increasing $2.7 billion (45.6 percent) and credit revenue increasing $1.3 billion (72.7 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

	2017 Q1	2016 Q4	Q/Q Change	Q/Q % Change	2016 Q1	Y/Y Change	Y/Y % Change
Interest Rate & FX	$8,492	$6,215	$2,277	36.6%	$5,832	$2,660	45.6%
Equity	$4,867	$3,461	$1,406	40.6%	$3,441	$1,426	41.4%
Commodity & Other	$449	$1,249	-$800	-64.1%	$738	-$289	-39.2%
Credit	$3,108	$455	$2,653	583.2%	$1,799	$1,308	72.7%
Total HC Trading Revenue	$16,916	$11,380	$5,536	48.6%	$11,810	$5,106	43.2%

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

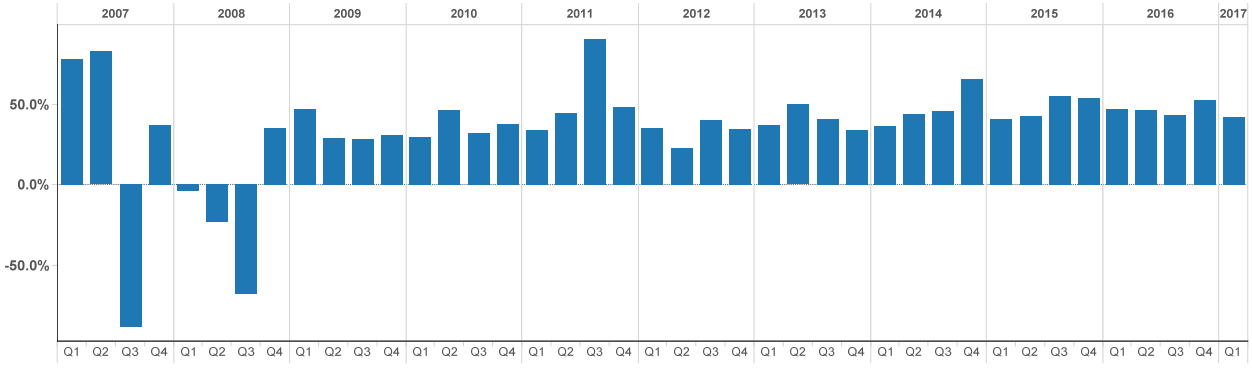
Bank Trading Revenue as a Percentage of Consolidated Holding Company Trading Revenue

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 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 trading commodity and equity products.

In the first quarter of 2017, banks generated 41.7 percent of consolidated holding company trading revenue, down from 52.6 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)

Credit Risk

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 current 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 where 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 $0.4 trillion (15.0 percent) in the first quarter of 2017 to $2.4 trillion, driven by an 11.4 percent decrease in receivables from interest rate contracts and a 29.4 percent decrease from FXcontracts (see table 3). Because interest rate contracts make up 71.9 percent of total notional derivative contracts, changes in interest rates drive credit exposure in derivative portfolios. Declines in interest rates tend to increase exposure. This effect has increased in recent years, as the maturity profile of interest rate derivatives has increased, making credit exposure more sensitive to changes in longer-term rates.

Because banks hedge the market risk of their derivative portfolios, a similar decrease in GNFVs matched the change in GPFV. Derivative payables, GNFV, decreased $0.4 trillion (15.0 percent) to $2.4 trillion during the quarter, driven by decreases in payables on interest rate contracts and FX contracts.

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

	2017 Q1	2016 Q4	Q/Q Change	Q/Q % Change	2016 Q1	Y/Y Change	Y/Y % Change
Interest Rate	$1,750	$1,976	-$226	-11.4%	$2,856	-$1,106	-38.7%
Foreign Exchange	$476	$673	-$198	-29.4%	$626	-$150	-24.0%
Equity	$95	$91	$3	3.8%	$101	-$6	-5.8%
Commodities	$46	$48	-$1	-2.9%	$53	-$7	-12.6%
Credit	$69	$76	-$8	-9.9%	$114	-$46	-40.0%
Gross Positive Fair Value	$2,436	$2,865	-$429	-15.0%	$3,750	-$1,314	-35.0%

	2017 Q1	2016 Q4	Q/Q Change	Q/Q % Change	2016 Q1	Y/Y Change	Y/Y % Change
Interest Rate	$1,685	$1,914	-$229	-12.0%	$2,781	-$1,096	-39.4%
Foreign Exchange	$474	$663	-$189	-28.5%	$637	-$163	-25.6%
Equity	$100	$94	$6	6.7%	$96	$4	4.3%
Commodities	$46	$47	-$1	-1.8%	$57	-$11	-19.3%
Credit	$69	$75	-$6	-8.1%	$112	-$44	-39.0%
Gross Negative Fair Value	$2,373	$2,791	-$418	-15.0%	$3,683	-$1,310	-35.6%

Source: Call report, Schedule RC-L

A legally enforceable netting agreement with 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 become unique netting sets that 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. In some cases, transactions that fall under separate netting sets may be tied together under a separate legally enforceable netting agreement. 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 credit exposures across all netting sets 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 decreased by $44.4 billion

(11.0 percent) to $357.8 billion in the first quarter of 2017 (see table 5).[3] Legally enforceable netting agreements allowed banks to reduce GPFV exposures by 85.3 percent ($2.1 trillion) in the first quarter of 2017.

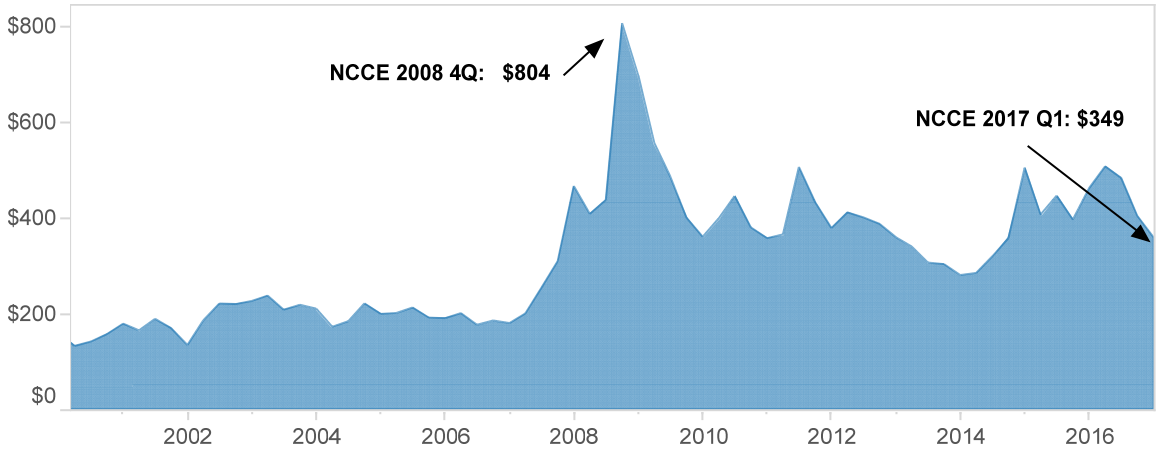
Table 5. Net Current Credit Exposure, in Billions of Dollars

	2017 Q1	2016 Q4	Q/Q Change	Q/Q % Change
Gross Positive Fair Value	$2,436	$2,865	-$429	-15.0%
NCCE RC-R	$358	$402	-$44	-11.0%
Netting Benefit RC-R	$2,078	$2,462	-$385	-15.6%
Netting Benefit % RC-R	85.3%	86.0%	-0.8%	

Source: Call report, 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 $1.8 trillion at the end of the first quarter of 2017. On March 31, 2017, exposure from credit contracts of $68.6 billion was $1.0 trillion lower (93.8 percent) than the $1.1 trillion on December 31, 2008 (see table 3). New regulations and a decrease in client demand have led to the reduction in credit derivative notional amounts.

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



Source: Call report, Schedule RC-R

The bulk of NCCE in the financial system is concentrated in banks and securities firms (47.5 percent) and corporations and other counterparties (42.7 percent) (see table 6). Relative to the fourth quarter of 2016, the first quarter of 2017 saw a decrease in the percentage of total credit exposure to banks and securities firms (from 48.5 percent to 47.5 percent), and a decrease

[3] Banks report NCCE in 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.

in the percentage of total credit exposure to corporations and other counterparties (from 43.0 percent to 42.7 percent).

The combined exposure to hedge funds, sovereign governments, and monoline financial firms was small (9.8 percent in total). The sheer size of aggregate counterparty exposures, however, 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 monolines, 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 Firms	Hedge Funds	Sovereign Governments	Corp & All Other Counterparties
2017 Q1	47.5%	0.1%	2.2%	7.5%	42.7%
2016 Q4	48.5%	0.1%	2.0%	6.5%	43.0%
2015 Q4	53.3%	0.1%	2.1%	6.0%	38.5%
2014 Q4	53.2%	0.1%	1.9%	6.4%	38.4%

Source: Call report, 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 against 106.7 percent of their total NCCE at the end of the first quarter of 2017, up from 98.5 percent in the fourth quarter of 2016 (see table 7). The increase in the ratio of collateral held against counterparty exposure was due primarily to stronger collateral coverage of exposures to banks and securities firms, which increased from 119.0 percent to 122.7 percent. Collateral held against hedge fund exposures increased in the first quarter, and coverage remains very high at 579.9 percent. Bank exposures to hedge funds have always been 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. Fair Value Collateral to Net Current Credit Exposure

	FV Banks & Securities Firms	FV Monoline Financial Firms	FV Hedge Funds	FV Sovereign Governments	FV Corp and All Other Counterparties	FV/NCCE%
2017 Q1	122.7%	0.0%	579.9%	34.5%	77.4%	106.7%
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%
2014 Q4	94.4%	0.0%	361.5%	11.0%	59.5%	80.6%

Source: Call report, Schedule RC-L

Collateral quality held by banks was very high and liquid during the quarter, with 69.5 percent held in cash (both U.S. dollar and non-dollar) and an additional 10.2 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
2017 Q1	42.0%	27.5%	8.3%	1.9%	2.0%	5.5%	12.8%
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%
2014 Q4	43.8%	31.9%	4.1%	1.7%	1.2%	1.7%	15.7%

Source: Call report, Schedule RC-L

Credit quality metrics for derivative exposures declined in the first quarter of 2017, as banks reported net charge-offs of $1.2 million, compared to net recoveries of $7.8 million in the fourth quarter of 2016 (see graph 7 in the appendix). The number of banks reporting charge-offs increased from seven to 11 banks. Net charge-offs in the first quarter of 2017 represented 0.0003 percent of the NCCE from derivative contracts. For comparison purposes, commercial and industrial (C&I) loan net charge-offs decreased $865.5 million, or 35.6 percent, to $1.6 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 in normal markets. VaR is not the maximum potential loss. 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 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 capital.

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

	JPMORGAN	CITIGROUP	BANK OF AMERICA	GOLDMAN	MORGAN STANLEY	TOTAL
Q1 2017	$25	$100	$44	$64	$44	$277
Q4 2016	$38	$89	$41	$61	$38	$267
Q/Q Change	-$13	$11	$3	$3	$6	$10
Q/Q % Change	-34.2%	12.4%	7.3%	4.9%	15.8%	3.7%
Equity Capital	$255,863	$228,132	$268,153	$86,917	$77,924	$916,989
2016 Net Income	$59,979	$37,251	$40,708	$16,541	$14,142	$168,621
Avg VaR/Equity	0.01%	0.04%	0.02%	0.07%	0.06%	0.03%
Avg VaR/Net Income	0.04%	0.27%	0.11%	0.39%	0.31%	0.16%

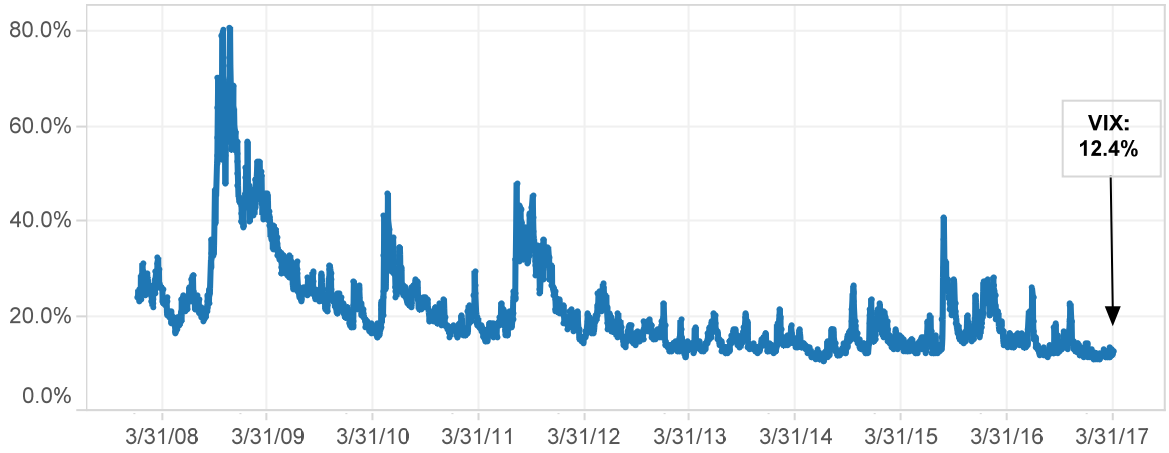
Source: 10K and 10Q U.S. Securities and Exchange Commission reports

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 trend over the past seven years 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 of S&P 500 index options 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)

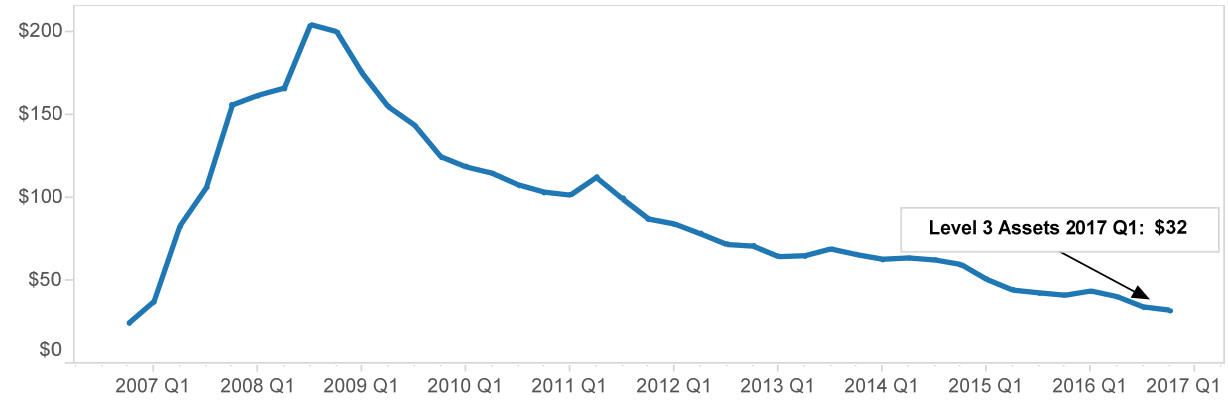


Source: Bloomberg

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 2017, banks held $31.8 billion of level 3 trading assets, down 5.8 percent from the previous quarter, and 22.0 percent lower than a year ago. Level 3 assets are $172.3 billion (84.4 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.

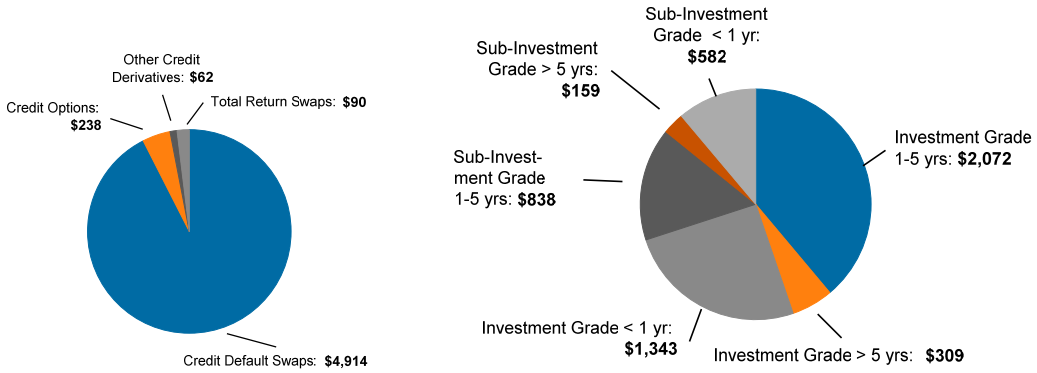
Credit Derivatives

The notional amounts outstanding of credit derivatives increased $10.2 billion (0.2 percent) in the first quarter of 2017 to $5.3 trillion. Contracts referencing sub-investment-grade firms increased $18.2 billion in the first quarter, while contracts referencing investment-grade firms decreased $8.0 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 $5.0 trillion (92.6 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 $97.7 billion (4.5 percent) in the quarter, represented the largest segment of the market at 39.1 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. 2017 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 63 insured U.S. commercial banks and savings associations that sold credit protection (i.e., assumed credit risk) was $2.6 trillion, down $16.7 billion (0.6 percent) from the fourth quarter of 2016. The notional amount for the 54 banks that purchased credit protection (i.e., hedged credit risk) was $2.7 trillion, $26.9 billion lower (1.0 percent) than in the fourth quarter of 2016 (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 insured U.S. commercial banks and savings associations in the first quarter increased by $13.1 trillion (7.9 percent) to $178.3 trillion from the previous quarter (see table 10). The increase was driven by an $8.2 trillion increase in interest rate notional amounts. A $5.7 trillion increase in futures and forwards contracts (16.6 percent) to $39.9 trillion drove the increase in interest rate notional amounts (see table 11). Swap contracts remained the dominant derivatives product at 55.6 percent of all notional amounts.

Interest rate contracts continued to represent the majority of the derivative market at $132.7 trillion, or 74.4 percent of total derivatives during the first quarter of 2017 (see table 10). FX and credit derivatives were 20.3 percent and 3.0 percent of total notional amounts, respectively. Commodity and equity derivatives collectively were only 2.3 percent of total notional derivatives.

The four banks with the most derivative activity hold 89.2 percent of all 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

	2017 Q1	2016 Q4	Q/Q Change	Q/Q % Change	2016 Q1	Y/Y Change	Y/Y % Change
Interest Rate	$132,690	$124,480	$8,210	6.6%	$147,218	-$14,528	-9.9%
Foreign Exchange	$36,161	$31,737	$4,423	13.9%	$34,568	$1,593	4.6%
Equity	$2,839	$2,488	$351	14.1%	$2,534	$305	12.0%
Commodity	$1,350	$1,257	$93	7.4%	$1,210	$140	11.6%
Credit Derivatives	$5,304	$5,293	$10	0.2%	$7,418	-$2,114	-28.5%
Total Notional	$178,343	$165,256	$13,087	7.9%	$192,947	-$14,604	-7.6%

Source: Call reports, Schedule RC-L

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

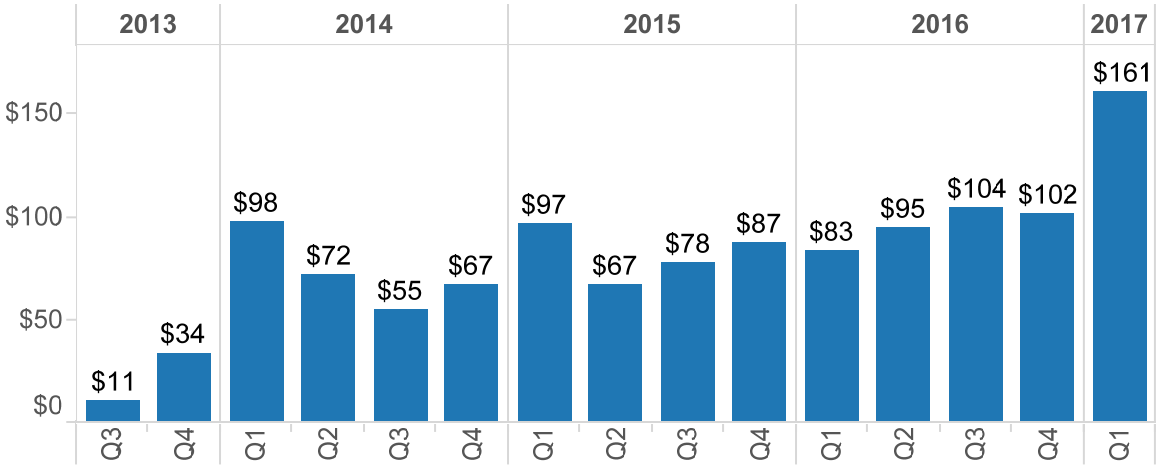
	2017 Q1	2016 Q4	Q/Q Change	Q/Q % Change	2016 Q1	Y/Y Change	Y/Y % Change
Futures & Forwards	$39,858	$34,193	$5,665	16.6%	$37,151	$2,707	7.3%
Swaps	$99,183	$96,384	$2,799	2.9%	$114,814	-$15,632	-13.6%
Options	$33,999	$29,386	$4,613	15.7%	$33,564	$435	1.3%
Credit Derivatives	$5,304	$5,293	$10	0.2%	$7,418	-$2,114	-28.5%
Total Notional	$178,343	$165,256	$13,087	7.9%	$192,947	-$14,604	-7.6%

Source: Call reports, Schedule RC-L

Compression Activity

Notional amounts have generally declined since 2011 due to trade compression efforts, which has led 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 2017, 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 2017, 39.2 percent of the derivative market was centrally cleared (see table 12). From a market factor perspective, 49.8 percent of interest rate derivative contracts' notional amounts outstanding were centrally cleared, while very little of the FX derivative market was centrally cleared. The credit derivative market remained largely uncleared, as 23.5 percent of investment grade and 20.1 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 91.4 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
2017 Q1	49.8%	1.2%	25.1%	5.0%	22.3%	16.0%	39.2%
2016 Q4	49.2%	1.0%	23.4%	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	44.7%	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, 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.

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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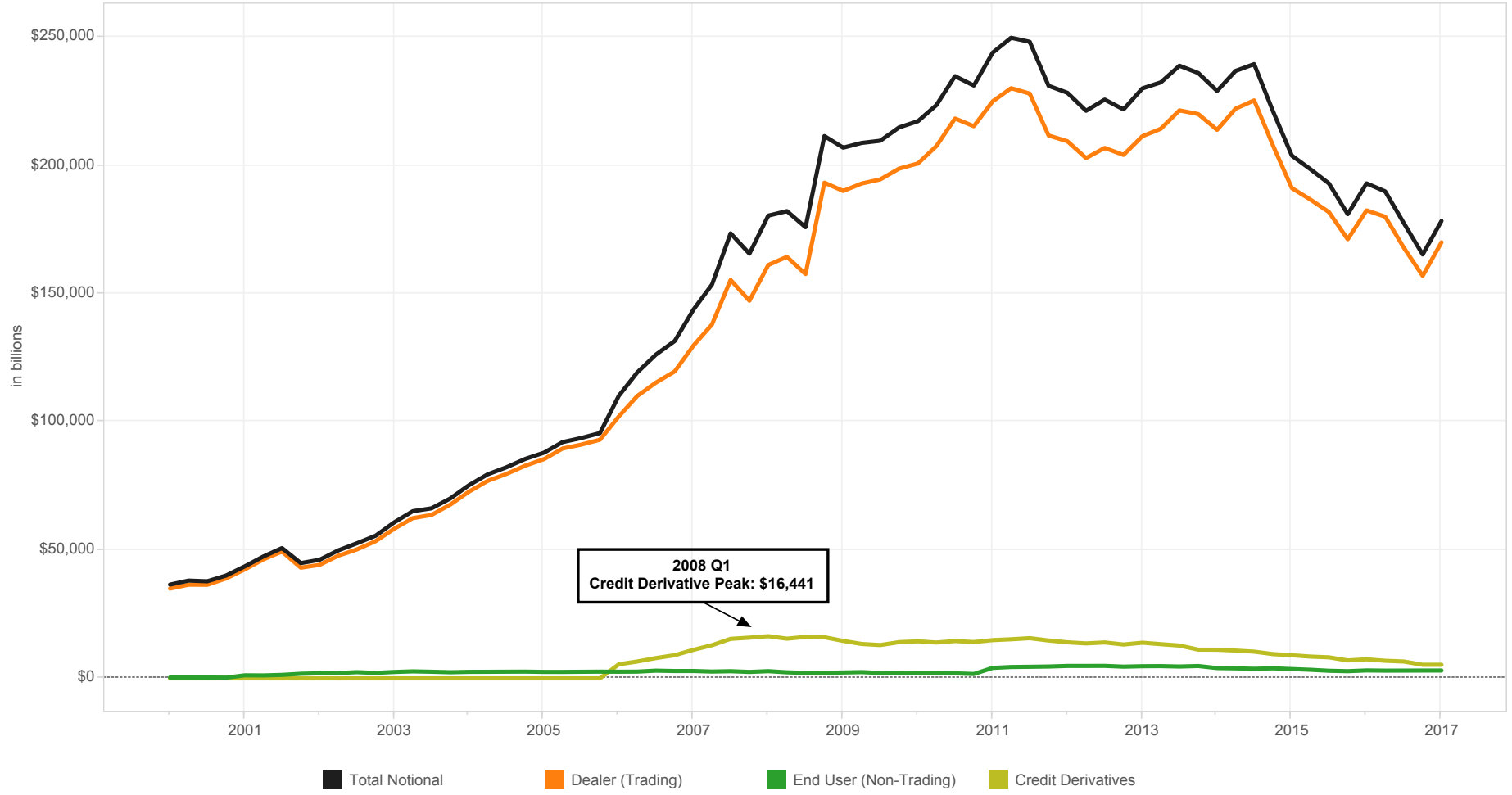
Graph 1

Derivative Notional Amounts by Type

Insured U.S. Commercial Banks and Savings Associations



In billions of dollars

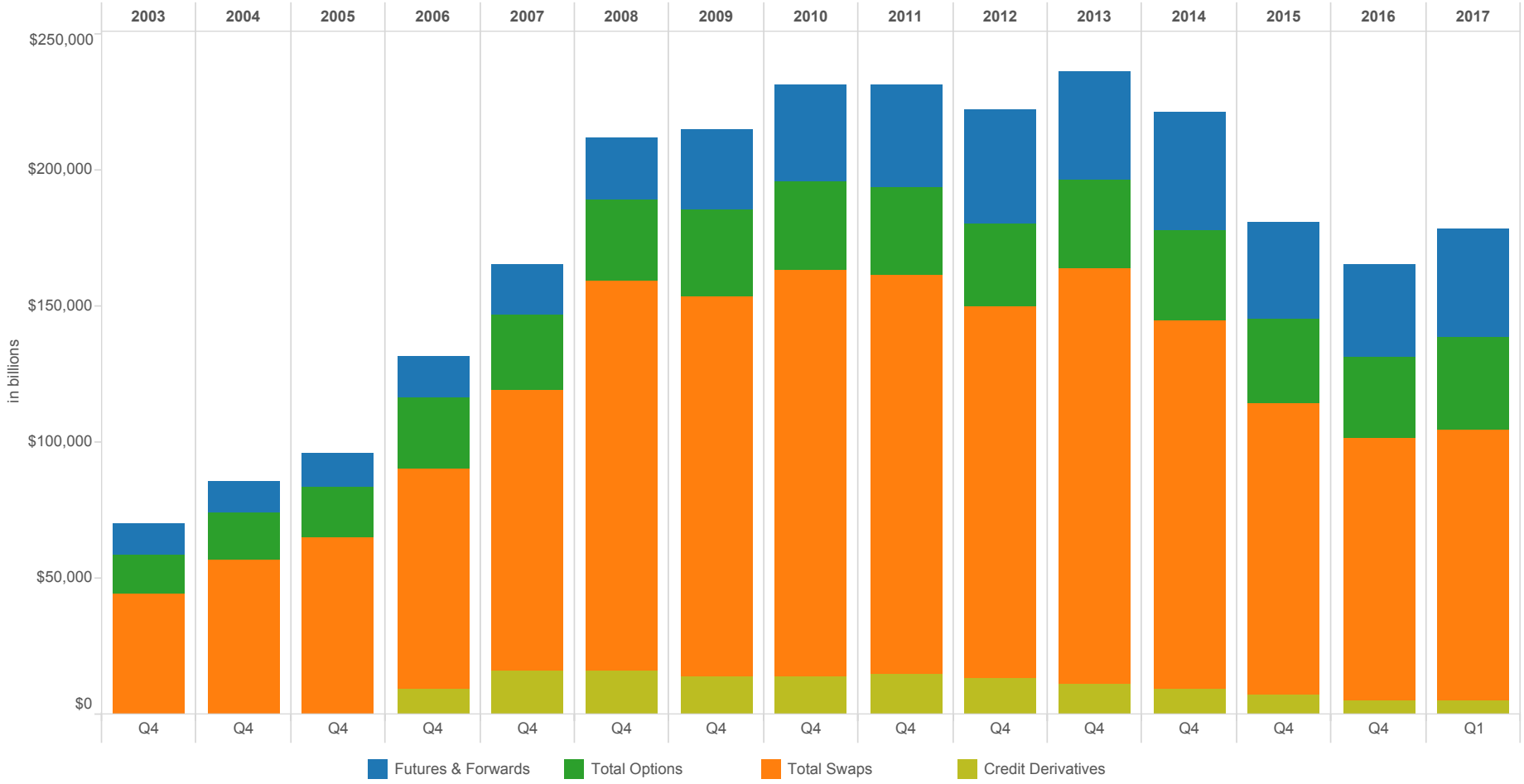
	2013				2014				2015				2016				2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Total Notional	$229,987	$232,342	$238,827	$235,992	$229,011	$236,808	$239,459	$221,078	$203,771	$198,523	$192,937	$180,952	$192,947	$189,834	$177,461	$165,256	$178,343
Dealer (Trading)	211,353	214,240	221,425	219,990	213,838	222,078	225,318	207,711	191,123	186,686	181,777	171,172	182,437	179,971	167,873	156,913	169,983
End User (Non-Trading)	4,733	4,776	4,610	4,812	4,008	3,903	3,732	3,918	3,632	3,349	2,963	2,794	3,092	3,010	3,025	3,049	3,056
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

Note: Numbers may not 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

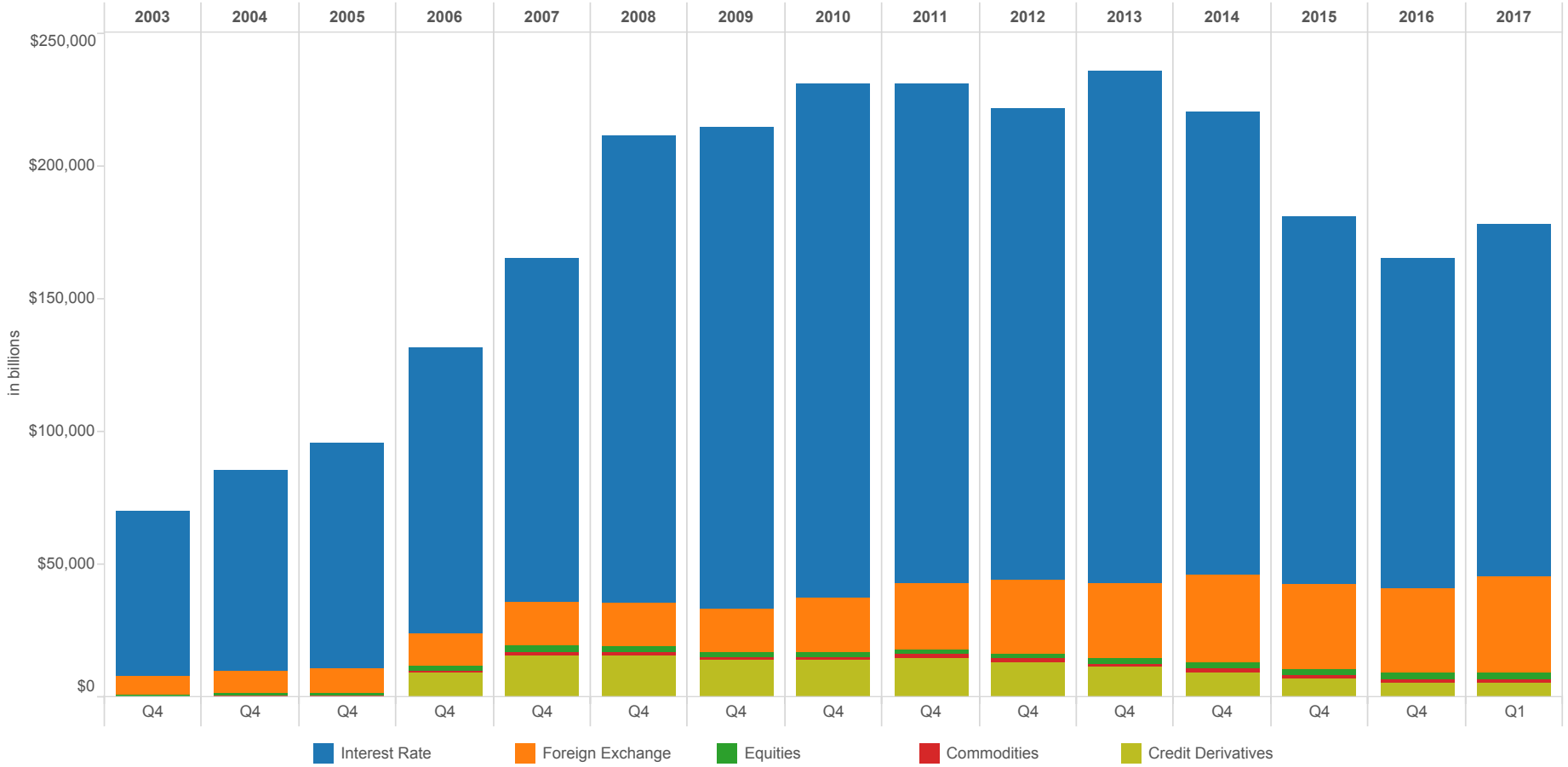
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q1
Futures & Forwards	$11,406	$11,370	$12,057	$14,882	$18,867	$22,529	$29,652	$35,539	$37,469	$41,621	$40,027	$43,380	$35,685	$34,193	$39,858
Total Options	14,616	17,754	18,858	26,277	27,727	29,747	31,884	32,078	32,505	30,375	32,305	33,081	30,889	29,386	33,999
Total Swaps	44,090	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	99,183
Credit Derivatives	0	0	0	9,020	15,863	16,029	14,112	14,151	14,759	13,190	11,191	9,449	6,986	5,293	5,304
Total Notional	70,112	85,536	95,627	131,519	165,559	211,416	214,786	231,099	230,998	221,794	235,992	221,078	180,952	165,256	178,343

*Notional amount of total: futures, exchange-traded options, over the counter options, forwards and swaps.
Note: Numbers may not add due to rounding
Source: Call reports

Graph 3

Derivative Contracts by Type*

Insured U.S. Commercial Banks and Savings Associations



In billions of dollars

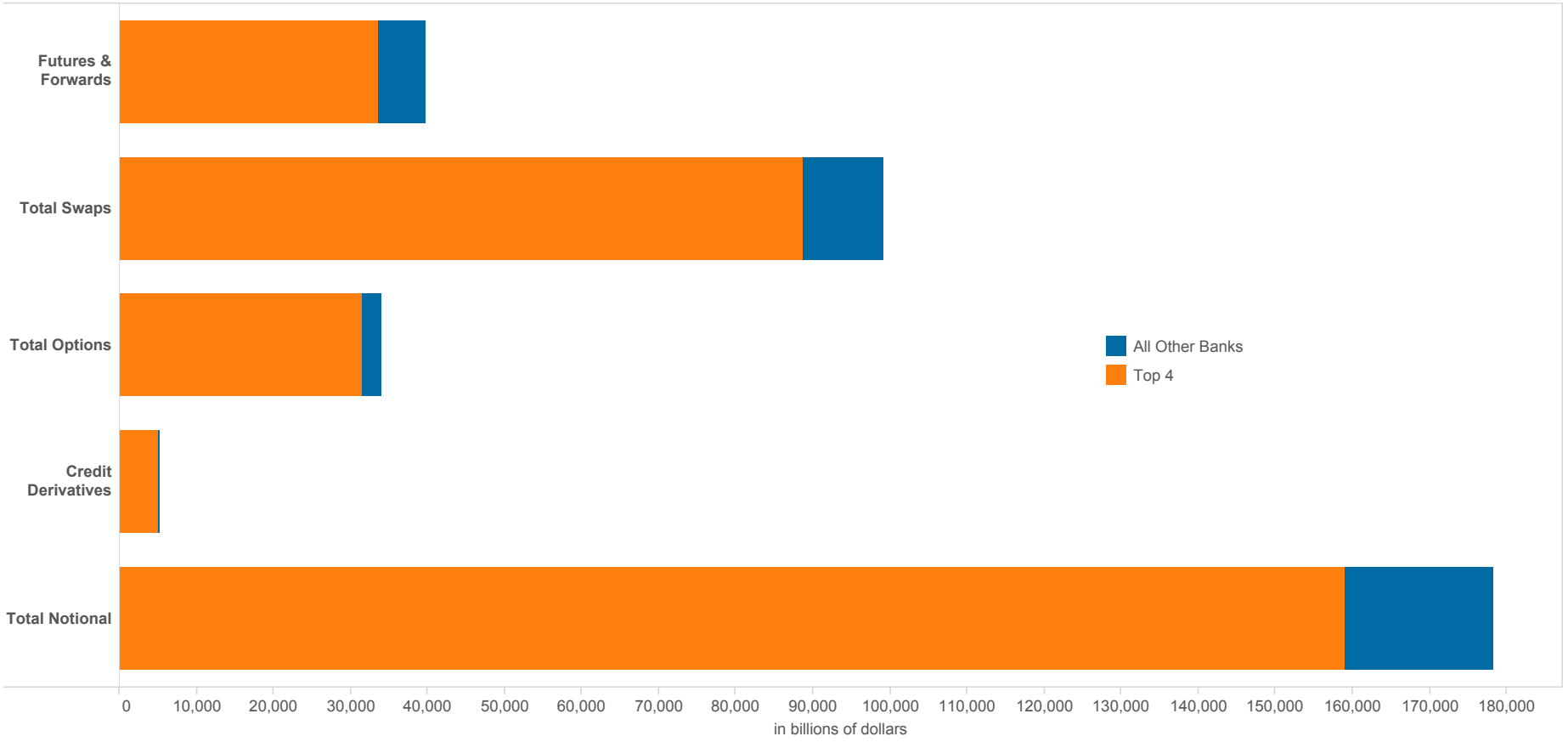
	2003 Q4	2004 Q4	2005 Q4	2006 Q4	2007 Q4	2008 Q4	2009 Q4	2010 Q4	2011 Q4	2012 Q4	2013 Q4	2014 Q4	2015 Q4	2016 Q4	2017 Q1
Interest Rate	$61,876	$75,533	$84,530	$107,435	$129,491	$175,895	$181,454	$193,399	$187,866	$177,650	$193,084	$174,687	$138,363	$124,480	$132,690
Foreign Exchange	7,185	8,607	9,289	11,900	16,614	16,224	16,555	20,990	25,436	27,587	28,480	33,183	32,100	31,737	36,161
Equities	829	1,112	1,255	2,271	2,524	2,207	1,685	1,364	1,606	1,970	2,028	2,537	2,395	2,488	2,839
Commodities	223	284	552	893	1,067	1,061	979	1,195	1,330	1,397	1,209	1,222	1,108	1,257	1,350
Credit Derivatives	0	0	0	9,020	15,863	16,029	14,112	14,151	14,759	13,190	11,191	9,449	6,986	5,293	5,304
Total Notional	70,112	85,536	95,627	131,519	165,559	211,416	214,786	231,099	230,998	221,794	235,992	221,078	180,952	165,256	178,343

Note: As of 2006 Q2 equities and commodities types are shown as separate categories. They were previously shown as "Other Derivs."
Numbers may not 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

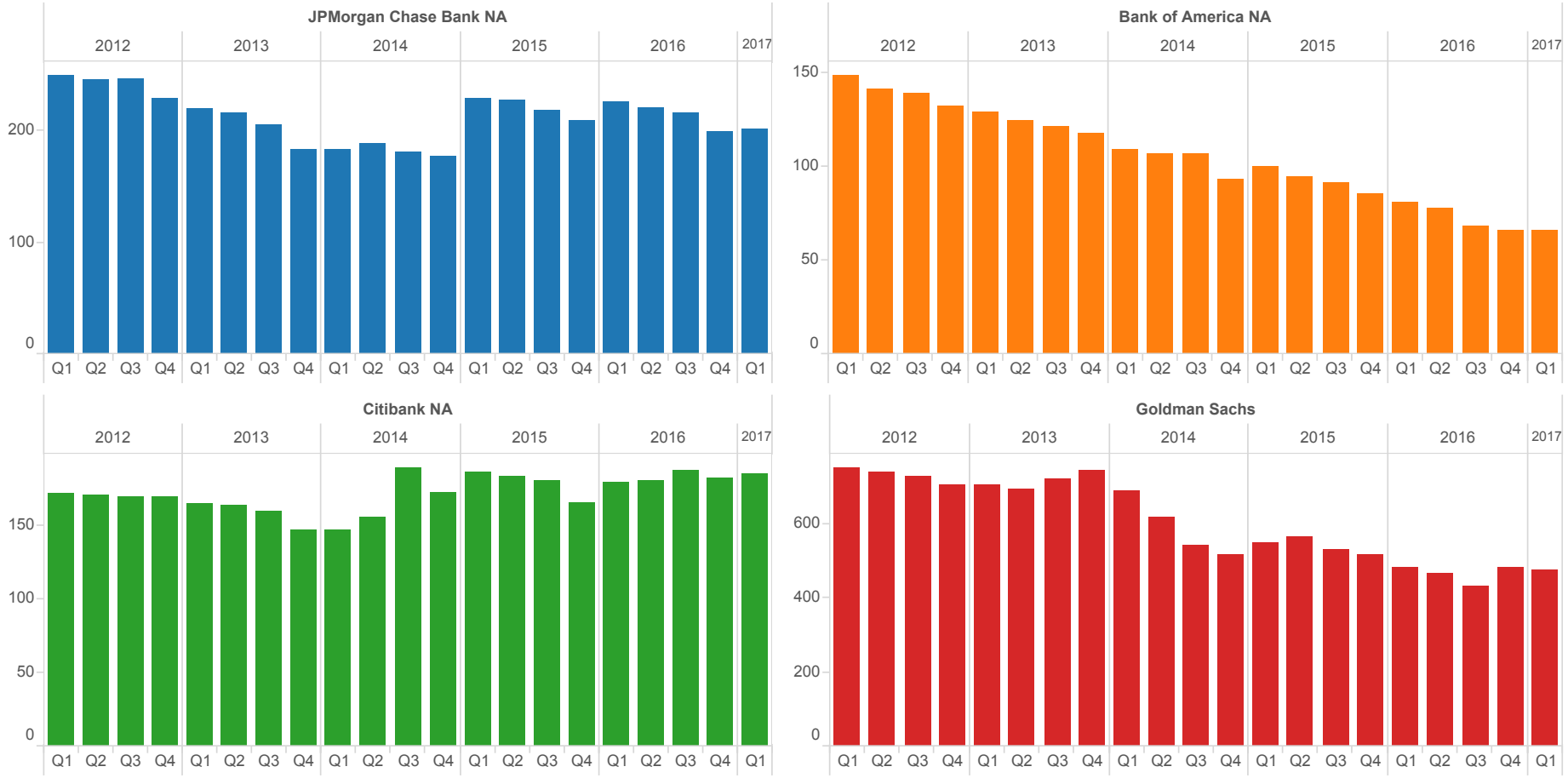
	Top 4	All Other Banks	Grand Total
Futures & Forwards	$33,593	$6,265	$39,858
Total Swaps	88,727	10,456	99,183
Total Options	31,597	2,402	33,999
Credit Derivatives	5,107	196	5,304
Total Notional	159,024	19,319	178,343

***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



	2012				2013				2014				2015				2016				2017
	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	250	246	247	229	219	216	205	183	183	189	181	177	229	228	219	209	225	221	216	199	201
Bank of America NA	149	141	139	132	129	125	121	117	109	107	107	93	100	95	91	85	81	77	68	66	66
Citibank NA	172	171	170	170	165	164	161	148	147	156	190	173	187	184	181	166	180	181	188	183	186
Goldman Sachs	751	738	727	705	703	693	719	741	689	620	539	516	547	563	530	516	482	467	433	481	472

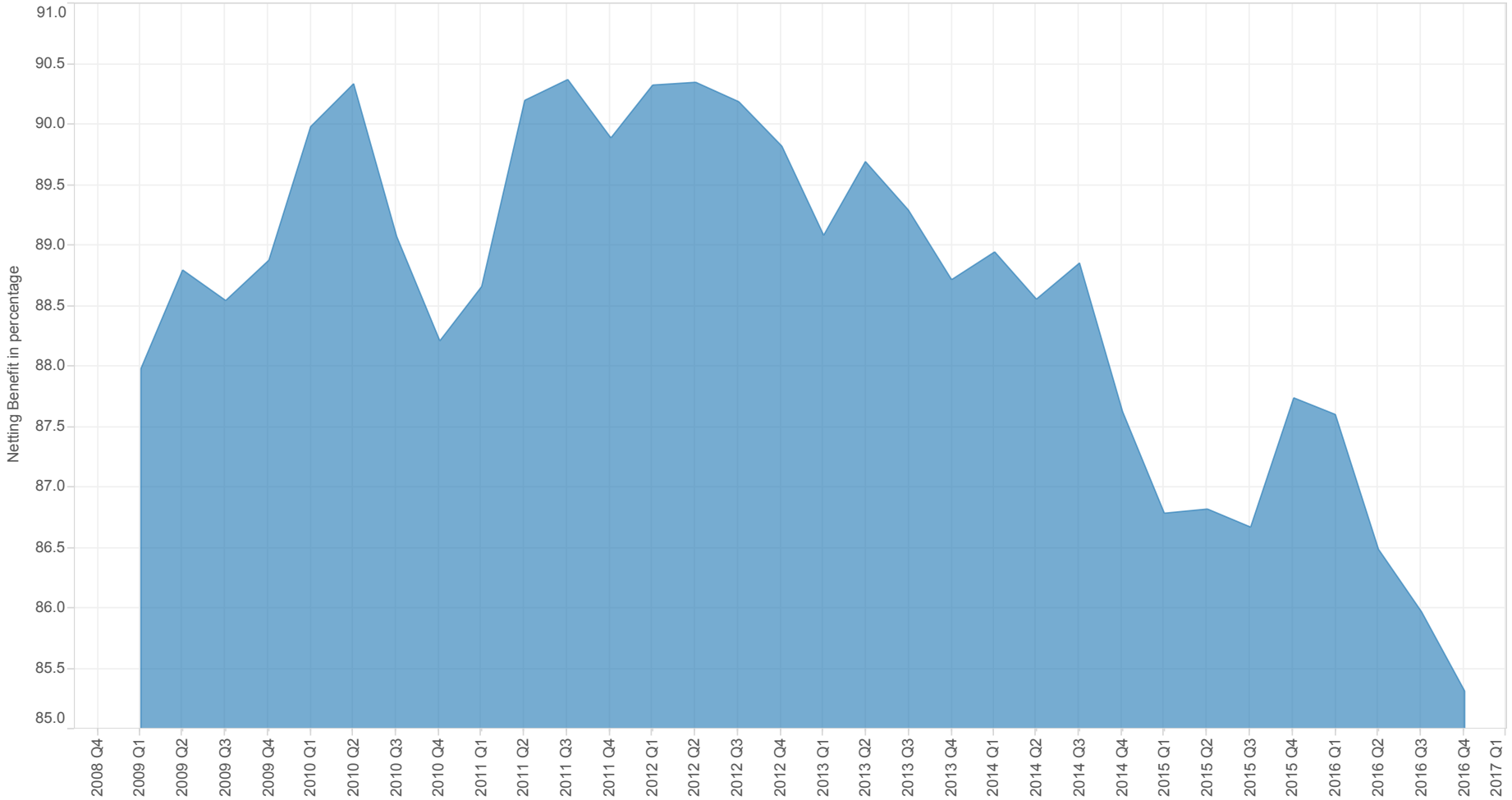
TOTAL	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
	284	282	281	271	261	258	262	262	248	240	224	211	238	242	232	223	226	222	217	220	220

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)

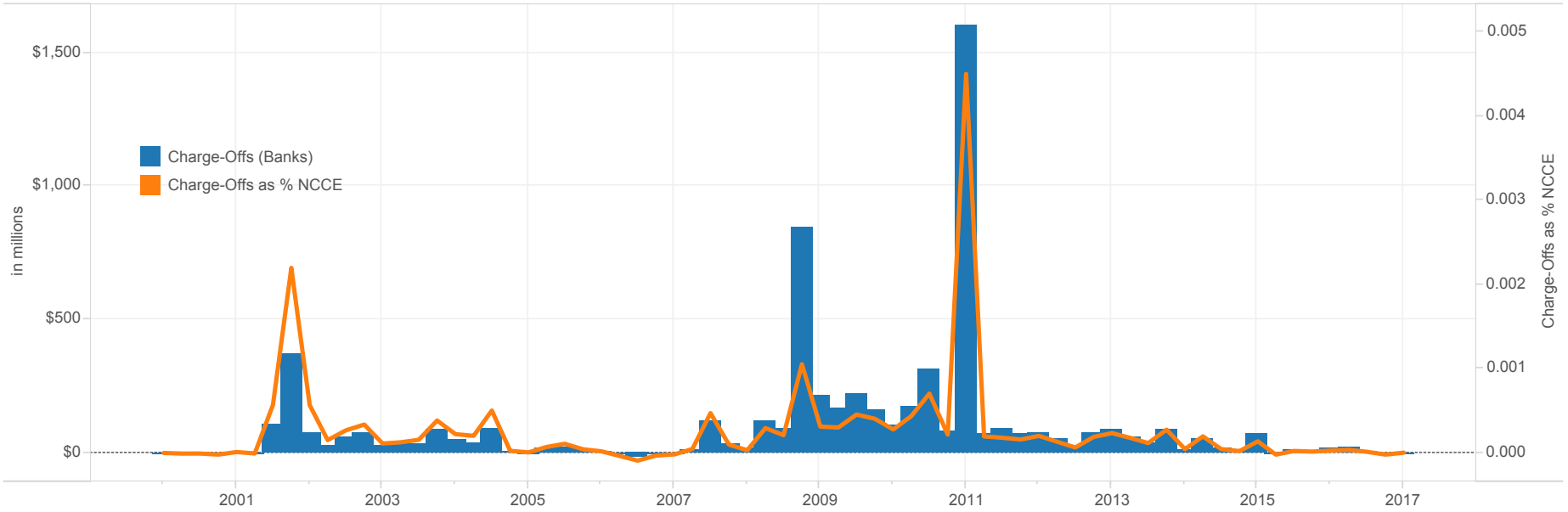
2009			2010				2011				2012				2013				2014				2015				2016				2017
Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
88.0	88.8	88.5	88.9	90.0	90.3	89.1	88.2	88.6	90.2	90.4	89.9	90.3	90.3	90.2	89.8	89.1	89.7	89.3	88.7	88.9	88.6	88.8	87.6	86.8	86.8	86.7	87.7	87.6	86.5	86.0	85.3

*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

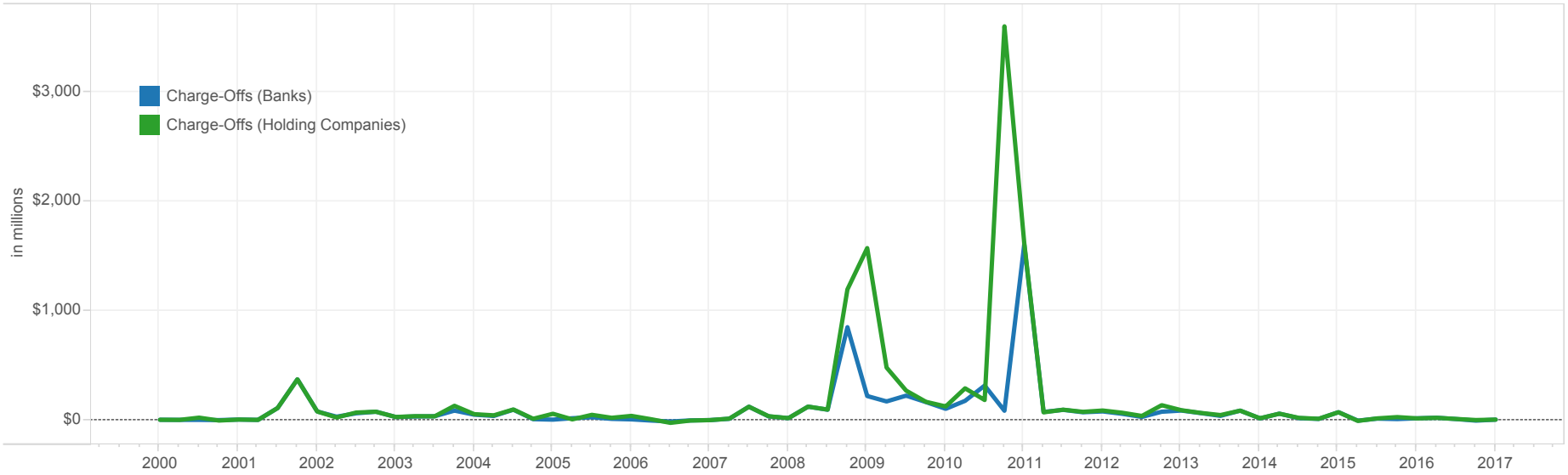
	2016				2017
	Q1	Q2	Q3	Q4	Q1
Charge-Offs (Banks)	13.30	18.56	6.48	-7.84	1.22

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

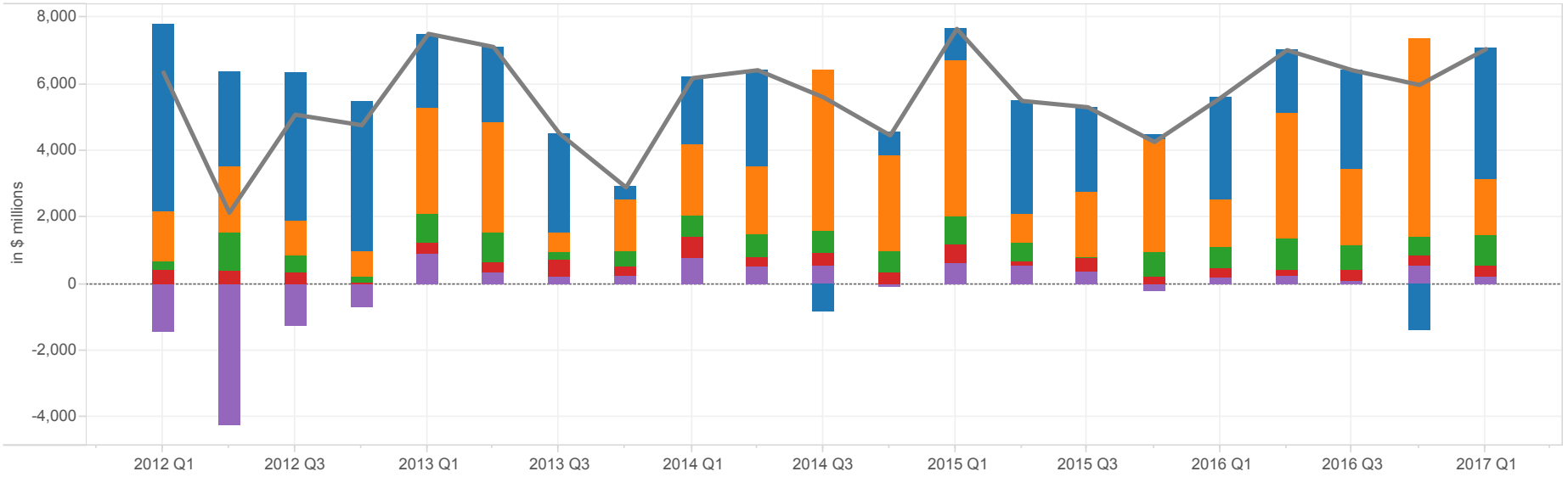
	2012				2013				2014				2015				2016				2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Charge-Offs (Banks)	76.3	54.3	26.1	73.4	84.3	60.7	35.8	83.5	12.8	55.9	14.5	7.9	69.3	-7.9	10.4	6.4	13.3	18.6	6.5	-7.8	1.2
Charge-Offs (Holding Companies)	84.6	64.0	34.9	133.4	87.2	62.6	42.9	83.4	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

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



In millions of dollars

	1Q17	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	3,905	2,487	1,951	3,905	-5,282	1,656	9,291	-1,376
Foreign Exchange	1,685	2,483	2,884	5,941	-1,069	1,864	5,941	855
Equity	922	751	672	972	-1,059	557	1,830	49
Commodity & Other	328	464	303	587	-307	226	789	129
Credit	223	447	287	624	-10,237	-191	2,727	-222
Total Trading Revenue	7,062	6,633	6,097	7,669	-10,580	4,112	10,217	4,273

In millions of dollars

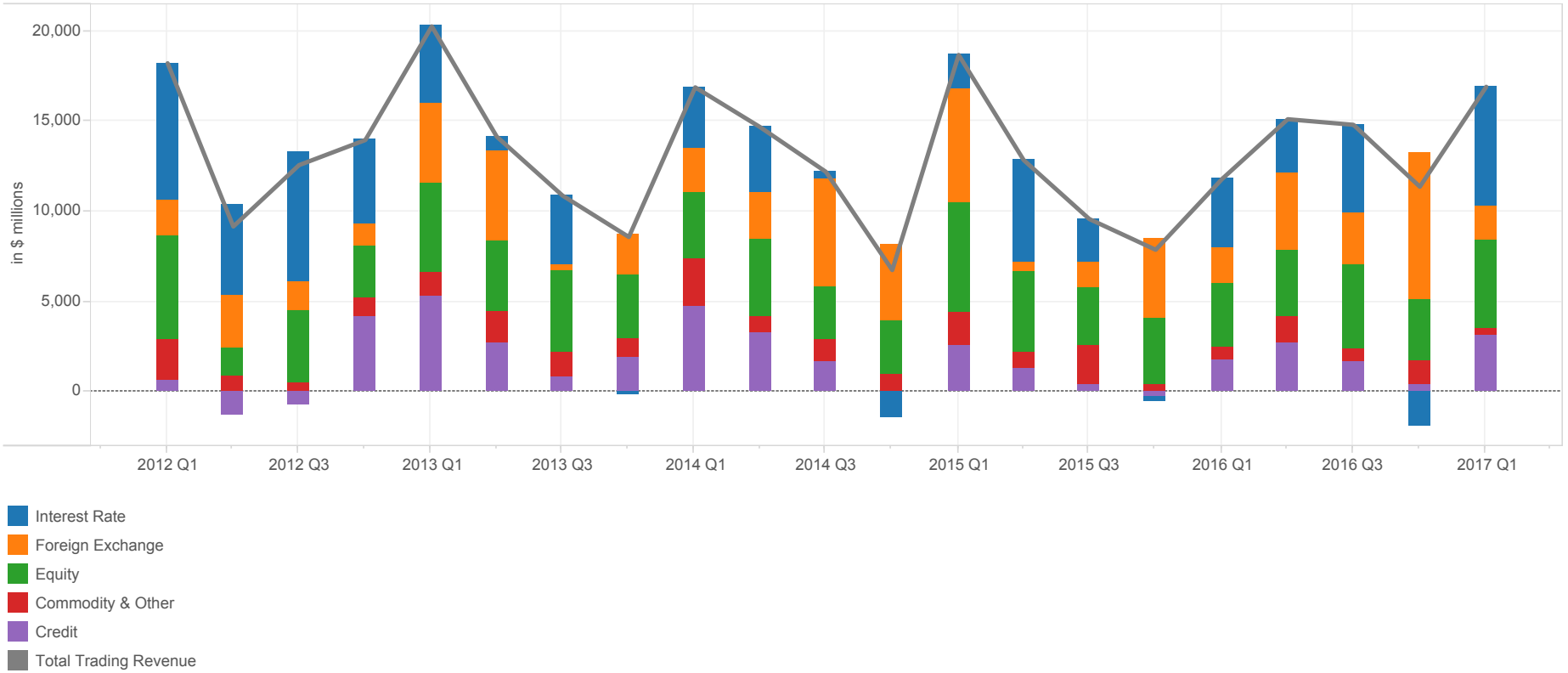
	2012				2013				2014				2015				2016				2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Interest Rate	5,627	2,870	4,457	4,521	2,243	2,268	3,002	360	2,015	2,883	-819	664	958	3,406	2,578	154	3,070	1,904	2,963	-1,376	3,905
Foreign Exchange	1,505	1,990	1,020	753	3,185	3,303	588	1,550	2,137	2,026	4,830	2,902	4,703	855	1,931	3,401	1,407	3,736	2,294	5,941	1,685
Equity	260	1,140	508	187	838	924	233	491	612	726	654	650	797	587	49	742	674	972	729	575	922
Commodity & Other	412	390	350	30	364	292	481	265	672	293	411	335	587	129	402	198	271	161	353	296	328
Credit	-1,444	-4,243	-1,242	-713	890	339	222	245	756	500	535	-79	624	530	357	-222	185	257	83	550	223
Total Trading Revenue	6,359	2,147	5,093	4,778	7,520	7,125	4,527	2,911	6,192	6,428	5,612	4,471	7,669	5,507	5,316	4,273	5,608	7,030	6,423	5,987	7,062

*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 total due to rounding.
Source: Call reports

Graph 9b

Quarterly Trading Revenue (Cash and Derivative Positions)*

Holding Company



In millions of dollars

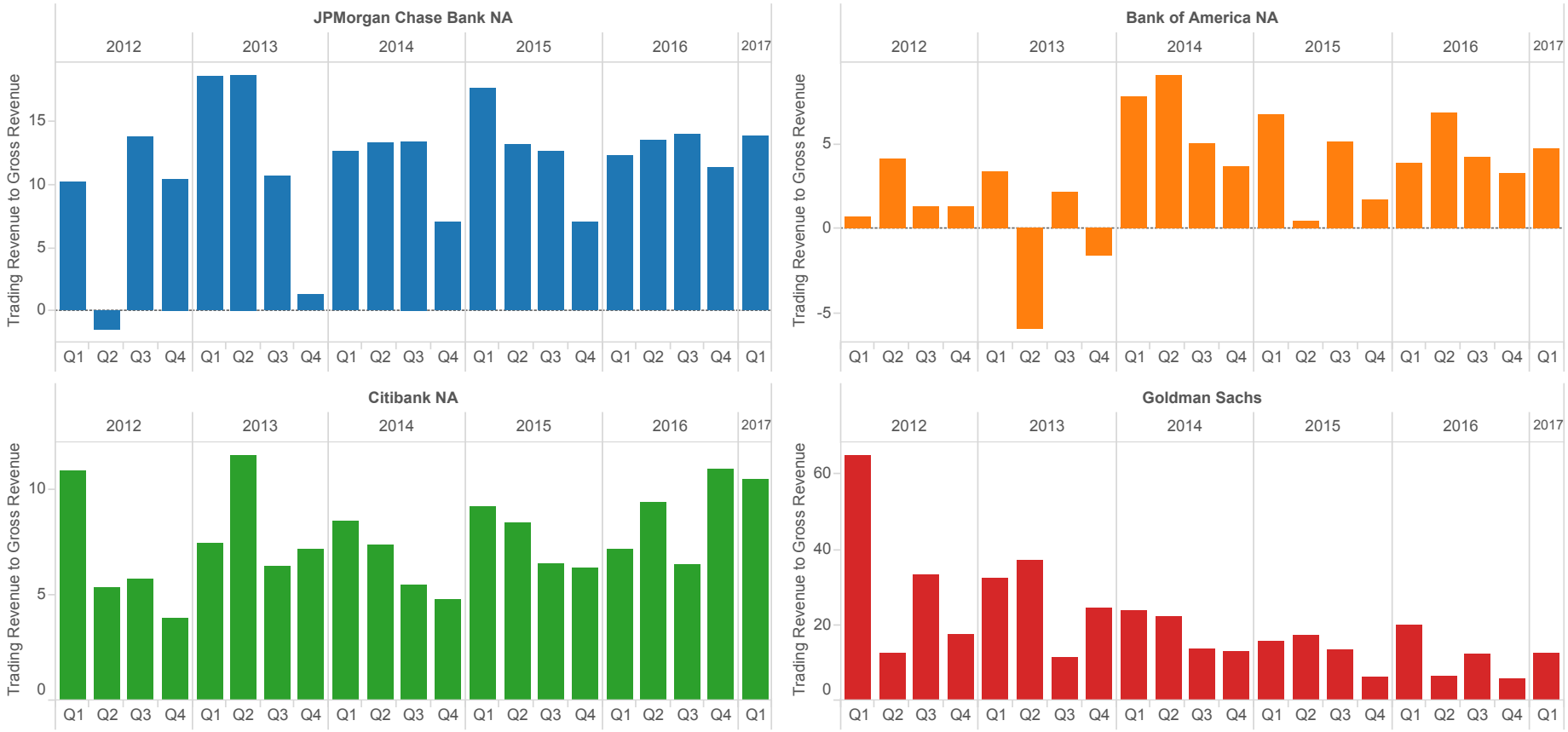
	2012				2013				2014				2015				2016				2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Interest Rate	7,592	5,032	7,139	4,683	4,272	823	3,811	-94	3,395	3,645	353	-1,396	1,893	5,662	2,403	-243	3,807	2,973	4,860	-1,885	6,567
Foreign Exchange	2,005	2,959	1,617	1,185	4,414	4,890	320	2,205	2,472	2,521	5,985	4,243	6,329	552	1,393	4,338	2,025	4,318	2,892	8,100	1,925
Equity	5,684	1,543	3,973	2,849	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	4,648	3,461	4,867
Commodity & Other	2,265	880	542	1,107	1,324	1,746	1,347	1,052	2,617	924	1,242	954	1,833	871	2,146	412	738	1,491	715	1,249	449
Credit	673	-1,239	-696	4,143	5,292	2,761	855	1,949	4,718	3,292	1,687	14	2,603	1,294	452	-317	1,799	2,724	1,695	455	3,108
Total Trading Revenue	18,220	9,175	12,575	13,968	20,262	14,156	10,893	8,595	16,885	14,679	12,205	6,762	18,680	12,860	9,590	7,887	11,810	15,118	14,809	11,380	16,916

***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 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)*

	2012				2013				2014				2015				2016				2017
	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	10.24	-1.48	13.79	10.50	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	13.55	14.06	11.37	13.84
Bank of America NA	0.67	4.16	1.28	1.35	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
Citibank NA	10.95	5.36	5.74	3.94	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
Goldman Sachs	65.27	12.48	33.26	17.68	32.65	37.30	11.54	24.45	23.67	22.21	13.74	13.06	15.85	17.32	13.32	6.16	20.00	6.66	12.43	5.68	12.60

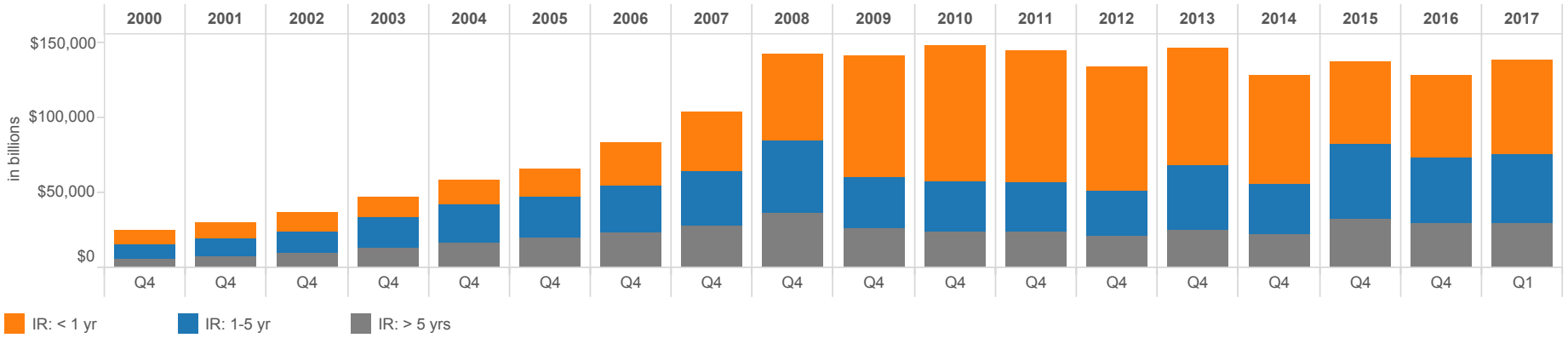
TOTAL	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
	8.705	2.784	7.863	5.723	10.421	9.563	6.718	2.774	10.057	10.453	8.526	5.351	11.677	7.620	8.409	5.034	8.367	10.146	8.565	8.535	9.978

*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

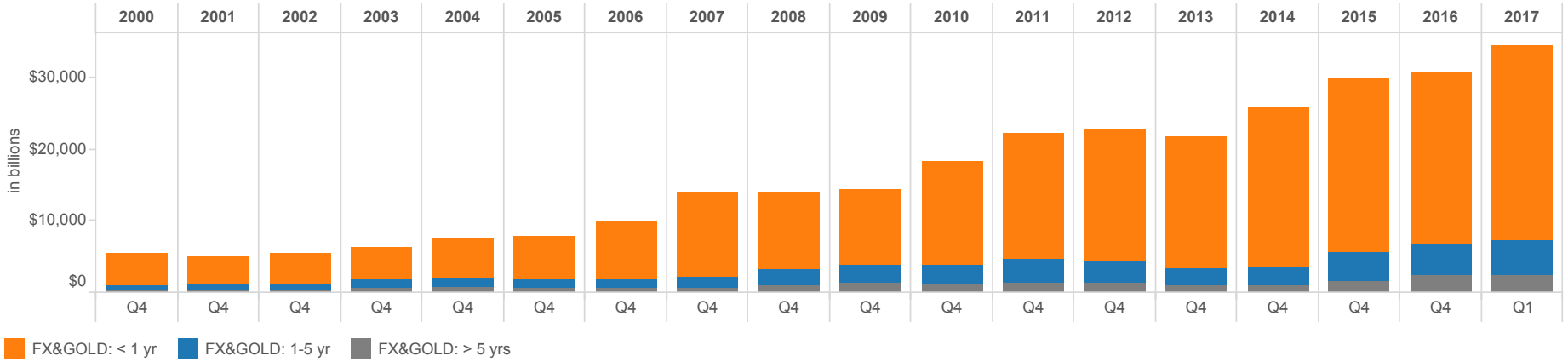
Graph 11

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

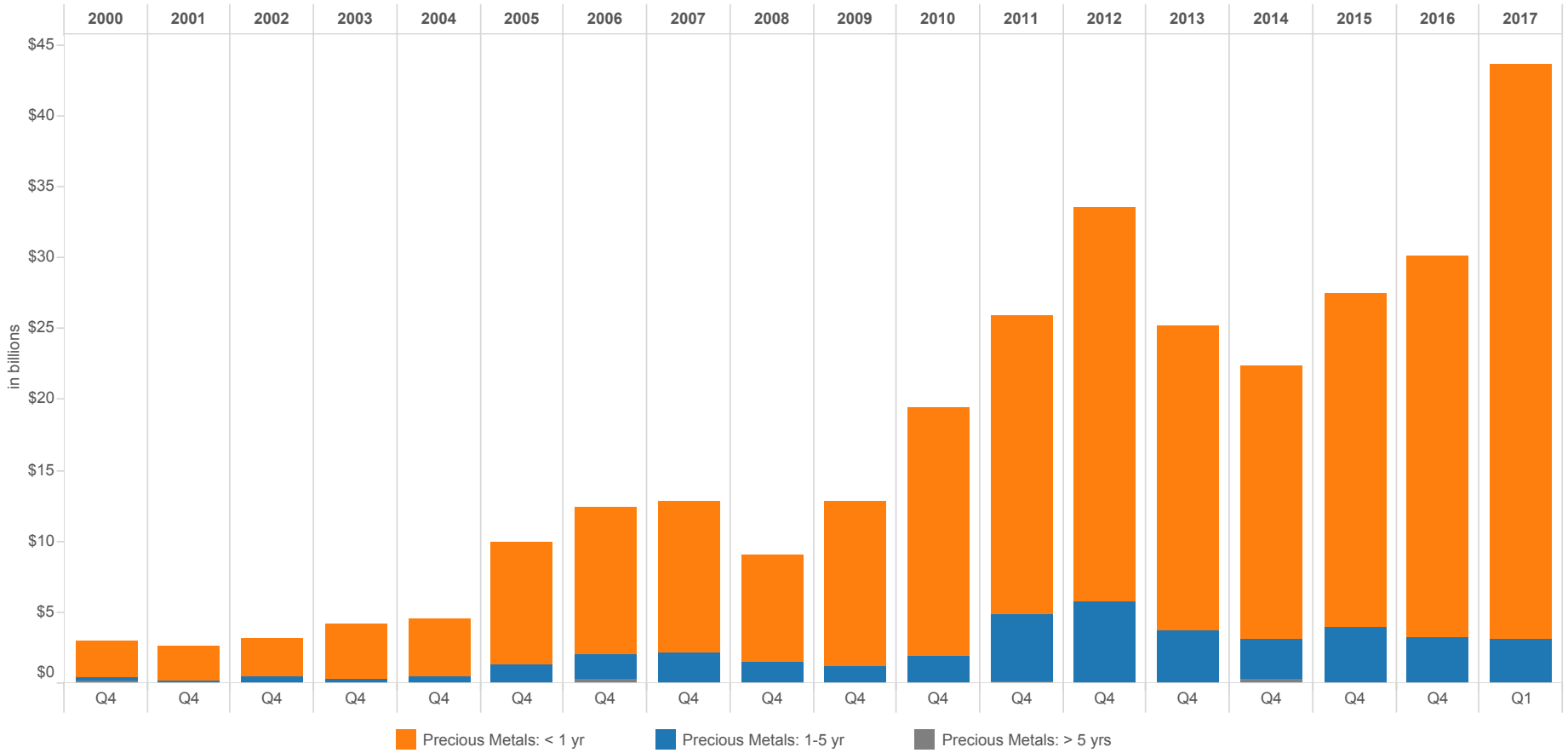
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q1
IR: < 1 yr	$9,688	$10,379	$12,982	$13,581	$15,921	$18,483	$29,552	$39,085	$58,618	$81,236	$90,843	$87,812	$82,948	$77,758	$71,808	$55,047	$55,053	$61,923
IR: 1-5 yr	9,894	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	43,262	46,450
IR: > 5 yrs	5,830	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	29,972
FX&GOLD: < 1 yr	4,397	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	27,320
FX&GOLD: 1-5 yr	622	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	4,772
FX&GOLD: > 5 yrs	361	499	439	582	762	689	594	622	1,082	1,347	1,290	1,503	1,480	1,029	969	1,648	2,420	2,429

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

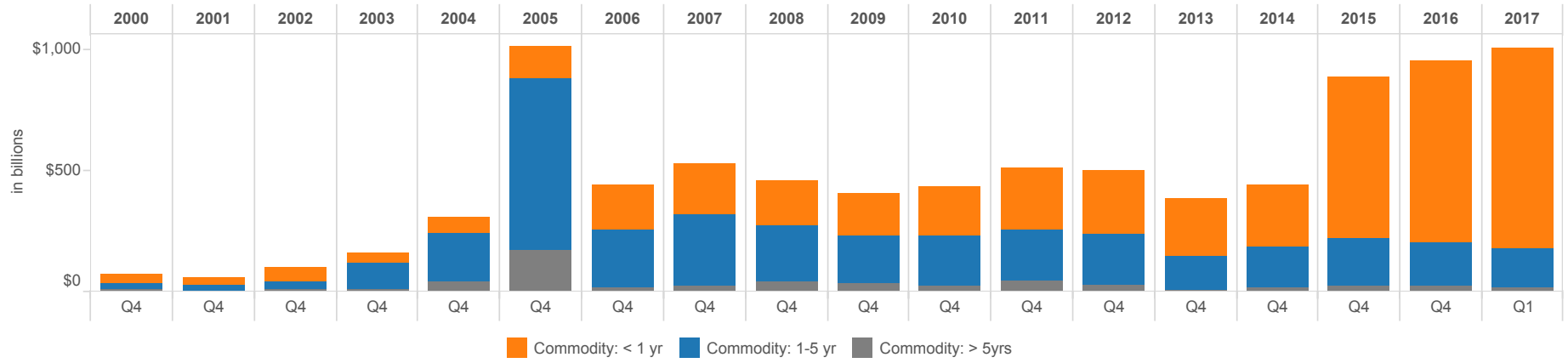
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q1
Precious Metals: < 1 yr	2.51	2.44	2.72	3.87	4.04	8.59	10.35	10.72	7.55	11.55	17.47	21.12	27.68	21.41	19.29	23.51	26.87	40.42
Precious Metals: 1-5 yr	0.25	0.23	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	3.13
Precious Metals: > 5 yrs	0.16	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	0.05

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

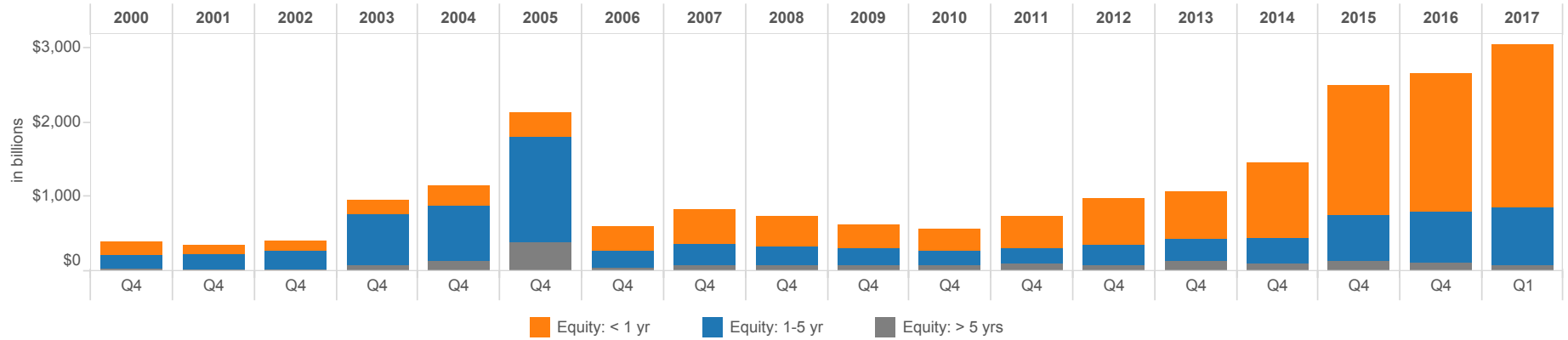
Graph 13

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

Commodity



Equity



In billions of dollars

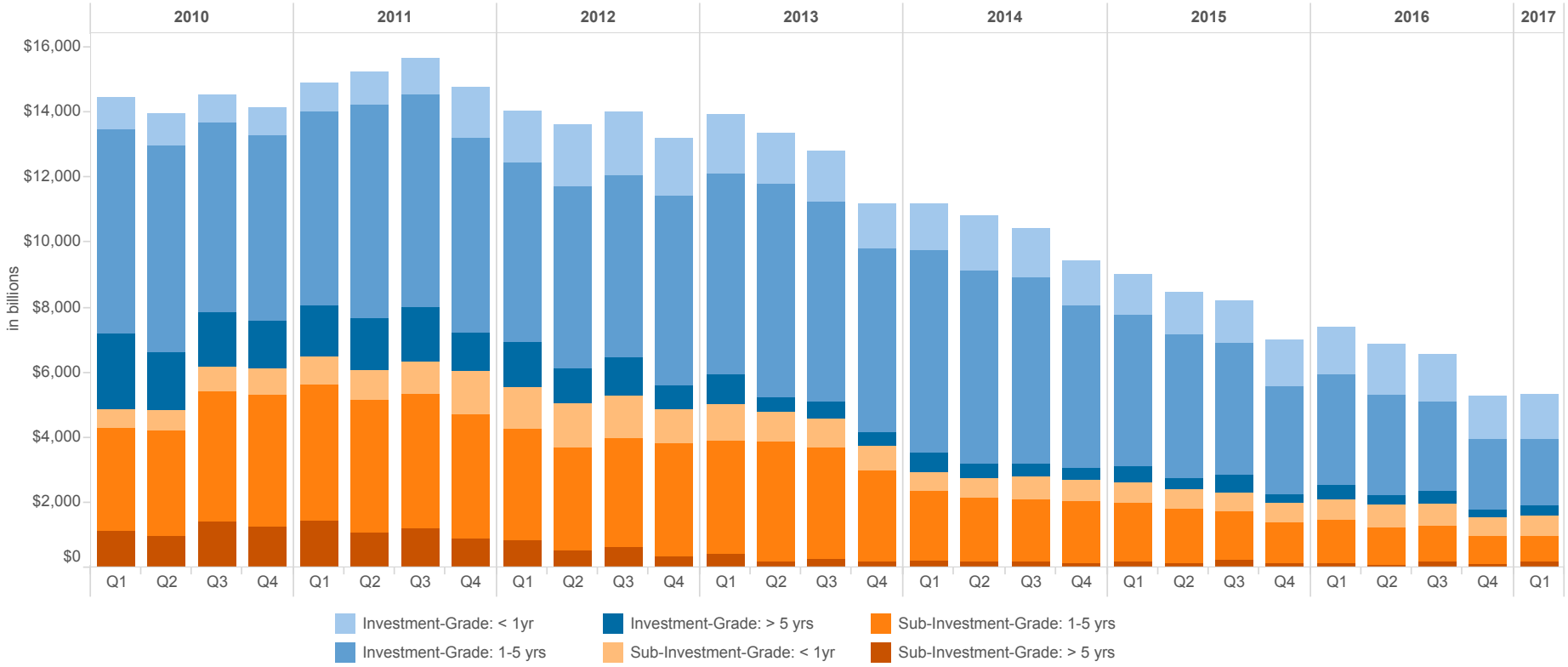
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q1
Commodity: < 1 yr	$36	$31	$55	$43	$64	$133	$185	$206	$179	$176	$203	$261	$261	$235	$257	$668	$750	$824
Commodity: 1-5 yr	27	25	35	103	205	707	235	297	233	198	209	209	208	144	164	197	179	160
Commodity: > 5yrs	11	2	9	14	40	175	20	25	43	33	25	46	28	6	20	22	23	20
Equity: < 1 yr	162	121	127	197	273	321	341	473	409	312	296	427	627	645	996	1,743	1,847	2,203
Equity: 1-5 yr	180	209	249	674	736	1,428	221	297	256	228	191	210	262	291	352	628	680	763
Equity: > 5 yrs	38	18	25	84	140	383	45	70	72	82	85	94	82	136	101	130	123	85

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.
Data 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
	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
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
Investment-Grade: > 5 yrs	948	455	552	409	577	448	433	382	508	359	520	281	457	262	385	214	309
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

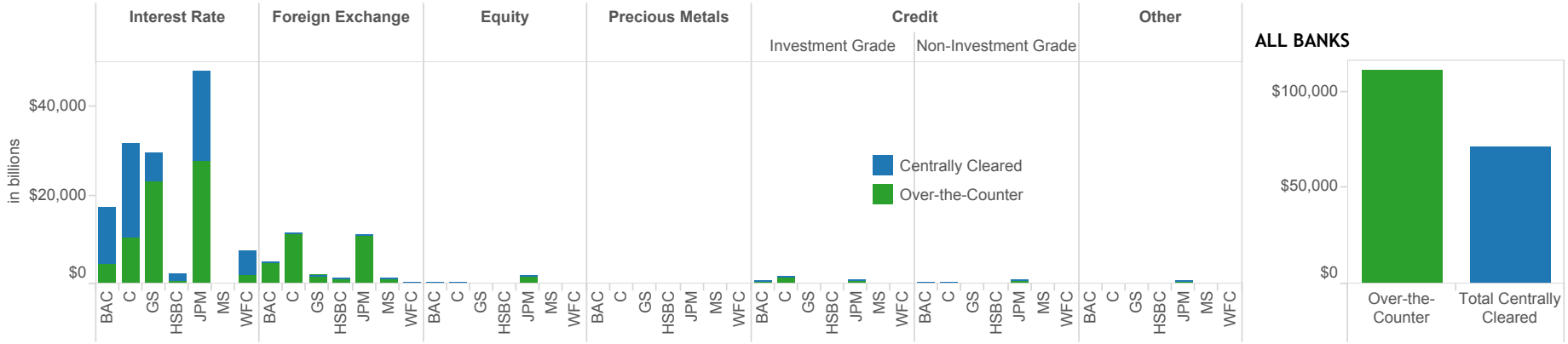
	2013				2014				2015				2016				2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Sub-Investment-Grade: < 1yr	1,090	933	879	765	619	642	671	658	596	562	569	607	622	683	683	581	582
Sub-Investment-Grade: 1-5 yrs	3,491	3,656	3,424	2,792	2,127	1,960	1,948	1,887	1,813	1,673	1,518	1,271	1,313	1,159	1,122	869	838
Sub-Investment-Grade: > 5 yrs	414	197	262	179	200	160	157	140	194	152	213	119	155	101	157	111	159
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

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

2017 Q1 Notional Amounts of Over-the-Counter and Centrally Cleared Derivative Contracts

Insured U.S. Commercial Banks and Savings Associations



In billions of dollars

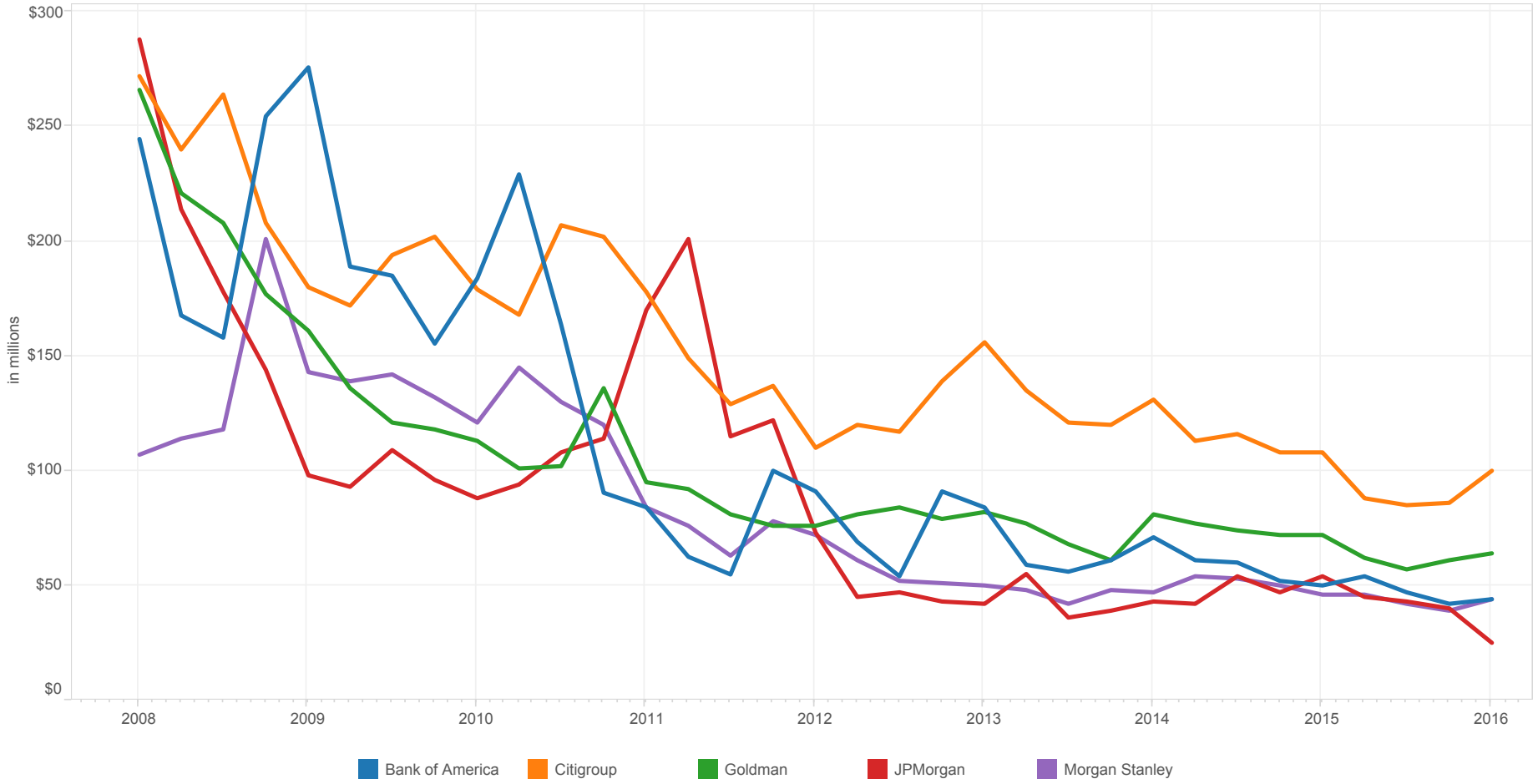
Bank Name	Interest Rate		Foreign Exchange		Equity		Precious Metals		Credit				Other		Total Centrally Cleared	Over-the-Counter	Total Notional
									Investment Grade		Non-Investment Grade						
	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter			
JPM	20,157	27,564	149	10,751	592	1,475	0	21	280	705	237	783	64	694	21,479	41,991	63,470
C	21,067	10,521	256	11,124	47	355	2	8	270	1,252	83	374	67	66	21,792	23,701	45,492
BAC	12,657	4,552	22	4,821	98	286	0	0	220	424	62	263	0	12	13,059	10,357	23,417
GS	6,655	23,013	0	2,113	0	41	0	0	0	93	0	62	0	5	6,655	25,326	31,981
HSBC	1,692	713	0	1,212	0	33	0	11	3	25	3	29	0	0	1,697	2,023	3,721
WFC	5,305	2,023	0	381	28	57	0	2	0	0	3	17	28	23	5,364	2,503	7,868
MS	0	1	4	1,206	0	0	0	0	0	7	0	2	0	0	4	1,216	1,220
Grand Total	67,532	68,386	431	31,608	765	2,247	2	41	773	2,506	388	1,530	160	800	70,051	107,117	177,168
ALL OTHER	1,340	1,088	0	2,483	0	38	0	0	0	10	0	9	1	44	1,341	3,672	5,013
TOTAL	68,872	69,473	431	34,091	765	2,285	2	41	773	2,516	388	1,539	160	843	71,392	110,789	182,181

% 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
									Investment Grade		Non-Investment Grade					
	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter		
JPM	42%	58%	1%	99%	29%	71%	0%	100%	28%	72%	23%	77%	8%	92%	34%	66%
C	67%	33%	2%	98%	12%	88%	22%	78%	18%	82%	18%	82%	50%	50%	48%	52%
BAC	74%	26%	0%	100%	26%	74%	0%	100%	34%	66%	19%	81%	0%	100%	56%	44%
GS	22%	78%	0%	100%	0%	100%			0%	100%	0%	100%	0%	100%	21%	79%
HSBC	70%	30%	0%	100%	0%	100%	0%	100%	10%	90%	9%	91%	0%	100%	46%	54%
WFC	72%	28%	0%	100%	33%	67%	1%	99%	45%	55%	15%	85%	55%	45%	68%	32%
MS	0%	100%	0%	100%	0%	100%			0%	100%	0%	100%			0%	100%

Source: Call reports, Schedule RC-R.

Graph 16
Value-at-Risk (VaR)
Insured U.S. Commercial Banks and Savings Associations



In millions of dollars

	2011				2012				2013				2014				2015				2016				2017
	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	$184	$229	$164	$90	$84	$63	$55	$100	$91	$69	$54	$91	$84	$59	$56	$61	$71	$61	$60	$52	$50	$54	$47	$42	$44
Citigroup	179	168	207	202	178	149	129	137	110	120	117	139	156	135	121	120	131	113	116	108	108	88	85	86	100
Goldman	113	101	102	136	95	92	81	76	76	81	84	79	82	77	68	61	81	77	74	72	72	62	57	61	64
JPMorgan	88	94	108	114	170	201	115	122	73	45	47	43	42	55	36	39	43	42	54	47	54	45	43	40	25
Morgan Stanley	121	145	130	120	84	76	63	78	72	61	52	51	50	48	42	48	47	54	53	50	46	46	42	39	44
Total	685	737	711	662	611	581	443	513	422	376	354	403	414	374	323	329	373	347	357	329	330	295	274	268	277

Data 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, 2017, MILLIONS OF DOLLARS

RANK	BANK NAME	STATE	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	CITIBANK NATIONAL ASSN	SD	$1,369,304	$50,312,331	$3,141,440	$939,709	$6,568,311	$29,269,978	$8,396,831	$1,996,062	$854,915
2	JPMORGAN CHASE BANK NA	OH	2,138,002	49,105,458	1,690,781	1,801,945	9,291,284	26,114,430	8,215,129	1,991,889	573,586
3	GOLDMAN SACHS BANK USA	NY	156,156	37,322,774	2,218,584	3,799,377	3,065,430	21,255,659	6,813,779	169,945	37,708
4	BANK OF AMERICA NA	NC	1,707,215	22,283,022	1,245,885	153,718	6,371,482	12,086,595	1,476,094	949,248	437,647
5	WELLS FARGO BANK NA	SD	1,749,176	8,442,328	127,426	207,011	2,166,793	5,056,747	852,839	31,512	5,651
6	HSBC NA	VA	200,405	4,031,696	105,284	28,339	797,068	2,762,415	217,972	120,617	48,522
7	MORGAN STANLEY BANK NA	UT	127,377	1,589,026	12,673	11,442	320,212	541,681	694,405	8,613	48,940
8	STATE STREET BANK&TRUST CO	MA	233,543	1,579,691	16,896	0	1,531,330	4,426	27,038	0	67,485
9	BANK OF NEW YORK MELLON	NY	260,306	842,047	16,319	23	479,867	317,476	28,202	160	55,009
10	PNC BANK NATIONAL ASSN	DE	360,349	421,089	37,029	42,900	21,938	286,541	26,329	6,351	816
11	U S BANK NATIONAL ASSN	OH	442,985	289,521	2,213	0	50,429	190,253	41,265	5,361	2,090
12	NORTHERN TRUST CO	IL	121,087	287,326	0	0	272,107	14,101	1,118	0	16,930
13	SUNTRUST BANK	GA	201,283	276,105	21,145	18,379	18,349	138,782	74,707	4,743	104
14	TD BANK NATIONAL ASSN	DE	274,107	189,707	0	0	6,773	181,818	608	507	3
15	MUFG UNION BANK NA	CA	116,116	150,567	2,154	0	75,475	66,138	6,790	10	769
16	CAPITAL ONE NATIONAL ASSN	VA	282,071	102,441	195	0	2,187	97,030	193	2,836	21
17	KEYBANK NATIONAL ASSN	OH	132,288	89,615	4,689	0	7,042	72,049	5,398	438	634
18	REGIONS BANK	AL	123,636	87,935	9,188	0	15,944	55,317	4,298	3,189	17
19	CITIZENS BANK NATIONAL ASSN	RI	118,240	80,481	0	0	9,020	61,709	7,401	2,350	111
20	FIFTH THIRD BANK	OH	137,904	68,841	441	152	5,150	48,541	11,528	3,029	492
21	BRANCH BANKING&TRUST CO	NC	214,563	62,449	462	0	7,236	44,501	10,250	0	51
22	COMPASS BANK	AL	83,988	43,630	119	0	1,508	33,286	8,717	0	59
23	CAPITAL ONE BANK USA NA	VA	105,874	43,427	0	0	8,568	34,859	0	0	38
24	BOKF NATIONAL ASSN	OK	32,840	39,175	410	368	33,242	3,588	1,565	1	12
25	HUNTINGTON NATIONAL BANK	OH	99,869	38,404	56	0	2,805	32,947	947	1,649	7
TOP 25 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$10,788,684	$177,779,085	$8,653,390	$7,003,363	$31,129,551	$98,770,868	$26,923,405	$5,298,509	$2,151,615
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			4,380,310	563,920	3,276	1,364	71,878	411,671	70,646	5,085	1,238
TOTAL COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,168,995	178,343,005	8,656,666	7,004,727	31,201,429	99,182,539	26,994,051	5,303,594	2,152,853

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 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, 2017, MILLIONS OF DOLLARS

RANK	HOLDING COMPANY	STATE	TOTAL ASSETS	TOTAL DERIVATIVES	FUTURES (EXCH TR)	OPTIONS (EXCH TR)	FORWARDS (OTC)	SWAPS (OTC)	OPTIONS (OTC)	CREDIT DERIVATIVES (OTC)	SPOT FX
1	CITIGROUP INC.	NY	$1,821,635	$54,814,377	$3,051,152	$6,071,085	$7,934,990	$27,776,781	$8,190,972	$1,789,397	$848,047
2	JPMORGAN CHASE & CO.	NY	2,546,290	48,566,031	1,734,887	1,949,336	9,613,241	25,347,167	7,908,024	2,013,376	560,321
3	GOLDMAN SACHS GROUP, INC., THE	NY	894,091	45,577,362	3,156,841	4,956,404	6,443,625	21,123,234	8,505,459	1,391,799	325,793
4	BANK OF AMERICA CORPORATION	NC	2,249,046	35,804,004	1,887,093	835,561	8,986,740	19,569,582	3,253,564	1,271,464	428,053
5	MORGAN STANLEY	NY	832,391	30,818,898	3,348,456	2,019,089	2,758,929	16,145,270	5,657,886	889,268	48,939
6	WELLS FARGO & COMPANY	CA	1,951,564	8,342,053	133,385	233,308	2,203,577	4,892,086	849,283	30,414	5,633
7	HSBC NORTH AMERICA HOLDINGS INC.	NY	295,079	6,562,714	775,559	550,695	798,259	4,091,692	225,891	120,617	48,522
8	MIZUHO AMERICAS LLC	NY	41,782	4,841,234	13,408	5,249	255,679	4,475,276	91,097	525	1,401
9	STATE STREET CORPORATION	MA	236,805	1,587,416	16,896	0	1,531,330	12,151	27,038	0	67,485
10	CREDIT SUISSE HOLDINGS (USA), INC.	NY	225,484	1,031,985	40,036	7,745	845,422	83,820	6,439	48,522	0
11	BARCLAYS US LLC	NY	200,477	868,838	47,100	269,235	376,678	18,912	51,869	105,044	0
12	BANK OF NEW YORK MELLON CORPORATION, THE	NY	337,536	843,143	17,899	2,173	502,573	292,136	28,202	160	54,901
13	PNC FINANCIAL SERVICES GROUP, INC., THE	PA	371,278	419,213	37,542	42,930	24,557	281,590	26,242	6,351	816
14	TD GROUP US HOLDINGS LLC	DE	353,617	330,307	100,744	26,300	8,498	193,553	608	604	3
15	U.S. BANCORP	MN	449,522	293,172	2,213	0	51,320	193,063	41,266	5,310	2,090
16	NORTHERN TRUST CORPORATION	IL	121,489	286,576	0	0	272,107	13,351	1,118	0	16,930
17	SUNTRUST BANKS, INC.	GA	205,950	273,058	21,145	18,379	18,349	136,735	73,707	4,743	104
18	DB USA CORPORATION	NY	185,155	229,939	20,579	118,871	63,597	16,601	6,723	3,568	0
19	MUFG AMERICAS HOLDINGS CORPORATION	NY	149,684	169,937	5,792	30	90,883	66,432	6,790	10	769
20	CAPITAL ONE FINANCIAL CORPORATION	VA	348,549	155,024	195	0	10,907	140,894	193	2,836	59
21	BNP PARIBAS USA, INC.	NY	136,617	133,050	76	2,957	103,694	23,633	2,689	0	26
22	KEYCORP	OH	134,973	95,673	4,881	0	9,170	74,750	6,454	418	634
23	CITIZENS FINANCIAL GROUP, INC.	RI	150,690	88,931	0	0	9,020	68,804	8,320	2,787	111
24	REGIONS FINANCIAL CORPORATION	AL	124,739	86,835	9,188	0	15,944	54,217	4,298	3,189	17
25	BB&T CORPORATION	NC	220,501	76,167	462	0	12,967	51,838	10,900	0	51
TOP 25 HOLDING COMPANIES WITH DERIVATIVES			$14,584,943	$242,295,936	$14,425,529	$17,109,348	$42,942,056	$125,143,568	$34,985,033	$7,690,401	$2,410,703

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 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, 2017, MILLIONS OF DOLLARS

RANK	BANK NAME	STATE	TOTAL ASSETS	TOTAL DERIVATIVES	PERCENT EXCH TRADED CONTRACTS	PERCENT OTC CONTRACTS	PERCENT INT RATE CONTRACTS	PERCENT FOREIGN EXCH CONTRACTS	PERCENT OTHER CONTRACTS	PERCENT CREDIT DERIVATIVES
					(%)	(%)	(%)	(%)	(%)	(%)
1	CITIBANK NATIONAL ASSN	SD	$1,369,304	$50,312,331	8.1	91.9	69.1	25.1	1.9	4.0
2	JPMORGAN CHASE BANK NA	OH	2,138,002	49,105,458	7.1	92.9	69.0	22.1	4.9	4.1
3	GOLDMAN SACHS BANK USA	NY	156,156	37,322,774	16.1	83.9	93.6	5.8	0.1	0.5
4	BANK OF AMERICA NA	NC	1,707,215	22,283,022	6.3	93.7	72.3	21.7	1.7	4.3
5	WELLS FARGO BANK NA	SD	1,749,176	8,442,328	4.0	96.0	92.3	4.6	2.7	0.4
6	HSBC NA	VA	200,405	4,031,696	3.3	96.7	64.3	30.5	2.3	3.0
7	MORGAN STANLEY BANK NA	UT	127,377	1,589,026	1.5	98.5	0.8	98.6	0.0	0.5
8	STATE STREET BANK&TRUST CO	MA	233,543	1,579,691	1.1	98.9	1.2	97.1	1.6	0.0
9	BANK OF NEW YORK MELLON	NY	260,306	842,047	1.9	98.1	38.4	61.4	0.1	0.0
10	PNC BANK NATIONAL ASSN	DE	360,349	421,089	19.0	81.0	93.5	3.7	1.3	1.5
11	U S BANK NATIONAL ASSN	OH	442,985	289,521	0.8	99.2	81.6	16.2	0.3	1.9
12	NORTHERN TRUST CO	IL	121,087	287,326	0.0	100.0	4.7	95.2	0.1	0.0
13	SUNTRUST BANK	GA	201,283	276,105	14.3	85.7	73.6	2.6	22.1	1.7
14	TD BANK NATIONAL ASSN	DE	274,107	189,707	0.0	100.0	94.6	5.1	0.0	0.3
15	MUFG UNION BANK NA	CA	116,116	150,567	1.4	98.6	93.7	3.3	3.0	0.0
16	CAPITAL ONE NATIONAL ASSN	VA	282,071	102,441	0.2	99.8	92.0	0.6	4.7	2.8
17	KEYBANK NATIONAL ASSN	OH	132,288	89,615	5.2	94.8	90.9	8.0	0.6	0.5
18	REGIONS BANK	AL	123,636	87,935	10.4	89.6	93.0	2.3	1.0	3.6
19	CITIZENS BANK NATIONAL ASSN	RI	118,240	80,481	0.0	100.0	86.9	10.2	0.0	2.9
20	FIFTH THIRD BANK	OH	137,904	68,841	0.9	99.1	76.3	14.0	5.3	4.4
21	BRANCH BANKING&TRUST CO	NC	214,563	62,449	0.7	99.3	99.1	0.9	0.0	0.0
22	COMPASS BANK	AL	83,988	43,630	0.3	99.7	93.3	3.1	3.6	0.0
23	CAPITAL ONE BANK USA NA	VA	105,874	43,427	0.0	100.0	80.3	19.7	0.0	0.0
24	BOKF NATIONAL ASSN	OK	32,840	39,175	2.0	98.0	93.7	1.1	5.2	0.0
25	HUNTINGTON NATIONAL BANK	OH	99,869	38,404	0.1	99.9	85.7	5.2	4.8	4.3
	TOP 25 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES		$10,788,684	$177,779,085	$15,656,753	$162,122,332	$132,165,300	$36,135,413	$67	$5,298,509
	OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES		4,380,310	563,920	4,640	559,280	524,433	25,229	853	5,085
	TOTAL FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES		15,168,995	178,343,005	15,661,393	162,681,612	132,689,733	36,160,642	920	5,303,594
				(%)	(%)	(%)	(%)	(%)	(%)	(%)
	TOP 25 COMMERCIAL BANKS, SAs & TCs: % OF TOTAL COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVE			99.7	8.8	90.9	74.1	20.3	0.0	3.0
	OTHER COMMERCIAL BANKS, SAs & TCs: % OF TOTAL COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVE			0.3	0.0	0.3	0.3	0.0	0.0	0.0
	TOTAL FOR COMMERCIAL BANKS, SAs & TCs: % OF TOTAL COMMERCIAL BANKS, SAs & TCs WITH DERIVA			100.0	8.8	91.2	74.4	20.3	0.0	3.0

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 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, 2017, MILLIONS OF DOLLARS

RANK	BANK NAME	STATE	TOTAL ASSETS	TOTAL DERIVATIVES	TOTAL RISK-BASED CAPITAL	BILATERALLY NETTED CURRENT CREDIT EXPOSURE	POTENTIAL FUTURE EXPOSURE	TOTAL CREDIT EXPOSURE FROM ALL CONTRACTS	(%) TOTAL CREDIT EXPOSURE TO CAPITAL
1	CITIBANK NATIONAL ASSN	SD	$1,369,304	$50,312,331	$140,431	$86,942	$173,798	$260,740	186
2	JPMORGAN CHASE BANK NA	OH	2,138,002	49,105,458	186,495	129,569	245,290	374,859	201
3	GOLDMAN SACHS BANK USA	NY	156,156	37,322,774	27,192	57,665	70,800	128,465	472
4	BANK OF AMERICA NA	NC	1,707,215	22,283,022	161,375	36,982	69,314	106,296	66
5	WELLS FARGO BANK NA	SD	1,749,176	8,442,328	147,007	14,933	34,675	49,608	34
6	HSBC NA	VA	200,405	4,031,696	26,467	7,619	13,445	21,063	80
7	MORGAN STANLEY BANK NA	UT	127,377	1,589,026	14,140	862	4,814	5,676	40
8	STATE STREET BANK&TRUST CO	MA	233,543	1,579,691	16,564	4,146	9,698	13,844	84
9	BANK OF NEW YORK MELLON	NY	260,306	842,047	19,771	2,821	5,977	8,798	44
10	PNC BANK NATIONAL ASSN	DE	360,349	421,089	34,967	2,814	1,140	3,954	11
11	U S BANK NATIONAL ASSN	OH	442,985	289,521	45,087	895	4,035	4,929	11
12	NORTHERN TRUST CO	IL	121,087	287,326	9,569	1,169	2,345	3,514	37
13	SUNTRUST BANK	GA	201,283	276,105	21,336	1,024	3,650	4,674	22
14	TD BANK NATIONAL ASSN	DE	274,107	189,707	23,841	2,087	1,262	3,349	14
15	MUFG UNION BANK NA	CA	116,116	150,567	14,560	882	301	1,183	8
16	CAPITAL ONE NATIONAL ASSN	VA	282,071	102,441	25,496	594	1,504	2,099	8
17	KEYBANK NATIONAL ASSN	OH	132,288	89,615	14,494	468	303	771	5
18	REGIONS BANK	AL	123,636	87,935	14,371	369	867	1,236	9
19	CITIZENS BANK NATIONAL ASSN	RI	118,240	80,481	13,576	388	580	967	7
20	FIFTH THIRD BANK	OH	137,904	68,841	16,188	505	872	1,377	9
21	BRANCH BANKING&TRUST CO	NC	214,563	62,449	23,675	582	554	1,136	5
22	COMPASS BANK	AL	83,988	43,630	9,115	293	303	596	7
23	CAPITAL ONE BANK USA NA	VA	105,874	43,427	14,461	192	155	348	2
24	BOKF NATIONAL ASSN	OK	32,840	39,175	3,005	229	185	414	14
25	HUNTINGTON NATIONAL BANK	OH	99,869	38,404	10,760	333	483	816	8
TOP 25 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$10,788,684	$177,779,085	$1,033,942	$354,362	$646,350	$1,000,712	97
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			4,380,310	563,920	475,164	3,451	4,365	7,816	2
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,168,995	178,343,005	1,509,106	357,813	650,714	1,008,528	67

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 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, 2017, MILLIONS OF DOLLARS

RANK	BANK NAME	STATE	TOTAL ASSETS	TOTAL DERIVATIVES	TOTAL HELD FOR TRADING & MTM	% HELD FOR TRADING & MTM	TOTAL NOT FOR TRADING MTM	% NOT FOR TRADING MTM
1	CITIBANK NATIONAL ASSN	SD	$1,369,304	$50,312,331	$48,259,569	99.9	$56,700	0.1
2	JPMORGAN CHASE BANK NA	OH	2,138,002	49,105,458	46,786,382	99.3	327,187	0.7
3	GOLDMAN SACHS BANK USA	NY	156,156	37,322,774	37,116,880	99.9	35,949	0.1
4	BANK OF AMERICA NA	NC	1,707,215	22,283,022	20,325,221	95.3	1,008,553	4.7
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$5,370,677	$159,023,585	$152,488,052	99.1	$1,428,389	0.9
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			9,798,318	19,319,420	17,495,240	91.5	1,627,730	8.5
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,168,995	178,343,005	169,983,292	98.2	3,056,119	1.8

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.
Note: Numbers may not total due to rounding.
Source: Call reports, Schedule RC-L

TABLE 6

GROSS FAIR VALUES OF DERIVATIVE CONTRACTS
TOP 4 COMMERCIAL BANKS, SAVINGS ASSOCIATIONS AND TRUST COMPANIES IN DERIVATIVES
MARCH 31, 2017, MILLIONS OF DOLLARS

					TRADING		NOT FOR TRADING		CREDIT DERIVATIVES	
RANK	BANK NAME	STATE	TOTAL ASSETS	TOTAL 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	CITIBANK NATIONAL ASSN	SD	$1,369,304	$50,312,331	$483,455	$481,013	$461	$437	$26,119	$26,562
2	JPMORGAN CHASE BANK NA	OH	2,138,002	49,105,458	806,412	779,952	3,953	3,853	25,485	25,504
3	GOLDMAN SACHS BANK USA	NY	156,156	37,322,774	625,091	589,761	237	118	2,894	2,589
4	BANK OF AMERICA NA	NC	1,707,215	22,283,022	226,302	223,096	33,113	37,525	12,027	11,899
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$5,370,677	$159,023,585	$2,141,260	$2,073,822	$37,764	$41,933	$66,525	$66,554
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			9,798,318	19,319,420	176,216	177,946	11,910	10,904	2,044	1,989
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,168,995	178,343,005	2,317,476	2,251,768	49,674	52,837	68,569	68,543

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, 2017, MILLIONS OF DOLLARS
NOTE: REVENUE FIGURES ARE FOR THE QUARTER (NOT YEAR-TO-DATE)

RANK	BANK NAME	STATE	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	CITIBANK NATIONAL ASSN	SD	$1,369,304	$50,312,331	$1,666	$1,247	$417	$53	$17	($68)
2	JPMORGAN CHASE BANK NA	OH	2,138,002	49,105,458	3,014	1,236	698	660	145	275
3	GOLDMAN SACHS BANK USA	NY	156,156	37,322,774	165	844	(454)	(16)	0	(209)
4	BANK OF AMERICA NA	NC	1,707,215	22,283,022	849	84	337	215	65	148
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$5,370,677	$159,023,585	$5,694	$3,411	$998	$912	$227	$146
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			9,798,318	19,319,420	1,368	494	687	10	101	77
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,168,995	178,343,005	7,062	3,905	1,685	922	328	223

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 sum 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, 2017, MILLIONS OF DOLLARS

RANK	BANK NAME	STATE	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	CITIBANK NATIONAL ASSN	SD	$1,369,304	$50,312,331	$14,383,401	$11,209,127	$5,995,158	$31,587,686	$9,789,934	$1,141,310	$448,896	$11,380,140
2	JPMORGAN CHASE BANK NA	OH	2,138,002	49,105,458	23,091,050	15,095,515	9,533,615	47,720,180	7,795,983	2,072,100	1,032,213	10,900,296
3	GOLDMAN SACHS BANK USA	NY	156,156	37,322,774	11,017,983	10,674,275	7,975,777	29,668,035	786,679	709,779	616,738	2,113,196
4	BANK OF AMERICA NA	NC	1,707,215	22,283,022	8,750,222	5,332,270	3,126,244	17,208,736	4,091,526	540,096	211,006	4,842,628
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$5,370,677	$159,023,585	$57,242,656	$42,311,187	$26,630,794	$126,184,637	$22,464,122	$4,463,285	$2,308,853	$29,236,260
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			9,798,318	19,319,420	4,680,756	4,138,872	3,340,919	12,160,548	4,856,291	309,012	120,467	5,285,770
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,168,995	178,343,005	61,923,412	46,450,059	29,971,713	138,345,185	27,320,413	4,772,297	2,429,320	34,522,030

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 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, 2017, MILLIONS OF DOLLARS

RANK	BANK NAME	STATE	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	CITIBANK NATIONAL ASSN	SD	$1,369,304	$50,312,331	$9,062	$918	$0	$9,980
2	JPMORGAN CHASE BANK NA	OH	2,138,002	49,105,458	19,139	1,418	0	20,557
3	GOLDMAN SACHS BANK USA	NY	156,156	37,322,774	0	0	0	0
4	BANK OF AMERICA NA	NC	1,707,215	22,283,022	0	31	0	31
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$5,370,677	$159,023,585	$28,201	$2,367	$0	$30,568
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			9,798,318	19,319,420	12,216	760	50	13,026
TOTAL FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,168,995	178,343,005	40,417	3,127	50	43,594

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 total due to rounding.
Source: Call reports, Schedule RC-R

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 DERIVATIVES
MARCH 31, 2017, MILLIONS OF DOLLARS

RANK	BANK NAME	STATE	TOTAL ASSETS	TOTAL DERIVATIVES	OTHER COMM MATURITY < 1 YR	OTHER COMM MATURITY 1 - 5 YRS	OTHER COMM MATURITY > 5 YRS	OTHER COMM ALL MATURITIES	EQUITY MATURITY < 1 YR	EQUITY MATURITY 1 - 5 YRS	EQUITY MATURITY > 5 YRS	EQUITY ALL MATURITIES
1	CITIBANK NATIONAL ASSN	SD	$1,369,304	$50,312,331	$99,050	$30,763	$3,505	$133,318	$284,500	$107,557	$10,186	$402,243
2	JPMORGAN CHASE BANK NA	OH	2,138,002	49,105,458	667,233	74,959	15,717	757,909	1,480,281	531,509	54,433	2,066,223
3	GOLDMAN SACHS BANK USA	NY	156,156	37,322,774	3,396	1,285	0	4,681	17,036	12,727	10,774	40,537
4	BANK OF AMERICA NA	NC	1,707,215	22,283,022	8,443	3,250	27	11,720	330,905	51,943	1,828	384,676
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$5,370,677	$159,023,585	$778,122	$110,257	$19,249	$907,628	$2,112,722	$703,736	$77,221	$2,893,679
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			9,798,318	19,319,420	45,481	49,302	1,184	95,967	89,916	59,015	7,749	156,680
TOTAL FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,168,995	178,343,005	823,603	159,559	20,433	1,003,595	2,202,638	762,751	84,970	3,050,359

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 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, 2017, MILLIONS OF DOLLARS

						CREDIT DERIVATIVES INVESTMENT GRADE				CREDIT DERIVATIVES SUB-INVESTMENT GRADE			
RANK	BANK NAME	STATE	TOTAL ASSETS	TOTAL DERIVATIVES	TOTAL CREDIT 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	CITIBANK NATIONAL ASSN	SD	$1,369,304	$50,312,331	$1,996,062	$494,309	$931,723	$107,582	$1,533,614	$142,370	$288,750	$31,328	$462,448
2	JPMORGAN CHASE BANK NA	OH	2,138,002	49,105,458	1,991,889	503,833	674,415	124,217	1,302,465	250,986	366,264	72,174	689,424
3	GOLDMAN SACHS BANK USA	NY	156,156	37,322,774	169,945	32,809	48,931	16,900	98,640	22,194	29,690	19,421	71,305
4	BANK OF AMERICA NA	NC	1,707,215	22,283,022	949,248	285,050	362,624	51,767	699,441	138,809	91,387	19,611	249,807
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$5,370,677	$159,023,585	$5,107,144	$1,316,001	$2,017,693	$300,466	$3,634,160	$554,359	$776,091	$142,534	$1,472,984
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			9,798,318	19,319,420	196,450	26,873	54,660	8,537	90,071	27,710	62,036	16,634	106,379
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,168,995	178,343,005	5,303,594	1,342,874	2,072,353	309,003	3,724,231	582,069	838,127	159,168	1,579,363

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 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, 2017, MILLIONS OF DOLLARS

RANK	BANK NAME	STATE	TOTAL ASSETS	TOTAL DERIVATIVES	TOTAL CREDIT DERVATIVES	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	CITIBANK NATIONAL ASSN	SD	$1,369,304	$48,316,269	$1,996,062	$1,009,793	$986,269	$936,993	$21,426	$51,374	$0	$927,738	$9,871	$48,660	$0
2	JPMORGAN CHASE BANK NA	OH	2,138,002	47,113,569	1,991,889	1,022,717	969,172	956,084	15,568	45,668	5,397	924,245	2,681	42,239	7
3	GOLDMAN SACHS BANK USA	NY	156,156	37,152,829	169,945	96,171	73,774	82,058	2,579	9,278	2,256	65,012	2,152	6,610	0
4	BANK OF AMERICA NA	NC	1,707,215	21,333,774	949,248	472,870	476,378	449,377	8,174	15,319	0	446,411	10,932	19,035	0
5	WELLS FARGO BANK NA	SD	1,749,176	8,410,816	31,512	20,435	11,077	3,423	0	0	17,012	2,885	0	22	8,170
6	HSBC NA	VA	200,405	3,911,079	120,617	64,097	56,520	55,404	8,693	0	0	53,450	3,069	0	0
7	MORGAN STANLEY BANK NA	UT	127,377	1,580,413	8,613	8,613	0	8,613	0	0	0	0	0	0	0
8	STATE STREET BANK&TRUST CO	MA	233,543	1,579,691	0	0	0	0	0	0	0	0	0	0	0
9	BANK OF NEW YORK MELLON	NY	260,306	841,887	160	160	0	160	0	0	0	0	0	0	0
10	PNC BANK NATIONAL ASSN	DE	360,349	414,738	6,351	2,315	4,036	50	0	0	2,265	0	0	0	4,036
11	U S BANK NATIONAL ASSN	OH	442,985	284,160	5,361	1,504	3,856	75	0	0	1,429	50	0	0	3,806
12	NORTHERN TRUST CO	IL	121,087	287,326	0	0	0	0	0	0	0	0	0	0	0
13	SUNTRUST BANK	GA	201,283	271,362	4,743	2,627	2,115	520	2,103	0	4	0	2,103	0	12
14	TD BANK NATIONAL ASSN	DE	274,107	189,200	507	502	5	502	0	0	0	5	0	0	0
15	MUFG UNION BANK NA	CA	116,116	150,557	10	10	0	10	0	0	0	0	0	0	0
16	CAPITAL ONE NATIONAL ASSN	VA	282,071	99,605	2,836	957	1,879	0	0	0	957	0	0	0	1,879
17	KEYBANK NATIONAL ASSN	OH	132,288	89,177	438	317	121	317	0	0	0	28	93	0	0
18	REGIONS BANK	AL	123,636	84,746	3,189	810	2,379	38	0	0	773	38	0	0	2,341
19	CITIZENS BANK NATIONAL ASSN	RI	118,240	78,131	2,350	0	2,350	0	0	0	0	0	0	0	2,350
20	FIFTH THIRD BANK	OH	137,904	65,813	3,029	405	2,624	0	0	0	405	0	0	0	2,624
21	BRANCH BANKING&TRUST CO	NC	214,563	62,449	0	0	0	0	0	0	0	0	0	0	0
22	COMPASS BANK	AL	83,988	43,630	0	0	0	0	0	0	0	0	0	0	0
23	CAPITAL ONE BANK USA NA	VA	105,874	43,427	0	0	0	0	0	0	0	0	0	0	0
24	BOKF NATIONAL ASSN	OK	32,840	39,174	1	1	0	1	0	0	0	0	0	0	0
25	HUNTINGTON NATIONAL BANK	OH	99,869	36,755	1,649	1,053	596	0	0	0	1,053	0	0	0	596
	TOP 25 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES		$10,788,684	$172,480,576	$5,298,509	$2,705,358	$2,593,151	$2,493,624	$58,543	$121,639	$31,552	$2,419,862	$30,901	$116,566	$25,822
	OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES		4,380,310	558,836	5,085	2,030	3,055	7	78	0	1,945	273	2	0	2,780
	TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES		15,168,995	173,039,411	5,303,594	2,707,388	2,596,206	2,493,630	58,622	121,639	33,497	2,420,135	30,903	116,566	28,602
					(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
	TOP 25 COMMERCIAL BANKS, SAs & TCs: % OF TOTAL COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES				99.9	51.0	48.9	47.0	1.1	2.3	0.6	45.6	0.6	2.2	0.5
	OTHER COMMERCIAL BANKS, SAs & TCs: % OF TOTAL COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES				0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs: % OF TOTAL COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES				100.0	51.0	49.0	47.0	1.1	2.3	0.6	45.6	0.6	2.2	0.5

Note: Credit derivatives have been excluded from the sum of total derivatives here.
Note: Numbers may not 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, 2017, MILLIONS OF DOLLARS

Call Report Schedule SU	
A. Gross Notional Amount of Derivatives	
Total gross notional amount of interest rate derivatives held for trading	$678
Total gross notional amount of all other derivatives held for trading	$10
Total gross notional amount of interest rate derivatives not held for trading	$7,210
Total gross notional amount of all other derivatives not held for trading	$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	$4,792
b. Foreign exchange rate and gold	$0
c. Credit (investment grade reference asset)	$4
d. Credit (non-investment grade reference asset)	$11
e. Equity	$0
g. Other	$5
f. Precious metals (except gold)	$0
B. Notional principal amounts of centrally cleared derivative contracts covered by the regulatory capital rules:	
a. Interest rate	$158
b. Foreign exchange rate and gold	$0
c. Credit (investment grade reference asset)	$4
d. Credit (non-investment grade reference asset)	$0
e. Equity	$0
f. Precious metals (except gold)	$0
g. Other	$0
C. Current credit exposure across all derivative contracts covered by the regulatory capital rules	$39

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