Office of the
Comptroller of the Currency

Quarterly Report on Bank Trading and Derivatives Activities

Second Quarter 2017

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

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Contents

About This Report

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 1,418[2] insured U.S. commercial banks and savings associations reported derivative activities at the end of the second quarter of 2017. A small group of large financial institutions continues to dominate derivative activity in the U.S. commercial banking system. During the second quarter of 2017, four large commercial banks represented 89.6 percent of the total banking industry notional amounts and 86.0 percent of industry net current credit exposure (NCCE) (see table 4 in the appendix).

The OCC and other supervisors have dedicated examiners at the largest banks to continuously evaluate the credit, market, operational, reputation, and compliance risks of bank 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.

This is the 87th edition of the OCC's Quarterly Report on Bank Trading and Derivatives Activities. The first report was published in 1995. Please send any comments or feedback on the structure and content of this report to the OCC by email: QuarterlyDerivatives@occ.treas.gov.

Executive Summary

- Insured U.S. commercial banks and savings associations (collectively, banks) reported trading revenue of $6.7 billion in the second quarter of 2017, $0.3 billion less (4.9 percent) than in the previous quarter and $0.3 billion less (4.5 percent) than a year earlier (see page 4).
- Credit exposure from derivatives increased in the second quarter of 2017 as compared to the first quarter of 2017. NCCE increased $11.7 billion, or 3.3 percent, to $369.5 billion (see page 8).
- Trading risk, as measured by value-at-risk (VaR), decreased in the second quarter of 2017. Total average VaR across the top five dealer banking companies decreased $4.0 million, or 1.4 percent, to $273.0 million (see page 11).
- Derivative notional amounts increased in the second quarter of 2017 by $7.2 trillion, or 4.0 percent, to $185.5 trillion (see page 14).
- Derivative contracts remained concentrated in interest rate products, which represented 75.4 percent of total derivative notional amounts (see page 14).

[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 $6.7 billion in trading revenue in the second quarter of 2017, $0.3 billion less (4.9 percent) than in the previous quarter and $0.3 billion less (4.5 percent) than a year earlier (see table 1). The largest driver of the year-over-year decrease in trading revenue was interest rate and foreign exchange (FX) trading offset by an increase in equity trading revenue.

Combined interest rate and FX revenue led the quarterly decrease, with revenue decreasing $0.4 billion to $5.2 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 Q2	2017 Q1	Q/Q Change	Q/Q % Change	2016 Q2	Y/Y Change	Y/Y % Change
Interest Rate & FX	$5,171	$5,590	-$419	-7.5%	$5,640	-$470	-8.3%
Equity	$1,122	$922	$200	21.6%	$972	$150	15.4%
Commodity & Other	$206	$328	-$122	-37.2%	$161	$45	27.8%
Credit	$216	$223	-$7	-3.2%	$257	-$42	-16.2%
Total Trading Revenue	$6,714	$7,062	-$348	-4.9%	$7,031	-$317	-4.5%

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 $15.2 billion in the second quarter of 2017 was $1.8 billion (10.7 percent) lower than in the previous quarter. A $1.9 billion decrease in combined interest rate and FX revenue drove the decrease in trading revenue from the previous quarter. Year-over-year holding company trading results improved by $0.04 billion (0.3 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 Q2	2017 Q1	Q/Q Change	Q/Q % Change	2016 Q2	Y/Y Change	Y/Y % Change
Interest Rate & FX	$6,603	$8,454	-$1,851	-21.9%	$7,292	-$689	-9.4%
Equity	$5,682	$4,902	$781	15.9%	$3,612	$2,070	57.3%
Commodity & Other	$1,279	$449	$831	185.1%	$1,491	-$212	-14.2%
Credit	$1,594	$3,173	-$1,579	-49.8%	$2,724	-$1,130	-41.5%
Total HC Trading Revenue	$15,159	$16,978	-$1,819	-10.7%	$15,120	$39	0.3%

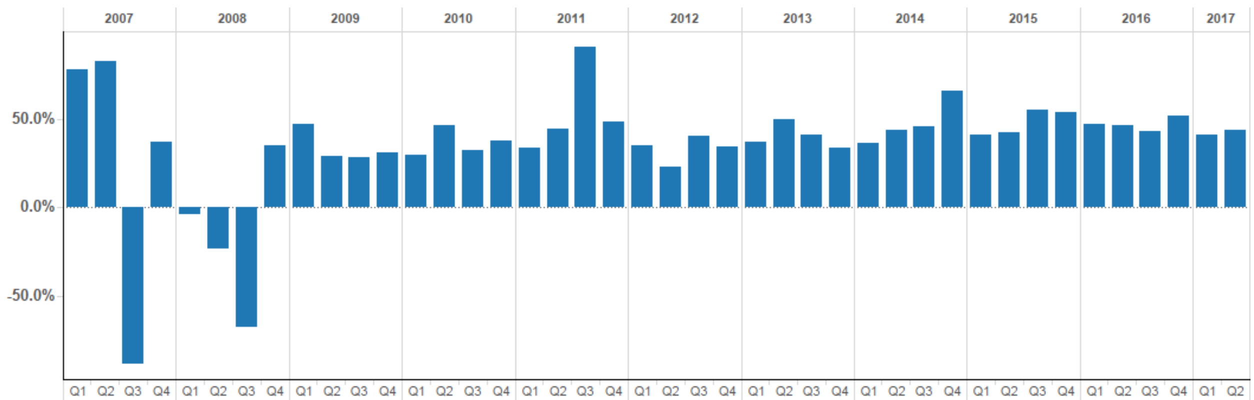
Source: Consolidated Financial Statements for Holding Companies—FR Y-9C, Schedule HI

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 second quarter of 2017, banks generated 44.3 percent of consolidated holding company trading revenue, up from 41.6 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 $79.0 billion (3.2 percent) in the second quarter of 2017 to $2.4 trillion, driven by a $116 billion (6.6 percent) decrease in receivables from interest rate contracts (see table 3). Because interest rate contracts make up 69.3 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 $78.0 billion (3.3 percent) to $2.3 trillion during the quarter, driven by decreases in payables on interest rate contracts.

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

	2017 Q2	2017 Q1	Q/Q Change	Q/Q % Change	2016 Q2	Y/Y Change	Y/Y % Change
Interest Rate	$1,634	$1,750	-$116	-6.6%	$3,120	-$1,486	-47.6%
Foreign Exchange	$515	$476	$39	8.3%	$706	-$191	-27.0%
Equity	$97	$95	$2	2.5%	$101	-$4	-4.2%
Commodities	$42	$46	-$4	-9.6%	$51	-$9	-18.2%
Credit	$69	$69	$0	0.4%	$101	-$32	-31.9%
Gross Positive Fair Value	$2,357	$2,436	-$79	-3.2%	$4,079	-$1,722	-42.2%

	2017 Q2	2017 Q1	Q/Q Change	Q/Q % Change	2016 Q2	Y/Y Change	Y/Y % Change
Interest Rate	$1,565	$1,685	-$119	-7.1%	$3,045	-$1,480	-48.6%
Foreign Exchange	$515	$474	$41	8.7%	$694	-$179	-25.8%
Equity	$102	$100	$2	2.3%	$95	$7	7.7%
Commodities	$43	$46	-$3	-6.5%	$54	-$11	-20.5%
Credit	$69	$69	$1	1.3%	$100	-$31	-30.6%
Gross Negative Fair Value	$2,295	$2,373	-$78	-3.3%	$3,988	-$1,693	-42.5%

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 increased by $11.7 billion

(3.3 percent) to $369.5 billion in the second quarter of 2017 (see table 5).[3] Legally enforceable netting agreements allowed banks to reduce GPFV exposures by 84.3 percent ($2.0 trillion) in the second quarter of 2017.

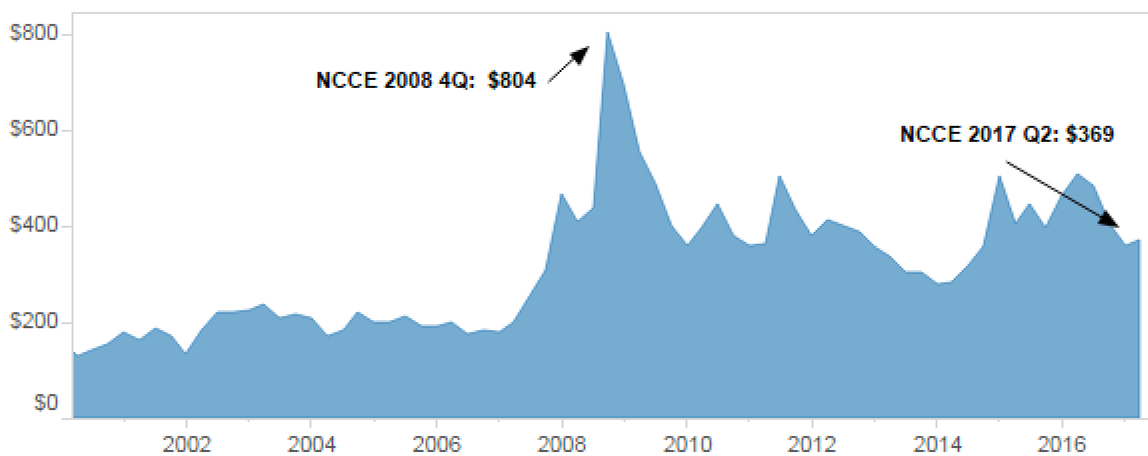
Table 5. Net Current Credit Exposure, in Billions of Dollars

	2017 Q2	2017 Q1	Q/Q Change	Q/Q % Change
Gross Positive Fair Value	$2,357	$2,436	-$79	-3.2%
NCCE RC-R	$369	$358	$12	3.3%
Netting Benefit RC-R	$1,987	$2,078	-$91	-4.4%
Netting Benefit % RC-R	84.3%	85.3%		-1.0%

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 $1.6 trillion at the end of the second quarter of 2017. On June 30, 2017, exposure from credit contracts were $68.8 billion (see table 3), which is $1.0 trillion lower (93.7 percent) than the $1.1 trillion on December 31, 2008. New regulations and a decrease in client demand have led to the reduction in credit derivative notional amounts since 2008.

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 (42.8 percent) (see table 6).

The combined exposure to hedge funds, sovereign governments, and monoline financial firms was small (9.7 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

[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.

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 (7.1 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 Q2	47.5%	0.1%	2.5%	7.1%	42.8%
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 108.5 percent of their total NCCE at the end of the second quarter of 2017, up from 106.7 percent in the first quarter of 2017 (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 122.7 percent to 125.7 percent. Collateral held against hedge fund exposures decreased in the second quarter, but coverage remains very high at 522.3 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 Q2	125.7%	0.0%	522.3%	35.0%	77.5%	108.5%
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 68.5 percent held in cash (both U.S. dollar and non-dollar) and an additional 11.6 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 Q2	40.9%	27.6%	9.5%	2.1%	2.0%	5.3%	12.5%
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 decreased in the second quarter of 2017, as banks reported net charge-offs of $8.7 million, compared to net charge-offs of $1.2 million in the first quarter of 2017 (see graph 7 in the appendix). The number of banks reporting charge-offs increased from 11 to 14 banks. Net charge-offs in the second quarter of 2017 represented 0.002 percent of the NCCE from derivative contracts. For comparison purposes, commercial and industrial (C&I) loan net charge-offs increased $363.5 million, or 23.6 percent, to $1.9 billion during the quarter and were 0.1 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. 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
Q2 2017	$27	$96	$48	$51	$51	$273
Q1 2017	$25	$100	$44	$64	$44	$277
Q/Q Change	$2	-$4	$4	-$13	$7	-$4
Q/Q % Change	8.0%	-4.0%	9.1%	-20.3%	15.9%	-1.4%
Equity Capital	$258,483	$230,019	$270,987	$86,675	$77,826	$923,990
2016 Net Income	$59,979	$37,251	$40,708	$16,541	$14,142	$168,621
Avg VaR/Equity	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%
Avg VaR/Net Income	0.1%	0.3%	0.1%	0.3%	0.4%	0.2%

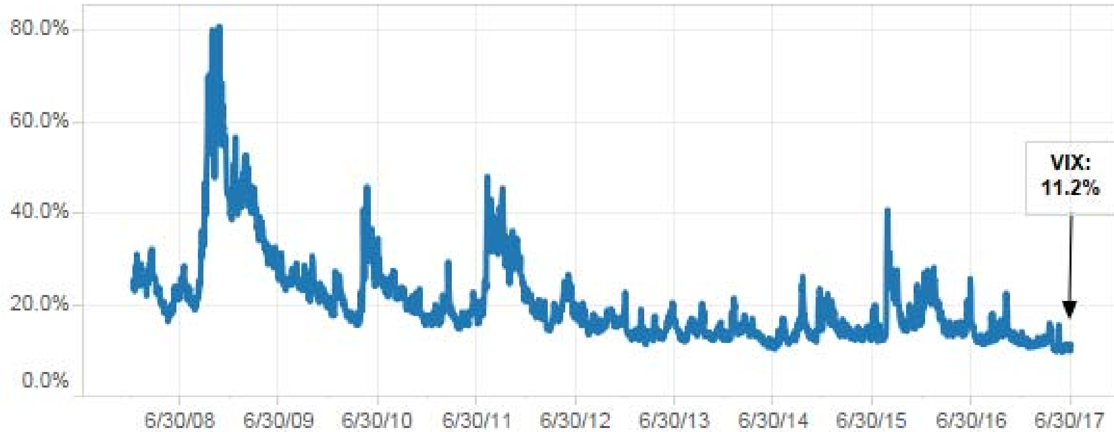
Source: 10K and 10Q U.S. Securities and Exchange Commission reports

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 second quarter of 2017, banks held $29.2 billion of level 3 trading assets, down 8.1 percent from the previous quarter, and 32.6 percent lower than a year ago. Level 3 assets are $174.9 billion (85.7 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.

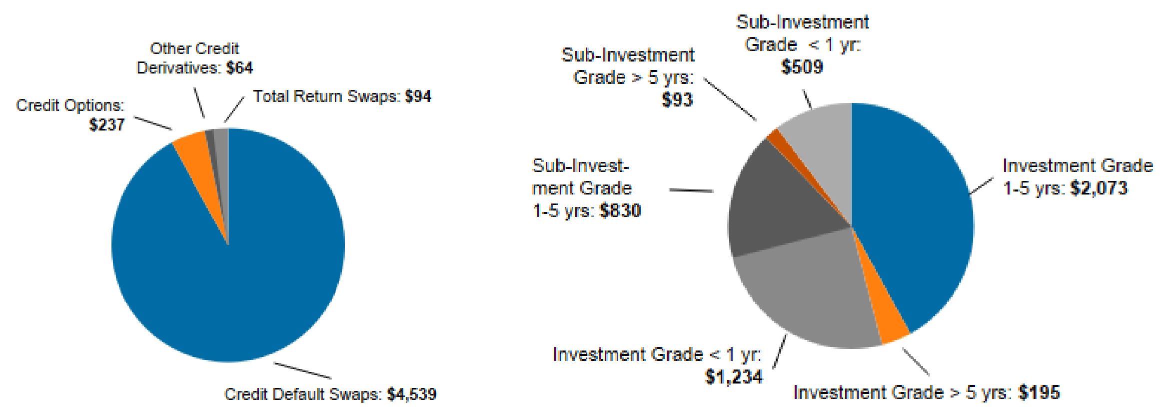
Credit Derivatives

The notional amounts outstanding of credit derivatives decreased $369.0 billion (7.0 percent) in the second quarter of 2017 to $4.9 trillion. Contracts referencing sub-investment-grade firms decreased $147.0 billion in the second quarter, while contracts referencing investment-grade firms decreased $222.1 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 $4.5 trillion (92.0 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 increased by $0.8 billion (0.04 percent) in the quarter, represented the largest segment of the market at 42.0 percent of all credit derivative notional amounts. Contracts of all tenors that reference investment-grade entities are 71.0 percent of the market (see chart on right in figure 5 and graph 14 in the appendix).

Figure 5. 2017 Q2 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 68 insured U.S. commercial banks and savings associations that sold credit protection (i.e., assumed credit risk) was $2.4 trillion, down $170.8 billion (6.6 percent) from the first quarter of 2017. The notional amount for the 53 banks that purchased credit protection (i.e., hedged credit risk) was $2.5 trillion, $198.2 billion lower (7.3 percent) than in the first quarter of 2017 (see table 12 in the appendix).

Notional Amounts

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

The notional amount of derivative contracts held by insured U.S. commercial banks and savings associations in the second quarter increased by $7.2 trillion (4.0 percent) to $185.5 trillion from the previous quarter (see table 10). The increase was driven by a $7.1 trillion increase in interest rate notional amounts. A $3.8 trillion increase in swap contracts (3.9 percent) to $103.0 trillion and a $3.7 trillion increase in option contracts drove the increase in interest rate notional amounts (see table 11). Swap contracts remained the dominant derivatives product at 55.5 percent of all notional amounts.

Interest rate contracts continued to represent the majority of the derivative market at $139.8 trillion, or 75.4 percent of total derivatives during the second quarter of 2017 (see table 10). FX and credit derivatives were 19.7 percent and 2.7 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 89.6 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 Q2	2017 Q1	Q/Q Change	Q/Q % Change	2016 Q2	Y/Y Change	Y/Y % Change
Interest Rate	$139,817	$132,690	$7,128	5.4%	$143,795	-$3,977	-2.8%
Foreign Exchange	$36,521	$36,161	$361	1.0%	$35,185	$1,336	3.8%
Equity	$2,908	$2,839	$69	2.4%	$2,672	$236	8.8%
Commodity	$1,334	$1,350	-$16	-1.2%	$1,328	$6	0.5%
Credit Derivatives	$4,935	$5,304	-$369	-7.0%	$6,853	-$1,919	-28.0%
Total Notional	$185,516	$178,343	$7,174	4.0%	$189,834	-$4,317	-2.3%

Source: Call reports, Schedule RC-L

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

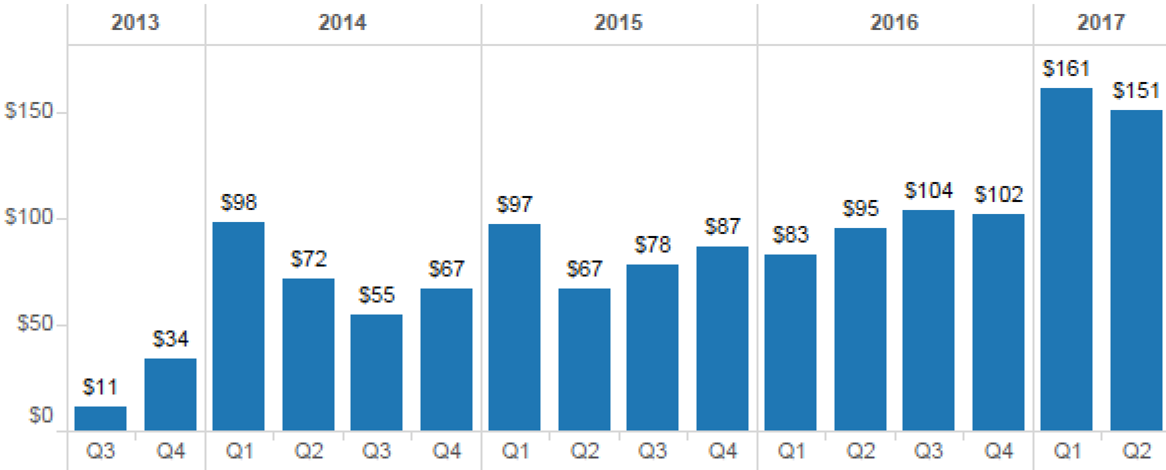
	2017 Q2	2017 Q1	Q/Q Change	Q/Q % Change	2016 Q2	Y/Y Change	Y/Y % Change
Futures & Forwards	$39,841	$39,858	-$16	0.0%	$38,790	$1,051	2.7%
Swaps	$103,004	$99,183	$3,822	3.9%	$111,901	-$8,896	-8.0%
Options	$37,736	$33,999	$3,737	11.0%	$32,289	$5,447	16.9%
Credit Derivatives	$4,935	$5,304	-$369	-7.0%	$6,853	-$1,919	-28.0%
Total Notional	$185,516	$178,343	$7,174	4.0%	$189,834	-$4,317	-2.3%

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 decreased in the second 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 second quarter of 2017, 40.3 percent of the derivative market was centrally cleared (see table 12). From a market factor perspective, 50.8 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 25.2 percent of investment grade and 20.5 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 91.9 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 Q2	50.8%	1.1%	27.3%	4.9%	23.6%	15.5%	40.3%
2017 Q1	49.8%	1.2%	25.1%	5.0%	22.3%	16.0%	39.2%
2016 Q4	49.2%	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.

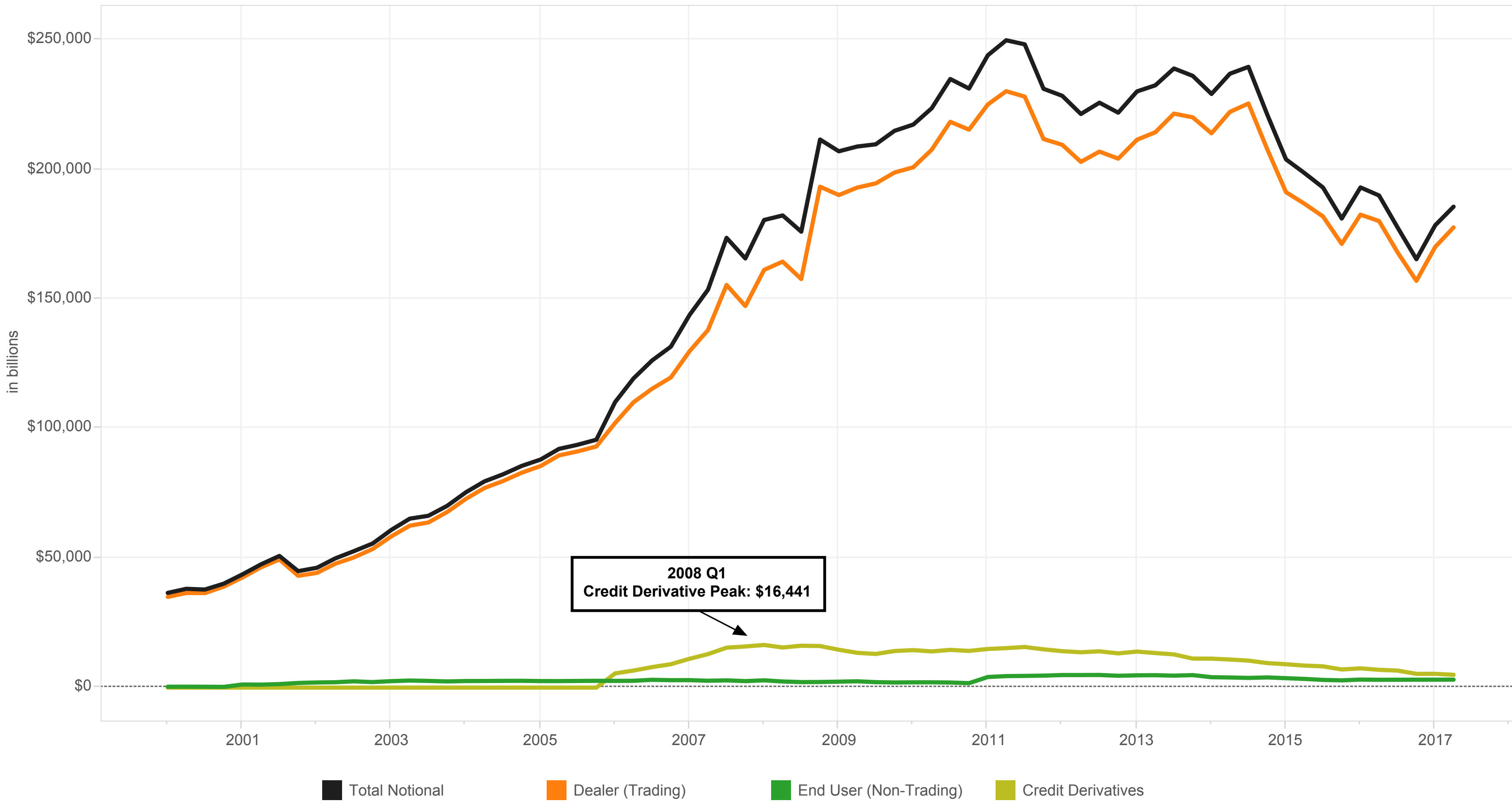
Index of Tables and Figures

Appendix: Supplementary Graphs and Tables

Graph 1

Derivative Notional Amounts by Type

Insured U.S. Commercial Banks and Savings Associations



In billions of dollars

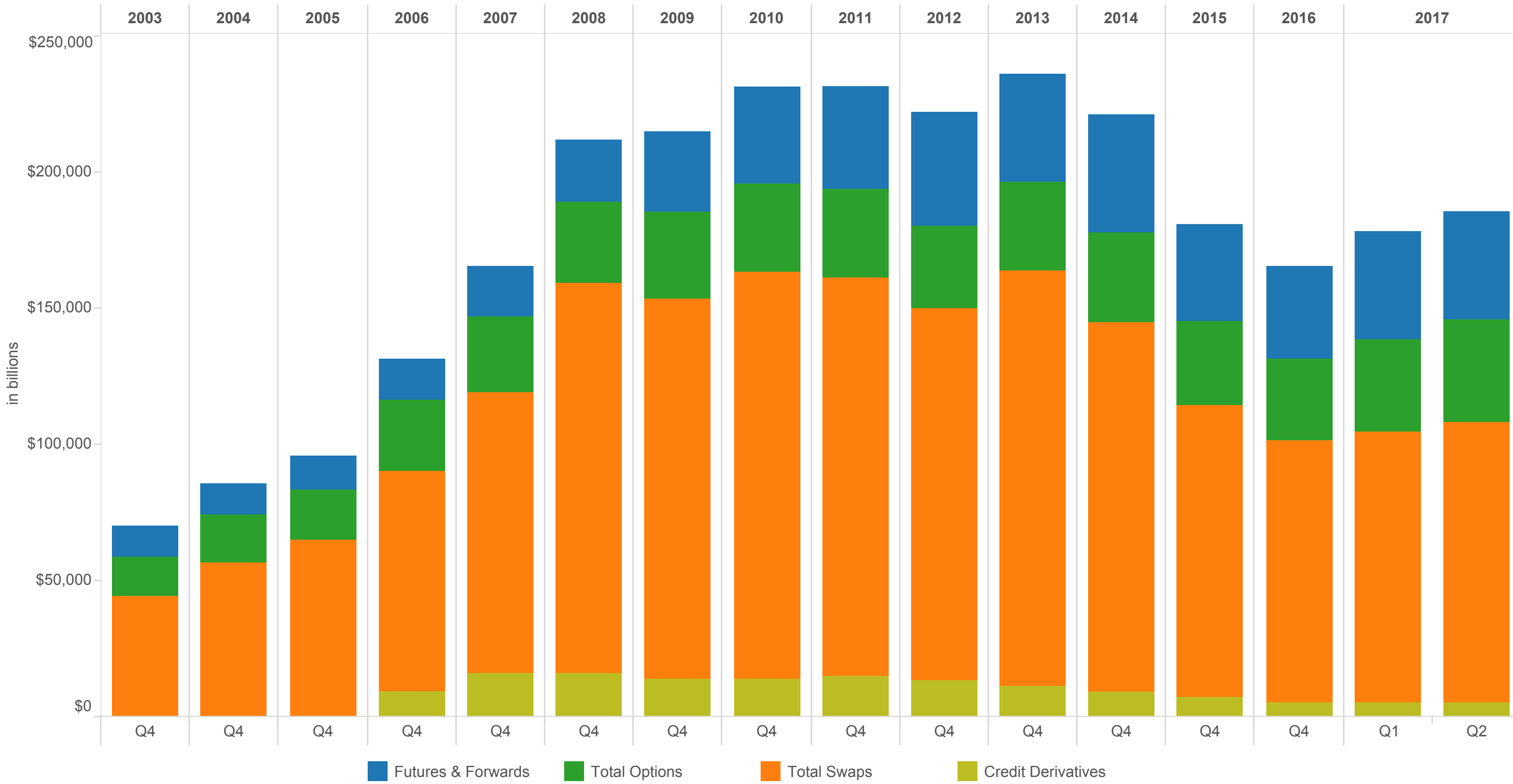
	2013				2014				2015				2016				2017	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Total Notional	$229,987	$232,342	$238,827	$235,992	$229,011	$236,808	$239,459	$221,078	$203,771	$198,523	$192,937	$180,952	$192,947	$189,834	$177,461	$165,256	$178,343	$185,516
Dealer (Trading)	211,353	214,240	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	177,518
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	3,063
Credit Derivatives	13,901	13,327	12,793	11,191	11,165	10,827	10,408	9,449	9,017	8,488	8,198	6,986	7,418	6,853	6,562	5,293	5,304	4,935

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

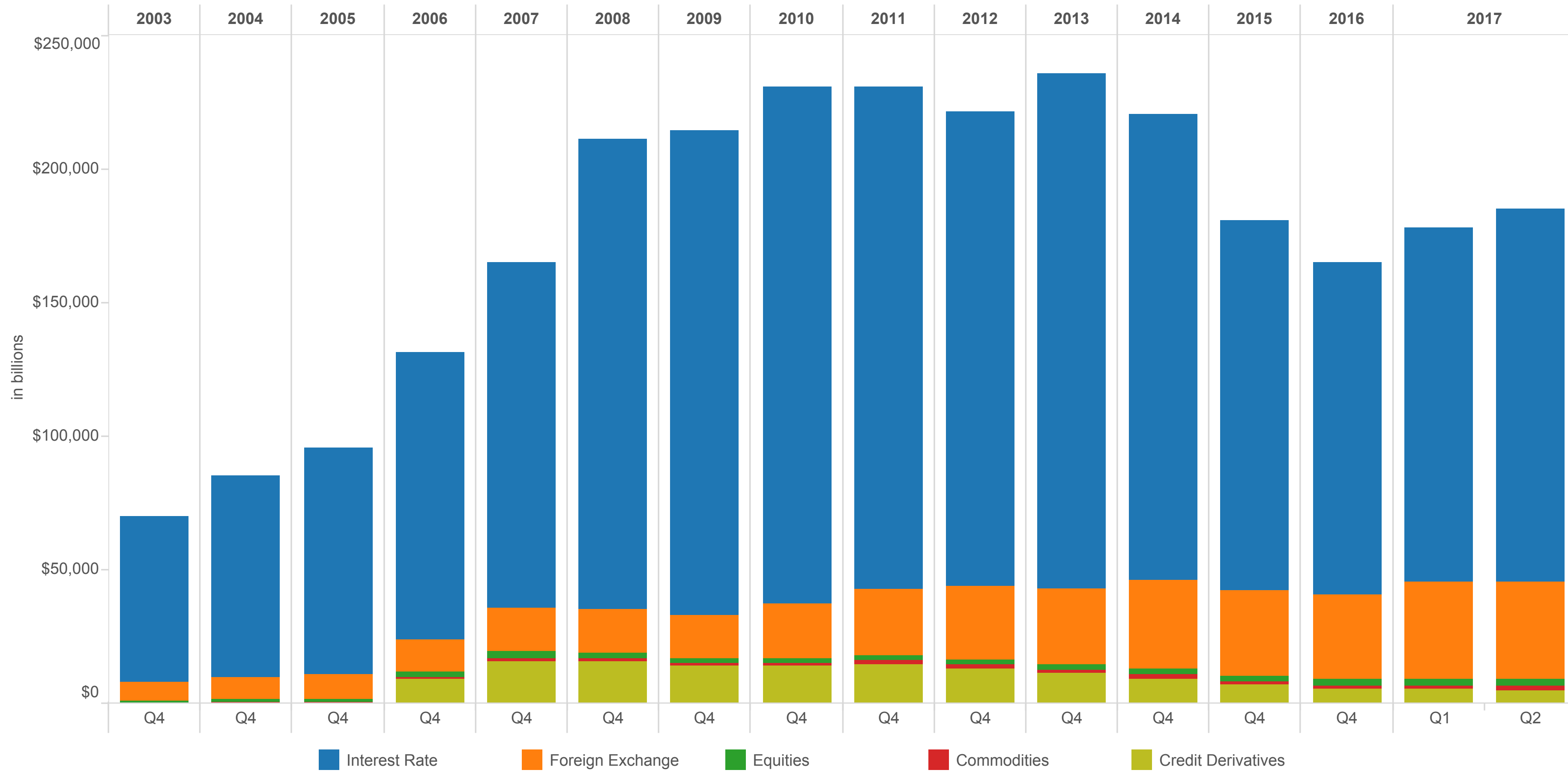


In billions of dollars

	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	Q2
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	$39,841
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	37,736
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	103,004
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	4,935
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	185,516

*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

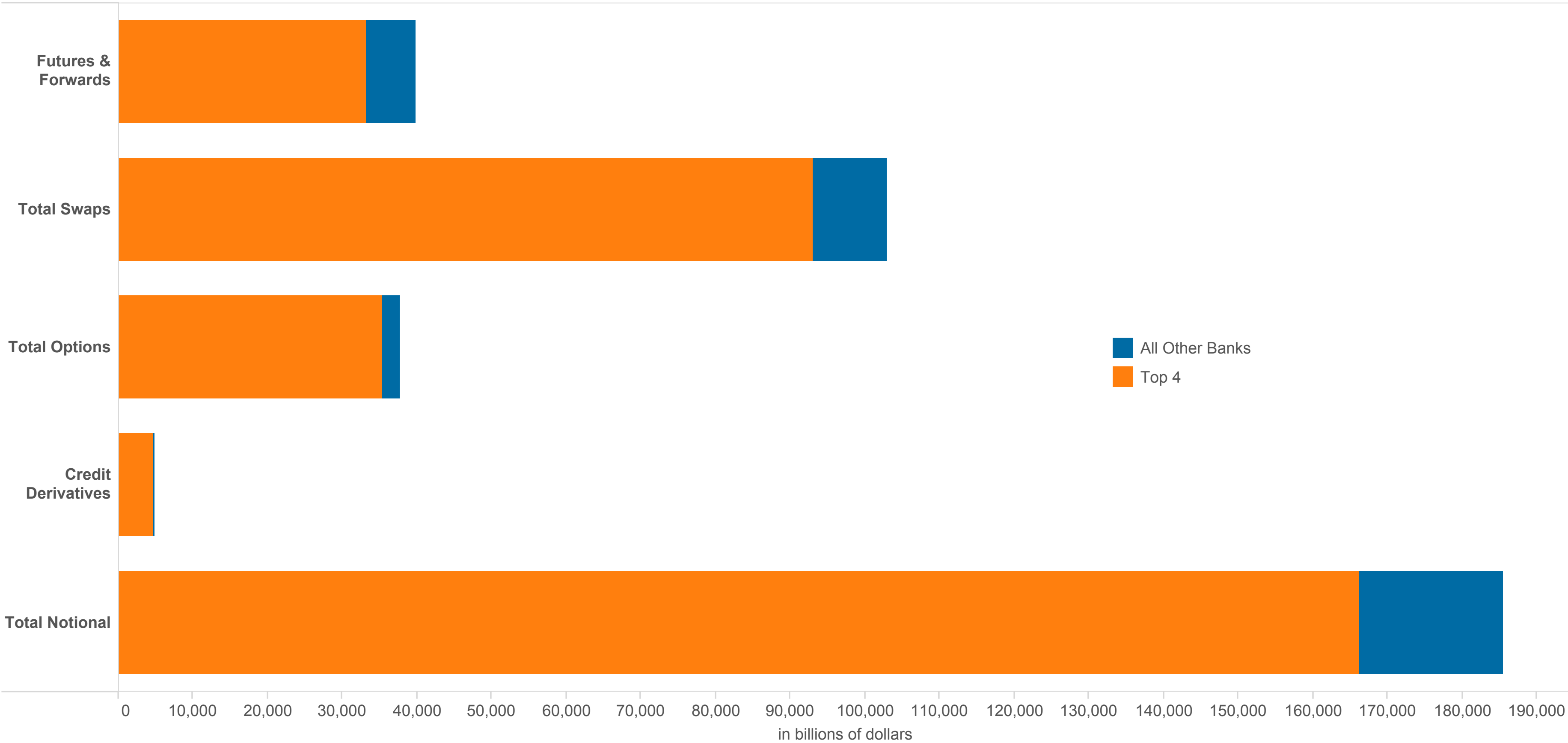


In billions of dollars

	2003	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	Q2
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	$139,817
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	36,521
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	2,908
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	1,334
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	4,935
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	185,516

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

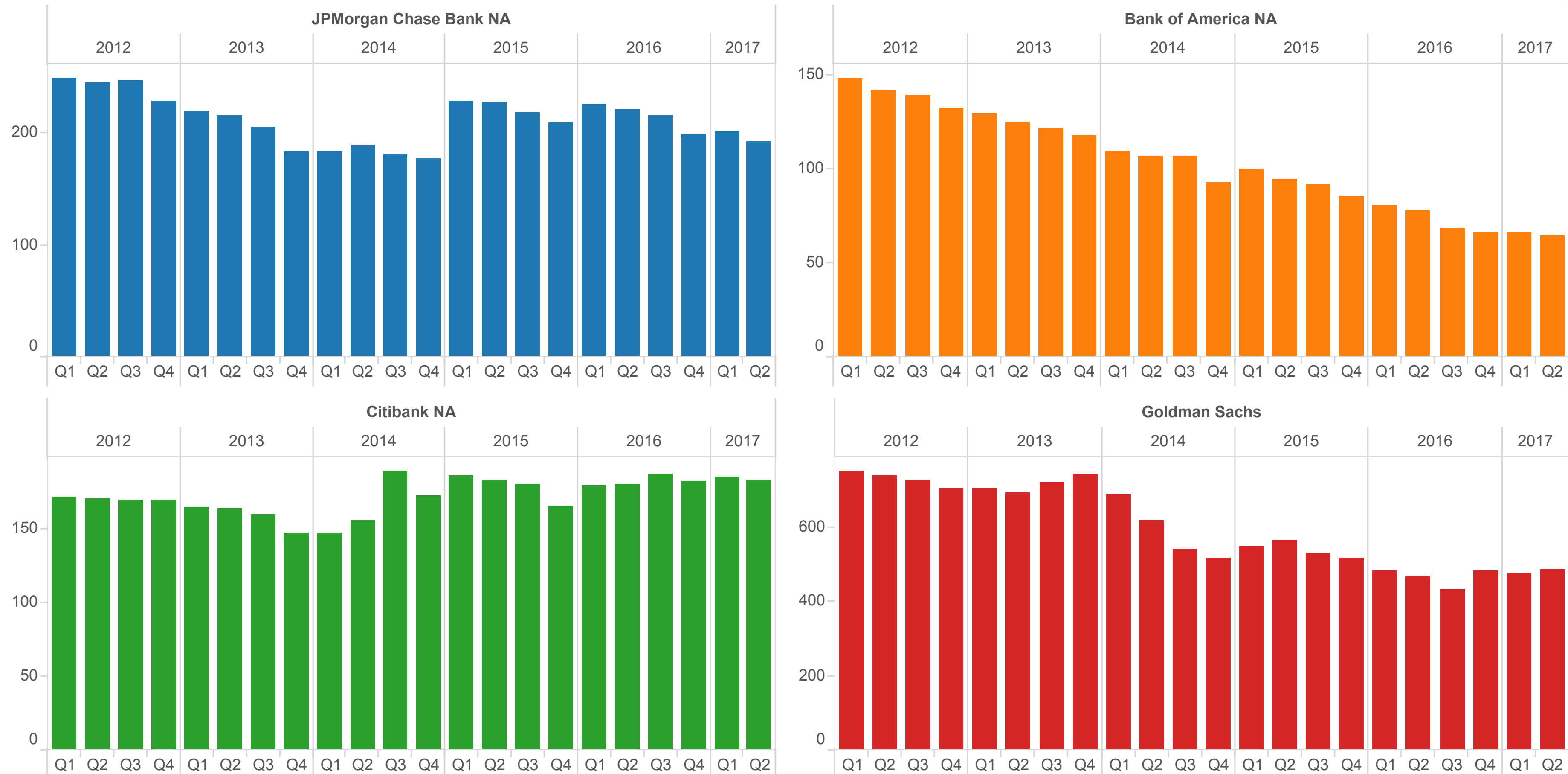


In billions of dollars

	Top 4	All Other Banks	Grand Total
Futures & Forwards	$33,209	$6,632	$39,841
Total Swaps	93,025	9,979	103,004
Total Options	35,273	2,463	37,736
Credit Derivatives	4,750	185	4,935
Total Notional	166,257	19,259	185,516

*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	Q2
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	193
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	64
Citibank NA	172	171	170	170	165	164	161	148	147	156	190	173	187	184	181	166	180	181	188	183	186	184
Goldman Sachs	751	738	727	705	703	693	719	741	689	620	539	516	547	563	530	516	482	467	433	481	472	484

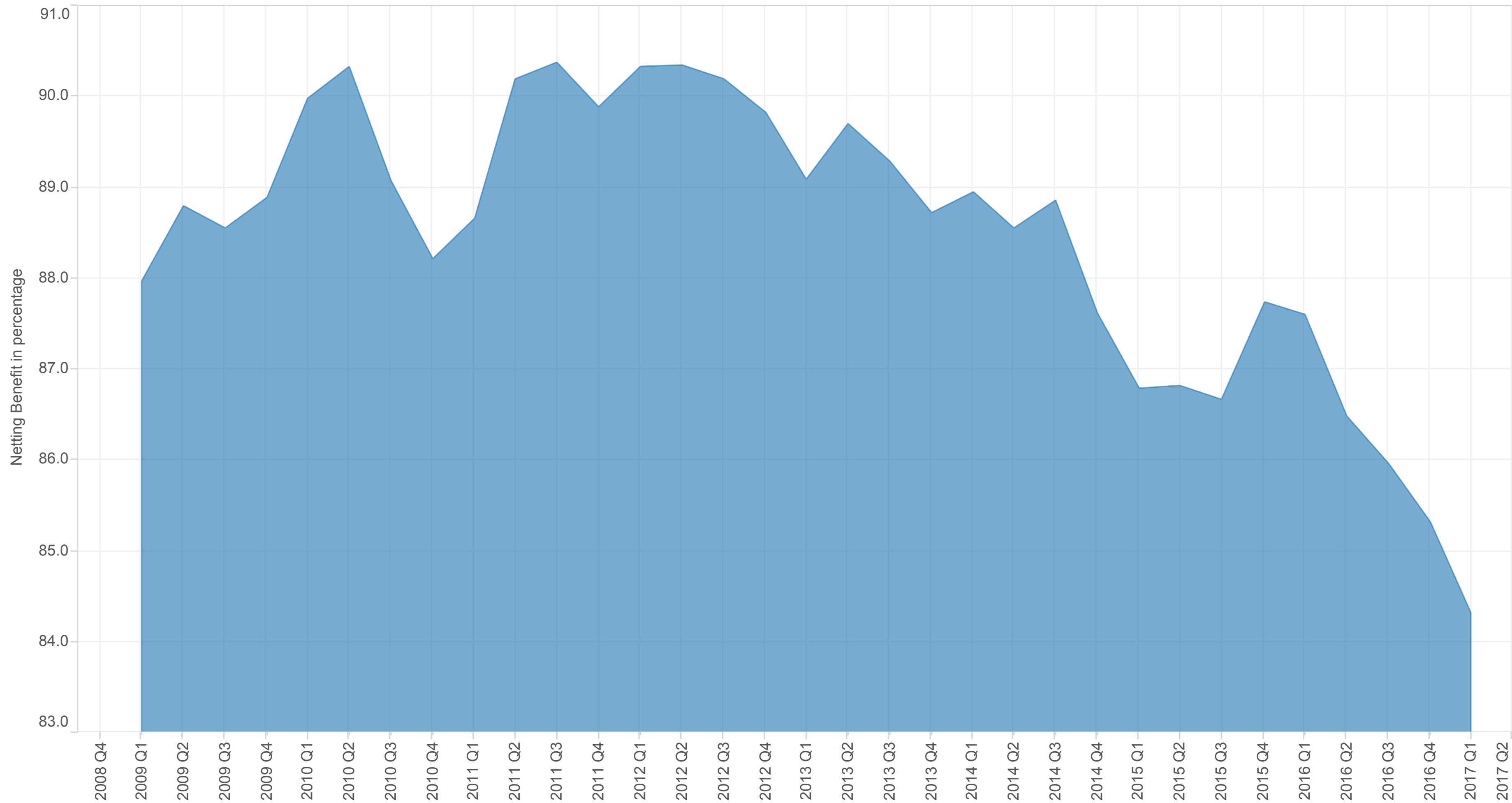
TOTAL	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
	284	282	281	271	261	258	262	262	248	240	224	211	238	242	232	223	226	222	217	220	220	218

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

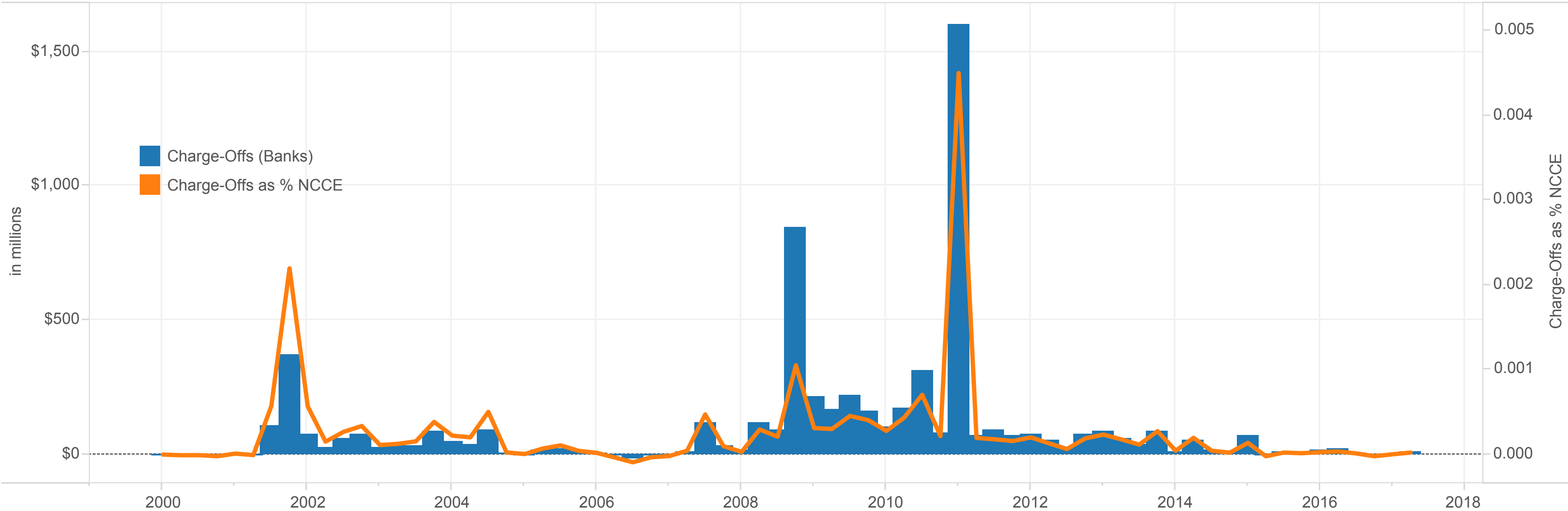


Netting Benefit (in percentage)

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	Q2
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	84.3

***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

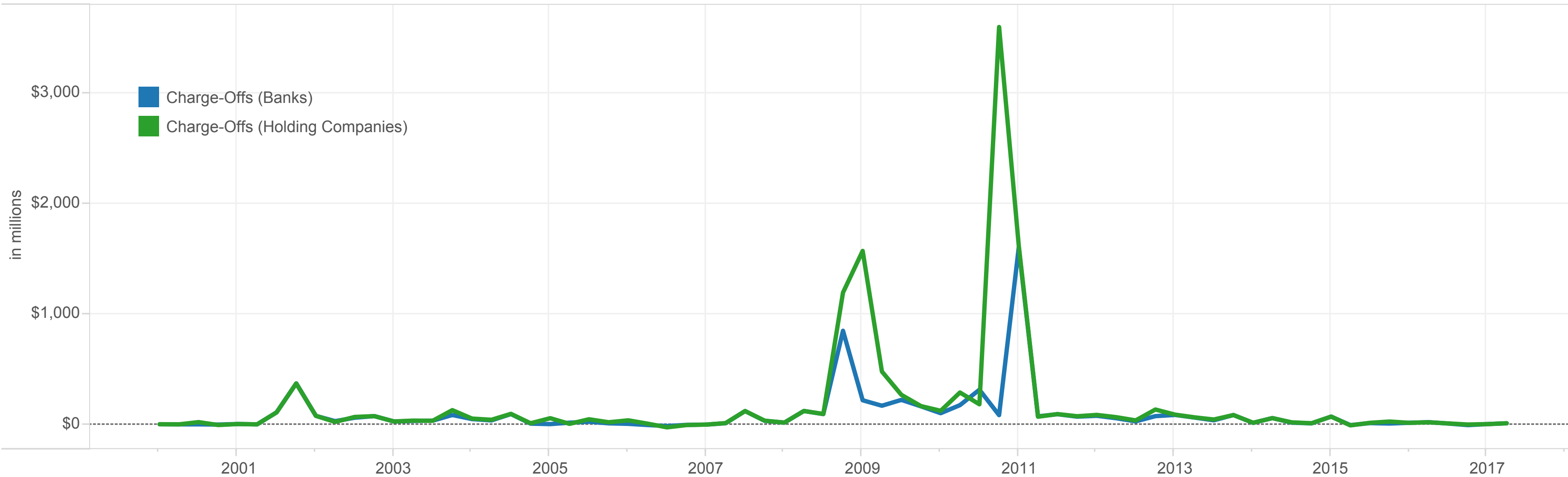
	2016				2017	
	Q1	Q2	Q3	Q4	Q1	Q2
Charge-Offs (Banks)	13.30	18.56	6.48	-7.84	1.22	8.71

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

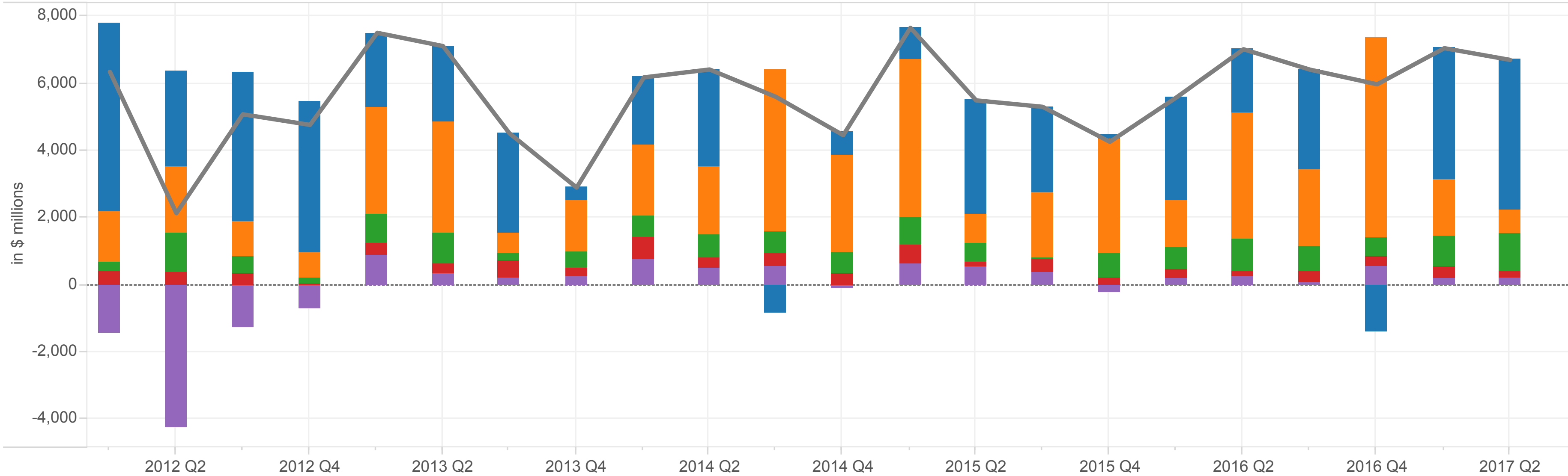
	2012				2013				2014				2015				2016				2017	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Charge-Offs (Banks)	76.3	54.3	26.1	73.4	84.3	60.7	35.8	83.5	12.8	55.9	14.5	7.9	69.3	-7.9	10.4	6.4	13.3	18.6	6.5	-7.8	1.2	8.7
Charge-Offs (Holding Companies)	84.6	64.0	34.9	133.4	87.2	62.6	42.9	83.4	13.6	55.6	17.2	9.1	69.0	-10.2	12.9	24.5	12.8	18.0	7.5	-2.5	1.4	8.9

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

Graph 9a

Quarterly Trading Revenue (Cash and Derivative Positions)* - Bank

Insured U.S. Commercial Banks and Savings Associations



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

In millions of dollars

	2Q17	Average Past 12 Q2's	Past 8 Quarter Average	Past 8 Quarter High	Past 8 Quarter Low	Since 2000 Average	Max Since 2000	Min Since 2000
Interest Rate	4,486	3,170	2,343	4,486	-5,282	1,697	9,291	-1,376
Foreign Exchange	685	1,825	2,437	5,941	-1,069	1,848	5,941	685
Equity	1,122	852	708	1,122	-1,059	565	1,830	49
Commodity & Other	206	197	260	402	-307	226	789	129
Credit	215	376	242	550	-10,237	-185	2,727	-222
Total Trading Revenue	6,714	6,420	5,991	7,062	-10,580	4,150	10,217	4,273

In millions of dollars

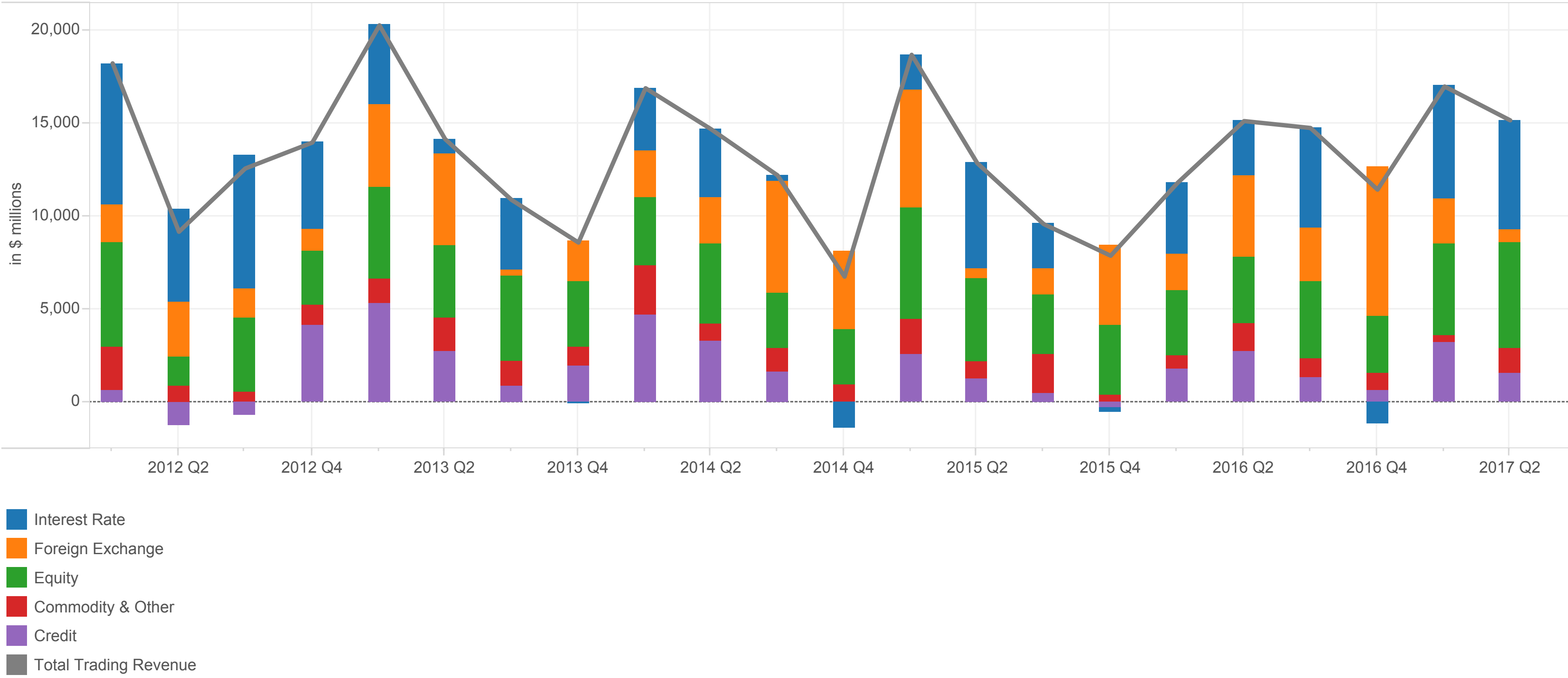
	2012				2013				2014				2015				2016				2017	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Interest Rate	5,627	2,870	4,457	4,521	2,243	2,268	3,002	360	2,015	2,883	-819	664	958	3,406	2,578	154	3,070	1,904	2,963	-1,376	3,905	4,486
Foreign Exchange	1,505	1,990	1,020	753	3,185	3,303	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	685
Equity	260	1,140	508	187	838	924	233	491	612	726	654	650	797	587	49	742	674	972	729	575	922	1,122
Commodity & Other	412	390	350	30	364	292	481	265	672	293	411	335	587	129	402	198	271	161	353	296	328	206
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	215
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	6,714

*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

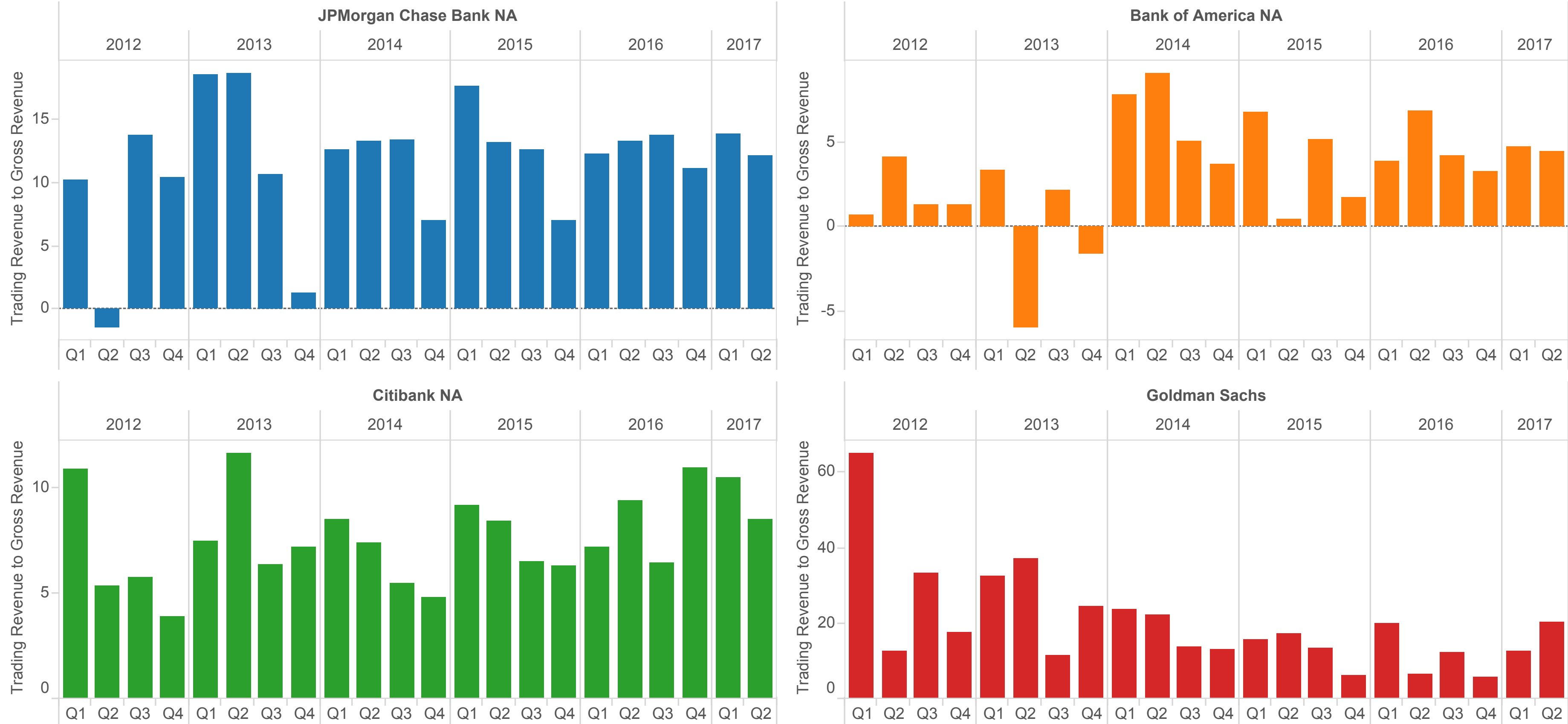
	2012				2013				2014				2015				2016				2017	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Interest Rate	7,592	5,032	7,139	4,683	4,272	823	3,811	-94	3,395	3,645	353	-1,396	1,893	5,662	2,403	-243	3,808	2,974	5,378	-1,193	6,014	5,882
Foreign Exchange	2,005	2,959	1,617	1,185	4,414	4,890	320	2,205	2,472	2,521	5,985	4,243	6,329	552	1,393	4,338	2,025	4,318	2,899	8,007	2,440	721
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	4,159	3,021	4,902	5,682
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	969	1,003	449	1,279
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	1,345	601	3,173	1,594
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	11,811	15,120	14,750	11,438	16,978	15,159

*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	Q2
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	13.34	13.83	11.17	13.84	12.16
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	4.49
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	8.50
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	20.41

TOTAL	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
	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	10.085	8.513	8.480	9.978	8.856

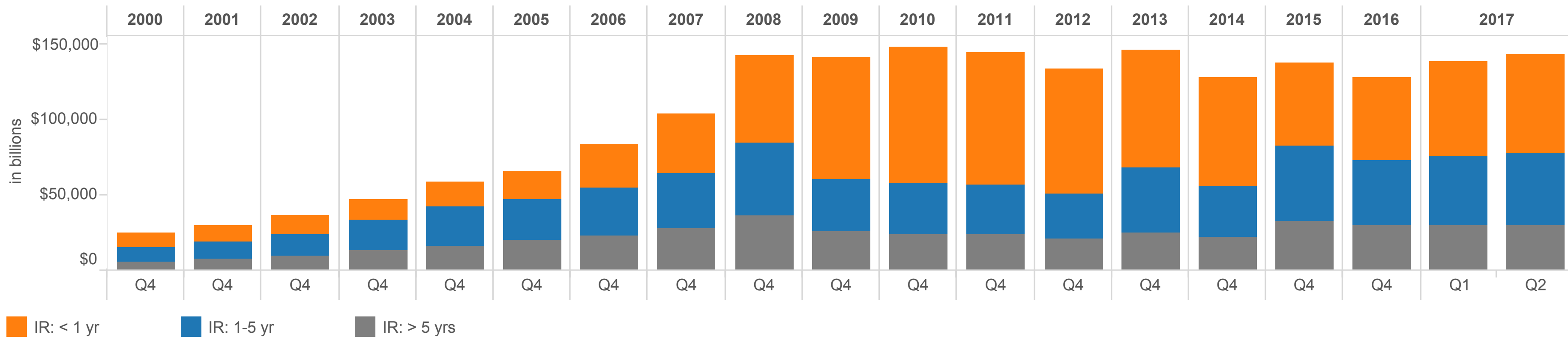
*The trading revenue figures are for cash and derivative activities. Revenue figures are quarterly, not year-to-date numbers.
Note: Gross revenue equals interest income plus non-interest income.
Source: Call reports

Graph 11

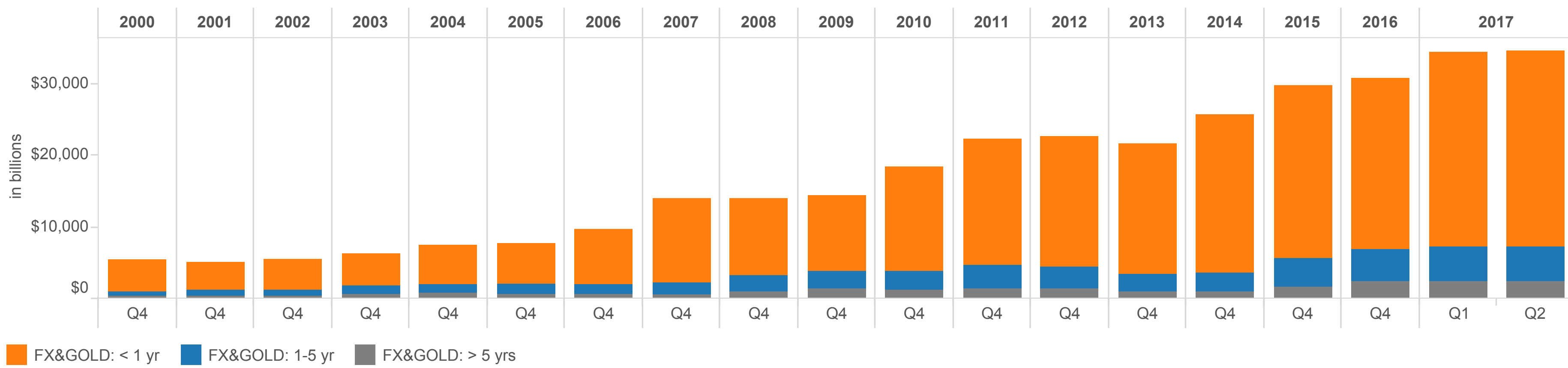
Notional Amounts of Interest Rate and FX + Gold Contracts by Maturity

Insured U.S. Commercial Banks and Savings Associations

Interest Rate



FX & Gold



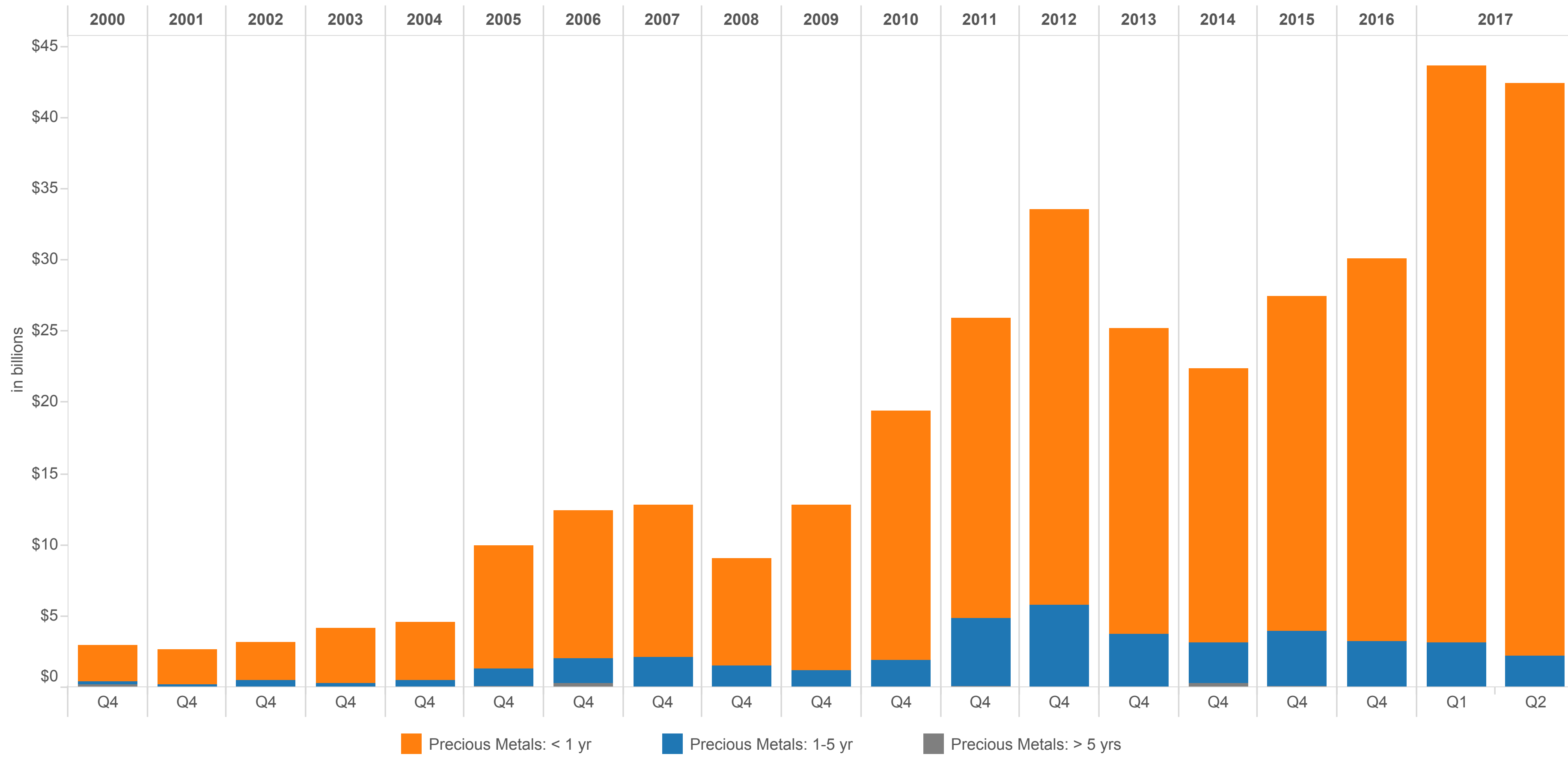
In billions of dollars

	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	Q2
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	$65,968
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	48,373
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	29,633
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	27,411
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	4,813
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	2,496

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	Q2
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	40.14
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	2.24
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	0.04

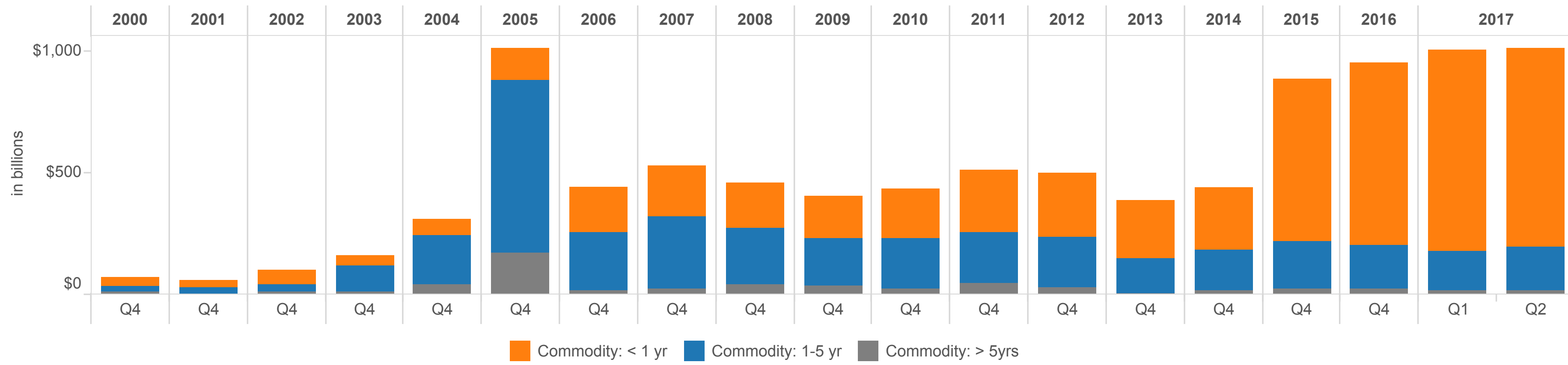
Note: Figures exclude FX contracts with an original maturity of 14 days or less, written options, basis swaps, and any other contracts not subject to risk-based capital requirements.
Source: Call reports

Graph 13

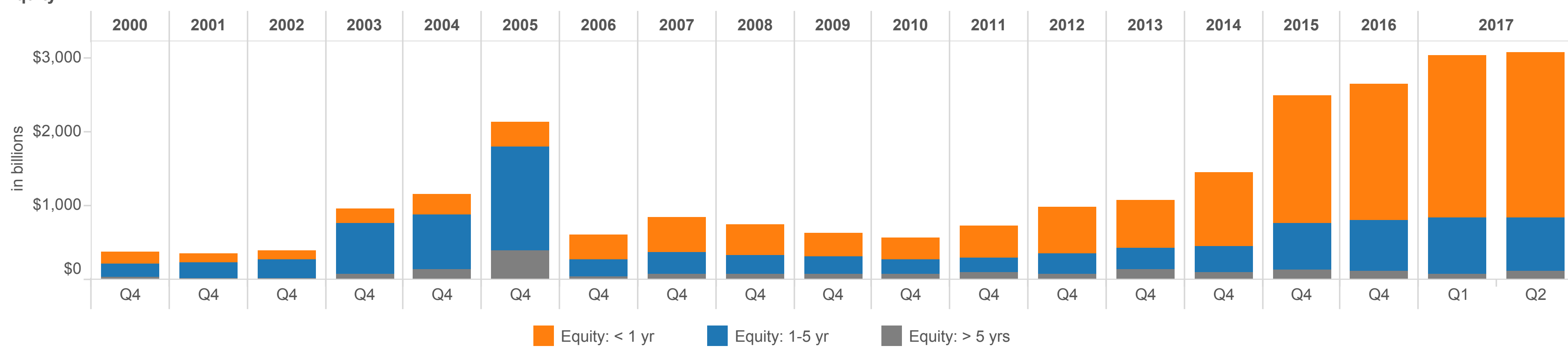
Notional Amounts of Commodity and Equity Contracts by Maturity

Insured U.S. Commercial Banks and Savings Associations

Commodity



Equity



In billions of dollars

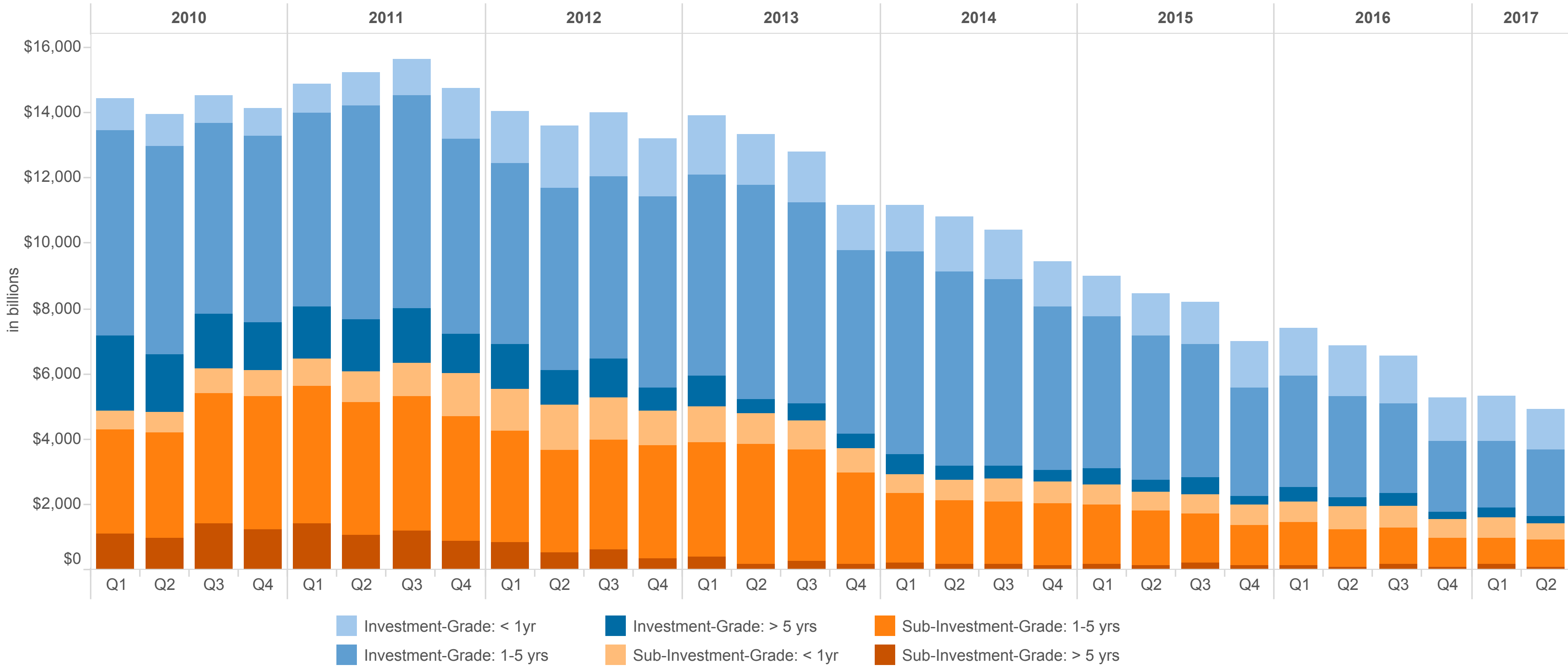
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q1	Q2
Commodity: < 1 yr	$36	$31	$55	$43	$64	$133	$185	$206	$179	$176	$203	$261	$261	$235	$257	$668	$750	$824	$819
Commodity: 1-5 yr	27	25	35	103	205	707	235	297	233	198	209	209	208	144	164	197	179	160	175
Commodity: > 5yrs	11	2	9	14	40	175	20	25	43	33	25	46	28	6	20	22	23	20	21
Equity: < 1 yr	162	121	127	197	273	321	341	473	409	312	296	427	627	645	996	1,743	1,847	2,203	2,236
Equity: 1-5 yr	180	209	249	674	736	1,428	221	297	256	228	191	210	262	291	352	628	680	763	720
Equity: > 5 yrs	38	18	25	84	140	383	45	70	72	82	85	94	82	136	101	130	123	85	127

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

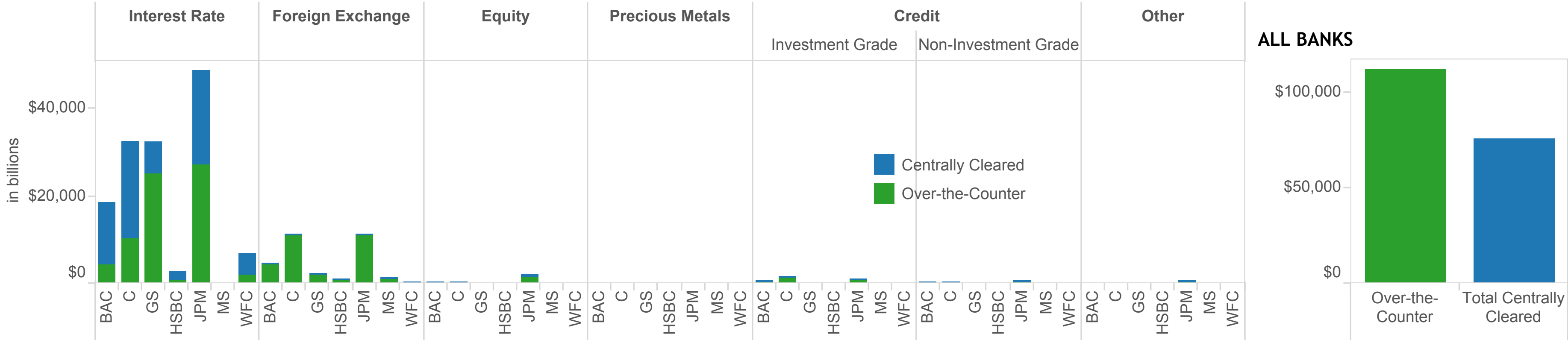
	2013				2014				2015				2016				2017	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Sub-Investment-Grade: < 1yr	1,090	933	879	765	619	642	671	658	596	562	569	607	622	683	683	581	582	509
Sub-Investment-Grade: 1-5 yrs	3,491	3,656	3,424	2,792	2,127	1,960	1,948	1,887	1,813	1,673	1,518	1,271	1,313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

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 Q2 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: Centrally Cleared	Interest Rate: Over-the-Counter	Foreign Exchange: Centrally Cleared	Foreign Exchange: Over-the-Counter	Equity: Centrally Cleared	Equity: Over-the-Counter	Precious Metals: Centrally Cleared	Precious Metals: Over-the-Counter	Credit – Investment Grade: Centrally Cleared	Credit – Investment Grade: Over-the-Counter	Credit – Non-Investment Grade: Centrally Cleared	Credit – Non-Investment Grade: Over-the-Counter	Other: Centrally Cleared	Other: Over-the-Counter	Total Centrally Cleared	Over-the-Counter	Total Notional
JPM	21,376	27,144	108	11,124	672	1,474	0	20	326	696	189	615	68	700	22,738	41,773	64,511
C	22,360	10,212	245	11,154	37	336	2	8	268	1,229	84	375	61	67	23,056	23,382	46,437
BAC	14,075	4,325	18	4,777	107	286	0	0	215	352	60	207	0	17	14,476	9,964	24,440
GS	7,030	25,283	0	2,163	0	26	0	0	0	89	0	60	0	5	7,030	27,627	34,656
HSBC	2,050	667	0	1,037	0	36	0	10	1	19	2	27	0	0	2,053	1,796	3,849
WFC	4,906	2,036	0	410	27	54	0	2	0	0	4	18	27	25	4,964	2,546	7,510
MS	12	1	9	1,197	0	0	0	0	0	8	0	2	0	0	21	1,208	1,229
Grand Total	71,809	69,668	379	31,862	842	2,212	2	40	810	2,394	339	1,305	156	814	74,337	108,295	182,632
ALL OTHER	1,371	1,125	0	2,480	0	30	0	0	0	11	0	10	1	43	1,373	3,698	5,071
TOTAL	73,180	70,794	379	34,341	842	2,241	2	40	811	2,405	339	1,315	157	857	75,710	111,993	187,703

% of Total

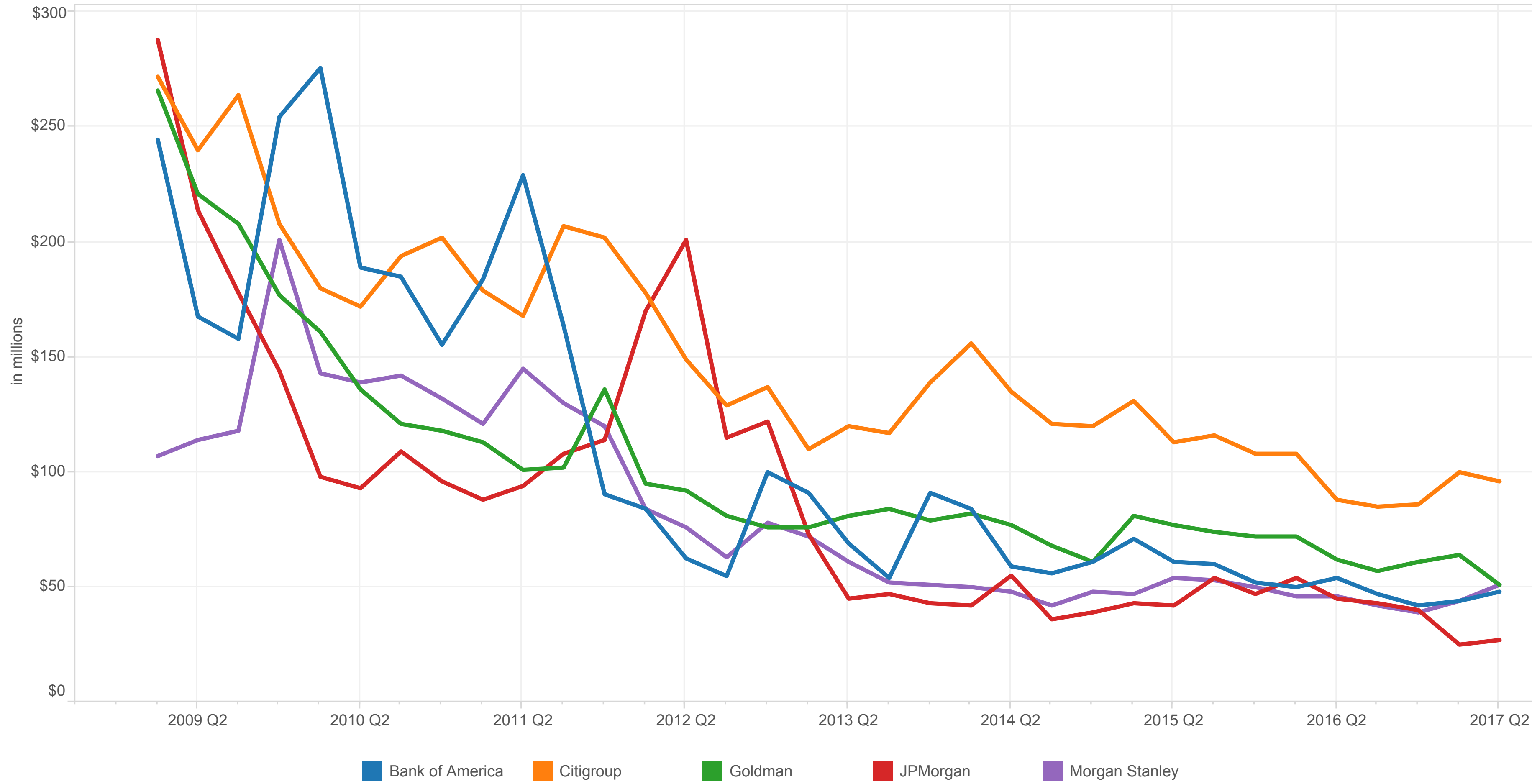
Bank Name	Interest Rate: Centrally Cleared	Interest Rate: Over-the-Counter	Foreign Exchange: Centrally Cleared	Foreign Exchange: Over-the-Counter	Equity: Centrally Cleared	Equity: Over-the-Counter	Precious Metals: Centrally Cleared	Precious Metals: Over-the-Counter	Credit – Investment Grade: Centrally Cleared	Credit – Investment Grade: Over-the-Counter	Credit – Non-Investment Grade: Centrally Cleared	Credit – Non-Investment Grade: Over-the-Counter	Other: Centrally Cleared	Other: Over-the-Counter	Total Centrally Cleared as a % of Total Notional	Total Over-the-Counter as a % of Total Notional
JPM	44%	56%	1%	99%	31%	69%	0%	100%	32%	68%	23%	77%	9%	91%	35%	65%
C	69%	31%	2%	98%	10%	90%	21%	79%	18%	82%	18%	82%	48%	52%	50%	50%
BAC	76%	24%	0%	100%	27%	73%	0%	100%	38%	62%	23%	77%	0%	100%	59%	41%
GS	22%	78%	0%	100%	0%	100%			0%	100%	0%	100%	0%	100%	20%	80%
HSBC	75%	25%	0%	100%	0%	100%	0%	100%	6%	94%	7%	93%	0%	100%	53%	47%
WFC	71%	29%	0%	100%	33%	67%	0%	100%	59%	41%	16%	84%	52%	48%	66%	34%
MS	92%	8%	1%	99%	0%	100%			0%	100%	0%	100%			2%	98%

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	Q2
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	$48
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	96
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	51
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	27
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	51
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	273

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
JUNE 30, 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	$1,401,303	$51,166,304	$3,092,186	$958,461	$6,669,672	$30,249,687	$8,226,151	$1,970,147	$872,547
2	JPMORGAN CHASE BANK NA	OH	2,152,006	50,975,537	2,027,898	2,204,547	9,305,377	27,189,633	8,448,777	1,799,305	680,734
3	GOLDMAN SACHS BANK USA	NY	151,219	41,333,695	2,005,619	5,399,343	2,998,286	22,426,326	8,344,508	159,613	57,489
4	BANK OF AMERICA NA	NC	1,705,928	22,781,285	1,279,219	192,371	5,830,647	13,159,249	1,498,817	820,982	436,121
5	WELLS FARGO BANK NA	SD	1,731,937	8,080,498	123,245	194,042	2,335,958	4,520,259	873,159	33,835	6,437
6	HSBC NA	VA	191,932	4,206,371	180,577	22,344	903,850	2,789,688	207,639	102,273	37,308
7	MORGAN STANLEY BANK NA	UT	116,382	1,643,194	15,081	15,982	332,782	508,715	760,271	10,363	58,957
8	STATE STREET BANK&TRUST CO	MA	234,889	1,549,730	12,155	0	1,507,674	3,969	25,932	0	76,690
9	BANK OF NEW YORK MELLON	NY	280,876	845,544	20,662	65	471,282	327,077	26,298	160	80,315
10	PNC BANK NATIONAL ASSN	DE	361,211	455,806	41,988	49,200	26,494	303,934	27,575	6,616	1,001
11	U S BANK NATIONAL ASSN	OH	456,910	305,886	3,460	510	54,640	194,862	47,176	5,237	2,018
12	NORTHERN TRUST CO	IL	125,198	299,000	0	0	283,753	14,135	1,111	0	20,960
13	SUNTRUST BANK	GA	202,481	262,852	25,227	17,138	19,459	136,342	59,310	5,376	187
14	TD BANK NATIONAL ASSN	DE	268,185	177,400	0	0	6,075	170,164	660	502	0
15	MUFG UNION BANK NA	CA	116,715	134,158	2,304	0	60,957	63,817	7,080	0	555
16	CAPITAL ONE NATIONAL ASSN	VA	280,232	111,910	195	0	2,437	105,981	248	3,049	28
17	KEYBANK NATIONAL ASSN	OH	133,555	91,539	4,399	0	6,970	74,113	5,632	425	685
18	CITIZENS BANK NATIONAL ASSN	RI	120,138	87,022	0	0	4,332	71,801	8,324	2,566	152
19	REGIONS BANK	AL	123,716	82,583	6,189	0	16,840	51,808	4,249	3,497	24
20	FIFTH THIRD BANK	OH	138,698	75,186	444	207	5,387	51,828	14,185	3,135	466
21	BRANCH BANKING&TRUST CO	NC	215,274	65,302	1,389	0	8,305	45,324	10,284	0	33
22	BOKF NATIONAL ASSN	OK	32,319	57,640	450	345	51,675	3,630	1,539	1	53
23	COMPASS BANK	AL	83,947	45,633	588	0	1,354	34,633	9,024	35	57
24	CAPITAL ONE BANK USA NA	VA	108,100	43,660	0	0	8,485	35,174	0	0	65
25	HUNTINGTON NATIONAL BANK	OH	101,280	37,263	40	0	2,615	31,933	935	1,740	5
TOP 25 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$10,834,431	$184,914,998	$8,843,316	$9,054,554	$30,915,306	$102,564,083	$28,608,883	$4,928,856	$2,332,889
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			4,409,115	601,276	4,372	1,347	78,405	440,123	71,294	5,734	2,141
TOTAL COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,243,546	185,516,274	8,847,687	9,055,902	30,993,711	103,004,206	28,680,177	4,934,591	2,335,029

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
JUNE 30, 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	$1,864,063	$56,061,759	$3,207,245	$6,075,393	$7,945,286	$29,055,530	$8,062,163	$1,716,142	$861,819
2	GOLDMAN SACHS GROUP, INC., THE	NY	906,536	50,434,374	3,225,270	6,317,143	6,805,544	22,683,382	10,078,149	1,324,886	345,642
3	JPMORGAN CHASE & CO.	NY	2,563,174	50,382,837	2,065,412	2,366,201	9,677,683	26,347,419	8,107,704	1,818,418	669,114
4	BANK OF AMERICA CORPORATION	NC	2,256,095	36,523,681	1,787,774	896,761	8,265,246	21,049,399	3,400,365	1,124,136	396,547
5	MORGAN STANLEY	NY	841,016	31,539,365	3,497,438	1,747,290	2,575,192	16,857,281	6,124,248	737,916	65,030
6	WELLS FARGO & COMPANY	CA	1,930,871	7,938,838	130,089	217,100	2,320,132	4,369,134	869,609	32,774	6,420
7	HSBC NORTH AMERICA HOLDINGS INC.	NY	307,797	6,740,289	626,947	642,615	904,550	4,248,108	215,796	102,273	37,308
8	MIZUHO AMERICAS LLC	NY	42,508	4,953,649	10,167	3,216	260,142	4,612,483	66,662	979	1,752
9	STATE STREET CORPORATION	MA	238,276	1,557,223	12,155	0	1,507,674	11,462	25,932	0	76,690
10	RBC USA HOLDCO CORPORATION	NY	147,045	1,094,276	156,464	691,099	194,676	51,215	425	397	260
11	CREDIT SUISSE HOLDINGS (USA), INC.	NY	215,029	979,662	32,859	8,950	800,936	79,826	6,040	51,051	0
12	BANK OF NEW YORK MELLON CORPORATION, THE	NY	354,815	848,216	21,769	2,170	495,609	302,210	26,298	160	80,291
13	BARCLAYS US LLC	NY	179,007	587,332	33,829	187,995	256,187	19,831	0	89,490	11
14	PNC FINANCIAL SERVICES GROUP, INC., THE	PA	372,357	453,545	42,273	49,215	29,780	298,286	27,374	6,616	1,001
15	U.S. BANCORP	MN	463,844	308,279	3,460	510	54,227	197,667	47,178	5,237	2,018
16	NORTHERN TRUST CORPORATION	IL	125,606	298,250	0	0	283,753	13,385	1,111	0	20,960
17	SUNTRUST BANKS, INC.	GA	207,318	260,244	25,667	17,138	19,459	134,295	58,310	5,376	187
18	TD GROUP US HOLDINGS LLC	DE	348,630	236,014	41,026	5,050	7,678	181,002	660	599	0
19	DB USA CORPORATION	NY	190,921	192,342	6,289	99,823	53,879	22,557	4,870	4,924	0
20	CAPITAL ONE FINANCIAL CORPORATION	VA	350,593	166,757	195	0	11,073	152,193	248	3,049	94
21	MUFG AMERICAS HOLDINGS CORPORATION	NY	150,578	155,314	5,174	4	78,949	64,107	7,080	0	555
22	CITIZENS FINANCIAL GROUP, INC.	RI	151,993	97,372	0	0	4,332	80,722	9,226	3,092	152
23	KEYCORP	OH	136,362	97,345	4,399	0	9,094	76,746	6,691	415	685
24	REGIONS FINANCIAL CORPORATION	AL	124,778	81,483	6,189	0	16,840	50,708	4,249	3,497	24
25	BB&T CORPORATION	NC	221,192	78,886	1,389	0	15,000	51,562	10,935	0	33
	TOP 25 HOLDING COMPANIES WITH DERIVATIVES		$14,690,405	$252,067,332	$14,943,479	$19,327,673	$42,592,922	$131,010,511	$37,161,322	$7,031,425	$2,566,594

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
JUNE 30, 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	$1,401,303	$51,166,304	7.9	92.1	69.5	24.9	1.8	3.9
2	JPMORGAN CHASE BANK NA	OH	2,152,006	50,975,537	8.3	91.7	69.6	22.0	4.8	3.5
3	GOLDMAN SACHS BANK USA	NY	151,219	41,333,695	17.9	82.1	94.1	5.4	0.1	0.4
4	BANK OF AMERICA NA	NC	1,705,928	22,781,285	6.5	93.5	73.6	21.0	1.7	3.6
5	WELLS FARGO BANK NA	SD	1,731,937	8,080,498	3.9	96.1	91.6	5.2	2.8	0.4
6	HSBC NA	VA	191,932	4,206,371	4.8	95.2	70.6	24.5	2.5	2.4
7	MORGAN STANLEY BANK NA	UT	116,382	1,643,194	1.9	98.1	1.0	98.3	0.0	0.6
8	STATE STREET BANK&TRUST CO	MA	234,889	1,549,730	0.8	99.2	1.0	97.4	1.6	0.0
9	BANK OF NEW YORK MELLON	NY	280,876	845,544	2.5	97.5	37.5	62.3	0.1	0.0
10	PNC BANK NATIONAL ASSN	DE	361,211	455,806	20.0	80.0	93.6	3.7	1.3	1.5
11	U S BANK NATIONAL ASSN	OH	456,910	305,886	1.3	98.7	82.2	15.7	0.4	1.7
12	NORTHERN TRUST CO	IL	125,198	299,000	0.0	100.0	4.6	95.3	0.1	0.0
13	SUNTRUST BANK	GA	202,481	262,852	16.1	83.9	77.3	2.5	18.2	2.0
14	TD BANK NATIONAL ASSN	DE	268,185	177,400	0.0	100.0	94.6	5.1	0.0	0.3
15	MUFG UNION BANK NA	CA	116,715	134,158	1.7	98.3	92.6	4.4	3.0	0.0
16	CAPITAL ONE NATIONAL ASSN	VA	280,232	111,910	0.2	99.8	92.0	0.6	4.6	2.7
17	KEYBANK NATIONAL ASSN	OH	133,555	91,539	4.8	95.2	91.3	7.7	0.6	0.5
18	CITIZENS BANK NATIONAL ASSN	RI	120,138	87,022	0.0	100.0	85.4	11.6	0.0	2.9
19	REGIONS BANK	AL	123,716	82,583	7.5	92.5	92.2	2.5	1.0	4.2
20	FIFTH THIRD BANK	OH	138,698	75,186	0.9	99.1	76.8	13.8	5.2	4.2
21	BRANCH BANKING&TRUST CO	NC	215,274	65,302	2.1	97.9	99.1	0.9	0.0	0.0
22	BOKF NATIONAL ASSN	OK	32,319	57,640	1.4	98.6	95.8	0.6	3.6	0.0
23	COMPASS BANK	AL	83,947	45,633	1.3	98.7	92.7	3.8	3.4	0.1
24	CAPITAL ONE BANK USA NA	VA	108,100	43,660	0.0	100.0	80.6	19.4	0.0	0.0
25	HUNTINGTON NATIONAL BANK	OH	101,280	37,263	0.1	99.9	86.1	4.0	5.2	4.7
TOP 25 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$10,834,431	$184,914,998	$17,897,870	$167,017,128	$139,258,468	$36,493,854	$62	$4,928,856
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			4,409,115	601,276	5,719	595,557	558,984	27,520	585	5,734
TOTAL FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,243,546	185,516,274	17,903,589	167,612,685	139,817,452	36,521,374	647	4,934,591
				(%)	(%)	(%)	(%)	(%)	(%)	(%)
TOP 25 COMMERCIAL BANKS, SAs & TCs: % OF TOTAL COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVE				99.7	9.6	90.0	75.1	19.7	0.0	2.7
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 DERIVAT				100.0	9.7	90.3	75.4	19.7	0.0	2.7

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
JUNE 30, 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	$1,401,303	$51,166,304	$142,010	$88,233	$172,519	$260,752	184
2	JPMORGAN CHASE BANK NA	OH	2,152,006	50,975,537	195,851	133,803	243,358	377,161	193
3	GOLDMAN SACHS BANK USA	NY	151,219	41,333,695	27,125	59,953	71,427	131,380	484
4	BANK OF AMERICA NA	NC	1,705,928	22,781,285	162,892	35,756	69,227	104,983	64
5	WELLS FARGO BANK NA	SD	1,731,937	8,080,498	162,320	15,213	31,700	46,913	29
6	HSBC NA	VA	191,932	4,206,371	26,610	7,410	12,936	20,346	76
7	MORGAN STANLEY BANK NA	UT	116,382	1,643,194	14,807	752	5,370	6,122	41
8	STATE STREET BANK&TRUST CO	MA	234,889	1,549,730	17,155	7,010	10,241	17,251	101
9	BANK OF NEW YORK MELLON	NY	280,876	845,544	20,372	4,778	4,504	9,282	46
10	PNC BANK NATIONAL ASSN	DE	361,211	455,806	34,825	3,008	1,267	4,275	12
11	U S BANK NATIONAL ASSN	OH	456,910	305,886	44,980	858	4,312	5,170	11
12	NORTHERN TRUST CO	IL	125,198	299,000	9,685	1,649	2,474	4,123	43
13	SUNTRUST BANK	GA	202,481	262,852	21,534	1,054	3,096	4,150	19
14	TD BANK NATIONAL ASSN	DE	268,185	177,400	24,491	1,665	1,094	2,759	11
15	MUFG UNION BANK NA	CA	116,715	134,158	14,756	913	351	1,264	9
16	CAPITAL ONE NATIONAL ASSN	VA	280,232	111,910	26,160	838	1,470	2,309	9
17	KEYBANK NATIONAL ASSN	OH	133,555	91,539	14,706	510	285	795	5
18	CITIZENS BANK NATIONAL ASSN	RI	120,138	87,022	13,665	421	640	1,061	8
19	REGIONS BANK	AL	123,716	82,583	14,390	342	659	1,000	7
20	FIFTH THIRD BANK	OH	138,698	75,186	16,292	417	921	1,338	8
21	BRANCH BANKING&TRUST CO	NC	215,274	65,302	23,756	572	518	1,090	5
22	BOKF NATIONAL ASSN	OK	32,319	57,640	3,024	198	193	391	13
23	COMPASS BANK	AL	83,947	45,633	8,915	259	306	566	6
24	CAPITAL ONE BANK USA NA	VA	108,100	43,660	14,818	116	103	219	1
25	HUNTINGTON NATIONAL BANK	OH	101,280	37,263	10,944	318	499	817	7
TOP 25 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$10,834,431	$184,914,998	$1,066,081	$366,046	$639,470	$1,005,516	94
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			4,409,115	601,276	479,950	3,439	4,646	8,085	2
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,243,546	185,516,274	1,546,031	369,485	644,116	1,013,601	66

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
JUNE 30, 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	$1,401,303	$51,166,304	$49,142,778	99.9	$53,379	0.1
2	JPMORGAN CHASE BANK NA	OH	2,152,006	50,975,537	48,844,348	99.3	331,884	0.7
3	GOLDMAN SACHS BANK USA	NY	151,219	41,333,695	41,140,106	99.9	33,976	0.1
4	BANK OF AMERICA NA	NC	1,705,928	22,781,285	21,006,004	95.7	954,299	4.3
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$5,410,456	$166,256,821	$160,133,236	99.1	$1,373,538	0.9
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			9,833,090	19,259,453	17,385,206	91.1	1,689,703	8.9
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,243,546	185,516,274	177,518,442	98.3	3,063,241	1.7

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
JUNE 30, 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	$1,401,303	$51,166,304	$494,382	$490,107	$589	$633	$27,957	$28,326
2	JPMORGAN CHASE BANK NA	OH	2,152,006	50,975,537	786,843	760,052	3,613	3,823	25,275	25,512
3	GOLDMAN SACHS BANK USA	NY	151,219	41,333,695	614,066	576,856	244	133	2,816	2,613
4	BANK OF AMERICA NA	NC	1,705,928	22,781,285	219,283	219,587	22,119	27,020	10,726	10,908
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$5,410,456	$166,256,821	$2,114,574	$2,046,602	$26,565	$31,609	$66,774	$67,359
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			9,833,090	19,259,453	137,495	136,923	9,440	10,608	2,042	2,080
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,243,546	185,516,274	2,252,069	2,183,525	36,005	42,217	68,816	69,439

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
JUNE 30, 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	$1,401,303	$51,166,304	$1,362	$893	$427	$60	$15	($33)
2	JPMORGAN CHASE BANK NA	OH	2,152,006	50,975,537	2,783	847	877	874	56	129
3	GOLDMAN SACHS BANK USA	NY	151,219	41,333,695	288	1,993	(1,728)	(26)	0	49
4	BANK OF AMERICA NA	NC	1,705,928	22,781,285	887	230	335	210	44	68
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$5,410,456	$166,256,821	$5,320	$3,963	($89)	$1,118	$115	$213
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			9,833,090	19,259,453	1,394	(559)	774	4	91	1,084
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,243,546	185,516,274	6,714	3,404	685	1,122	206	1,297

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
JUNE 30, 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	$1,401,303	$51,166,304	$15,583,266	$10,939,640	$6,049,315	$32,572,221	$9,808,312	$1,127,414	$462,694	$11,398,420
2	JPMORGAN CHASE BANK NA	OH	2,152,006	50,975,537	23,182,414	16,160,314	9,177,148	48,519,876	8,040,927	2,111,113	1,079,397	11,231,437
3	GOLDMAN SACHS BANK USA	NY	151,219	41,333,695	12,550,743	11,464,574	8,297,190	32,312,507	879,012	681,916	602,469	2,163,397
4	BANK OF AMERICA NA	NC	1,705,928	22,781,285	9,660,683	5,688,151	3,051,853	18,400,687	3,999,865	563,251	232,152	4,795,268
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$5,410,456	$166,256,821	$60,977,106	$44,252,679	$26,575,506	$131,805,291	$22,728,116	$4,483,694	$2,376,712	$29,588,522
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			9,833,090	19,259,453	4,990,471	4,120,103	3,057,538	12,168,112	4,682,905	329,700	119,481	5,132,085
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,243,546	185,516,274	65,967,577	48,372,782	29,633,044	143,973,403	27,411,021	4,813,394	2,496,193	34,720,607

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
JUNE 30, 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	$1,401,303	$51,166,304	$9,098	$960	$0	$10,058
2	JPMORGAN CHASE BANK NA	OH	2,152,006	50,975,537	19,703	502	0	20,205
3	GOLDMAN SACHS BANK USA	NY	151,219	41,333,695	0	0	0	0
4	BANK OF AMERICA NA	NC	1,705,928	22,781,285	31	0	0	31
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$5,410,456	$166,256,821	$28,832	$1,462	$0	$30,294
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			9,833,090	19,259,453	11,304	778	42	12,123
TOTAL FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,243,546	185,516,274	40,136	2,240	42	42,417

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
JUNE 30, 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	$1,401,303	$51,166,304	$89,485	$33,983	$4,027	$127,495	$269,945	$102,980	$10	$372,935
2	JPMORGAN CHASE BANK NA	OH	2,152,006	50,975,537	674,030	78,798	15,484	768,312	1,530,785	499,846	115,010	2,145,641
3	GOLDMAN SACHS BANK USA	NY	151,219	41,333,695	2,784	1,856	0	4,640	8,123	13,834	4,161	26,118
4	BANK OF AMERICA NA	NC	1,705,928	22,781,285	13,020	3,812	110	16,942	341,041	49,533	1,935	392,509
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$5,410,456	$166,256,821	$779,319	$118,449	$19,621	$917,389	$2,149,894	$666,193	$121,116	$2,937,203
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			9,833,090	19,259,453	39,602	56,122	1,077	96,801	86,578	54,172	5,658	146,408
TOTAL FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,243,546	185,516,274	818,921	174,571	20,698	1,014,190	2,236,472	720,365	126,774	3,083,610

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
JUNE 30, 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	$1,401,303	$51,166,304	$1,970,147	$452,864	$985,840	$67,793	$1,506,497	$142,497	$306,095	$15,058	$463,650
2	JPMORGAN CHASE BANK NA	OH	2,152,006	50,975,537	1,799,305	463,301	650,286	73,317	1,186,904	217,756	355,501	39,144	612,401
3	GOLDMAN SACHS BANK USA	NY	151,219	41,333,695	159,613	34,468	48,296	14,685	97,449	20,617	28,343	13,204	62,164
4	BANK OF AMERICA NA	NC	1,705,928	22,781,285	820,982	265,326	328,876	31,738	625,940	110,388	69,913	14,741	195,042
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$5,410,456	$166,256,821	$4,750,047	$1,215,959	$2,013,298	$187,533	$3,416,790	$491,258	$759,852	$82,147	$1,333,257
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			9,833,090	19,259,453	184,544	18,340	59,868	7,216	85,424	17,418	70,540	11,162	99,119
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,243,546	185,516,274	4,934,591	1,234,299	2,073,166	194,749	3,502,214	508,676	830,392	93,309	1,432,376

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
JUNE 30, 2017, MILLIONS OF DOLLARS

						TOTAL CREDIT DERIVATIVES		PURCHASED				SOLD			
RANK	BANK NAME	STATE	TOTAL ASSETS	TOTAL DERIVATIVES	TOTAL CREDIT DERVATIVES	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	$1,401,303	$49,196,157	$1,970,147	$992,175	$977,972	$914,506	$24,933	$52,736	$0	$911,876	$11,898	$54,198	$0
2	JPMORGAN CHASE BANK NA	OH	2,152,006	49,176,232	1,799,305	918,805	880,500	861,283	17,040	35,746	4,736	834,104	4,389	41,997	10
3	GOLDMAN SACHS BANK USA	NY	151,219	41,174,082	159,613	88,040	71,573	76,008	2,583	9,370	79	60,077	2,126	9,370	0
4	BANK OF AMERICA NA	NC	1,705,928	21,960,303	820,982	410,889	410,093	387,483	9,232	14,174	0	379,834	10,725	19,534	0
5	WELLS FARGO BANK NA	SD	1,731,937	8,046,663	33,835	22,329	11,506	3,110	0	300	18,919	2,352	0	22	9,132
6	HSBC NA	VA	191,932	4,104,098	102,273	53,288	48,985	48,898	4,390	0	0	47,393	1,592	0	0
7	MORGAN STANLEY BANK NA	UT	116,382	1,632,831	10,363	9,863	500	9,863	0	0	0	500	0	0	0
8	STATE STREET BANK&TRUST CO	MA	234,889	1,549,730	0	0	0	0	0	0	0	0	0	0	0
9	BANK OF NEW YORK MELLON	NY	280,876	845,384	160	160	0	160	0	0	0	0	0	0	0
10	PNC BANK NATIONAL ASSN	DE	361,211	449,190	6,616	2,690	3,926	15	0	0	2,675	0	0	0	3,926
11	U S BANK NATIONAL ASSN	OH	456,910	300,649	5,237	1,516	3,721	25	0	0	1,491	0	0	0	3,721
12	NORTHERN TRUST CO	IL	125,198	299,000	0	0	0	0	0	0	0	0	0	0	0
13	SUNTRUST BANK	GA	202,481	257,476	5,376	2,922	2,454	475	2,442	0	5	0	2,442	0	12
14	TD BANK NATIONAL ASSN	DE	268,185	176,898	502	497	5	497	0	0	0	5	0	0	0
15	MUFG UNION BANK NA	CA	116,715	134,158	0	0	0	0	0	0	0	0	0	0	0
16	CAPITAL ONE NATIONAL ASSN	VA	280,232	108,861	3,049	950	2,098	0	0	0	950	0	0	0	2,098
17	KEYBANK NATIONAL ASSN	OH	133,555	91,114	425	310	115	310	0	0	0	22	93	0	0
18	CITIZENS BANK NATIONAL ASSN	RI	120,138	84,456	2,566	0	2,566	0	0	0	0	0	0	0	2,566
19	REGIONS BANK	AL	123,716	79,086	3,497	875	2,623	38	0	0	837	38	0	0	2,585
20	FIFTH THIRD BANK	OH	138,698	72,050	3,135	515	2,621	0	0	0	515	0	0	0	2,621
21	BRANCH BANKING&TRUST CO	NC	215,274	65,302	0	0	0	0	0	0	0	0	0	0	0
22	BOKF NATIONAL ASSN	OK	32,319	57,639	1	1	1	1	0	0	0	1	0	0	0
23	COMPASS BANK	AL	83,947	45,599	35	0	35	0	0	0	0	35	0	0	0
24	CAPITAL ONE BANK USA NA	VA	108,100	43,660	0	0	0	0	0	0	0	0	0	0	0
25	HUNTINGTON NATIONAL BANK	OH	101,280	35,523	1,740	1,112	627	0	0	0	1,112	0	0	0	627
TOP 25 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$10,834,431	$179,986,142	$4,928,856	$2,506,936	$2,421,920	$2,302,671	$60,620	$112,326	$31,319	$2,236,235	$33,265	$125,121	$27,299
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			4,409,115	595,542	5,734	2,266	3,468	6	78	0	2,182	325	2	0	3,141
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,243,546	180,581,683	4,934,591	2,509,202	2,425,388	2,302,677	60,698	112,326	33,501	2,236,560	33,266	125,121	30,441
					(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
TOP 25 COMMERCIAL BANKS, SAs & TCs: % OF TOTAL COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES					99.9	50.8	49.1	46.7	1.2	2.3	0.6	45.3	0.7	2.5	0.6
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	50.8	49.2	46.7	1.2	2.3	0.7	45.3	0.7	2.5	0.6

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
JUNE 30, 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	$750
Total gross notional amount of all other derivatives held for trading	$116
Total gross notional amount of interest rate derivatives not held for trading	$8,260
Total gross notional amount of all other derivatives not held for trading	$171

Call Report Schedule RC-R	
A. Notional principal amounts of over-the-counter derivative contracts covered by the regulatory capital rules:	
a. Interest rate	$5,010
b. Foreign exchange rate and gold	$0
c. Credit (investment grade reference asset)	$8
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	$178
b. Foreign exchange rate and gold	$0
c. Credit (investment grade reference asset)	$0
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	$49

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