Office of the Comptroller of the Currency

Quarterly Report on Bank Trading and Derivatives Activities

Third Quarter 2016

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Executive Summary

- Insured U.S. commercial banks and savings associations (collectively, banks) reported trading revenue of $6.4 billion in the third quarter of 2016, $0.6 billion less (8.6 percent) than in the previous quarter and $1.1 billion higher (20.8 percent) than a year earlier (see page 4).
- Credit exposure from derivatives decreased in the third quarter of 2016 as compared to the second quarter. Net current credit exposure (NCCE) decreased $24.0 billion, or 4.7 percent, to $481.7 billion (see page 8).
- Trading risk, as measured by value-at-risk (VaR), decreased in the third quarter of 2016. Total average VaR across the top five dealer banking companies decreased $21.0 million, or 7.1 percent, to $274.0 million (see page 11).
- Derivative notional amounts decreased in the third quarter by $12.4 trillion, or 6.5 percent, to $177.5 trillion (see page 14).
- Derivative contracts remained concentrated in interest rate products, which represented 74.9 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. A total of 1,438 insured U.S. commercial banks and savings associations reported derivative activities at the end of the third quarter of 2016. A small group of large financial institutions continues to dominate derivative activity in the U.S. commercial banking system. During the third quarter of 2016, four large commercial banks represented 89.7 percent of the total banking industry notional amounts and 84.4 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.

Revenue

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

Insured U.S. commercial banks and savings associations reported $6.4 billion in trading revenue in the third quarter of 2016, $0.6 billion less (8.6 percent) than in the previous quarter and $1.1 billion more (20.8 percent) than a year earlier (see table 1).

Relative to the second quarter of 2016, third quarter trading revenue declined. Combined interest rate and foreign exchange (FX) revenue led the decline, with revenue decreasing $0.4 billion to $5.3 billion. Since dealers often use interest rate contracts to hedge exposures in FX derivatives, it is useful to view these categories collectively.

After a slow start to the year, bank trading revenue over the past two quarters has brought year-to-date trading revenue near historical averages. Trading results for the second and third quarters of 2016 were the second highest recorded for each respective quarter since 2000.

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

	2016 Q3	2016 Q2	Q/Q Change	Q/Q % Change	2015 Q3	Y/Y Change	Y/Y % Change
Interest Rate	$2,960	$1,904	$1,056	55.4%	$2,578	$382	14.8%
Foreign Exchange	$2,294	$3,736	-$1,442	-38.6%	$1,931	$363	18.8%
Equity	$729	$972	-$243	-25.0%	$49	$680	1393.6%
Commodity & Other	$354	$161	$192	119.5%	$402	-$48	-12.0%
Credit	$86	$257	-$171	-66.4%	$357	-$270	-75.8%
Total Trading Revenue	$6,423	$7,031	-$608	-8.6%	$5,316	$1,107	20.8%

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 $14.8 billion in the third quarter of 2016 was $0.3 billion (1.9 percent) lower than in the previous quarter. A $1.7 billion decrease in combined credit and commodity revenue, offset by an increase of $1.4 billion in combined equity, interest rate and FX revenue, drove the decrease in trading revenue from the previous quarter. Year-over-year holding company trading results improved by $5.2 billion (54.7 percent), with combined interest rate and FX trading revenue increasing $3.9 billion (103 percent).

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

	2016 Q3	2016 Q2	Q/Q Change	Q/Q % Change	2015 Q3	Y/Y Change	Y/Y % Change
Interest Rate	$4,561	$2,973	$1,589	53.4%	$2,403	$2,158	89.8%
Foreign Exchange	$3,164	$4,318	-$1,155	-26.7%	$1,393	$1,770	127.1%
Equity	$4,657	$3,612	$1,045	28.9%	$3,196	$1,461	45.7%
Commodity & Other	$784	$1,491	-$707	-47.4%	$2,146	-$1,362	-63.5%
Credit	$1,670	$2,724	-$1,053	-38.7%	$452	$1,218	269.3%
Total HC Trading Revenue	$14,837	$15,118	-$282	-1.9%	$9,591	$5,246	54.7%

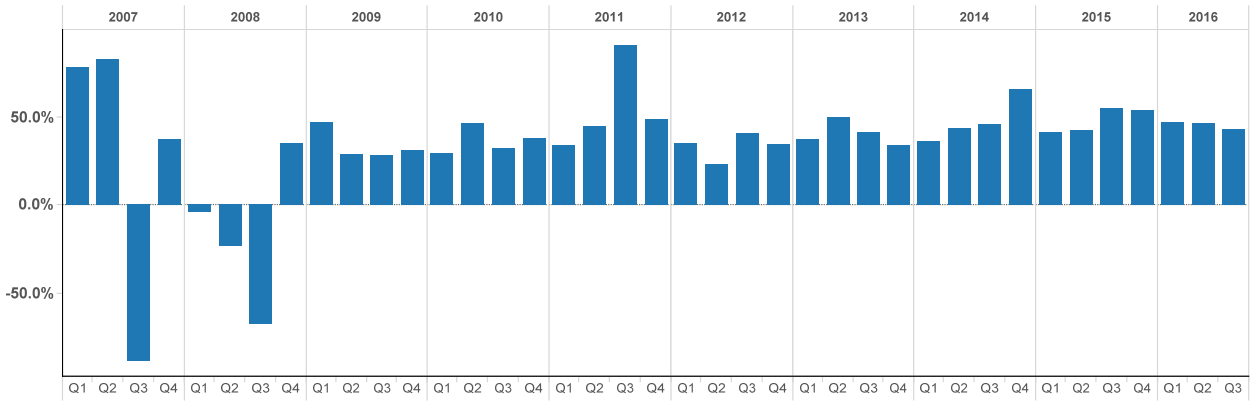
Source: Consolidated Financial Statements for Holding Companies—FR Y-9C, Schedule HI

Bank Trading Revenue as a Percent 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 the 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 third quarter of 2016, banks generated 43.3 percent of consolidated holding company trading revenue, down from 45.5 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 $0.5 trillion (12.6 percent) in the third quarter of 2016 to $3.6 trillion, driven by a 12.9 percent decrease in receivables from interest rate and FX contracts (see table 3). Because interest rate contracts make up 80.1 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 increase in GNFVs matched the change in GPFV. Derivative payables, GNFV, decreased $0.5 trillion (12.9 percent) to $3.5 trillion during the quarter, driven by decreases in payables on interest rate and FX contracts.

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

	2016 Q3	2016 Q2	Q/Q Change	Q/Q % Change	2015 Q3	Y/Y Change	Y/Y % Change
Interest Rate	$2,853	$3,120	-$267	-8.6%	$2,491	$362	14.5%
Foreign Exchange	$481	$706	-$225	-31.8%	$569	-$89	-15.6%
Equity	$96	$101	-$5	-4.9%	$118	-$22	-18.3%
Commodity & Other	$42	$51	-$9	-18.2%	$63	-$21	-33.0%
Credit	$91	$101	-$10	-9.8%	$131	-$40	-30.4%
Gross Positive Fair Value	**$3,563**	**$4,079**	**-$516**	**-12.6%**	**$3,372**	**$192**	**5.7%**

	2016 Q3	2016 Q2	Q/Q Change	Q/Q % Change	2015 Q3	Y/Y Change	Y/Y % Change
Interest Rate	$2,776	$3,045	-$269	-8.8%	$2,414	$362	15.0%
Foreign Exchange	$467	$694	-$227	-32.7%	$585	-$117	-20.0%
Equity	$95	$95	$0	0.0%	$110	-$15	-13.9%
Commodity & Other	$44	$54	-$10	-18.9%	$69	-$25	-36.6%
Credit	$91	$100	-$9	-9.3%	$126	-$36	-28.2%
Gross Negative Fair Value	**$3,473**	**$3,988**	**-$516**	**-12.9%**	**$3,305**	**$168**	**5.1%**

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 typically 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 $24.0 billion

(4.7 percent) to $481.7 billion in the third quarter of 2016 (see table 5).[1] Legally enforceable netting agreements allowed banks to reduce GPFV exposures by 86.5 percent ($3.1 trillion) in the third quarter of 2016.

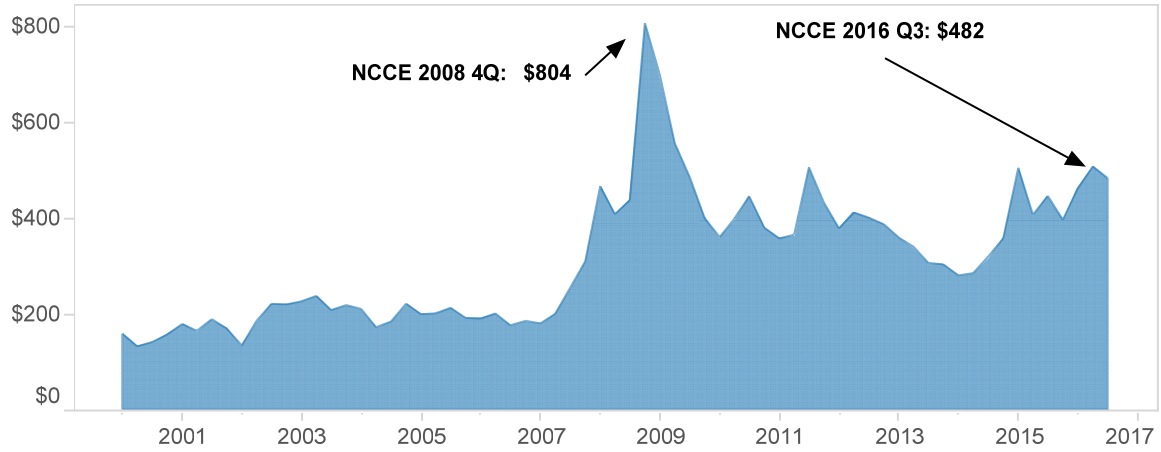
Table 5. Net Current Credit Exposure, in Billions of Dollars

	2016 Q3	2016 Q2	Q/Q Change	Q/Q % Change
Gross Positive Fair Value	$3,563	$4,079	-$516	-12.6%
NCCE RC-R	$482	$506	-$24	-4.7%
Netting Benefit RC-R	$3,082	$3,573	-$492	-13.8%
Netting % RC-R	86.5%	87.6%	-1.1%	

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 $2.9 trillion at the end of the third quarter of 2016. On September 30, 2016, exposure from credit contracts of $91.1 billion was $1.0 trillion lower (91.7 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.

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 (51.0 percent) and corporations and other counterparties (39.5 percent) (see table 6). Relative to the second quarter of 2016, the third quarter of 2016 saw an increase in the percentage of total credit exposure to banks and securities firms (from 49.0 percent to 51.0 percent), and a decrease

[1] 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. The recent change to reflect central counterparty exposures in RC-R, however, has led to a convergence in the two schedules. This report uses RC-R to measure NCCE.

in the percentage of total credit exposure to corporations and other counterparties (from 42.3 percent to 39.5 percent).

The combined exposure to hedge funds, sovereign governments, and monoline financial firms was small (9.5 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 (7.4 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	Corporations & All Other Counterparties
2016	Q3	51.0%	0.1%	2.0%	7.4%	39.5%
2016	Q2	49.0%	0.1%	2.1%	6.5%	42.3%
2016	Q1	49.7%	0.1%	2.2%	6.7%	41.4%
2015	Q3	52.6%	0.1%	2.2%	6.0%	39.1%
2014	Q3	54.0%	0.1%	2.3%	6.9%	36.7%

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 95.1 percent of their total NCCE at the end of the third quarter of 2016, up from 86.2 percent in the second 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 103.1 percent to 107.2 percent. Collateral held against hedge fund exposures increased in the third quarter, and coverage remains very high at 461.7 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 Corporations & All Other Counterparties	FV/NCCE%
2016	Q3	107.2%	0.7%	461.7%	26.4%	73.9%	95.1%
2016	Q2	103.1%	4.6%	368.4%	26.7%	62.4%	86.2%
2016	Q1	94.6%	0.0%	378.8%	20.1%	65.5%	83.7%
2015	Q3	99.6%	0.0%	388.1%	15.3%	64.5%	87.0%
2014	Q3	97.8%	6.2%	345.0%	12.7%	50.3%	80.0%

Source: Call report, Schedule RC-L

Collateral quality held by banks was very high and liquid during the quarter, with 76.1 percent held in cash (both U.S. dollar and non-dollar) and an additional 7.7 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	Corporate Bonds	Equity Securities	All Other Collateral
2016	Q3	42.8%	33.3%	5.7%	2.0%	1.4%	5.2%	9.6%
2016	Q2	44.2%	33.3%	5.2%	2.2%	1.3%	4.9%	8.8%
2016	Q1	45.7%	32.2%	4.9%	1.9%	1.2%	4.9%	9.0%
2015	Q3	44.8%	30.6%	4.8%	1.7%	1.5%	5.1%	11.6%
2014	Q3	45.0%	33.0%	2.3%	3.0%	0.8%	1.7%	14.2%

Source: Call report, Schedule RC-L

Credit quality metrics for derivative exposures improved in the third quarter of 2016, as banks reported net charge-offs of $6.5 million, compared to net charge-offs of $18.6 million in the second quarter of 2016 (see graph 8 in the appendix). The number of banks reporting charge-offs decreased from 16 to 12 banks. Net charge-offs in the third quarter of 2016 represented 0.001 percent of the NCCE from derivative contracts. For comparison purposes, commercial and industrial (C&I) loan net charge-offs decreased $76.7 million, or 3.5 percent, to $2.1 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. 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 Sachs	Morgan Stanley	Total
2016 Q3 VaR	$43	$85	$47	$57	$42	$274
2016 Q2 VaR	$45	$88	$54	$62	$46	$295
Q/Q Change	-$2	-$3	-$7	-$5	-$4	-$21
Q/Q % Change	-4.4%	-3.4%	-13.0%	-8.1%	-8.7%	-7.1%
Equity Capital	$254,331	$231,575	$270,083	$87,110	$77,149	$920,248
2015 Net Income	$61,568	$45,535	$41,107	$18,137	$17,941	$184,288
Avg VaR/Equity	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%
Avg VaR/Net Income	0.1%	0.2%	0.1%	0.3%	0.3%	0.2%

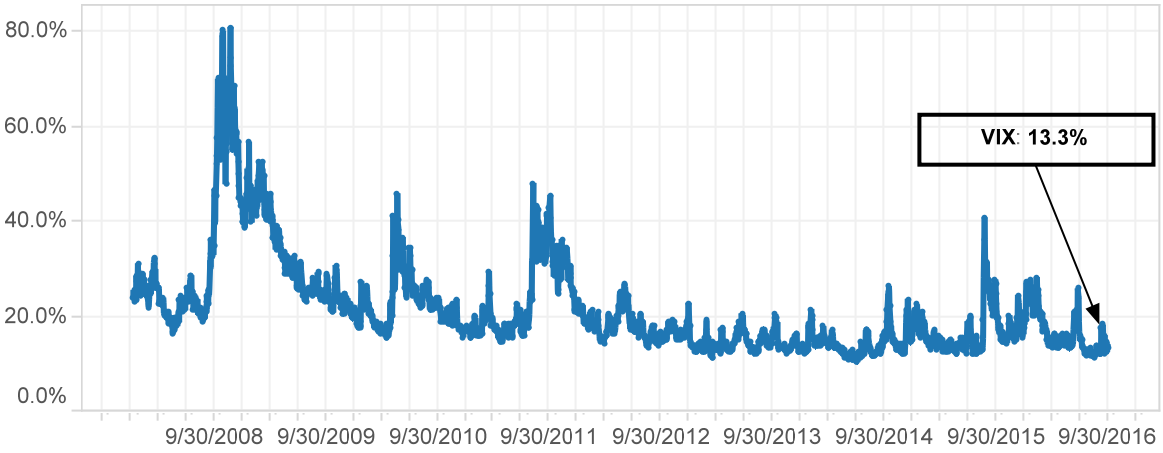
Source: 10K and 10Q U.S. Securities and Exchange Commission reports

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,[2] 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)

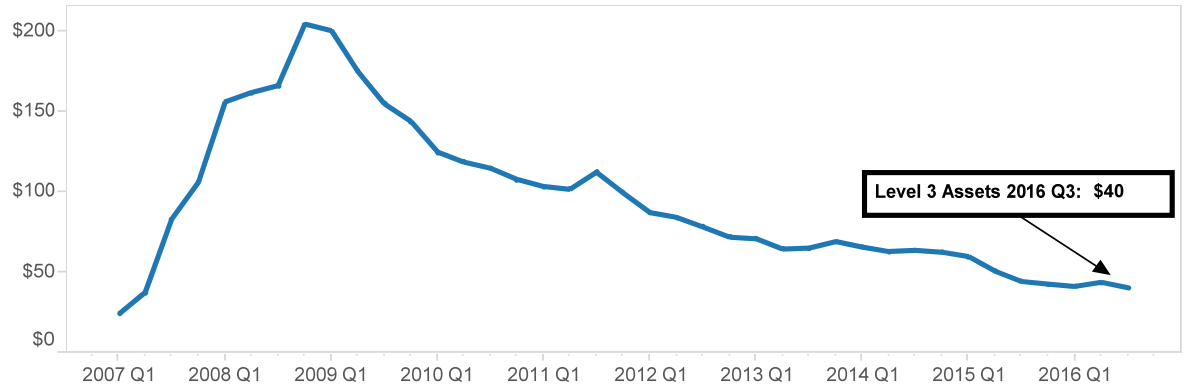


Source: Bloomberg

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 third quarter of 2016, banks held $40.0 billion of level 3 trading assets, down 7.8 percent from the previous quarter, and 8.9 percent lower than a year ago. Level 3 assets are $164.1 billion (80.4 percent) lower than the peak level from 2008.

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



Source: Call reports, Schedule RC-Q

[2] VIX is the trademarked ticker symbol for the Chicago Board Options Exchange SPX Volatility Index.

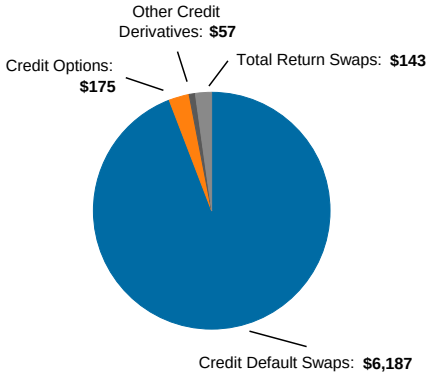
Credit Derivatives

The notional amounts outstanding of credit derivatives decreased $0.3 trillion (4.2 percent) in the third quarter of 2016 to $6.6 trillion. Contracts referencing sub-investment-grade firms increased $19.1 billion, while contracts referencing investment-grade firms decreased $310.0 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 $6.2 trillion (94.3 percent) of all credit derivative notional amounts (see also tables 11 and 12 in the appendix).

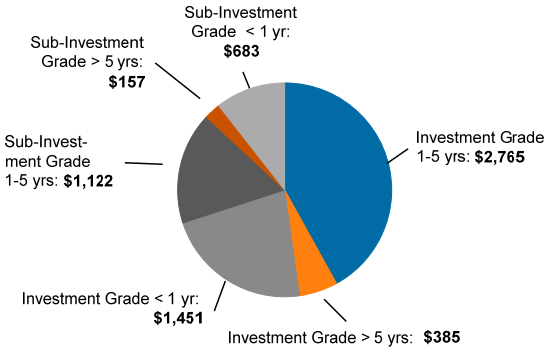
Contracts referencing investment-grade entities with maturities from one to five years, which decreased by $335.8 billion (10.8 percent) in the quarter, represented the largest segment of the market at 42.1 percent of all credit derivative notional amounts. Contracts of all tenors that reference investment-grade entities are 70.1 percent of the market (see chart on right in figure 5 and graph 14 in the appendix).

Figure 5. 2016 Q3 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 59 insured U.S. commercial banks and savings associations that sold credit protection (i.e., assumed credit risk) was $3.2 trillion, down $134.6 billion (4.0 percent) from the second quarter of 2016. The notional amount for the 50 banks that purchased credit protection (i.e., hedged credit risk) was $3.3 trillion, $156.4 billion lower (4.5 percent) than in the second 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 risks.

The notional amount of derivative contracts held by insured U.S. commercial banks and savings associations in the third quarter decreased by $12.4 trillion (6.5 percent) to $177.5 trillion from the previous quarter (see table 10). The decrease was driven by a $10.8 trillion decrease in

interest rate notional amounts. An $8.9 trillion decrease in swaps contracts (7.9 percent) to $103.0 trillion drove the decrease in interest rate notional amounts (see table 11). Swap contracts remained the dominant derivatives product at 58.0 percent of all notional amounts.

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

	2016 Q3	2016 Q2	Q/Q Change	Q/Q % Change	2015 Q3	Y/Y Change	Y/Y % Change
Interest Rate	$132,993	$143,795	-$10,802	-7.5%	$148,665	-$15,672	-10.5%
Foreign Exchange	$33,858	$35,185	-$1,327	-3.8%	$32,175	$1,683	5.2%
Equity	$2,735	$2,672	$62	2.3%	$2,509	$226	9.0%
Commodities	$1,312	$1,328	-$16	-1.2%	$1,390	-$77	-5.6%
Credit	$6,562	$6,853	-$291	-4.2%	$8,198	-$1,635	-19.9%
Total Notional	$177,461	$189,834	-$12,373	-6.5%	$192,937	-$15,476	-8.0%

Source: Call reports, Schedule RC-L

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

	2016 Q3	2016 Q2	Q/Q Change	Q/Q % Change	2015 Q3	Y/Y Change	Y/Y % Change
Futures & Forwards	$36,958	$38,790	-$1,832	-4.7%	$38,988	-$2,030	-5.2%
Swaps	$103,014	$111,901	-$8,887	-7.9%	$112,697	-$9,683	-8.6%
Options	$30,926	$32,289	-$1,363	-4.2%	$33,054	-$2,128	-6.4%
Credit Derivatives	$6,562	$6,853	-$291	-4.2%	$8,198	-$1,635	-19.9%
Total Notional	$177,461	$189,834	-$12,373	-6.5%	$192,937	-$15,476	-8.0%

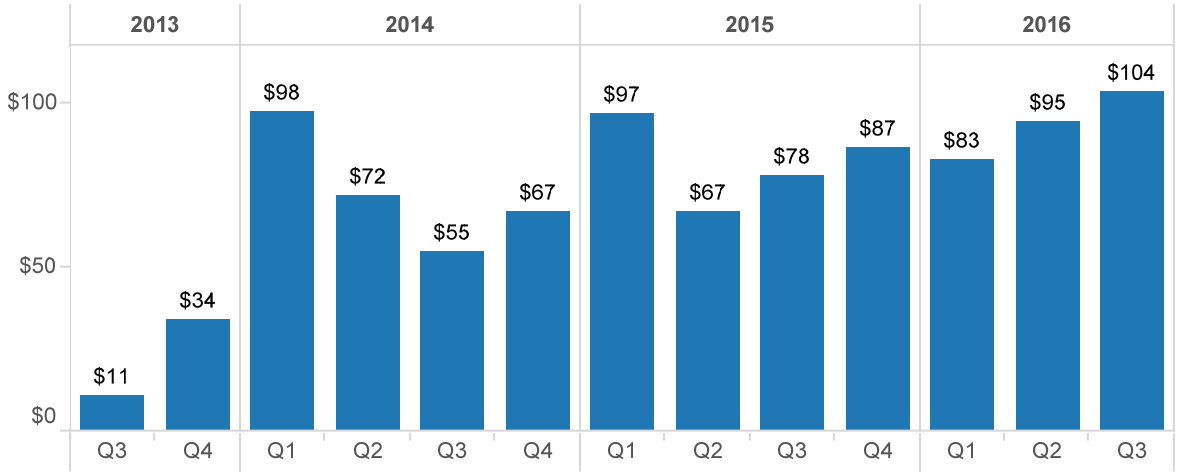
Source: Call reports, Schedule RC-L

The four banks with the most derivative activity hold 89.7 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).

Interest rate contracts continued to represent the majority of the derivative market at $133.0 trillion or 74.9 percent of total derivatives during the third quarter of 2016 (see table 10). FX and credit derivatives were 19.1 percent and 3.7 percent of total notional amounts, respectively. Commodity and equity derivatives collectively were only 2.3 percent of total notional derivatives.

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 risks and capital costs for large banks. Trade compression activities increased in the third quarter of 2016, 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 third quarter of 2016, 39.0 percent of the derivative market was centrally cleared (see table 12). From a market factor perspective, 49.2 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 22.8 percent of investment grade and 17.2 percent of non-investment-grade transactions were centrally cleared.

Centrally cleared derivative transactions were heavily concentrated at qualified central counterparties, with 92.1 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
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 organized exchanges.

Potential future exposure: 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 uses 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): Measures the market's expectation of stock market volatility of S&P 500 index options over the next 30-day period.

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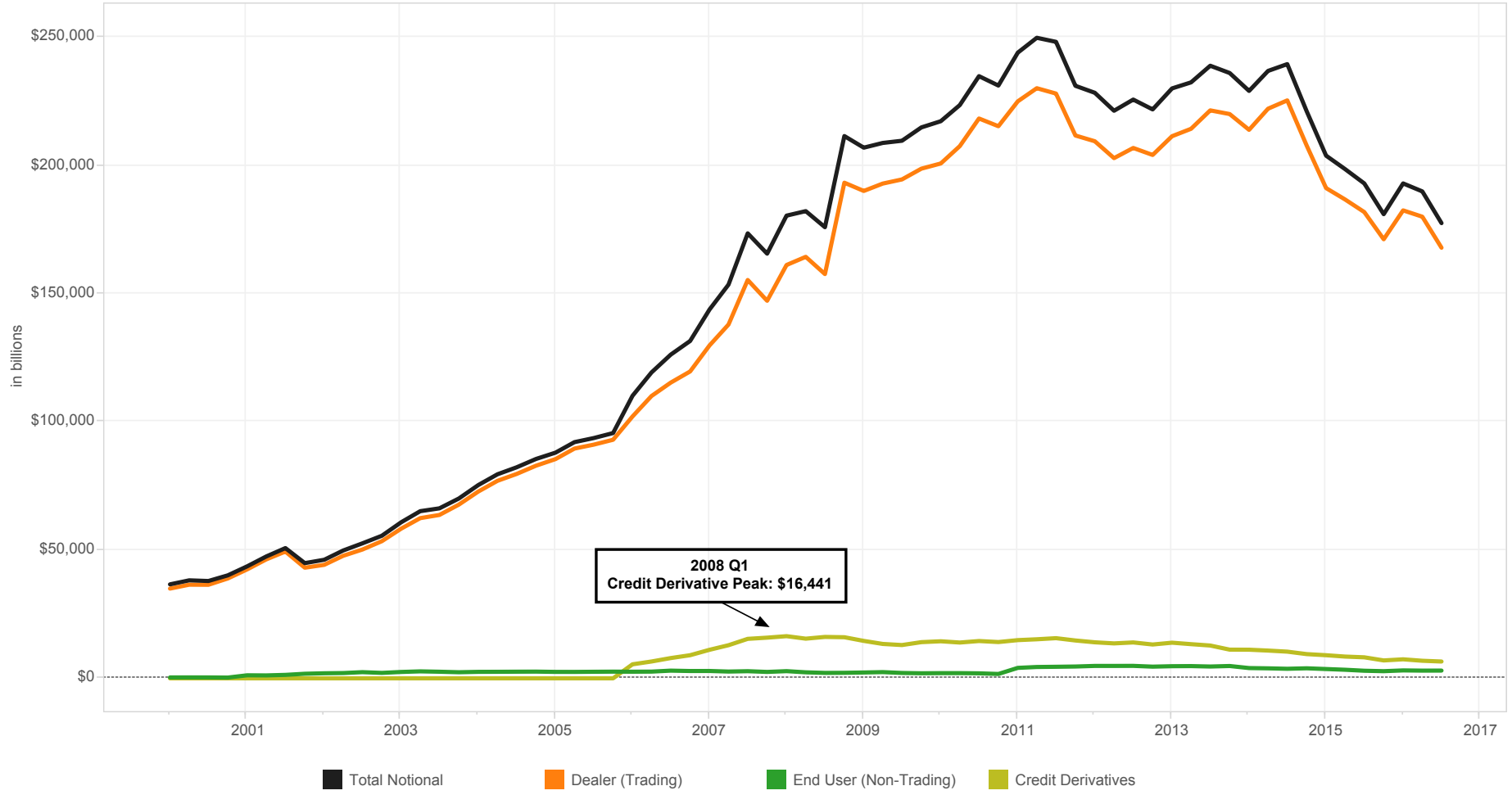
Graph 1
Derivative Notional Amounts by Type
Insured U.S. Commercial Banks and Savings Associations



In billions of dollars

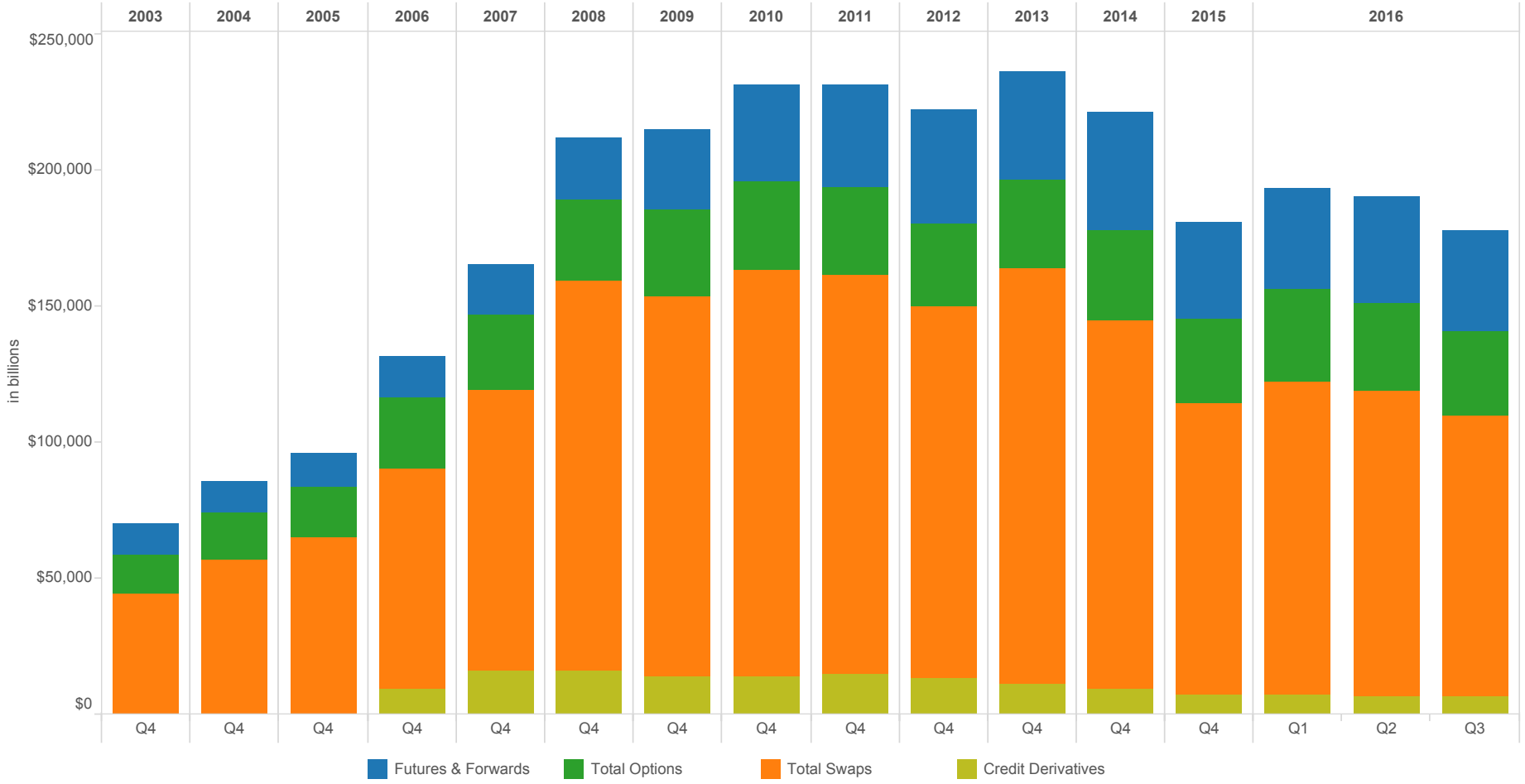
	2013				2014				2015				2016		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Total Notional	$229,987	$232,342	$238,827	$235,992	$229,011	$236,808	$239,459	$221,078	$203,771	$198,523	$192,937	$180,953	$192,948	$189,834	$177,461
Dealer (Trading)	211,353	214,240	221,425	219,990	213,838	222,078	225,318	207,711	191,123	186,686	181,777	171,173	182,438	179,971	167,873
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
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

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

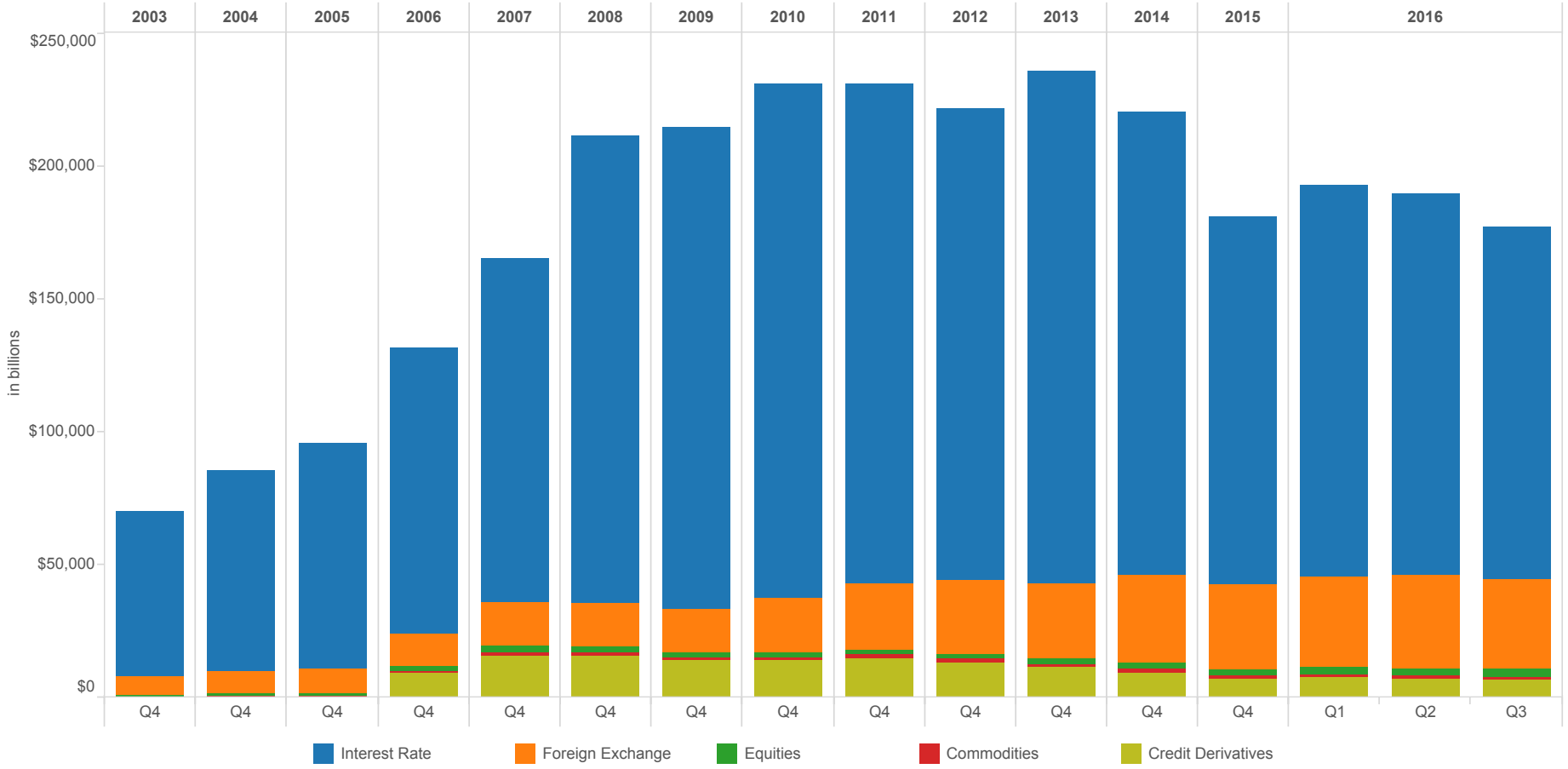


In billions of dollars

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q1	Q2	Q3
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	$37,151	$38,790	$36,958
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	33,564	32,289	30,926
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	114,814	111,901	103,014
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	7,418	6,853	6,562
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	180,953	192,948	189,834	177,461

*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

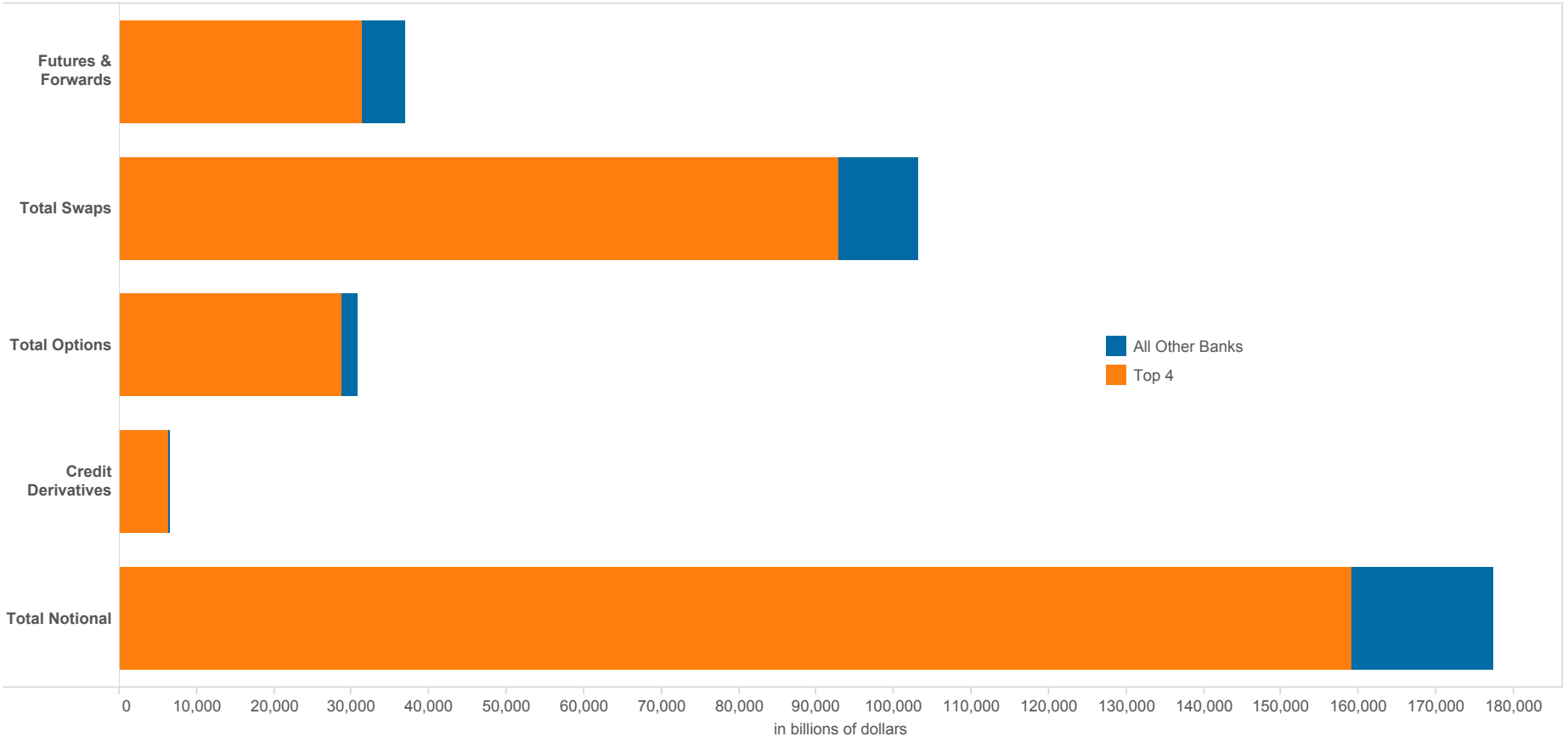
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q1	Q2	Q3
Interest Rate	$61,876	$75,533	$84,530	$107,435	$129,491	$175,895	$181,454	$193,399	$187,866	$177,650	$193,084	$174,687	$138,363	$147,218	$143,795	$132,993
Foreign Exchange	7,185	8,607	9,289	11,900	16,614	16,224	16,555	20,990	25,436	27,587	28,480	33,183	32,100	34,568	35,185	33,858
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	2,534	2,672	2,735
Commodities	223	284	552	893	1,067	1,061	979	1,195	1,330	1,397	1,209	1,222	1,108	1,210	1,328	1,312
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	7,418	6,853	6,562
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	180,953	192,948	189,834	177,461

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	$31,338	$5,620	$36,958
Total Swaps	92,823	10,191	103,014
Total Options	28,739	2,187	30,926
Credit Derivatives	6,343	220	6,562
Total Notional	159,243	18,217	177,461

***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

	2010				2011				2012				2013				2014				2015				2016		
	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
JPMorgan Chase Bank NA	266	257	267	265	275	274	285	256	250	246	247	229	219	216	205	183	183	189	181	177	229	228	219	209	225	221	216
Bank of America NA	164	166	177	174	182	182	187	176	149	141	139	132	129	125	121	117	109	107	107	93	100	95	91	85	81	77	68
Citibank NA	180	171	197	182	185	203	195	177	172	171	170	170	165	164	161	148	147	156	190	173	187	184	181	166	180	181	188
Goldman Sachs	666	685	638	628	781	788	801	794	751	738	727	705	703	693	719	741	689	620	539	516	547	563	530	516	482	467	433

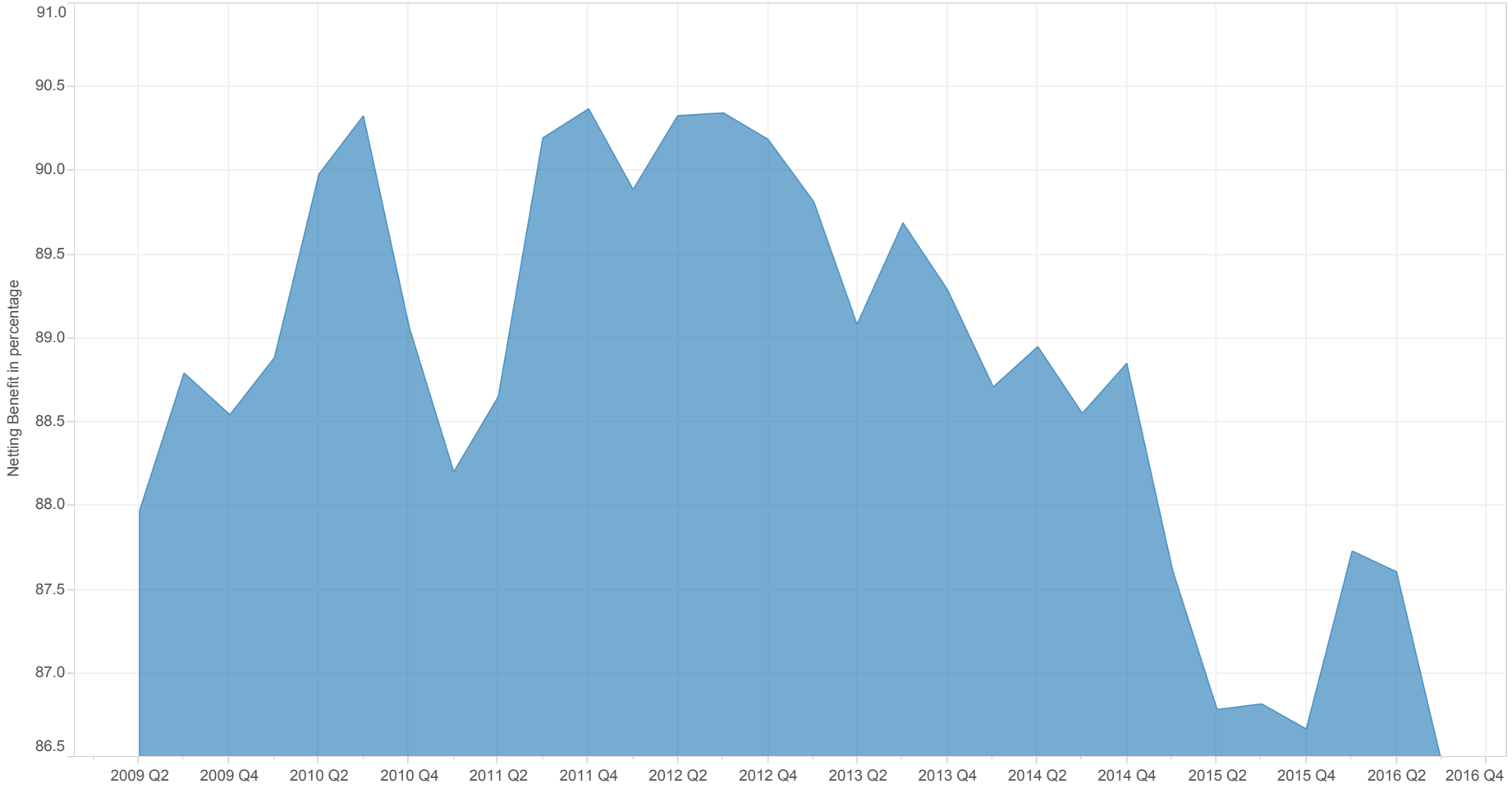
TOTAL	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
	285	287	282	278	304	310	313	297	284	282	281	271	261	258	262	262	248	240	224	211	238	242	232	223	226	222	217

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)

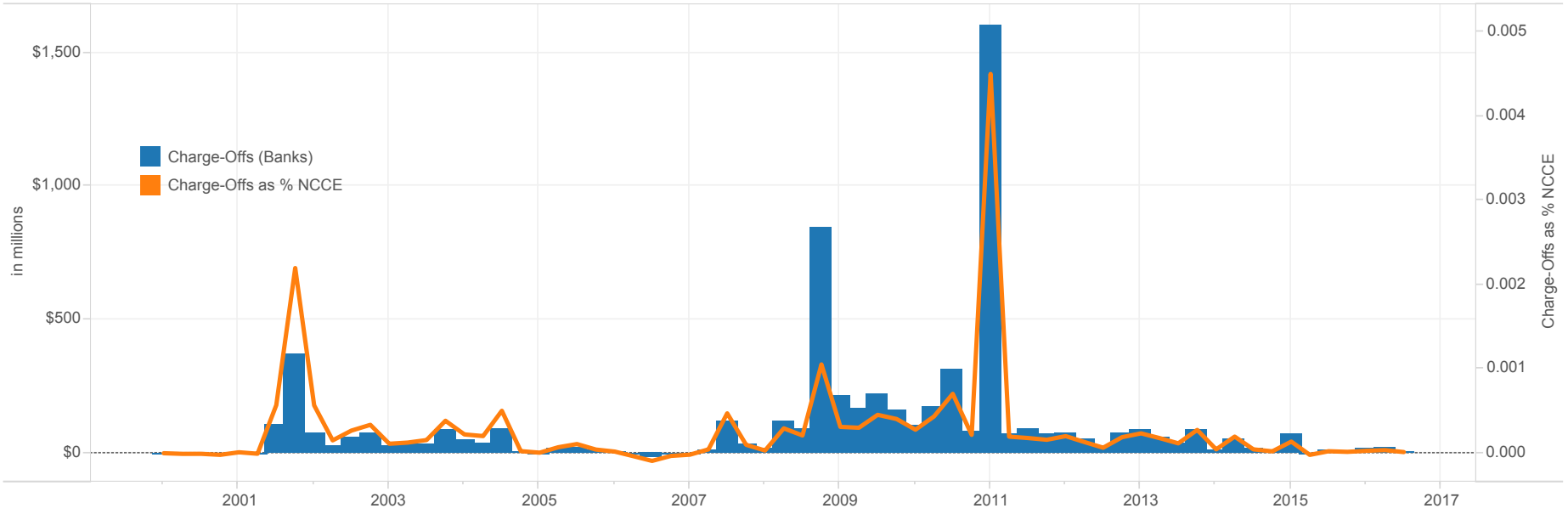
2009			2010				2011				2012				2013				2014				2015				2016		
Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
88.0	88.8	88.5	88.9	90.0	90.3	89.1	88.2	88.6	90.2	90.4	89.9	90.3	90.3	90.2	89.8	89.1	89.7	89.3	88.7	88.9	88.6	88.8	87.6	86.8	86.8	86.7	87.7	87.6	86.5

***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

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

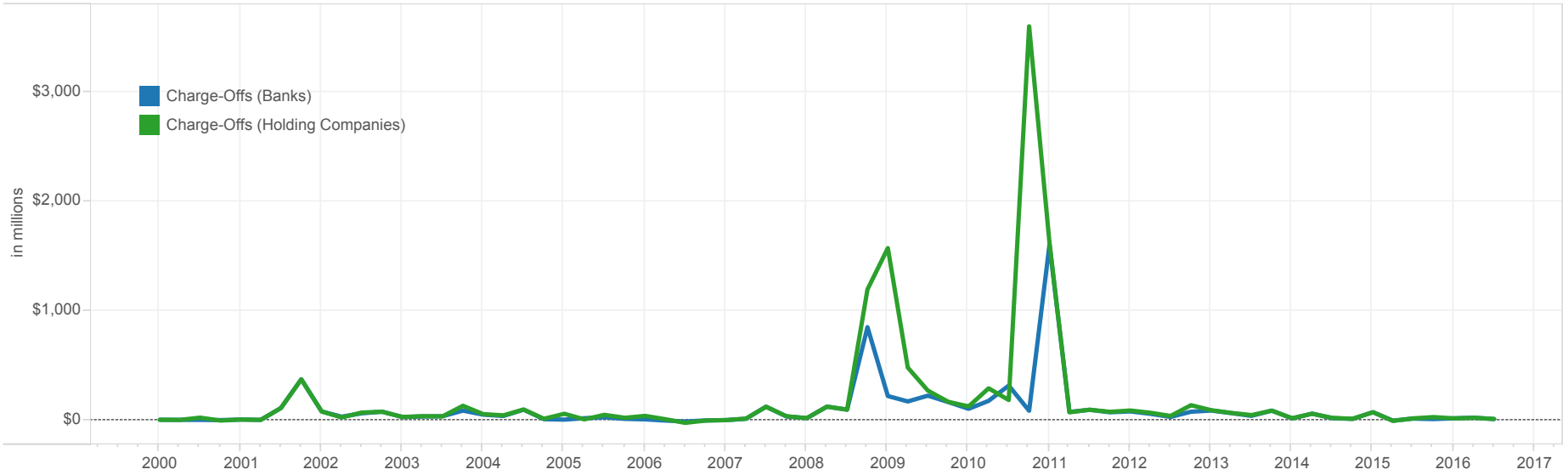
	2016		
	Q1	Q2	Q3
Charge-Offs (Banks)	13.30	18.56	6.48

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

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

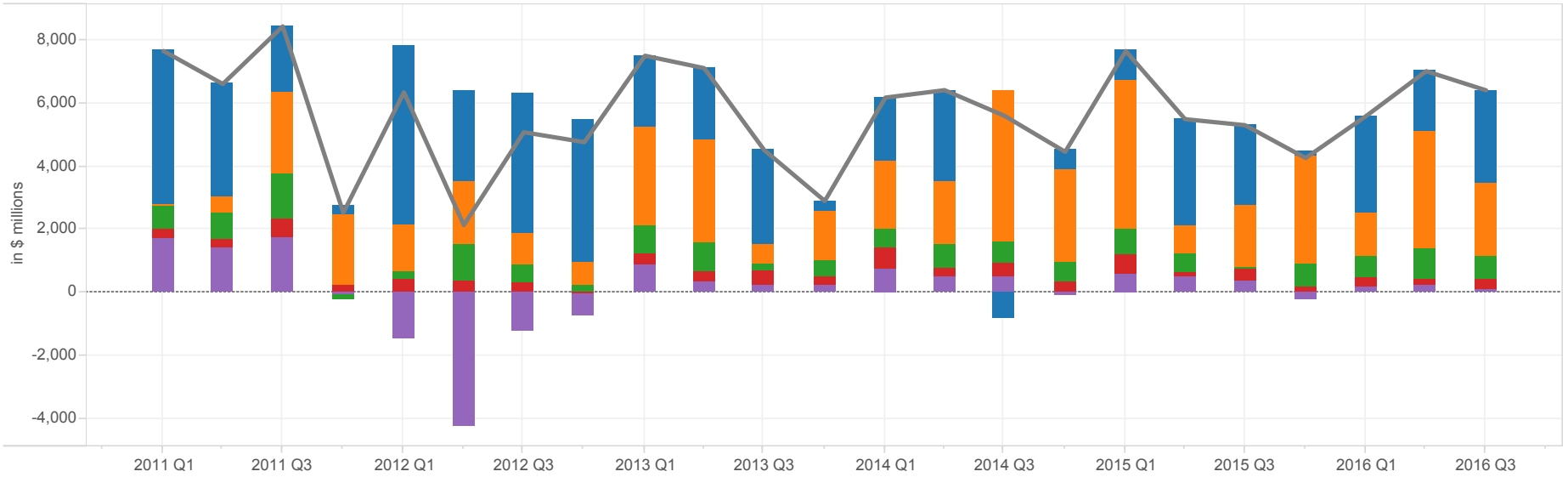
	2012				2013				2014				2015				2016		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Charge-Offs (Banks)	76.3	54.3	26.1	73.4	84.3	60.7	35.8	83.5	12.8	55.9	14.5	7.9	69.3	-7.9	10.4	6.4	13.3	18.6	6.5
Charge-Offs (Holding Companies)	84.6	64.0	34.9	133.4	87.2	62.6	42.9	83.4	13.6	55.6	17.2	9.1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

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

Graph 9

Quarterly Trading Revenue (Cash and Derivative Positions)*

Insured U.S. Commercial Banks and Savings Associations



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

In millions of dollars

	3Q2016	Average Past 12 Q3's	Past 8 Quarter Average	Past 8 Quarter High	Past 8 Quarter Low	Since 2000 Average	Max Since 2000	Min Since 2000
Interest Rate	2,960	1,930	1,653	3,406	-5,282	1,669	9,291	-819
Foreign Exchange	2,294	2,411	2,895	4,830	-1,069	1,807	4,830	855
Equity	729	416	650	972	-1,059	551	1,830	49
Commodity & Other	353	412	316	587	-307	224	789	129
Credit	86	300	253	624	-10,237	-208	2,727	-222
Total Trading Revenue	6,423	5,469	5,768	7,669	-10,580	4,042	10,217	4,274

In millions of dollars

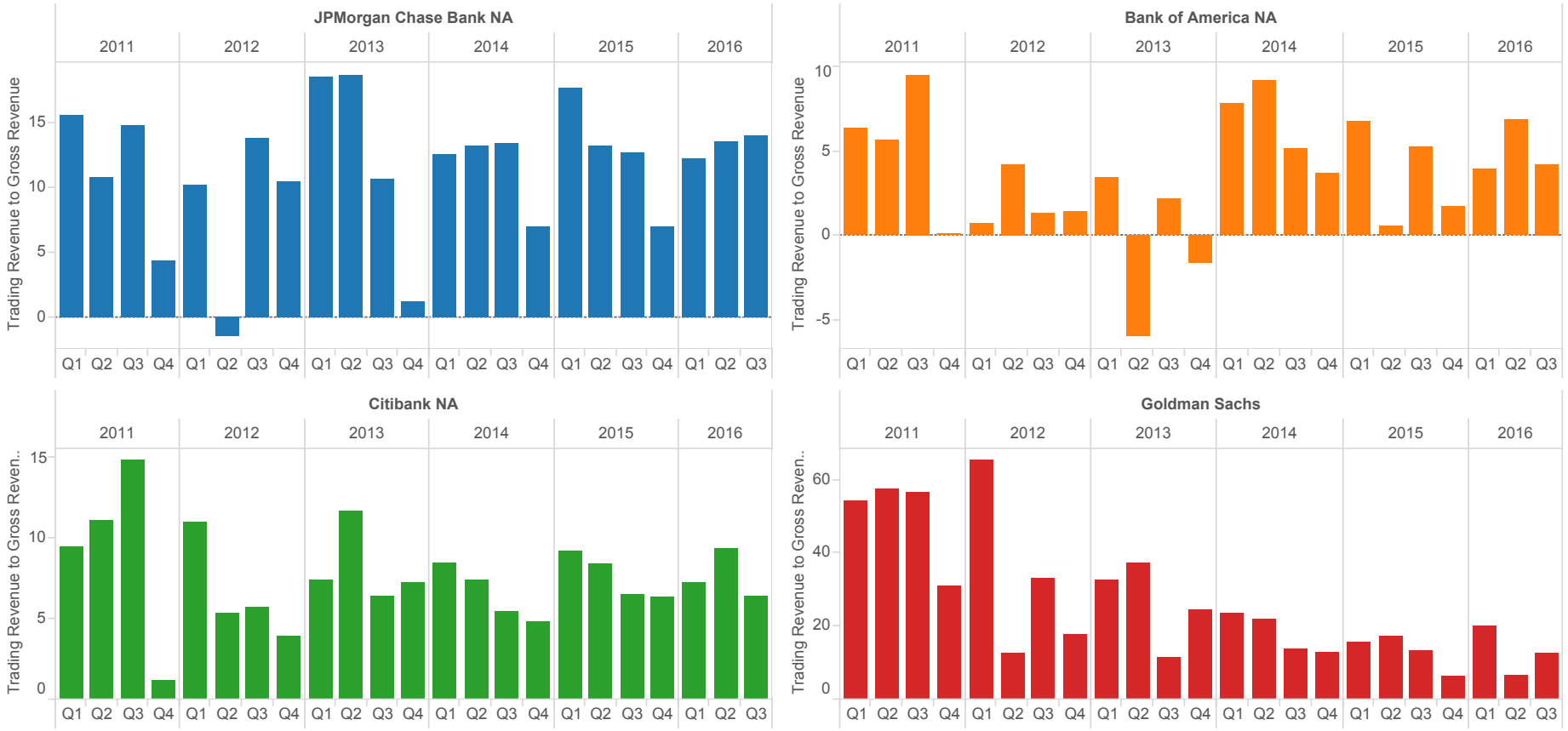
	2011				2012				2013				2014				2015				2016		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Interest Rate	4,855	3,611	2,093	257	5,627	2,870	4,457	4,521	2,243	2,268	3,002	360	2,015	2,883	-819	664	958	3,406	2,578	155	3,070	1,904	2,960
Foreign Exchange	35	491	2,595	2,235	1,505	1,990	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
Equity	762	808	1,442	-111	260	1,140	508	187	838	924	233	491	612	726	654	650	797	587	49	742	674	972	729
Commodity & Other	319	307	558	259	412	390	350	30	364	292	481	265	672	293	411	335	587	129	402	198	271	161	353
Credit	1,699	1,406	1,764	-102	-1,444	-4,243	-1,242	-713	890	339	222	245	756	500	535	-79	624	530	357	-222	185	257	86
Total Trading Revenue	7,671	6,624	8,451	2,539	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	4,274	5,608	7,030	6,423

*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 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)*

	2011				2012				2013				2014				2015				2016		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
JPMorgan Chase Bank NA	15.64	10.84	14.82	4.33	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
Bank of America NA	6.34	5.60	9.48	0.07	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
Citibank NA	9.44	11.11	14.79	1.18	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
Goldman Sachs	54.26	57.61	56.57	30.93	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

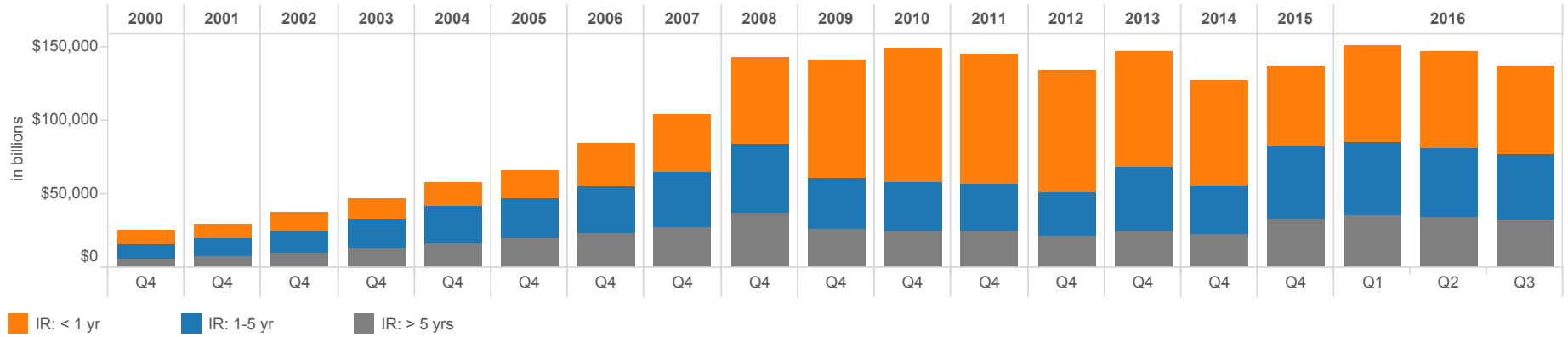
TOTAL	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
	11.67	10.32	14.16	2.36	8.70	2.78	7.86	5.72	10.42	9.56	6.72	2.77	10.06	10.45	8.53	5.35	11.68	7.62	8.41	5.03	8.37	10.15	8.56

*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

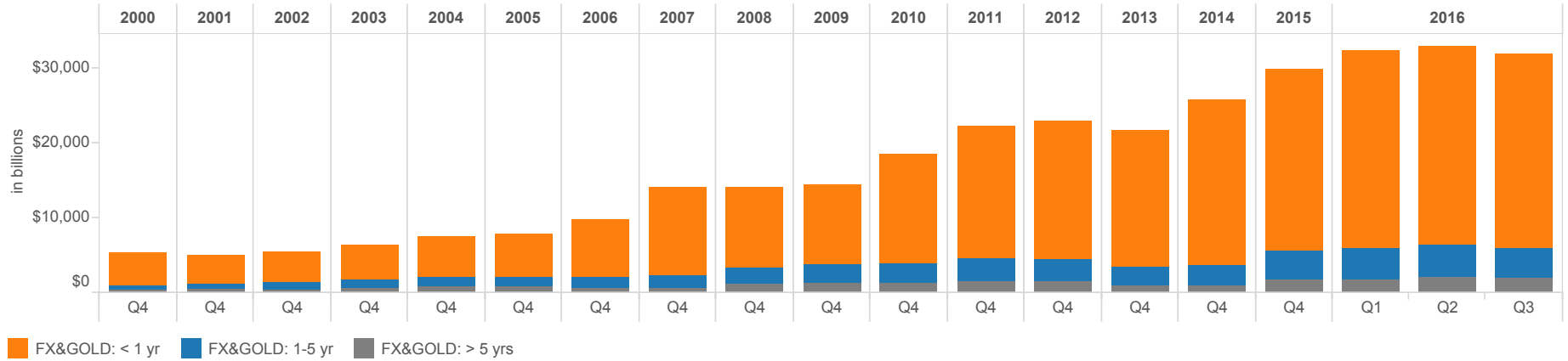
Graph 11

Notional Amounts of Interest Rate and Foreign Exchange + Gold Contracts by Maturity
Insured U.S. Commercial Banks and Savings Associations

Interest Rate



FX & Gold



In billions of dollars

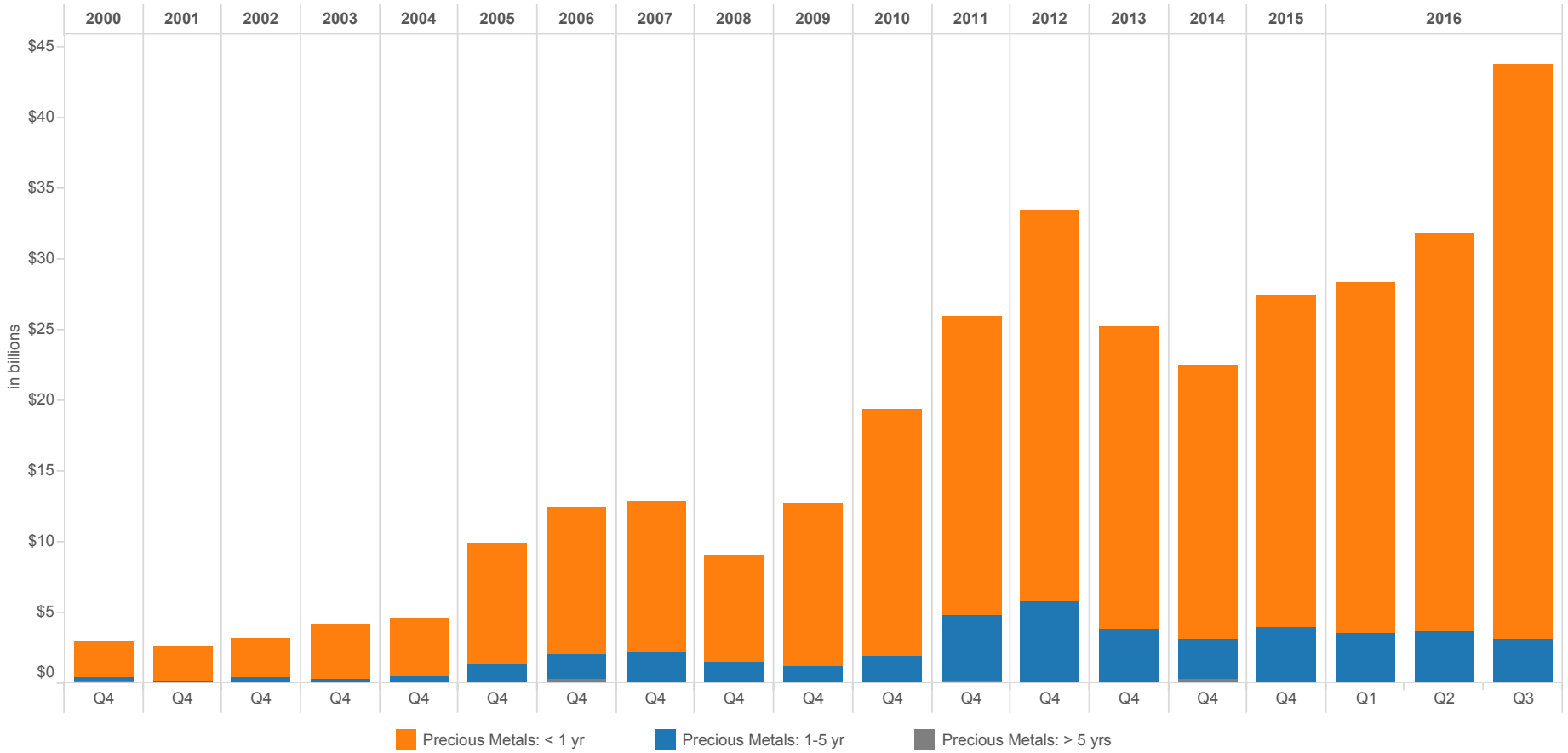
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q1	Q2	Q3
IR: < 1 yr	$9,708	$10,379	$12,982	$13,581	$15,921	$18,483	$29,552	$39,085	$58,618	$81,236	$90,843	$87,812	$82,948	$77,758	$71,808	$55,047	$65,651	$66,424	$58,875
IR: 1-5 yr	9,925	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	49,407	50,715	47,002	45,383
IR: > 5 yrs	5,843	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	34,846	33,931	32,522
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	26,232	26,623	25,798
FX&GOLD: 1-5 yr	626	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	4,082	4,112	4,096
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	1,819	2,150	1,901

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

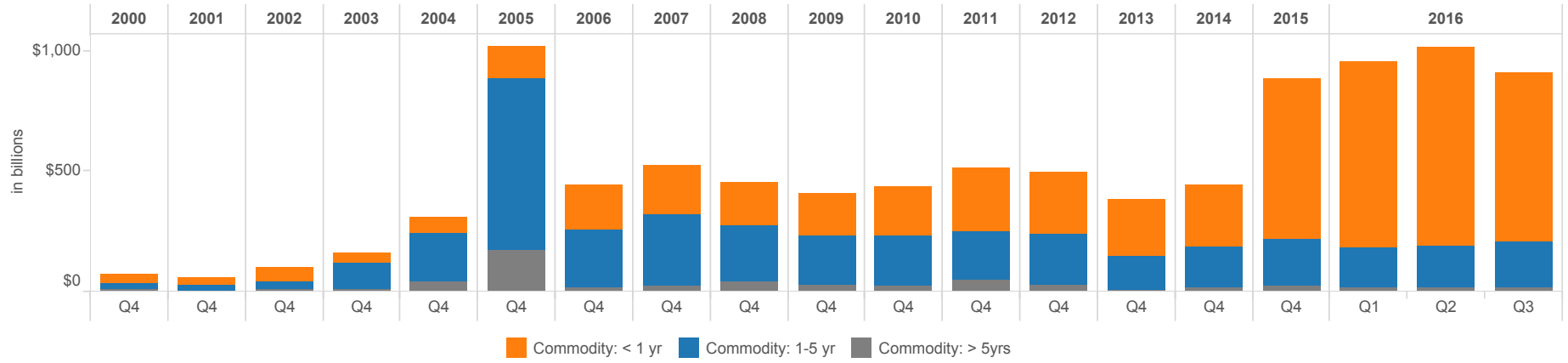
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q1	Q2	Q3
Precious Metals: < 1 yr	2.51	2.44	2.72	3.87	4.04	8.59	10.35	10.72	7.55	11.55	17.47	21.12	27.68	21.41	19.29	23.51	24.88	28.19	40.59
Precious Metals: 1-5 yr	0.25	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	3.53	3.68	3.19
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	0.01	0.02	0.00

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

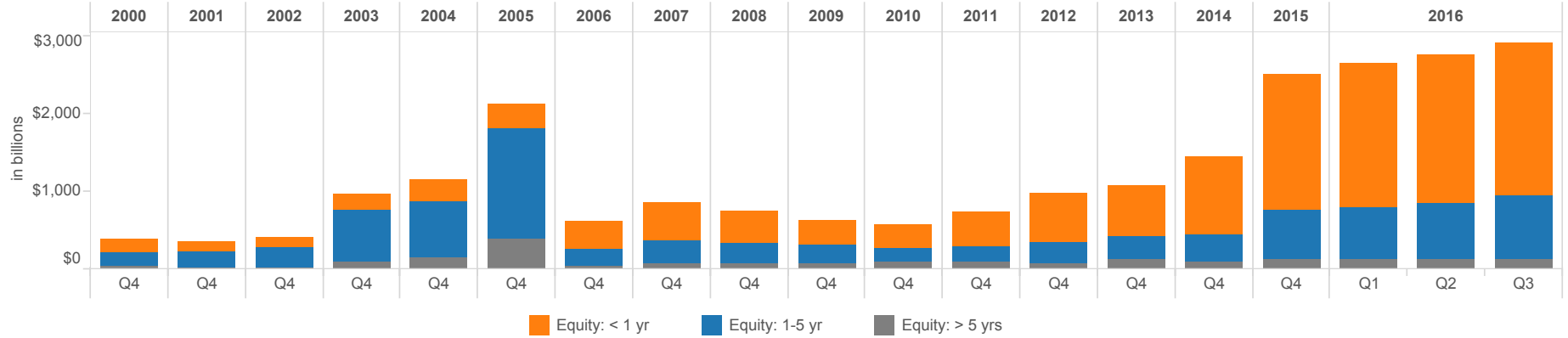
Graph 13

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

Commodity



Equity



In billions of dollars

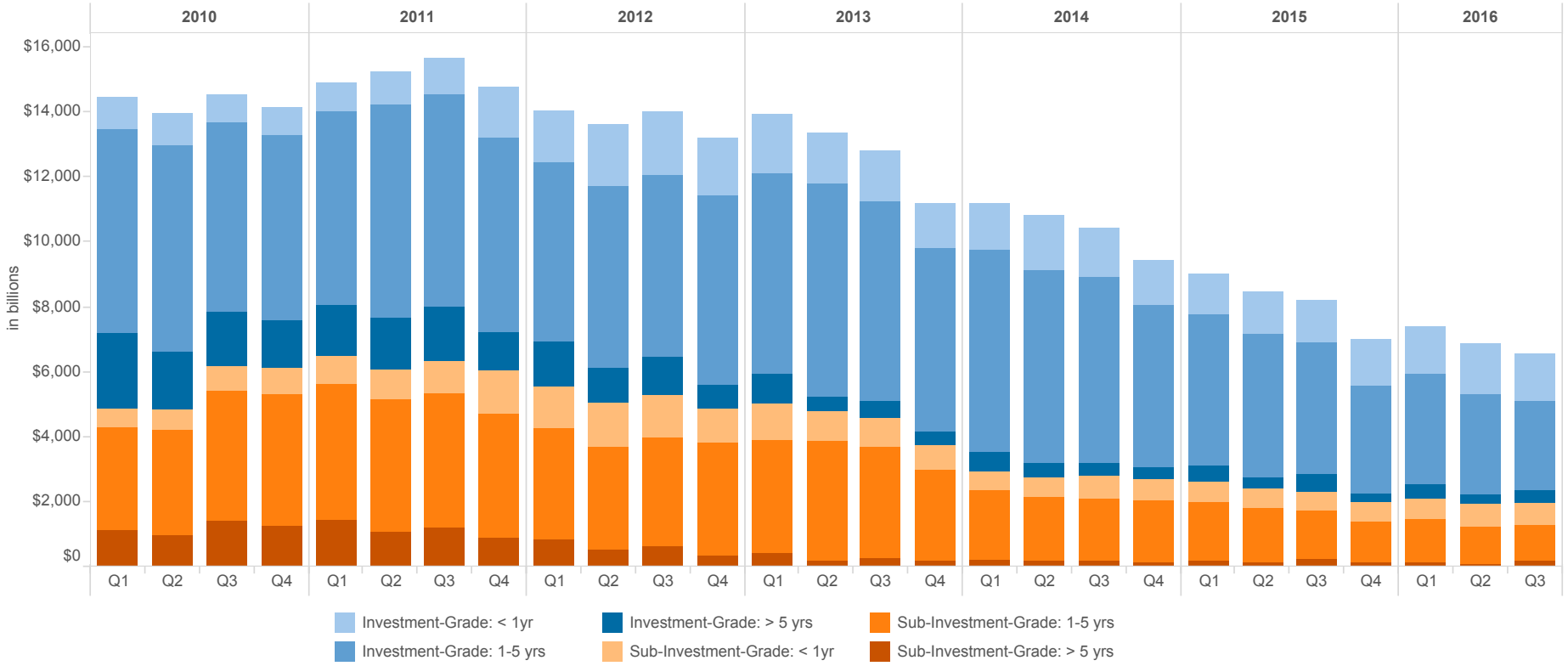
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q1	Q2	Q3
Commodity: < 1 yr	$36	$31	$55	$43	$64	$133	$185	$206	$179	$176	$203	$261	$261	$235	$257	$668	$773	$827	$702
Commodity: 1-5 yr	27	25	35	103	205	707	235	297	233	198	209	209	208	144	164	197	166	173	193
Commodity: > 5yrs	11	2	9	14	40	175	20	25	43	33	25	46	28	6	20	22	17	20	15
Equity: < 1 yr	162	121	127	197	273	321	341	473	409	312	296	427	627	645	996	1,743	1,841	1,907	1,954
Equity: 1-5 yr	180	209	249	674	736	1,428	221	297	256	228	191	210	262	291	352	628	675	710	822
Equity: > 5 yrs	38	18	25	84	140	383	45	70	72	82	85	94	82	136	101	130	129	134	129

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

	2012				2013				2014				2015				2016		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Investment-Grade: < 1yr	$1,607	$1,921	$1,943	$1,757	$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
Investment-Grade: 1-5 yrs	5,519	5,567	5,580	5,832	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
Investment-Grade: > 5 yrs	1,386	1,104	1,200	736	948	455	552	409	577	448	433	382	508	359	520	281	457	262	385
Total Investment Grade	$8,513	$8,592	$8,723	$8,326	$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

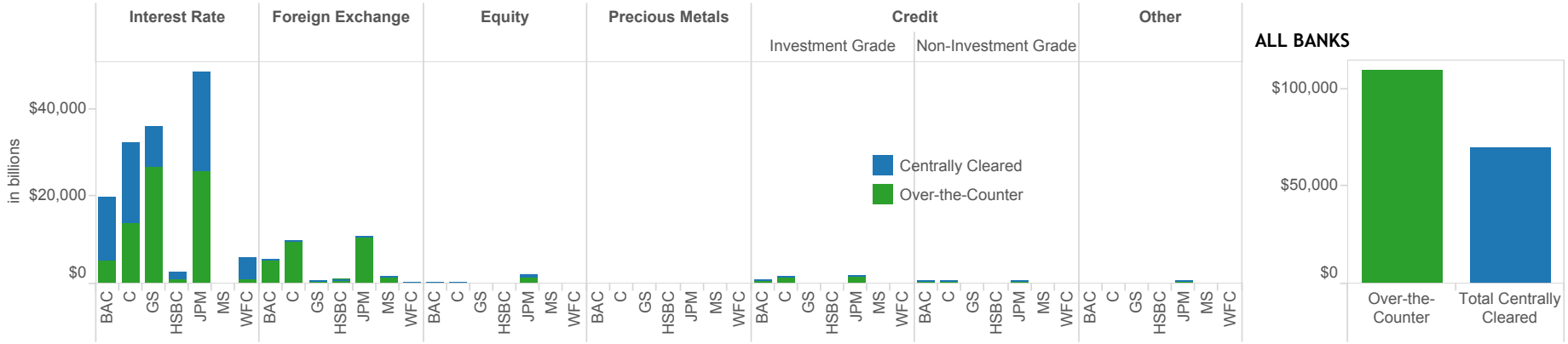
	2012				2013				2014				2015				2016		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Sub-Investment-Grade: < 1yr	1,290	1,353	1,303	1,040	1,090	933	879	765	619	642	671	658	596	562	569	607	622	683	683
Sub-Investment-Grade: 1-5 yrs	3,413	3,139	3,349	3,473	3,491	3,656	3,424	2,792	2,127	1,960	1,948	1,887	1,813	1,673	1,518	1,271	1,313	1,159	1,122
Sub-Investment-Grade: > 5 yrs	835	541	623	352	414	197	262	179	200	160	157	140	194	152	213	119	155	101	157
Total Sub-Investment Grade	$5,538	$5,032	$5,275	$4,865	$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

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

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	22,764	25,713	49	10,924	493	1,346	0	17	428	1,562	116	571	61	707	21,802	40,372	62,174
C	18,364	14,032	74	9,938	30	332	2	7	168	1,594	61	482	55	81	19,850	23,694	43,544
BAC	14,412	5,258	50	5,513	55	276	0	0	334	584	102	431	0	19	12,076	10,765	22,841
GS	9,410	26,619	0	825	0	63	0	0	0	85	0	64	0	12	7,996	25,633	33,629
HSBC	1,581	975	0	1,069	0	38	0	6	5	26	10	38	0	0	1,630	2,175	3,804
WFC	4,773	1,091	0	381	29	51	0	1	0	1	4	16	23	21	5,270	1,618	6,888
MS	0	0	4	1,745	0	0	0	0	0	6	0	2	0	0	4	1,260	1,264
Grand Total	71,305	73,688	177	30,394	607	2,106	2	30	935	3,858	293	1,604	139	841	68,628	105,517	174,145
ALL OTHER	1,086	1,278	2	2,313	0	38	0	0	0	8	0	6	1	39	1,160	3,551	4,711
TOTAL	72,391	74,966	178	32,707	607	2,144	2	30	935	3,866	293	1,610	140	880	69,788	109,068	178,856

% of Total

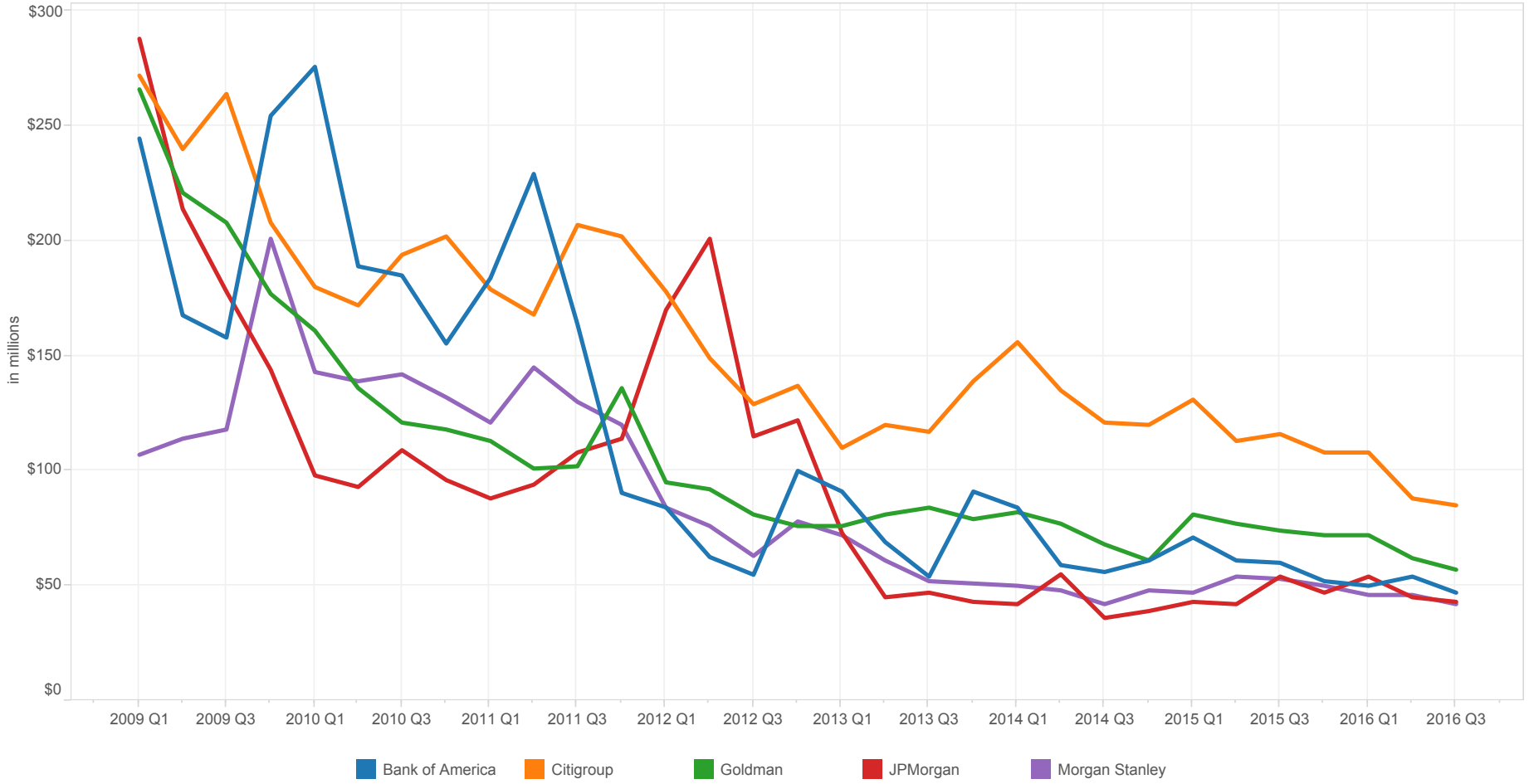
Bank Name	Interest Rate		Foreign Exchange		Equity		Precious Metals		Credit				Other		Total Centrally Cleared as a % of Total Notional	Total Over-the-Counter as a % of Total Notional
									Investment Grade		Non-Investment Grade					
	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	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	47%	53%	0%	100%	27%	73%	0%	100%	22%	78%	17%	83%	8%	92%	35%	65%
C	57%	43%	1%	99%	8%	92%	21%	79%	10%	90%	11%	89%	41%	59%	46%	54%
BAC	73%	27%	1%	99%	17%	83%			36%	64%	19%	81%	0%	100%	53%	47%
GS	26%	74%	0%	100%	0%	100%			0%	100%	0%	100%	0%	100%	24%	76%
HSBC	62%	38%	0%	100%	0%	100%	0%	100%	16%	84%	21%	79%	0%	100%	43%	57%
WFC	81%	19%	0%	100%	36%	64%	0%	100%	1%	99%	20%	80%	52%	48%	77%	23%
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

	2010				2011				2012				2013				2014				2015				2016		
	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
Bank of America	$276	$189	$185	$155	$184	$229	$164	$90	$84	$63	$55	$100	$91	$69	$54	$91	$84	$59	$56	$61	$71	$61	$60	$52	$50	$54	$47
Citigroup	180	172	194	202	179	168	207	202	178	149	129	137	110	120	117	139	156	135	121	120	131	113	116	108	108	88	85
Goldman	161	136	121	118	113	101	102	136	95	92	81	76	76	81	84	79	82	77	68	61	81	77	74	72	72	62	57
JPMorgan	98	93	109	96	88	94	108	114	170	201	115	122	73	45	47	43	42	55	36	39	43	42	54	47	54	45	43
Morgan Stanley	143	139	142	132	121	145	130	120	84	76	63	78	72	61	52	51	50	48	42	48	47	54	53	50	46	46	42
Total	858	729	751	703	685	737	711	662	611	581	443	513	422	376	354	403	414	374	323	329	373	347	357	329	330	295	274

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
SEPTEMBER 30, 2016, 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	JPMORGAN CHASE BANK NA	OH	$2,118,497	$51,076,843	$1,717,391	$1,534,088	$9,372,373	$27,976,834	$7,949,033	$2,527,124	$813,073
2	CITIBANK NATIONAL ASSN	SD	1,356,393	48,140,013	1,849,151	1,217,161	5,797,209	29,259,714	7,726,404	2,290,374	929,212
3	GOLDMAN SACHS BANK USA	NY	158,429	38,053,388	1,678,475	2,657,532	3,655,190	23,915,446	5,981,165	165,580	10,394
4	BANK OF AMERICA NA	NC	1,659,793	21,973,095	1,129,973	157,706	6,138,719	11,670,687	1,516,309	1,359,701	464,550
5	WELLS FARGO BANK NA	SD	1,740,819	7,363,786	151,507	124,452	1,679,355	4,605,886	769,337	33,249	6,376
6	HSBC NA	VA	203,705	4,327,467	206,155	26,321	670,420	2,918,964	360,793	144,815	27,429
7	MORGAN STANLEY BANK NA	UT	126,826	1,571,981	21,275	11,522	325,735	660,404	544,694	8,351	48,219
8	STATE STREET BANK&TRUST CO	MA	251,545	1,289,761	6,467	0	1,250,815	5,004	27,474	0	64,975
9	BANK OF NEW YORK MELLON	NY	299,651	957,904	19,738	61	533,475	360,776	43,676	178	53,822
10	PNC BANK NATIONAL ASSN	DE	357,859	351,043	24,438	0	26,703	270,829	22,625	6,448	771
11	SUNTRUST BANK	GA	200,201	272,538	20,508	15,283	21,784	147,242	62,725	4,996	147
12	U S BANK NATIONAL ASSN	OH	448,401	269,493	8,427	3,300	60,527	166,617	25,657	4,965	2,206
13	NORTHERN TRUST CO	IL	119,702	266,164	0	0	250,952	14,121	1,091	0	16,891
14	MUFG UNION BANK NA	CA	116,912	178,192	3,617	0	98,986	67,217	8,363	10	416
15	TD BANK NATIONAL ASSN	DE	264,528	176,011	0	0	7,522	166,928	958	603	10
16	CAPITAL ONE NATIONAL ASSN	VA	279,255	88,747	164	0	2,382	83,840	160	2,201	25
17	REGIONS BANK	AL	124,196	83,609	4,676	0	18,021	54,512	4,100	2,301	9
18	KEYBANK NATIONAL ASSN	OH	101,265	77,400	6,695	0	7,579	56,449	6,114	562	675
19	CITIZENS BANK NATIONAL ASSN	RI	114,605	74,208	0	0	9,923	56,749	5,109	2,427	212
20	FIFTH THIRD BANK	OH	140,771	68,701	346	32	6,293	46,822	12,455	2,753	330
21	BRANCH BANKING&TRUST CO	NC	217,378	58,801	564	0	11,564	40,760	5,912	0	43
22	BOKF NATIONAL ASSN	OK	32,669	50,849	160	466	45,059	3,101	2,059	4	13
23	HUNTINGTON NATIONAL BANK	OH	100,416	38,153	113	0	2,838	32,742	976	1,484	15
24	CAPITAL ONE BANK USA NA	VA	105,930	36,871	0	0	7,977	28,895	0	0	52
25	COMPASS BANK	AL	84,983	36,129	210	0	1,486	26,047	8,385	0	76
TOP 25 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$10,724,731	$176,881,147	$6,850,048	$5,747,923	$30,002,887	$102,636,587	$25,085,576	$6,558,126	$2,439,940
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			4,461,122	579,691	7,813	2,138	97,604	377,324	90,473	4,339	1,416
TOTAL COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,185,854	177,460,838	6,857,861	5,750,061	30,100,491	103,013,911	25,176,049	6,562,465	2,441,356

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
SEPTEMBER 30, 2016, 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	$1,818,117	$51,789,991	$2,030,668	$6,086,903	$6,698,060	$27,362,447	$7,511,849	$2,100,064	$927,397
2	JPMORGAN CHASE & CO.	NY	2,521,029	50,667,476	1,855,158	1,645,547	9,724,579	27,269,117	7,628,722	2,544,353	795,948
3	GOLDMAN SACHS GROUP, INC., THE	NY	880,006	45,480,638	2,050,785	3,874,848	6,130,516	24,103,222	7,683,000	1,638,267	282,794
4	BANK OF AMERICA CORPORATION	NC	2,198,884	35,602,230	1,533,397	858,191	8,529,313	19,534,871	3,456,712	1,689,746	455,611
5	MORGAN STANLEY	NY	813,891	28,379,530	2,145,622	1,558,418	2,832,896	15,486,517	5,257,601	1,098,476	60,820
6	HSBC NORTH AMERICA HOLDINGS INC.	NY	304,439	11,533,150	339,994	429,968	671,272	9,579,508	367,593	144,815	27,429
7	WELLS FARGO & COMPANY	CA	1,942,124	7,266,148	157,381	148,400	1,709,847	4,452,446	765,672	32,402	6,373
8	MIZUHO AMERICAS LLC	NY	46,763	5,019,054	28,868	2,830	439,333	4,433,869	110,381	3,773	2,184
9	STATE STREET CORPORATION	MA	256,145	1,297,850	6,748	0	1,250,899	12,729	27,474	0	64,975
10	CREDIT SUISSE HOLDINGS (USA), INC.	NY	222,973	1,129,366	45,625	7,463	926,815	83,858	5,707	59,897	0
11	BANK OF NEW YORK MELLON CORPORATION, THE	NY	374,114	974,717	20,657	6,728	564,103	339,375	43,676	178	53,763
12	BARCLAYS US LLC	NY	221,861	875,466	32,630	241,673	366,703	24,153	75,969	134,338	0
13	RBC USA HOLDCO CORPORATION	NY	142,593	601,934	220,597	172,753	142,201	65,314	626	441	128
14	PNC FINANCIAL SERVICES GROUP, INC., THE	PA	369,442	348,016	24,822	20	28,754	265,572	22,400	6,448	771
15	U.S. BANCORP	MN	454,134	272,619	8,426	3,300	61,098	169,422	25,658	4,715	2,206
16	SUNTRUST BANKS, INC.	GA	205,247	271,155	20,665	15,283	21,784	146,242	61,725	5,456	147
17	NORTHERN TRUST CORPORATION	IL	120,085	265,414	0	0	250,952	13,371	1,091	0	16,891
18	TD GROUP US HOLDINGS LLC	DE	338,720	252,882	58,672	4,501	9,653	178,393	958	704	10
19	MUFG AMERICAS HOLDINGS CORPORATION	NY	151,117	189,307	8,336	0	104,869	67,730	8,363	10	417
20	DB USA CORPORATION	NY	203,360	184,162	13,898	113,316	42,939	7,389	6,200	420	0
21	CAPITAL ONE FINANCIAL CORPORATION	VA	345,187	133,368	164	0	10,520	120,325	160	2,201	77
22	BNP PARIBAS USA, INC.	NY	146,765	108,914	10	46	85,186	20,907	2,764	0	16
23	KEYCORP	OH	136,228	90,229	6,695	0	7,795	67,762	7,419	557	676
24	REGIONS FINANCIAL CORPORATION	AL	125,307	82,509	4,676	0	18,021	53,412	4,100	2,301	9
25	CITIZENS FINANCIAL GROUP, INC.	RI	147,442	81,991	0	0	9,923	63,492	5,711	2,865	212
TOP 25 HOLDING COMPANIES WITH DERIVATIVES			$14,485,974	$242,898,116	$10,614,493	$15,170,188	$40,638,032	$133,921,446	$33,081,530	$9,472,426	$2,698,854

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
SEPTEMBER 30, 2016, 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	JPMORGAN CHASE BANK NA	OH	$2,118,497	$51,076,843	6.4	93.6	70.3	20.3	4.5	4.9
2	CITIBANK NATIONAL ASSN	SD	1,356,393	48,140,013	6.4	93.6	69.9	23.5	1.9	4.8
3	GOLDMAN SACHS BANK USA	NY	158,429	38,053,388	11.4	88.6	93.5	5.9	0.2	0.4
4	BANK OF AMERICA NA	NC	1,659,793	21,973,095	5.9	94.1	71.2	21.1	1.5	6.2
5	WELLS FARGO BANK NA	SD	1,740,819	7,363,786	3.7	96.3	91.1	5.5	3.0	0.5
6	HSBC NA	VA	203,705	4,327,467	5.4	94.6	66.3	27.7	2.6	3.3
7	MORGAN STANLEY BANK NA	UT	126,826	1,571,981	2.1	97.9	1.3	98.1	0.0	0.5
8	STATE STREET BANK&TRUST CO	MA	251,545	1,289,761	0.5	99.5	0.7	97.2	2.1	0.0
9	BANK OF NEW YORK MELLON	NY	299,651	957,904	2.1	97.9	43.1	56.8	0.1	0.0
10	PNC BANK NATIONAL ASSN	DE	357,859	351,043	7.0	93.0	92.7	4.4	1.1	1.8
11	SUNTRUST BANK	GA	200,201	272,538	13.1	86.9	77.1	2.6	18.5	1.8
12	U S BANK NATIONAL ASSN	OH	448,401	269,493	4.4	95.6	79.7	18.2	0.3	1.8
13	NORTHERN TRUST CO	IL	119,702	266,164	0.0	100.0	5.2	94.7	0.1	0.0
14	MUFG UNION BANK NA	CA	116,912	178,192	2.0	98.0	93.1	3.6	3.3	0.0
15	TD BANK NATIONAL ASSN	DE	264,528	176,011	0.0	100.0	92.3	7.4	0.0	0.3
16	CAPITAL ONE NATIONAL ASSN	VA	279,255	88,747	0.2	99.8	94.1	0.7	2.7	2.5
17	REGIONS BANK	AL	124,196	83,609	5.6	94.4	93.7	2.5	1.0	2.8
18	KEYBANK NATIONAL ASSN	OH	101,265	77,400	8.7	91.3	90.4	8.4	0.5	0.7
19	CITIZENS BANK NATIONAL ASSN	RI	114,605	74,208	0.0	100.0	85.8	10.9	0.0	3.3
20	FIFTH THIRD BANK	OH	140,771	68,701	0.5	99.5	72.2	18.5	5.3	4.0
21	BRANCH BANKING&TRUST CO	NC	217,378	58,801	1.0	99.0	99.1	0.9	0.0	0.0
22	BOKF NATIONAL ASSN	OK	32,669	50,849	1.2	98.8	94.4	2.2	3.4	0.0
23	HUNTINGTON NATIONAL BANK	OH	100,416	38,153	0.3	99.7	87.7	4.8	3.6	3.9
24	CAPITAL ONE BANK USA NA	VA	105,930	36,871	0.0	100.0	78.4	21.6	0.0	0.0
25	COMPASS BANK	AL	84,983	36,129	0.6	99.4	92.0	3.5	4.6	0.0
	TOP 25 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES		$10,724,731	$176,881,147	$12,597,971	$164,283,176	$132,452,881	$33,832,720	$60	$6,558,126
	OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES		4,461,122	579,691	9,951	569,740	540,063	25,641	1,415	4,339
	TOTAL FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES		15,185,854	177,460,838	12,607,922	164,852,916	132,992,944	33,858,361	1,475	6,562,465
				(%)	(%)	(%)	(%)	(%)	(%)	(%)
	TOP 25 COMMERCIAL BANKS, SAs & TCs: % OF TOTAL COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVE			99.7	7.1	92.6	74.6	19.1	0.0	3.7
	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 DERIVA			100.0	7.1	92.9	74.9	19.1	0.0	3.7

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
SEPTEMBER 30, 2016, 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	JPMORGAN CHASE BANK NA	OH	$2,118,497	$51,076,843	$182,984	$165,756	$228,933	$394,689	216
2	CITIBANK NATIONAL ASSN	SD	1,356,393	48,140,013	140,425	125,293	138,845	264,138	188
3	GOLDMAN SACHS BANK USA	NY	158,429	38,053,388	26,502	71,786	42,980	114,766	433
4	BANK OF AMERICA NA	NC	1,659,793	21,973,095	167,037	43,758	70,040	113,798	68
5	WELLS FARGO BANK NA	SD	1,740,819	7,363,786	145,757	26,025	28,766	54,791	38
6	HSBC NA	VA	203,705	4,327,467	26,715	9,993	13,609	23,602	88
7	MORGAN STANLEY BANK NA	UT	126,826	1,571,981	14,577	1,291	5,076	6,367	44
8	STATE STREET BANK&TRUST CO	MA	251,545	1,289,761	17,092	4,171	8,006	12,178	71
9	BANK OF NEW YORK MELLON	NY	299,651	957,904	19,074	5,070	5,170	10,240	54
10	PNC BANK NATIONAL ASSN	DE	357,859	351,043	36,217	4,140	454	4,594	13
11	SUNTRUST BANK	GA	200,201	272,538	21,223	1,980	2,865	4,845	23
12	U S BANK NATIONAL ASSN	OH	448,401	269,493	44,330	1,329	4,389	5,718	13
13	NORTHERN TRUST CO	IL	119,702	266,164	9,420	1,329	1,975	3,304	35
14	MUFG UNION BANK NA	CA	116,912	178,192	14,435	1,566	344	1,911	13
15	TD BANK NATIONAL ASSN	DE	264,528	176,011	22,831	3,280	1,286	4,566	20
16	CAPITAL ONE NATIONAL ASSN	VA	279,255	88,747	23,026	1,387	1,141	2,528	11
17	REGIONS BANK	AL	124,196	83,609	14,369	559	572	1,131	8
18	KEYBANK NATIONAL ASSN	OH	101,265	77,400	11,219	1,051	333	1,385	12
19	CITIZENS BANK NATIONAL ASSN	RI	114,605	74,208	13,345	1,048	527	1,575	12
20	FIFTH THIRD BANK	OH	140,771	68,701	16,435	1,047	851	1,899	12
21	BRANCH BANKING&TRUST CO	NC	217,378	58,801	23,129	1,132	579	1,712	7
22	BOKF NATIONAL ASSN	OK	32,669	50,849	2,824	280	152	431	15
23	HUNTINGTON NATIONAL BANK	OH	100,416	38,153	10,261	482	350	832	8
24	CAPITAL ONE BANK USA NA	VA	105,930	36,871	13,905	556	170	726	5
25	COMPASS BANK	AL	84,983	36,129	9,004	696	286	983	11
	TOP 25 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES		$10,724,731	$176,881,147	$1,026,136	$475,006	$557,701	$1,032,707	101
	OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES		4,461,122	579,691	479,846	6,727	4,301	11,028	2
	TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES		15,185,854	177,460,838	1,505,982	481,732	562,002	1,043,734	69

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
SEPTEMBER 30, 2016, 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	JPMORGAN CHASE BANK NA	OH	$2,118,497	$48,549,719	$48,209,325	99.3	$340,394	0.7
2	CITIBANK NATIONAL ASSN	SD	1,356,393	45,849,639	45,752,457	99.8	97,182	0.2
3	GOLDMAN SACHS BANK USA	NY	158,429	37,887,808	37,851,459	99.9	36,349	0.1
4	BANK OF AMERICA NA	NC	1,659,793	20,613,394	19,669,204	95.4	944,190	4.6
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$5,293,112	$152,900,560	$151,482,445	99.1	$1,418,115	0.9
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			9,892,742	17,997,812	16,390,696	91.1	1,607,116	8.9
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,185,854	170,898,372	167,873,141	98.2	3,025,231	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
SEPTEMBER 30, 2016, 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	JPMORGAN CHASE BANK NA	OH	$2,118,497	$51,076,843	$1,096,459	$1,058,949	$3,276	$6,288	$35,049	$34,864
2	CITIBANK NATIONAL ASSN	SD	1,356,393	48,140,013	705,260	694,291	761	1,658	33,062	33,756
3	GOLDMAN SACHS BANK USA	NY	158,429	38,053,388	992,930	957,414	684	7	3,266	2,895
4	BANK OF AMERICA NA	NC	1,659,793	21,973,095	340,422	335,563	37,484	41,839	17,019	16,769
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$5,293,112	$159,243,339	$3,135,071	$3,046,217	$42,205	$49,792	$88,396	$88,284
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			9,892,742	18,217,499	268,591	268,628	26,371	17,477	2,667	2,482
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,185,854	177,460,838	3,403,662	3,314,845	68,576	67,269	91,063	90,766

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
SEPTEMBER 30, 2016, 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	JPMORGAN CHASE BANK NA	OH	$2,118,497	$51,076,843	$2,938	$1,158	$777	$619	$200	$184
2	CITIBANK NATIONAL ASSN	SD	1,356,393	48,140,013	977	668	472	(29)	13	(147)
3	GOLDMAN SACHS BANK USA	NY	158,429	38,053,388	136	(4)	228	18	0	(106)
4	BANK OF AMERICA NA	NC	1,659,793	21,973,095	833	184	318	112	51	168
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$5,293,112	$159,243,339	$4,884	$2,006	$1,795	$720	$264	$99
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			9,892,742	18,217,499	1,539	954	499	9	89	(13)
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,185,854	177,460,838	6,423	2,960	2,294	729	353	86

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
TOP 4 COMMERCIAL BANKS, SAVINGS ASSOCIATIONS AND TRUST COMPANIES IN DERIVATIVES
SEPTEMBER 30, 2016, 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	JPMORGAN CHASE BANK NA	OH	$2,118,497	$51,076,843	$20,665,554	$14,910,917	$10,194,467	$45,770,938	$8,234,823	$1,969,019	$997,356	$11,201,198
2	CITIBANK NATIONAL ASSN	SD	1,356,393	48,140,013	14,022,701	10,187,259	6,470,742	30,680,702	8,555,608	1,085,342	437,195	10,078,145
3	GOLDMAN SACHS BANK USA	NY	158,429	38,053,388	11,855,378	11,158,403	9,515,079	32,528,860	535,441	187,095	150,492	873,028
4	BANK OF AMERICA NA	NC	1,659,793	21,973,095	8,226,618	5,099,775	3,172,314	16,498,707	3,904,574	533,744	204,383	4,642,701
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$5,293,112	$159,243,339	$54,770,251	$41,356,354	$29,352,602	$125,479,207	$21,230,446	$3,775,200	$1,789,426	$26,795,072
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			9,892,742	18,217,499	4,104,612	4,026,364	3,169,469	11,300,445	4,567,319	320,973	111,955	5,000,247
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,185,854	177,460,838	58,874,863	45,382,718	32,522,071	136,779,652	25,797,765	4,096,173	1,901,381	31,795,319

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
TOP 4 COMMERCIAL BANKS, SAVINGS ASSOCIATIONS AND TRUST COMPANIES IN DERIVATIVES
SEPTEMBER 30, 2016, 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	JPMORGAN CHASE BANK NA	OH	$2,118,497	$51,076,843	$19,178	$1,719	$0	$20,897
2	CITIBANK NATIONAL ASSN	SD	1,356,393	48,140,013	12,378	684	0	13,062
3	GOLDMAN SACHS BANK USA	NY	158,429	38,053,388	0	0	0	0
4	BANK OF AMERICA NA	NC	1,659,793	21,973,095	0	0	0	0
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$5,293,112	$159,243,339	$31,556	$2,403	$0	$33,959
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			9,892,742	18,217,499	9,035	784	1	9,820
TOTAL FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,185,854	177,460,838	40,591	3,187	1	43,779

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
TOP 4 COMMERCIAL BANKS, SAVINGS ASSOCIATIONS AND TRUST COMPANIES IN DERIVATIVES
SEPTEMBER 30, 2016, 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	JPMORGAN CHASE BANK NA	OH	$2,118,497	$51,076,843	$583,662	$85,790	$9,636	$679,088	$1,305,687	$571,226	$98,172	$1,975,085
2	CITIBANK NATIONAL ASSN	SD	1,356,393	48,140,013	76,903	42,796	4,233	123,932	253,240	121,198	10,168	384,606
3	GOLDMAN SACHS BANK USA	NY	158,429	38,053,388	1,748	1,821	0	3,569	35,628	16,392	10,219	62,239
4	BANK OF AMERICA NA	NC	1,659,793	21,973,095	11,836	5,598	27	17,461	265,118	62,280	1,358	328,756
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$5,293,112	$159,243,339	$674,149	$136,005	$13,896	$824,050	$1,859,673	$771,096	$119,917	$2,750,686
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			9,892,742	18,217,499	27,850	56,840	1,189	85,880	94,719	50,748	9,309	154,776
TOTAL FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,185,854	177,460,838	701,999	192,845	15,085	909,930	1,954,392	821,844	129,226	2,905,462

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
TOP 4 COMMERCIAL BANKS, SAVINGS ASSOCIATIONS AND TRUST COMPANIES IN DERIVATIVES
SEPTEMBER 30, 2016, 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	JPMORGAN CHASE BANK NA	OH	$2,118,497	$51,076,843	$2,527,124	$550,203	$1,039,502	$155,715	$1,745,420	$293,061	$426,193	$62,450	$781,704
2	CITIBANK NATIONAL ASSN	SD	1,356,393	48,140,013	2,290,374	529,584	1,064,534	145,432	1,739,550	152,381	357,410	41,033	550,824
3	GOLDMAN SACHS BANK USA	NY	158,429	38,053,388	165,580	22,340	50,206	15,636	88,182	23,245	41,684	12,469	77,398
4	BANK OF AMERICA NA	NC	1,659,793	21,973,095	1,359,701	315,735	551,169	57,652	924,556	184,255	226,820	24,070	435,145
TOP 4 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$5,293,112	$159,243,339	$6,342,779	$1,417,862	$2,705,411	$374,435	$4,497,708	$652,942	$1,052,107	$140,022	$1,845,071
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			9,892,742	18,217,499	219,686	33,113	59,397	10,518	103,029	30,449	69,687	16,522	116,658
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,185,854	177,460,838	6,562,465	1,450,975	2,764,808	384,953	4,600,737	683,391	1,121,794	156,544	1,961,729

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
SEPTEMBER 30, 2016, MILLIONS OF DOLLARS

						TOTAL CREDIT DERIVATIVES		BOUGHT				SOLD			
RANK	BANK NAME	STATE	TOTAL ASSETS	TOTAL DERIVATIVES	TOTAL CREDIT DERVATIVES	BOUGHT	SOLD	CREDIT DEFAULT SWAPS	TOTAL RETURN SWAPS	CREDIT OPTIONS	OTHER CREDIT DERIVATIVES	CREDIT DEFAULT SWAPS	TOTAL RETURN SWAPS	CREDIT OPTIONS	OTHER CREDIT DERIVATIVES
1	JPMORGAN CHASE BANK NA	OH	$2,118,497	$48,549,719	$2,527,124	$1,287,974	$1,239,150	$1,229,006	$19,829	$33,877	$5,262	$1,207,903	$4,779	$26,460	$8
2	CITIBANK NATIONAL ASSN	SD	1,356,393	45,849,639	2,290,374	1,167,620	1,122,754	1,083,836	42,283	41,501	0	1,055,834	28,754	38,166	0
3	GOLDMAN SACHS BANK USA	NY	158,429	37,887,808	165,580	90,936	74,644	87,346	3,357	158	75	71,232	2,907	134	371
4	BANK OF AMERICA NA	NC	1,659,793	20,613,394	1,359,701	676,118	683,583	653,455	11,158	11,505	0	646,097	14,439	23,047	0
5	WELLS FARGO BANK NA	SD	1,740,819	7,330,537	33,249	22,329	10,920	4,398	0	350	17,581	3,555	0	31	7,334
6	HSBC NA	VA	203,705	4,182,652	144,815	75,875	68,940	67,748	8,127	0	0	65,752	3,188	0	0
7	MORGAN STANLEY BANK NA	UT	126,826	1,563,630	8,351	8,351	0	8,351	0	0	0	0	0	0	0
8	STATE STREET BANK&TRUST CO	MA	251,545	1,289,761	0	0	0	0	0	0	0	0	0	0	0
9	BANK OF NEW YORK MELLON	NY	299,651	957,726	178	178	0	178	0	0	0	0	0	0	0
10	PNC BANK NATIONAL ASSN	DE	357,859	344,595	6,448	2,561	3,887	50	0	0	2,511	0	0	0	3,887
11	SUNTRUST BANK	GA	200,201	267,542	4,996	2,829	2,167	665	2,158	0	6	0	2,158	0	8
12	U S BANK NATIONAL ASSN	OH	448,401	264,528	4,965	1,573	3,392	285	0	0	1,288	250	0	0	3,142
13	NORTHERN TRUST CO	IL	119,702	266,164	0	0	0	0	0	0	0	0	0	0	0
14	MUFG UNION BANK NA	CA	116,912	178,182	10	10	0	10	0	0	0	0	0	0	0
15	TD BANK NATIONAL ASSN	DE	264,528	175,408	603	598	5	598	0	0	0	5	0	0	0
16	CAPITAL ONE NATIONAL ASSN	VA	279,255	86,546	2,201	775	1,426	0	0	0	775	0	0	0	1,426
17	REGIONS BANK	AL	124,196	81,309	2,301	614	1,687	58	0	0	556	5	0	0	1,682
18	KEYBANK NATIONAL ASSN	OH	101,265	76,838	562	418	145	418	0	0	0	52	93	0	0
19	CITIZENS BANK NATIONAL ASSN	RI	114,605	71,781	2,427	0	2,427	0	0	0	0	0	0	0	2,427
20	FIFTH THIRD BANK	OH	140,771	65,948	2,753	280	2,473	0	0	0	280	0	0	0	2,473
21	BRANCH BANKING&TRUST CO	NC	217,378	58,801	0	0	0	0	0	0	0	0	0	0	0
22	BOKF NATIONAL ASSN	OK	32,669	50,844	4	2	2	2	0	0	0	2	0	0	0
23	HUNTINGTON NATIONAL BANK	OH	100,416	36,669	1,484	925	560	0	0	0	925	0	0	0	560
24	CAPITAL ONE BANK USA NA	VA	105,930	36,871	0	0	0	0	0	0	0	0	0	0	0
25	COMPASS BANK	AL	84,983	36,129	0	0	0	0	0	0	0	0	0	0	0
TOP 25 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			$10,724,731	$170,323,021	$6,558,126	$3,339,965	$3,218,161	$3,136,404	$86,912	$87,391	$29,258	$3,050,687	$56,319	$87,838	$23,317
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			4,461,122	575,352	4,339	1,582	2,757	64	78	0	1,439	269	2	0	2,486
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES			15,185,854	170,898,372	6,562,465	3,341,547	3,220,918	3,136,468	86,990	87,391	30,698	3,050,956	56,320	87,838	25,803
					(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
TOP 25 COMMERCIAL BANKS, SAs & TCs: % OF TOTAL COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES					99.9	50.9	49.0	47.8	1.3	1.3	0.4	46.5	0.9	1.3	0.4
OTHER COMMERCIAL BANKS, SAs & TCs: % OF TOTAL COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES					0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL AMOUNT FOR COMMERCIAL BANKS, SAs & TCs: % OF TOTAL COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES					100.0	50.9	49.1	47.8	1.3	1.3	0.5	46.5	0.9	1.3	0.4

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