

## Quarterly Report on Bank Trading and Derivatives Activities

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Third Quarter 2024

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

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## About This Report

The Office of the Comptroller of the Currency's (OCC) quarterly report on bank trading and derivatives activities is based on call report information provided by all insured U.S. commercial banks and savings associations, reports filed by U.S. financial holding companies, and other published data.<sup>1</sup> A total of 1,225 insured U.S. national and state commercial banks and savings associations reported trading and derivatives activities at the end of the third quarter of 2024.<sup>2</sup> A small group of large financial institutions continues to dominate trading and derivatives activity in the U.S. commercial banking system. During the third quarter of 2024, four large commercial banks represented 88.1 percent of the total banking industry notional amounts and 74.4 percent of industry net current credit exposure (NCCE).

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

This is the 116th 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 [QuarterlyDerivatives@occ.treas.gov](mailto:QuarterlyDerivatives@occ.treas.gov).

## Executive Summary

- Insured U.S. commercial banks and savings associations (collectively, banks) reported trading revenue of \$16.5 billion in the third quarter of 2024, \$263 million more (1.6 percent) than in the previous quarter and \$3.3 billion more (25.0 percent) than a year earlier (see table 1).
- Credit exposure from derivatives decreased in the third quarter of 2024 compared with the second quarter of 2024. NCCE decreased \$23 billion, or 9 percent, to \$237.0 billion (see table 5).
- Derivative notional amounts increased in the third quarter of 2024 by \$10.7 trillion, or 5.2 percent, to \$218.8 trillion (see table 10).
- Derivative contracts remained concentrated in interest rate products, which totaled \$150.5 trillion or 68.8 percent of total derivative notional amounts (see table 10).

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<sup>1</sup> Values in the tables and figures in this report may not add up to the totals because of rounding.

<sup>2</sup> Institutions with total assets of less than \$5 billion have the option to file the Federal Financial Institutions Examination Council (FFIEC) 051 call report. Due to the limited amount of derivatives data provided by FFIEC 051 call report filers, this report provides this information separately and distinctly in table 25 in the appendix.

## Revenue

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

Insured U.S. commercial banks and savings associations reported \$16.5 billion in trading revenue in the third quarter of 2024, \$263 million more (1.6 percent) than in the previous quarter and \$3.3 billion more (25.0 percent) than a year earlier (see table 1). The quarter-over-quarter increase in trading revenue was due to increases in revenue from interest rate and equity instruments. For a historical view of quarterly bank trading revenue by instrument, see figure 14a in the appendix.

**Table 1: Quarterly Bank Trading Revenue, in Millions of Dollars**

Trading instruments	3Q 2024	2Q 2024	Q/Q change	Q/Q % change	3Q 2023	Y/Y change	Y/Y % change
Interest rate	\$6,952	\$4,927	\$2,025	41.1%	\$630	\$6,323	1004.3%
Foreign exchange	\$1,857	\$4,377	-\$2,520	-57.6%	\$8,036	-\$6,178	-76.9%
Equity	\$7,517	\$5,912	\$1,605	27.2%	\$2,262	\$5,255	232.3%
Commodity and other	\$611	\$657	-\$46	-7.0%	\$942	-\$331	-35.1%
Credit	-\$426	\$376	-\$802	-213.2%	\$1,342	-\$1,768	-131.7%
<b>Total trading revenue</b>	<b>\$16,512</b>	<b>\$16,249</b>	<b>\$263</b>	<b>1.6%</b>	<b>\$13,211</b>	<b>\$3,301</b>	<b>25.0%</b>

Source: Call reports, Schedule RI

### Holding Company Trading Revenue

Consolidated bank holding company (BHC) trading performance provides a more complete picture of trading revenue in the banking system. As shown in table 2, consolidated holding company trading revenue of \$34.6 billion in the third quarter of 2024 was \$7.4 billion more (27.2 percent) than in the previous quarter. The quarter-over-quarter increase in trading revenue was due to increases in revenue from interest rate, equity, and commodity and other instruments. Year-over-year holding company trading revenue increased by \$15.7 billion (82.6 percent). For a historical view of quarterly holding company trading revenue by instrument, see figure 14b in the appendix.

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

Trading instruments	3Q 2024	2Q 2024	Q/Q change	Q/Q % change	3Q 2023	Y/Y change	Y/Y % change
Interest rate	\$15,401	\$6,632	\$8,769	132.2%	\$522	\$14,880	2851.8%
Foreign exchange	\$1,310	\$5,697	-\$4,386	-77.0%	\$8,752	-\$7,442	-85.0%
Equity	\$14,526	\$11,573	\$2,954	25.5%	\$6,084	\$8,442	138.8%
Commodity and other	\$2,496	\$1,545	\$951	61.6%	\$2,025	\$471	23.3%
Credit	\$893	\$1,777	-\$885	-49.8%	\$1,577	-\$684	-43.4%
<b>Total BHC trading revenue</b>	<b>\$34,627</b>	<b>\$27,224</b>	<b>\$7,403</b>	<b>27.2%</b>	<b>\$18,960</b>	<b>\$15,667</b>	<b>82.6%</b>

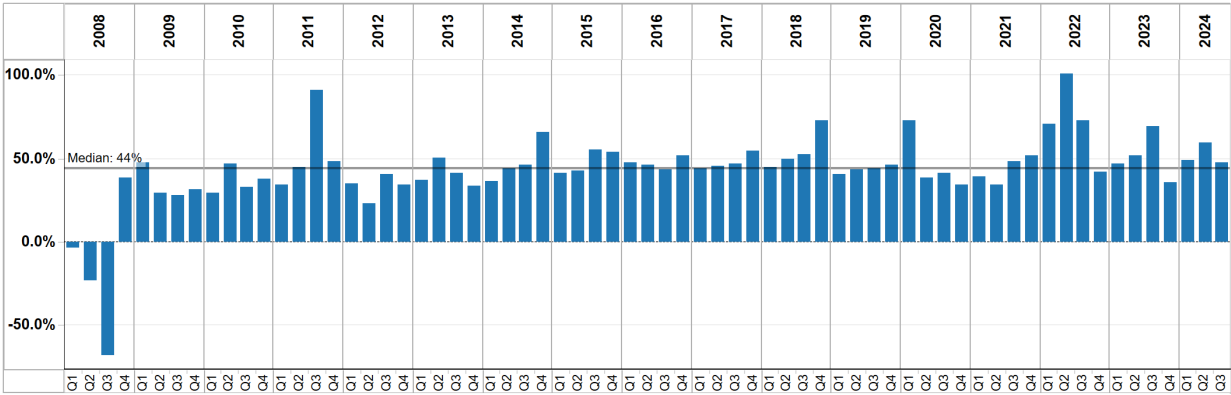
Source: Consolidated Financial Statements for Holding Companies—FR Y-9C, Schedule HI

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

Before the 2008 financial crisis, trading revenue at banks typically ranged from 60 percent to 80 percent of consolidated BHC trading revenue. Since the 2008 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 decreased and is typically between 30 percent and 50 percent. This decline reflects the significant amount of trading activity by the former investment banks that, while included in BHC results, remains outside insured commercial banks. More generally, insured U.S. commercial banks and savings associations have more limited legal authorities than their holding companies, particularly in the trading of commodity and equity products.

In the third quarter of 2024, banks generated 47.7 percent of consolidated holding company trading revenue, a decrease from 59.7 percent in the previous quarter (see figure 1).

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



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

## Counterparty Credit Risk

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

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

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

Measuring credit exposure in derivative contracts involves identifying those contracts a bank would lose value on 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 increased by \$301.0 billion (14.1 percent) in the third quarter of 2024 to \$2.4 trillion, primarily driven by a \$202.0 billion (15.1 percent) increase in receivables from interest rate contracts and a \$57.0 billion (10.5 percent) increase in receivables from FX contracts (see table 3a). GNFV increased \$333.0 billion (16.0 percent) to \$2.4 trillion during the quarter, driven by a \$206.0 billion (16.2 percent) increase in payables from interest rate contracts and a \$75.0 billion (14.0 percent) increase in payables from FX contracts (see table 3b).

**Table 3a: Gross Positive Fair Values, in Billions of Dollars**

Trading instruments	3Q 2024	2Q 2024	Q/Q change	Q/Q % change	3Q 2023	Y/Y change	Y/Y % change
Interest rate	\$1,541	\$1,339	\$202	15.1%	\$1,556	-\$15	-1.0%
FX	\$595	\$538	\$57	10.5%	\$680	-\$85	-12.5%
Equity	\$207	\$176	\$31	17.5%	\$138	\$69	50.4%
Commodity & other	\$55	\$47	\$8	16.4%	\$49	\$6	12.2%
Credit	\$42	\$38	\$4	9.7%	\$38	\$4	11.8%
<b>GPFV</b>	<b>\$2,441</b>	<b>\$2,140</b>	<b>\$301</b>	<b>14.1%</b>	<b>\$2,461</b>	<b>-\$20</b>	<b>-0.8%</b>

Source: Call reports, Schedule RC-L

**Table 3b: Gross Negative Fair Values, in Billions of Dollars**

Trading instruments	3Q 2024	2Q 2024	Q/Q change	Q/Q % change	3Q 2023	Y/Y change	Y/Y % change
Interest rate	\$1,478	\$1,272	\$206	16.2%	\$1,484	-\$6	-0.4%
FX	\$608	\$533	\$75	14.0%	\$663	-\$55	-8.3%
Equity	\$233	\$194	\$39	20.3%	\$140	\$93	66.5%
Commodity & other	\$51	\$44	\$7	16.2%	\$45	\$6	14.4%
Credit	\$49	\$42	\$7	15.8%	\$36	\$13	37.1%
<b>GNFV</b>	<b>\$2,419</b>	<b>\$2,085</b>	<b>\$333</b>	<b>16.0%</b>	<b>\$2,367</b>	<b>\$52</b>	<b>2.2%</b>

Source: Call reports, Schedule RC-L

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

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

**Table 4: Netting Contract Examples**

Bank A portfolio with Counterparty B	Number of contracts	Value of contracts	Credit measure/metric
Contracts with positive value to Bank A	6	\$500	GPFV
Contracts with negative value to Bank A	4	-\$350	GNFV
<b>Total contracts</b>	<b>10</b>	<b>\$150</b>	<b>NCCE to Bank A from Counterparty B</b>

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

NCCE is the primary metric the OCC uses to evaluate credit risk in bank derivative activities. NCCE for insured U.S. commercial banks and savings associations decreased by \$23.0 billion (9.0 percent) to \$237.0 billion in the third quarter of 2024 (see table 5).<sup>3</sup> Legally enforceable netting agreements allowed banks to reduce GPFV exposures by 90.3 percent (\$2.2 trillion) in the third quarter of 2024.

**Table 5: Net Current Credit Exposure, in Billions of Dollars**

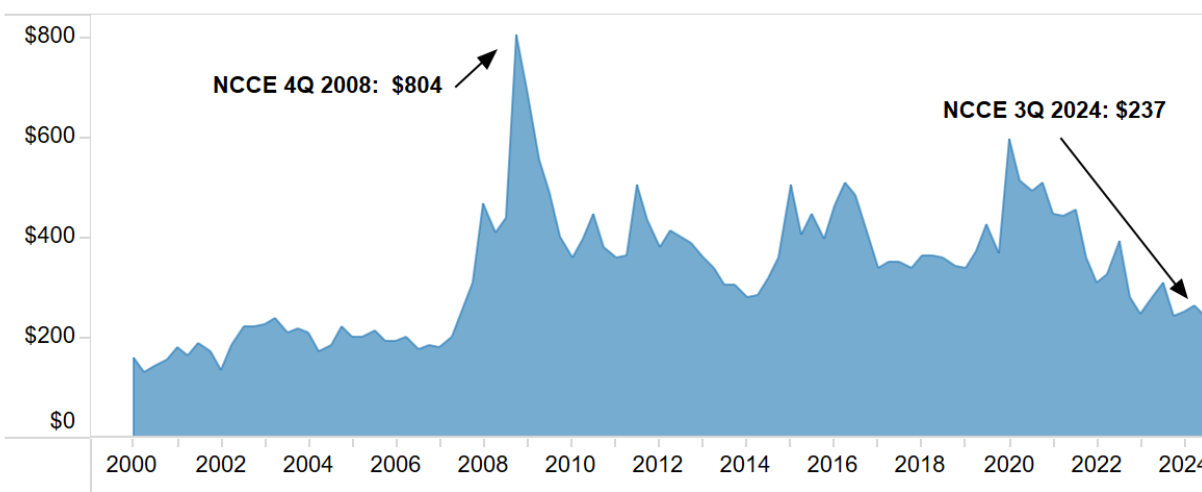
Netting benefit ratio	3Q 2024	2Q 2024	Q/Q change	Q/Q % change
GPFV	\$2,441	\$2,140	\$301	14.1%
NCCE RC-R	\$237	\$260	-\$23	-9.0%
<b>Netting benefit RC-R</b>	<b>\$2,204</b>	<b>\$1,880</b>	<b>\$325</b>	<b>17.3%</b>
<b>Netting benefit % RC-R</b>	<b>90.3%</b>	<b>87.8%</b>		<b>2.5%</b>

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

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

NCCE peaked at \$804.0 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 decline in NCCE since 2008 has largely resulted from declines in the GPFV of interest rate and credit contracts. After a large increase in NCCE during the first quarter of 2020 as markets responded to the financial impact of the COVID-19 global pandemic, NCCE ended the third quarter of 2024 at \$237.0 billion as more normal market activity resumed.

**Figure 2: Net Current Credit Exposure, in Billions of Dollars**



Source: Call reports, Schedule RC-R

The bulk of NCCE in the financial system is concentrated in banks and securities firms (37.6 percent) and in corporations and other counterparties (54.9 percent) (see table 6). The combined exposure to hedge funds and sovereign governments was small (7.6 percent in total).

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

Quarter	Banks and securities firms	Hedge funds	Sovereign governments	Corporations and other counterparties
3Q 2024	37.6%	2.3%	5.3%	54.9%
2Q 2024	39.9%	1.5%	4.0%	54.6%
1Q 2024	38.9%	1.4%	4.5%	55.2%
4Q 2023	34.6%	2.3%	5.0%	58.1%
4Q 2022	34.5%	2.3%	3.9%	59.2%
4Q 2021	37.9%	2.0%	7.4%	52.6%
4Q 2020	39.1%	2.2%	8.3%	50.4%
4Q 2019	44.2%	2.5%	9.2%	44.1%
4Q 2018	41.7%	5.0%	10.0%	43.2%
4Q 2017	41.7%	3.1%	7.9%	47.3%

Source: Call reports, Schedule RC-L



A more risk-sensitive measure of credit exposure would consider the value of collateral held against counterparty exposures. Reporting banks held collateral valued at 140.8 percent of their total NCCE at the end of the third quarter of 2024, up from 129.0 percent in the second quarter of 2024 (see table 7). Collateral held against hedge fund exposures decreased in the third quarter to 754.7 percent. Bank exposures to hedge funds are secured because banks take initial margin on transactions with hedge funds, in addition to fully securing any current credit exposure. Collateral coverage of corporate and sovereign exposures is much less than coverage of financial institutions and hedge funds.

**Table 7: Ratio of Fair Value (FV) Collateral to Net Current Credit Exposure**

Quarter	FV banks and securities firms	FV hedge funds	FV sovereign governments	FV corporate and all other counterparties	FV/NCCE %
3Q 2024	146.7%	754.7%	87.5%	116.8%	140.8%
2Q 2024	134.3%	884.6%	87.3%	106.8%	129.0%
1Q 2024	137.1%	892.0%	87.1%	104.9%	127.8%
4Q 2023	141.8%	574.3%	79.1%	90.8%	118.9%
4Q 2022	111.4%	474.5%	61.5%	75.4%	96.5%
4Q 2021	128.6%	687.6%	69.3%	76.0%	108.0%
4Q 2020	110.6%	467.6%	52.1%	59.5%	87.8%
4Q 2019	130.0%	485.9%	48.3%	91.8%	114.5%
4Q 2018	128.9%	308.0%	47.1%	91.8%	113.7%
4Q 2017	124.4%	495.5%	25.1%	89.8%	111.5%

Source: Call reports, Schedule RC-L

The majority of collateral held by banks against NCCE is very liquid with 56.3 percent held in cash (both U.S. dollar and other currencies) and an additional 12.1 percent held in U.S. Treasuries and U.S. government agency securities (see table 8). Supervisors assess changes in the quality and liquidity 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**

Quarter	Cash U.S. \$	Cash other currencies	U.S. Treasury securities	U.S. government agency	Corporate bonds	Equity securities	All other collateral
3Q 2024	41.9%	14.4%	11.4%	0.7%	5.0%	7.6%	19.1%
2Q 2024	46.5%	14.5%	9.7%	0.5%	4.6%	6.2%	18.0%
1Q 2024	46.1%	15.0%	9.6%	0.6%	4.8%	6.5%	17.4%
4Q 2023	46.2%	15.0%	10.3%	0.7%	4.1%	6.7%	17.0%
4Q 2022	55.8%	14.1%	8.2%	0.4%	3.6%	5.1%	12.9%
4Q 2021	39.6%	24.4%	8.1%	1.0%	1.6%	8.2%	17.2%
4Q 2020	39.5%	28.6%	7.8%	1.7%	1.1%	7.2%	14.1%
4Q 2019	34.4%	24.5%	11.6%	1.7%	2.3%	7.6%	17.7%
4Q 2018	37.2%	23.3%	10.8%	2.2%	2.1%	7.1%	17.2%
4Q 2017	37.6%	25.5%	10.3%	1.9%	2.5%	5.7%	16.5%

Source: Call reports, Schedule RC-L

## Market Risk

### Value-at-Risk

Banks primarily control market risk in trading operations by establishing limits against potential losses. Banks use value-at-risk (VaR) to quantify the maximum expected loss over a specified time and at a certain confidence level under relevant market conditions. Banks subject to the market risk capital rule, 12 CFR 3, subpart F, are required to report their VaR-based measures quarterly on Federal Financial Institutions Examination Council (FFIEC) Form 102. The VaR measurement is calculated daily using a one-tail, 99 percent confidence level and a holding period equivalent to a 10-business-day movement in underlying risk factors, such as rates, spreads, and prices. Tables 9a and 9b show the quarter-over-quarter change in VaR, as well as the VaR-based capital charge, for banks most active in trading and derivatives activity. As shown in table 9a, market risk in trading operations, as measured by VaR, is a small proportion of their risk-based capital. Figure 21 in the appendix illustrates the historical trend in VaR measurements for these institutions.

**Table 9a: Value-at-Risk, in Millions of Dollars**

Value-at-risk	JPMorgan Chase Bank NA	Citibank NA	Bank of America NA	Goldman Sachs Bank USA
3Q 2024 average 60-day VaR	\$224	\$162	\$76	\$272
2Q 2024 average 60-day VaR	\$282	\$151	\$85	\$276
Q/Q change	-\$58	\$11	-\$10	-\$4
3Q 2024 total risk-based capital	\$299,439	\$167,687	\$206,410	\$64,600

Source: Market Risk Regulatory Report for Institutions Subject to the Market Risk Capital Rule—FFIEC 102

**Table 9b: Value-at-Risk Capital Requirement, in Millions of Dollars**

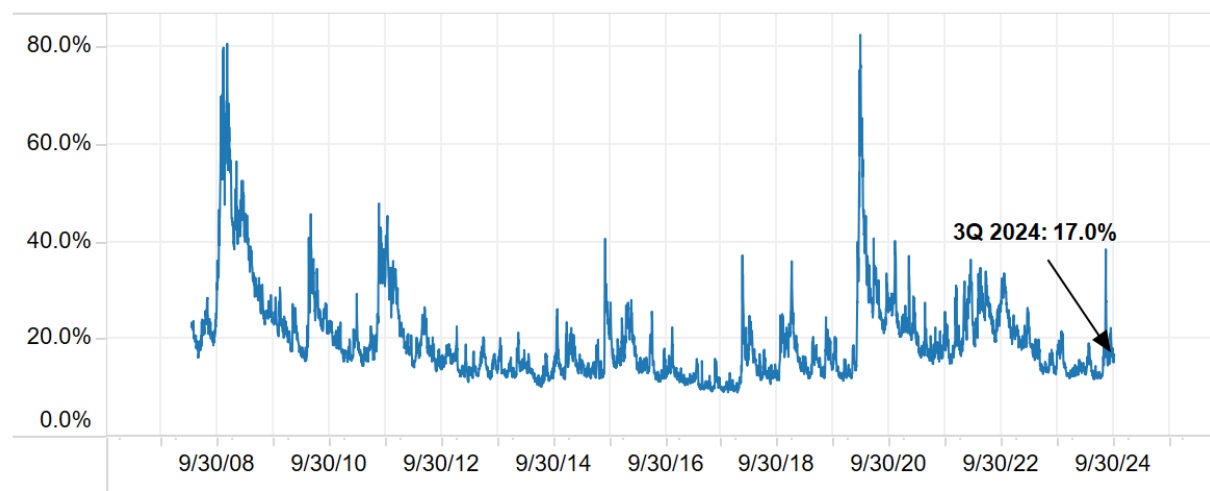
Value-at-risk capital requirement	JPMorgan Chase Bank NA	Citibank NA	Bank of America NA	Goldman Sachs Bank USA
3Q 2024 VaR capital requirement	\$673	\$485	\$228	\$817
2Q 2024 VaR capital requirement	\$847	\$452	\$256	\$828
Q/Q change	-\$174	\$33	-\$29	-\$11
3Q 2024 total risk-based capital	\$299,439	\$167,687	\$206,410	\$64,600

Source: Market Risk Regulatory Report for Institutions Subject to the Market Risk Capital Rule—FFIEC 102

## Volatility Index

Figure 3 shows the VIX, a volatility index,<sup>4</sup> which measures the market’s expectation of stock market volatility in the S&P 500 index over the next 30-day period. Higher volatility as represented by the VIX is associated with increased equity trading volume, which drives increased bank and holding company equity trading revenue. The figure illustrates that there was an extended period of low volatility following the end of the 2008 financial crisis that continued until late in the first quarter of 2020. In mid-March 2020 volatility spiked and exceeded its previous high from the 2008 financial crisis as financial markets reacted to fears over the potential impact of the COVID-19 global pandemic. While the volatility index experienced its largest one day spike on August 25, 2024, because of an asymmetric widening of bid-ask spreads and corresponding increase in option price quotes, the VIX has settled back to a more normal level of 17 percent at the end of the third quarter of 2024.

**Figure 3: Volatility Index (VIX)**



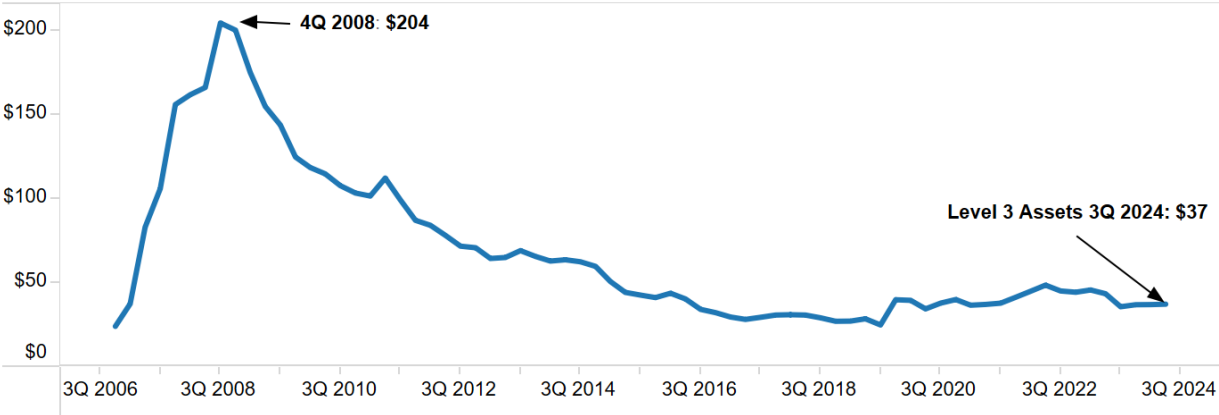
Source: Bloomberg

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

## 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 the model inputs that determine the fair value of these exposures are not derived from observable market transactions, banks use their own model assumptions in determining their fair values. Level 3 trading assets peaked at \$204.0 billion at the end of 2008 (see figure 4). At the end of the third quarter of 2024, banks held \$37.0 billion of level 3 trading assets, up 0.7 percent from the previous quarter and 14.4 percent lower than a year ago. Level 3 trading assets are \$167 billion (81.9 percent) lower than the peak level from 2008.

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



Source: Call reports, Schedule RC-Q

## Notional Amounts of All Derivative Contracts

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 total notional amount of derivative contracts that banks held in the third quarter increased by \$10.8 trillion (5.2 percent) to \$218.8 trillion from the previous quarter (see table 10). The increase in the notional amount of derivative contracts by underlying risk exposure was driven by increases across all instruments. Interest rate notional amounts continued to represent the majority of banks' derivative holdings at \$150.5 trillion, or 68.8 percent of total derivatives (see table 10).

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

Trading instrument	3Q 2024	2Q 2024	Q/Q Change	Q/Q % Change	3Q 2023	Y/Y Change	Y/Y % Change
Interest rate	\$150,476	\$144,959	\$5,517	3.8%	\$145,840	\$4,637	3.2%
FX	\$55,012	\$51,021	\$3,992	7.8%	\$46,859	\$8,153	17.4%
Equity	\$6,801	\$6,308	\$494	7.8%	\$5,935	\$866	14.6%
Commodity and other	\$1,808	\$1,699	\$109	6.4%	\$1,544	\$264	17.1%
Credit derivatives	\$4,752	\$4,112	\$640	15.6%	\$4,115	\$637	15.5%
<b>Total notional</b>	<b>\$218,849</b>	<b>\$208,098</b>	<b>\$10,752</b>	<b>5.2%</b>	<b>\$204,293</b>	<b>\$14,557</b>	<b>7.1%</b>

Source: Call reports, Schedule RC-L

The increase in the total notional amount of derivative contracts by contract type was primarily driven by increases in swap contracts and futures and forwards (see table 11). Swaps contracts remained the leading derivatives contract type at 61.0 percent of all notional amounts.

The four banks with the most derivative activity hold 88.1 percent of all bank derivatives, while the largest 25 banks account for nearly 100 percent of all contracts (see tables 15 and 17 and figure 9 in the appendix for more information).

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

Trading instrument	3Q 2024	2Q 2024	Q/Q change	Q/Q % change	3Q 2023	Y/Y change	Y/Y % change
Futures and forwards	\$38,971	\$36,701	\$2,270	6.2%	\$34,331	\$4,640	13.5%
Swaps	\$133,452	\$127,082	\$6,369	5.0%	\$124,697	\$8,755	7.0%
Options	\$41,675	\$40,203	\$1,472	3.7%	\$41,150	\$525	1.3%
Credit derivatives	\$4,752	\$4,112	\$640	15.6%	\$4,115	\$637	15.5%
<b>Total notional</b>	<b>\$218,849</b>	<b>\$208,098</b>	<b>\$10,752</b>	<b>5.2%</b>	<b>\$204,293</b>	<b>\$14,557</b>	<b>7.1%</b>

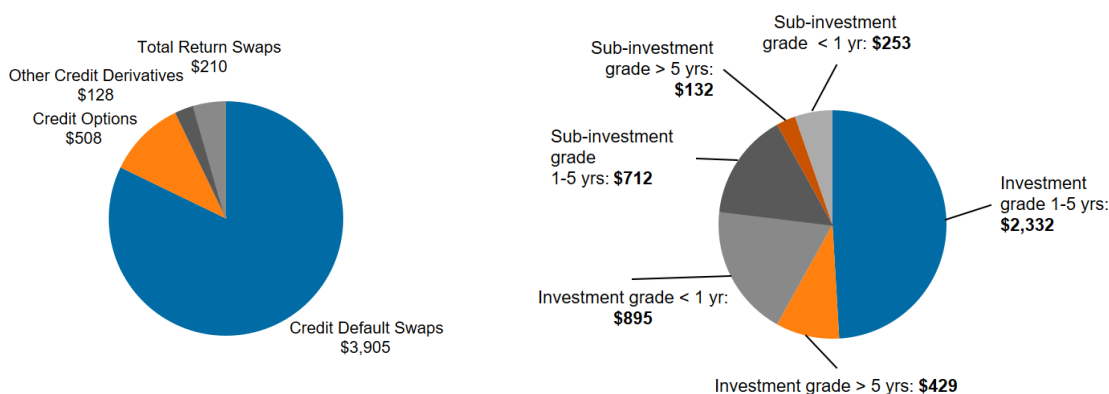
Source: Call reports, Schedule RC-L

## Credit Derivatives

The notional amounts of credit derivatives increased \$640.0 billion (15.6 percent) to \$4.8 trillion in the third quarter of 2024 (see table 11). As shown in the chart on the left of figure 5, credit default swaps are the dominant product, at \$3.9 trillion (82.2 percent) of all credit derivative notional amounts.

Credit derivative contracts referencing investment-grade entities with maturities from one to five years represented the largest segment of the market at \$2.3 trillion or 49.1 percent of all credit derivative notional amounts. Contracts of all tenors that reference investment-grade entities are \$3.7 trillion or 76.9 percent of the market (see the chart on the right in figure 5).

**Figure 5: Credit Derivative Composition, in Billions of Dollars**



Source: Call reports, Schedule RC-L

The notional amount for the 119 banks that net sold credit protection (i.e., assumed credit risk) was \$2.3 trillion, up \$324.4 billion (16.7 percent) from the second quarter of 2024 (see table 24 in the appendix). The notional amount for the 96 banks that net purchased credit protection (i.e., hedged credit risk) was \$2.5 trillion, \$315.8 billion higher (14.5 percent) than in the second quarter of 2024 (see table 24 in the appendix).

## Compression Activity

Notional amounts of banks' derivative contracts began declining in 2014 because of trade compression efforts, leading to less need for risk management products. Trade compression continued to be a significant factor in reducing the amount of notional derivatives outstanding until 2020. Since that time, the notional amount of derivatives has trended upward. As the effects of trade compression have now subsided with increased trading volumes and the LCH group data is no longer available, this data will cease to be reported in this and future publications.

## Centrally Cleared Derivative Contracts

In the first quarter of 2015, banks began reporting their volumes of cleared and uncleared derivative transactions, as well as risk weights for counterparties in each of these categories. In the third quarter of 2024, 35.2 percent of banks' derivative holdings were centrally cleared (see table 12). From a market factor perspective, 47.3 percent of interest rate derivative contracts' notional amounts outstanding were centrally cleared, while very little of the FX derivative market was centrally cleared. The bank-held credit derivative market remained largely uncleared, as 31.2 percent of credit derivative transactions were centrally cleared during the third quarter of 2024.

Centrally cleared derivative transactions were heavily concentrated at qualifying central counterparties, with 83.9 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**

Quarter	Interest rate	FX	Equity	Precious metals	Credit	Other	Total
3Q 2024	47.3%	3.2%	23.8%	7.7%	31.2%	14.2%	35.2%
2Q 2024	48.6%	3.1%	23.5%	6.4%	27.0%	13.4%	36.3%
1Q 2024	47.9%	3.0%	25.2%	6.9%	29.6%	13.2%	35.9%
4Q 2023	44.9%	2.9%	24.0%	6.7%	28.2%	12.9%	33.9%
3Q 2023	49.7%	3.1%	23.4%	6.8%	32.5%	14.0%	37.8%
2Q 2023	52.9%	3.0%	23.5%	7.7%	35.1%	12.5%	41.3%
1Q 2023	52.2%	3.0%	24.7%	7.3%	30.9%	12.6%	40.5%
4Q 2022	49.1%	2.7%	23.8%	8.8%	28.9%	12.2%	37.9%
3Q 2022	54.3%	3.0%	23.9%	6.6%	30.6%	12.9%	41.7%
2Q 2022	55.9%	3.2%	24.8%	5.9%	25.4%	12.3%	43.1%
1Q 2022	56.1%	2.9%	24.3%	6.4%	33.8%	12.4%	43.4%
4Q 2021	51.8%	2.0%	20.6%	3.1%	29.2%	12.3%	39.4%

Source: Call reports, Schedule RC-R

## Glossary of Terms

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

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

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

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

**Gross negative fair value (GNFV):** The sum total of the fair values of contracts when the bank owes money to its counterparties, without taking netting into account. 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 netting into account. 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 (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.

**Qualifying central counterparties (QCCP):** QCCPs are defined in 12 CFR 3.2 as a CCP either that the Financial Stability Oversight Council has designated systemically important under title VIII of the Dodd–Frank Wall Street Reform and Consumer Protection Act or that meets a series of standards. See 12 CFR 3.2 for a full definition.

**Total credit exposure:** The sum total of NCCE and PFE.

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

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

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

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**Table 13: Notional Amounts of Derivative Contracts**

Top 25 Commercial Banks, Savings Associations, and Trust Companies in Derivatives, in Millions of Dollars, September 30, 2024

Bank name	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
JPMORGAN CHASE BANK NA	\$3,584,105	\$60,038,410	\$1,095,445	\$1,286,536	\$11,386,510	\$35,190,802	\$9,535,219	\$1,543,898	\$1,212,643
GOLDMAN SACHS BANK USA	564,359	56,939,218	1,499,760	1,617,023	5,410,820	36,899,375	10,830,966	681,274	972,692
CITIBANK NATIONAL ASSN	1,733,111	51,176,364	532,263	911,772	6,195,485	33,255,102	8,607,097	1,674,645	660,560
BANK OF AMERICA NA	2,565,878	24,570,657	362,210	540,000	4,827,562	14,201,792	4,041,388	597,705	558,140
WELLS FARGO BANK NA	1,698,675	13,992,303	531,575	471,239	2,424,405	7,563,274	2,896,739	105,071	45,010
STATE STREET BANK&TRUST CO	334,336	3,040,099	46,904	0	2,928,826	34,999	29,370	0	86,954
HSBC NA	163,226	1,299,772	12,429	1,377	536,585	646,032	84,329	19,021	58,328
U S BANK NATIONAL ASSN	670,008	1,296,327	1,821	917	81,359	1,003,170	192,244	16,815	5,658
BANK OF NEW YORK MELLON	348,079	1,197,991	14,549	79	346,785	785,815	50,404	359	120,877
PNC BANK NATIONAL ASSN	559,700	736,381	9,865	9,250	26,160	606,417	71,400	13,290	2,498
NORTHERN TRUST CO	155,219	395,138	0	0	367,596	26,991	552	0	4,661
TRUIST BANK	515,224	387,943	6,187	22,279	24,151	264,019	62,413	8,894	547
MORGAN STANLEY BANK NA	224,864	378,042	1,602	200	52,894	273,688	25,278	24,380	5,395
TD BANK NATIONAL ASSN	399,881	356,032	0	0	1,993	353,913	127	0	0
CITIZENS BANK NATIONAL ASSN	219,536	280,820	1,440	0	9,443	232,715	35,242	1,980	194
CAPITAL ONE NATIONAL ASSN	483,857	277,540	25,905	0	13,142	167,206	64,879	6,409	167
REGIONS BANK	156,385	178,291	223	0	4,377	142,028	26,437	5,226	13
FIFTH THIRD BANK NA	213,583	175,287	2,121	460	5,862	98,851	63,442	4,551	779
BMO BANK NATIONAL ASSN	264,330	164,302	0	0	3,108	158,159	3,033	2	175
KEYBANK NATIONAL ASSN	187,221	142,486	753	0	5,142	121,703	14,752	136	272
OCEAN BANK	6,650	110,380	0	0	0	110,380	0	0	0
HUNTINGTON NATIONAL BANK	199,222	105,727	898	0	6,717	78,110	15,926	4,076	81
COMERICA BANK	79,753	82,952	0	0	3,269	66,352	11,406	1,925	206
MANUFACTURERS&TRADERS TR CO	211,332	81,983	0	0	3,226	73,396	5,362	0	129
BOKF NATIONAL ASSN	49,908	66,687	3,825	3,102	45,563	8,131	6,056	10	0
TOP 25 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES	\$15,588,443	\$217,471,133	\$4,149,773	\$4,864,234	\$34,710,978	\$132,362,420	\$36,674,060	\$4,709,668	\$3,735,980
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES	6,161,843	1,378,297	10,705	942	99,298	1,089,394	135,874	42,084	1,014
<b>Total all commercial banks, SAs &amp; TCs with derivatives</b>	<b>21,750,286</b>	<b>218,849,430</b>	<b>4,160,479</b>	<b>4,865,176</b>	<b>34,810,276</b>	<b>133,451,813</b>	<b>36,809,934</b>	<b>4,751,752</b>	<b>3,736,994</b>

Note: Credit derivatives have been included in the sum of total derivatives. Credit derivatives have been included as an "over-the-counter" (OTC) category, although the call report does not differentiate by market currently. Before the first quarter of 1995 total derivatives included spot FX. Beginning in that quarter, spot FX has been reported separately.

Source: Call reports, Schedule RC-L

**Table 14: Notional Amounts of Derivative Contracts (Holding Companies)**  
Top 25 Holding Companies in Derivatives, in Millions of Dollars, September 30, 2024

Holding company	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
JPMORGAN CHASE & CO.	\$4,210,048	\$59,436,951	\$1,155,032	\$2,135,250	\$11,977,808	\$33,615,196	\$9,031,003	\$1,522,662	\$1,199,085
CITIGROUP INC.	2,430,663	49,637,863	713,514	4,220,386	7,381,901	28,005,709	8,201,732	1,114,621	657,914
GOLDMAN SACHS GROUP, INC., THE	1,728,080	43,690,463	2,072,964	3,502,852	5,343,833	20,534,930	10,721,385	1,514,499	438,102
BANK OF AMERICA CORPORATION	3,324,293	43,169,473	852,932	1,934,231	8,389,190	25,497,334	5,238,630	1,257,156	404,251
MORGAN STANLEY	1,258,027	35,315,257	952,774	2,046,902	3,877,044	19,056,917	8,460,869	920,751	115,200
WELLS FARGO & COMPANY	1,922,125	14,485,768	558,689	531,487	3,010,693	7,397,922	2,893,847	93,130	44,986
SMBC AMERICAS HOLDINGS, INC.	39,044	6,454,879	635,223	1,002,053	258,414	2,829,096	1,727,445	2,648	401
STATE STREET CORPORATION	338,481	3,031,978	47,083	0	2,928,826	26,699	29,370	0	86,954
HSBC NORTH AMERICA HOLDINGS INC.	233,748	1,299,599	14,925	1,377	537,146	637,362	89,769	19,021	58,328
U.S. BANCORP	686,469	1,288,164	1,820	917	80,699	995,667	192,245	16,816	5,658
BANK OF NEW YORK MELLON CORPORATION, THE	427,461	1,179,381	14,747	79	359,898	753,894	50,404	359	120,946
BARCLAYS US LLC	192,176	852,438	36,785	320,828	463,915	29,914	196	800	22
PNC FINANCIAL SERVICES GROUP, INC., THE	565,085	714,251	9,997	9,250	32,281	577,893	71,400	13,430	2,498
BMO FINANCIAL CORP.	297,930	637,894	148,610	77,861	246,446	160,228	3,092	1,658	183
TD GROUP US HOLDINGS LLC	560,481	414,298	18,738	3,878	18,296	372,586	800	0	0
TRUIST FINANCIAL CORPORATION	523,434	382,032	6,187	22,279	25,484	256,435	62,413	9,234	547
CAPITAL ONE FINANCIAL CORPORATION	486,433	313,907	25,905	0	13,626	203,088	64,879	6,409	167
CITIZENS FINANCIAL GROUP, INC.	220,309	280,820	1,440	0	9,443	232,715	35,242	1,980	194
FIFTH THIRD BANCORP	214,318	179,492	2,121	460	5,862	103,056	63,442	4,551	779
REGIONS FINANCIAL CORPORATION	157,740	175,239	223	0	4,475	138,878	26,437	5,226	13
KEYCORP	189,766	149,697	824	0	7,756	126,229	14,752	136	272
AMERIPRISE FINANCIAL, INC.	185,985	148,755	6,626	3,073	386	43,421	91,716	3,533	0
SANTANDER HOLDINGS USA, INC.	168,019	143,176	3,150	130	68,636	61,399	9,688	173	49
HUNTINGTON BANCSHARES INCORPORATED	200,535	104,381	904	0	10,697	72,777	15,926	4,076	81
COMERICA INCORPORATED	79,923	83,152	0	0	3,269	66,552	11,406	1,925	206
<b>Top 25 holding companies with derivatives</b>	<b>\$20,640,573</b>	<b>\$263,569,308</b>	<b>\$7,281,213</b>	<b>\$15,813,292</b>	<b>\$45,056,024</b>	<b>\$141,795,897</b>	<b>\$47,108,088</b>	<b>\$6,514,795</b>	<b>\$3,136,838</b>

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

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

**Table 15: Distribution of Derivative Contracts**

Top 25 Commercial Banks, Savings Associations, and Trust Companies in Derivatives, in Millions of Dollars, September 30, 2024

Bank Name	Total assets	Total derivatives	Percent exchange traded contracts	Percent OTC contracts	Percent interest rate contracts	Percent foreign exchange contracts	Percent equity contracts	Percent other contracts	Percent credit derivatives
JPMORGAN CHASE BANK NA	\$3,584,105	\$60,038,410	4.0	96.0	65.5	25.7	4.8	1.5	2.6
GOLDMAN SACHS BANK USA	564,359	56,939,218	5.5	94.5	84.7	12.7	1.4	0.1	1.2
CITIBANK NATIONAL ASSN	1,733,111	51,176,364	2.8	97.2	61.7	31.2	2.9	0.9	3.3
BANK OF AMERICA NA	2,565,878	24,570,657	3.7	96.3	63.4	29.0	4.6	0.5	2.4
WELLS FARGO BANK NA	1,698,675	13,992,303	7.2	92.8	71.2	24.8	2.6	0.7	0.8
STATE STREET BANK&TRUST CO	334,336	3,040,099	1.5	98.5	2.7	96.4	0.0	0.9	0.0
HSBC NA	163,226	1,299,772	1.1	98.9	9.5	86.1	1.6	1.4	1.5
U S BANK NATIONAL ASSN	670,008	1,296,327	0.2	99.8	88.7	8.8	0.0	1.1	1.3
BANK OF NEW YORK MELLON	348,079	1,197,991	1.2	98.8	21.8	77.7	0.4	0.0	0.0
PNC BANK NATIONAL ASSN	559,700	736,381	2.6	97.4	91.3	4.2	0.6	2.1	1.8
NORTHERN TRUST CO	155,219	395,138	0.0	100.0	6.9	93.0	0.1	0.0	0.0
TRUIST BANK	515,224	387,943	7.3	92.7	77.5	6.4	11.1	2.7	2.3
MORGAN STANLEY BANK NA	224,864	378,042	0.5	99.5	43.1	35.2	15.3	0.0	6.4
TD BANK NATIONAL ASSN	399,881	356,032	0.0	100.0	99.5	0.4	0.0	0.0	0.0
CITIZENS BANK NATIONAL ASSN	219,536	280,820	0.5	99.5	87.6	11.2	0.0	0.4	0.7
CAPITAL ONE NATIONAL ASSN	483,857	277,540	9.3	90.7	83.6	6.4	0.0	7.7	2.3
REGIONS BANK	156,385	178,291	0.1	99.9	93.0	1.9	0.0	2.1	2.9
FIFTH THIRD BANK NA	213,583	175,287	1.5	98.5	64.6	21.8	1.3	9.7	2.6
BMO BANK NATIONAL ASSN	264,330	164,302	0.0	100.0	96.7	1.8	1.5	0.0	0.0
KEYBANK NATIONAL ASSN	187,221	142,486	0.5	99.5	89.2	4.5	0.0	6.2	0.1
OCEAN BANK	6,650	110,380	0.0	100.0	100.0	0.0	0.0	0.0	0.0
HUNTINGTON NATIONAL BANK	199,222	105,727	0.8	99.2	89.8	5.1	0.6	0.6	3.9
COMERICA BANK	79,753	82,952	0.0	100.0	76.3	4.0	0.0	17.4	2.3
MANUFACTURERS&TRADERS TR CO	211,332	81,983	0.0	100.0	98.4	1.6	0.0	0.0	0.0
BOKF NATIONAL ASSN	49,908	66,687	10.4	89.6	78.8	0.2	0.0	21.0	0.0
<b>Top 25 commercial banks, SAs &amp; TCs with derivatives</b>	<b>\$15,588,443</b>	<b>\$217,471,133</b>	<b>\$9,014,007</b>	<b>\$208,457,126</b>	<b>\$149,195,119</b>	<b>\$54,964,110</b>	<b>\$6,800,592</b>	<b>\$1,801,643</b>	<b>\$4,709,668</b>
<b>Other commercial banks, SAs &amp; TCs with derivatives</b>	<b>6,161,843</b>	<b>1,378,297</b>	<b>11,648</b>	<b>1,366,649</b>	<b>1,281,218</b>	<b>48,278</b>	<b>712</b>	<b>6,005</b>	<b>42,084</b>
<b>Total all commercial banks, SAs &amp; TCs with derivatives</b>	<b>21,750,286</b>	<b>218,849,430</b>	<b>9,025,655</b>	<b>209,823,775</b>	<b>150,476,337</b>	<b>55,012,387</b>	<b>6,801,305</b>	<b>1,807,648</b>	<b>4,751,752</b>
<b>Top 25 Commercial Banks, SAs &amp; TCs with derivatives: percentage of total</b>		<b>99.4</b>	<b>4.1</b>	<b>95.3</b>	<b>68.2</b>	<b>25.1</b>	<b>3.1</b>	<b>0.8</b>	<b>2.2</b>
<b>Other commercial banks, SAs &amp; TCs with derivatives: percentage of total</b>		<b>0.6</b>	<b>0.0</b>	<b>0.6</b>	<b>0.6</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Total all commercial banks, SAs &amp; TCs with derivatives: percentage of total</b>		<b>100.0</b>	<b>4.1</b>	<b>95.9</b>	<b>68.8</b>	<b>25.1</b>	<b>3.1</b>	<b>0.8</b>	<b>2.2</b>

Note: Currently, the call report does not differentiate credit derivatives by OTC or exchange-traded. Credit derivatives have been included in the "OTCr" category as well as in the sum of total derivatives here. "FX" does not include spot FX. "Other" is defined as the sum of commodity and equity contracts.

Source: Call reports, Schedule RC-L

**Table 16: Credit Equivalent Exposures**

Top 25 Commercial Banks, Savings Associations, and Trust Companies in Derivatives, in Millions of Dollars, September 30, 2024

Bank Name	Total assets	Total derivatives	Total risk-based capital	Bilaterally netted current credit exposure	Potential future exposure	Total credit exposure from all contracts	Percent of total credit exposure to capital
JPMORGAN CHASE BANK NA	\$3,584,105	\$60,038,410	\$299,439	\$85,939	\$254,583	\$340,522	114
GOLDMAN SACHS BANK USA	564,359	56,939,218	64,600	18,058	72,754	90,812	141
CITIBANK NATIONAL ASSN	1,733,111	51,176,364	167,687	41,995	163,310	205,305	122
BANK OF AMERICA NA	2,565,878	24,570,657	206,410	30,027	63,398	93,425	45
WELLS FARGO BANK NA	1,698,675	13,992,303	172,326	18,093	47,950	66,043	38
STATE STREET BANK&TRUST CO	334,336	3,040,099	19,459	4,559	22,057	26,616	137
HSBC NA	163,226	1,299,772	19,077	2,493	4,622	7,115	37
U S BANK NATIONAL ASSN	670,008	1,296,327	69,597	4,282	8,203	12,486	18
BANK OF NEW YORK MELLON	348,079	1,197,991	22,199	4,302	9,760	14,062	63
PNC BANK NATIONAL ASSN	559,700	736,381	55,234	4,212	-1,109	3,103	6
NORTHERN TRUST CO	155,219	395,138	11,992	1,019	4,978	5,998	50
TRUIST BANK	515,224	387,943	59,642	695	3,342	4,037	7
MORGAN STANLEY BANK NA	224,864	378,042	25,607	1,559	4,454	6,013	23
TD BANK NATIONAL ASSN	399,881	356,032	40,597	79	1,452	1,532	4
CITIZENS BANK NATIONAL ASSN	219,536	280,820	23,035	540	1,775	2,315	10
CAPITAL ONE NATIONAL ASSN	483,857	277,540	57,109	2,708	6,404	9,112	16
REGIONS BANK	156,385	178,291	16,508	357	588	945	6
FIFTH THIRD BANK NA	213,583	175,287	22,854	951	2,810	3,761	16
BMO BANK NATIONAL ASSN	264,330	164,302	27,958	216	210	426	2
KEYBANK NATIONAL ASSN	187,221	142,486	20,013	401	550	951	5
OCEAN BANK	6,650	110,380	733	0	1	1	0
HUNTINGTON NATIONAL BANK	199,222	105,727	17,741	1,334	902	2,236	13
COMERICA BANK	79,753	82,952	9,809	479	1,352	1,831	19
MANUFACTURERS&TRADERS TR CO	211,332	81,983	21,654	246	236	481	2
BOKF NATIONAL ASSN	49,908	66,687	4,955	598	872	1,470	30
<b>Top 25 commercial banks, SAs &amp; TCs with derivatives</b>	<b>\$15,588,443</b>	<b>\$217,471,133</b>	<b>\$1,456,237</b>	<b>\$225,144</b>	<b>\$675,454</b>	<b>\$900,599</b>	<b>62</b>
<b>Other commercial banks, SAs &amp; TCs with derivatives</b>	<b>6,161,843</b>	<b>1,378,297</b>	<b>653,501</b>	<b>11,493</b>	<b>9,932</b>	<b>21,425</b>	<b>3</b>
<b>Total all commercial banks, SAs &amp; TCs with derivatives</b>	<b>21,750,286</b>	<b>218,849,430</b>	<b>2,109,738</b>	<b>236,637</b>	<b>685,386</b>	<b>922,023</b>	<b>44</b>

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. The total credit exposure to capital ratio is calculated using risk-based capital (tier 1 plus tier 2 capital). Currently, the call report does not differentiate credit derivatives by contract type. Credit derivatives have been included in the sum of total derivatives here.

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

**Table 17: Notional Amounts of Derivative Contracts Held for Trading**

Top Four Commercial Banks, Savings Associations, and Trust Companies in Derivatives, in Millions of Dollars, September 30, 2024

Bank name	Total assets	Total derivatives	Total held for trading & MTM	Percent held for trading & MTM	Total not held for trading & MTM	Percent not held for trading & MTM
JPMORGAN CHASE BANK NA	\$3,584,105	\$60,038,410	\$57,595,626	98.5	\$898,886	1.5
GOLDMAN SACHS BANK USA	564,359	56,939,218	56,207,901	99.9	50,043	0.1
CITIBANK NATIONAL ASSN	1,733,111	51,176,364	49,378,578	99.8	123,141	0.2
BANK OF AMERICA NA	2,565,878	24,570,657	22,418,513	93.5	1,554,439	6.5
<b>Top four commercial banks, SAs &amp; TCs with derivatives</b>	<b>\$8,447,453</b>	<b>\$192,724,649</b>	<b>\$185,600,618</b>	<b>98.6</b>	<b>\$2,626,509</b>	<b>1.4</b>
<b>Other commercial banks, SAs &amp; TCs with derivatives</b>	<b>13,302,833</b>	<b>26,124,781</b>	<b>22,511,698</b>	<b>87.0</b>	<b>3,358,853</b>	<b>13.0</b>
<b>Total all commercial banks, SAs &amp; TCs with derivatives</b>	<b>21,750,286</b>	<b>218,849,430</b>	<b>208,112,316</b>	<b>97.2</b>	<b>5,985,362</b>	<b>2.8</b>

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.

Source: Call reports, Schedule RC-L



**Table 18: Gross Fair Values of Derivative Contracts**

Top Four Commercial Banks, Savings Associations, and Trust Companies in Derivatives, in Millions of Dollars, September 30, 2024

Bank name	Total assets	Total derivatives	Trading gross positive fair value*	Trading gross negative fair value**	Not for trading gross positive fair value*	Not for trading gross negative fair value**	Credit derivatives gross positive fair value	Credit derivatives gross negative fair value**
JPMORGAN CHASE BANK NA	\$3,584,105	\$60,038,410	\$682,756	\$665,824	\$2,339	\$3,883	\$11,122	\$14,518
GOLDMAN SACHS BANK USA	564,359	56,939,218	895,849	885,005	43	717	8,045	9,146
CITIBANK NATIONAL ASSN	1,733,111	51,176,364	437,235	430,274	1,429	2,210	17,851	18,266
BANK OF AMERICA NA	2,565,878	24,570,657	175,327	172,347	25,570	34,449	4,112	4,411
<b>Top four commercial banks, SAs &amp; TCs with derivatives</b>	<b>\$8,447,453</b>	<b>\$192,724,649</b>	<b>\$2,191,167</b>	<b>\$2,153,450</b>	<b>\$29,381</b>	<b>\$41,259</b>	<b>\$41,130</b>	<b>\$46,341</b>
<b>Other commercial banks, SAs &amp; TCs with derivatives</b>	<b>13,302,833</b>	<b>26,124,781</b>	<b>151,550</b>	<b>152,091</b>	<b>26,617</b>	<b>22,863</b>	<b>900</b>	<b>2,574</b>
<b>Total all commercial banks, SAs &amp; TCs with derivatives</b>	<b>21,750,286</b>	<b>218,849,430</b>	<b>2,342,717</b>	<b>2,305,541</b>	<b>55,998</b>	<b>64,122</b>	<b>42,030</b>	<b>48,915</b>

\* 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.

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.

Source: Call reports, Schedule RC-L

**Table 19: Trading Revenues From Cash Instruments and Derivatives**

Top Four Commercial Banks, Savings Associations, and Trust Companies in Derivatives, in Millions of Dollars: Revenue Figures are for the Quarter (Not Year-to-Date), September 30, 2024

Bank name	Total assets	Total derivatives	Total trading revenues from cash & off-balance sheet positions	Trading revenue from interest rate positions	Trading revenue from foreign exchange positions	Trading revenue from equity positions	Trading revenue from commodity & other positions	Trading revenue from credit positions
JPMORGAN CHASE BANK NA	\$3,584,105	\$60,038,410	8,017	1,795	1,301	4,717	205	-1
GOLDMAN SACHS BANK USA	564,359	56,939,218	1,563	2,814	-1,567	851	9	-544
CITIBANK NATIONAL ASSN	1,733,111	51,176,364	2,965	807	1,447	373	232	106
BANK OF AMERICA NA	2,565,878	24,570,657	1,056	347	102	509	46	52
<b>Top four commercial banks, SAs &amp; TCs with derivatives</b>	<b>\$8,447,453</b>	<b>\$192,724,649</b>	<b>13,601</b>	<b>5,763</b>	<b>1,283</b>	<b>6,450</b>	<b>492</b>	<b>-387</b>
<b>Other commercial banks, SAs &amp; TCs with derivatives</b>	<b>13,302,833</b>	<b>26,124,781</b>	<b>2,911</b>	<b>1,189</b>	<b>574</b>	<b>1,067</b>	<b>119</b>	<b>-39</b>
<b>Total all commercial banks, SAs &amp; TCs with derivatives</b>	<b>21,750,286</b>	<b>218,849,430</b>	<b>16,512</b>	<b>6,952</b>	<b>1,857</b>	<b>7,517</b>	<b>611</b>	<b>-426</b>

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

Source: Call reports, Schedules RC-L and Schedule RI

**Table 20: Notional Amounts of Derivative Contracts by Contract Type and Maturity (Interest Rate and Foreign Exchange Rate)**

Top Four Commercial Banks, Savings Associations, and Trust Companies in Derivatives, in Millions of Dollars, September 30, 2024

Bank name	Total assets	Total derivatives	Interest rate maturity < 1 year	Interest rate maturity 1-5 years	Interest rate maturity > 5 years	Interest rate: all maturities	Foreign exchange rate maturity < 1 year	Foreign exchange rate maturity 1-5 years	Foreign exchange rate maturity > 5 years	Foreign exchange rate: all maturities
JPMORGAN CHASE BANK NA	\$3,584,105	\$60,038,410	\$36,784,131	\$7,845,661	\$6,579,780	\$51,209,572	\$11,447,677	\$2,843,954	\$1,299,875	\$15,591,506
GOLDMAN SACHS BANK USA	564,359	56,939,218	25,160,135	9,457,506	8,790,069	43,407,710	4,772,138	1,197,294	793,380	6,762,812
CITIBANK NATIONAL ASSN	1,733,111	51,176,364	20,402,481	4,694,157	3,429,546	28,526,184	11,333,993	2,410,214	1,041,190	14,785,397
BANK OF AMERICA NA	2,565,878	24,570,657	7,314,974	5,255,483	3,362,514	15,932,971	5,987,617	579,994	353,783	6,921,394
<b>Top four commercial banks, SAs &amp; TCs with derivatives</b>	<b>\$8,447,453</b>	<b>\$192,724,649</b>	<b>\$89,661,721</b>	<b>\$27,252,807</b>	<b>\$22,161,909</b>	<b>\$139,076,437</b>	<b>\$33,541,425</b>	<b>\$7,031,456</b>	<b>\$3,488,228</b>	<b>\$44,061,109</b>
<b>Other commercial banks, SAs &amp; TCs with derivatives</b>	<b>13,302,833</b>	<b>26,124,781</b>	<b>11,181,321</b>	<b>3,097,021</b>	<b>1,011,130</b>	<b>15,289,472</b>	<b>8,750,495</b>	<b>409,162</b>	<b>109,121</b>	<b>9,268,779</b>
<b>Total all commercial banks, SAs &amp; TCs with derivatives</b>	<b>21,750,286</b>	<b>218,849,430</b>	<b>100,843,042</b>	<b>30,349,828</b>	<b>23,173,039</b>	<b>154,365,909</b>	<b>42,291,920</b>	<b>7,440,618</b>	<b>3,597,349</b>	<b>53,329,888</b>

Note: Beginning January 1, 2022, the largest banks are required to calculate their derivative exposure amount for regulatory capital purposes using the Standardized Approach for Counterparty Credit Risk (SA-CCR). Refer to the call report instructions and OCC Bulletin 2020-7, "Standardized Approach for Counterparty Credit Risk: Final Rule," for additional information on the SA-CCR exposure calculation.

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

**Table 21: Notional Amounts of Derivative Contracts by Contract Type and Maturity (Precious Metals)**

Top Four Commercial Banks, Savings Associations, and Trust Companies in Derivatives, in Millions of Dollars, September 30, 2024

Bank name	Total assets	Total derivatives	Precious metals maturity < 1 year	Precious metals maturity 1-5 years	Precious metals maturity > 5 years	Precious metals: all maturities
JPMORGAN CHASE BANK NA	\$3,584,105	\$60,038,410	\$294,655	\$30,767	\$21	\$325,443
GOLDMAN SACHS BANK USA	564,359	56,939,218	176	21	0	197
CITIBANK NATIONAL ASSN	1,733,111	51,176,364	140,347	8,200	0	148,547
BANK OF AMERICA NA	2,565,878	24,570,657	78,991	5,040	0	84,031
<b>Top four commercial banks, SAs &amp; TCs with derivatives</b>	<b>\$8,447,453</b>	<b>\$192,724,649</b>	<b>\$514,169</b>	<b>\$44,028</b>	<b>\$21</b>	<b>\$558,218</b>
<b>Other commercial banks, SAs &amp; TCs with derivatives</b>	<b>13,302,833</b>	<b>26,124,781</b>	<b>7,461</b>	<b>834</b>	<b>0</b>	<b>8,294</b>
<b>Total all commercial banks, SAs &amp; TCs with derivatives</b>	<b>21,750,286</b>	<b>218,849,430</b>	<b>521,630</b>	<b>44,862</b>	<b>21</b>	<b>566,512</b>

Note: Beginning January 1, 2022, the largest banks are required to calculate their derivative exposure amount for regulatory capital purposes using the Standardized Approach for Counterparty Credit Risk (SA-CCR). Under SA-CCR gold derivatives are considered precious metals derivative contracts rather than an exchange rate derivative contract, resulting in an increase in reported precious metals derivative contracts compared with prior quarters. Refer to the call report instructions and OCC Bulletin 2020-7, "Standardized Approach for Counterparty Credit Risk: Final Rule," for additional information on the SA-CCR exposure calculation.

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

**Table 22: Notional Amounts of Derivative Contracts by Contract Type and Maturity (Other Commodity and Equity)**

Top Four Commercial Banks, Savings Associations, and Trust Companies in Derivatives, in Millions of Dollars, September 30, 2024

Bank name	Total assets	Total derivatives	Other commodity maturity < 1 year	Other commodity maturity 1-5 years	Other commodity maturity > 5 years	Other commodity: all maturities	Equity maturity < 1 year	Equity maturity 1-5 years	Equity maturity > 5 years	Equity: all maturities
JPMORGAN CHASE BANK NA	\$3,584,105	\$60,038,410	\$912,088	\$153,784	\$4,770	\$1,070,642	\$4,402,508	\$852,175	\$83,026	\$5,337,709
GOLDMAN SACHS BANK USA	564,359	56,939,218	38,104	14,560	414	53,078	655,495	90,102	27,259	772,856
CITIBANK NATIONAL ASSN	1,733,111	51,176,364	149,058	58,106	925	208,089	708,962	173,524	11,599	894,085
BANK OF AMERICA NA	2,565,878	24,570,657	44,052	10,546	1,216	55,814	799,780	319,705	25,258	1,144,743
<b>Top four commercial banks, SAs &amp; TCs with derivatives</b>	<b>\$8,447,453</b>	<b>\$192,724,649</b>	<b>\$1,143,302</b>	<b>\$236,996</b>	<b>\$7,325</b>	<b>\$1,387,623</b>	<b>\$6,566,745</b>	<b>\$1,435,506</b>	<b>\$147,142</b>	<b>\$8,149,393</b>
<b>Other commercial banks, SAs &amp; TCs with derivatives</b>	<b>13,302,833</b>	<b>26,124,781</b>	<b>92,902</b>	<b>105,383</b>	<b>4,590</b>	<b>202,875</b>	<b>345,483</b>	<b>151,548</b>	<b>8,720</b>	<b>505,750</b>
<b>Total all commercial banks, SAs &amp; TCs with derivatives</b>	<b>21,750,286</b>	<b>218,849,430</b>	<b>1,236,204</b>	<b>342,379</b>	<b>11,915</b>	<b>1,590,498</b>	<b>6,912,228</b>	<b>1,587,054</b>	<b>155,862</b>	<b>8,655,143</b>

Note: Beginning January 1, 2022, the largest banks are required to calculate their derivative exposure amount for regulatory capital purposes using the Standardized Approach for Counterparty Credit Risk (SA-CCR). Refer to the call report instructions and OCC Bulletin 2020-7, "Standardized Approach for Counterparty Credit Risk: Final Rule," for additional information on the SA-CCR exposure calculation.

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

**Table 23: Notional Amounts of Credit Derivative Contracts by Contract Type and Maturity (Investment Grade and Sub-Investment Grade)**

Top Four Commercial Banks, Savings Associations, and Trust Companies in Derivatives, in Millions of Dollars, September 30, 2024

Bank name	Total assets	Total derivatives	Total credit derivatives	Investment grade maturity <1 year	Investment grade maturity 1-5 years	Investment grade maturity >5 years	Investment grade all maturities	Sub-investment grade maturity <1 year	Sub-investment grade maturity 1-5 years	Sub-investment grade maturity >5 years	Sub-investment grade all maturities
JPMORGAN CHASE BANK NA	\$3,584,105	\$60,038,410	\$1,543,898	\$367,203	\$638,045	\$204,017	\$1,209,265	\$90,714	\$188,525	\$55,394	\$334,633
GOLDMAN SACHS BANK USA	564,359	56,939,218	681,274	83,352	342,460	77,109	502,921	32,968	115,665	29,720	178,353
CITIBANK NATIONAL ASSN	1,733,111	51,176,364	1,674,645	237,948	1,010,000	75,242	1,323,190	72,416	254,468	24,571	351,455
BANK OF AMERICA NA	2,565,878	24,570,657	597,705	147,915	246,265	55,801	449,981	45,031	91,547	11,146	147,724
<b>Top four commercial banks, SAs &amp; TCs with derivatives</b>	<b>\$8,447,453</b>	<b>\$192,724,649</b>	<b>\$4,497,522</b>	<b>\$836,418</b>	<b>\$2,236,770</b>	<b>\$412,169</b>	<b>\$3,485,357</b>	<b>\$241,129</b>	<b>\$650,205</b>	<b>\$120,831</b>	<b>\$1,012,165</b>
<b>Other commercial banks, SAs &amp; TCs with derivatives</b>	<b>13,302,833</b>	<b>26,124,781</b>	<b>254,230</b>	<b>58,283</b>	<b>95,099</b>	<b>16,858</b>	<b>170,240</b>	<b>11,517</b>	<b>61,549</b>	<b>10,925</b>	<b>83,991</b>
<b>Total all commercial banks, SAs &amp; TCs with derivatives</b>	<b>21,750,286</b>	<b>218,849,430</b>	<b>4,751,752</b>	<b>894,701</b>	<b>2,331,869</b>	<b>429,027</b>	<b>3,655,597</b>	<b>252,646</b>	<b>711,754</b>	<b>131,756</b>	<b>1,096,156</b>

Source: Call reports, Schedule RC-L

**Table 24: Distribution of Credit Derivative Contracts Held for Trading**

Top 25 Commercial Banks, Savings Associations, and Trust Companies in Derivatives, in Millions of Dollars, September 30, 2024

Bank name	Total assets	Total derivatives	Total credit derivatives	Total credit derivatives purchased	Total credit derivatives sold	Purchased credit default swaps	Purchased total return swaps	Purchased credit options	Purchased other credit derivatives	Sold credit default swaps	Sold total return swaps	Sold credit options	Sold other credit derivatives
JPMORGAN CHASE BANK NA	\$3,584,105	\$60,038,410	\$1,543,898	\$796,121	\$747,777	\$618,931	\$46,742	\$124,735	\$5,713	\$601,628	\$18,256	\$127,633	\$260
GOLDMAN SACHS BANK USA	564,359	56,939,218	681,274	366,770	314,504	340,316	7,214	19,167	73	289,677	5,587	19,167	73
CITIBANK NATIONAL ASSN	1,733,111	51,176,364	1,674,645	868,013	806,632	778,280	35,358	54,375	0	738,008	15,545	53,079	0
BANK OF AMERICA NA	2,565,878	24,570,657	597,705	311,845	285,860	239,087	18,355	54,403	0	228,422	1,737	55,701	0
WELLS FARGO BANK NA	1,698,675	13,992,303	105,071	58,238	46,833	7,827	29,175	100	21,136	9,924	26,759	0	10,150
STATE STREET BANK&TRUST CO	334,336	3,040,099	0	0	0	0	0	0	0	0	0	0	0
HSBC NA	163,226	1,299,772	19,021	13,379	5,642	10,362	3,017	0	0	5,642	0	0	0
U S BANK NATIONAL ASSN	670,008	1,296,327	16,815	7,199	9,616	3,982	0	0	3,217	14	0	0	9,602
BANK OF NEW YORK MELLON	348,079	1,197,991	359	359	0	359	0	0	0	0	0	0	0
PNC BANK NATIONAL ASSN	559,700	736,381	13,290	5,495	7,795	100	0	0	5,395	0	0	0	7,795
NORTHERN TRUST CO	155,219	395,138	0	0	0	0	0	0	0	0	0	0	0
TRUIST BANK	515,224	387,943	8,894	2,901	5,993	325	1,341	0	1,235	0	0	0	5,993
MORGAN STANLEY BANK NA	224,864	378,042	24,380	21,641	2,739	20,784	857	0	0	2,592	147	0	0
TD BANK NATIONAL ASSN	399,881	356,032	0	0	0	0	0	0	0	0	0	0	0
CITIZENS BANK NATIONAL ASSN	219,536	280,820	1,980	0	1,980	0	0	0	0	0	0	0	1,980
CAPITAL ONE NATIONAL ASSN	483,857	277,540	6,409	3,731	2,679	0	0	0	3,731	0	0	0	2,679
REGIONS BANK	156,385	178,291	5,226	1,810	3,416	0	0	0	1,810	0	0	0	3,416
FIFTH THIRD BANK NA	213,583	175,287	4,551	1,281	3,270	0	0	0	1,281	0	0	0	3,270
BMO BANK NATIONAL ASSN	264,330	164,302	2	1	1	1	0	0	0	1	0	0	0
KEYBANK NATIONAL ASSN	187,221	142,486	136	78	58	78	0	0	0	12	46	0	0
OCEAN BANK	6,650	110,380	0	0	0	0	0	0	0	0	0	0	0
HUNTINGTON NATIONAL BANK	199,222	105,727	4,076	2,448	1,628	278	0	0	2,170	0	0	0	1,628
COMERICA BANK	79,753	82,952	1,925	949	976	949	0	0	0	976	0	0	0
MANUFACTURERS&TRADERS TR CO	211,332	81,983	0	0	0	0	0	0	0	0	0	0	0
BOKF NATIONAL ASSN	49,908	66,687	10	1	9	1	0	0	0	9	0	0	0
<b>Top 25 commercial banks, SAs &amp; TCs with derivatives</b>	<b>\$15,588,443</b>	<b>\$217,471,133</b>	<b>\$4,709,668</b>	<b>\$2,462,260</b>	<b>\$2,247,408</b>	<b>\$2,021,659</b>	<b>\$142,059</b>	<b>\$252,780</b>	<b>\$45,762</b>	<b>\$1,876,905</b>	<b>\$68,077</b>	<b>\$255,580</b>	<b>\$46,846</b>
<b>Other commercial banks, SAs &amp; TCs with derivatives</b>	<b>6,161,843</b>	<b>1,378,297</b>	<b>42,084</b>	<b>27,789</b>	<b>14,295</b>	<b>3,275</b>	<b>149</b>	<b>0</b>	<b>24,365</b>	<b>3,044</b>	<b>131</b>	<b>0</b>	<b>11,120</b>
<b>Total all commercial banks, SAs &amp; TCs with derivatives</b>	<b>21,750,286</b>	<b>218,849,430</b>	<b>4,751,752</b>	<b>2,490,049</b>	<b>2,261,703</b>	<b>2,024,935</b>	<b>142,208</b>	<b>252,780</b>	<b>70,127</b>	<b>1,879,949</b>	<b>68,208</b>	<b>255,580</b>	<b>57,966</b>
<b>Top 25 commercial banks, SAs &amp; TCs with derivatives: percentage of total</b>			<b>99.1</b>	<b>51.8</b>	<b>47.3</b>	<b>42.5</b>	<b>3.0</b>	<b>5.3</b>	<b>1.0</b>	<b>39.5</b>	<b>1.4</b>	<b>5.4</b>	<b>1.0</b>
<b>Other commercial banks, SAs &amp; TCs with derivatives: percentage of total</b>			<b>0.9</b>	<b>0.6</b>	<b>0.3</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.5</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.2</b>
<b>Total all commercial banks, SAs &amp; TCs with derivatives: percentage of total</b>			<b>100.0</b>	<b>52.4</b>	<b>47.6</b>	<b>42.6</b>	<b>3.0</b>	<b>5.3</b>	<b>1.5</b>	<b>39.6</b>	<b>1.4</b>	<b>5.4</b>	<b>1.2</b>

Note: Credit derivatives have been excluded from the sum of total derivatives here.

Source: Call reports, Schedule RC-L

**Table 25: Derivatives Data Reported by FFIEC 051 Filers\***

Commercial Banks, Savings Associations, and Trust Companies in Derivatives, in Millions of Dollars, September 30, 2024

**FFIEC 051 Call Report Schedule SU**

Gross notional amount of derivatives	3Q24	2Q24	1Q24	4Q23	3Q23	2Q23	1Q23	4Q22	3Q22	2Q22	1Q22	4Q21
Total gross notional amount of interest rate derivatives held for trading	\$5,854	\$5,850	\$5,774	\$5,586	\$5,325	\$5,242	\$5,016	\$4,792	\$4,915	\$4,953	\$4,994	\$5,011
Total gross notional amount of all other derivatives held for trading	\$59	\$61	\$51	\$149	\$50	\$47	\$51	\$43	\$42	\$35	\$39	\$44
Total gross notional amount of interest rate derivatives not held for trading	\$34,790	\$32,196	\$29,189	\$26,068	\$122,763	\$21,050	\$17,819	\$14,395	\$16,786	\$19,499	\$21,308	\$22,545
Total gross notional amount of all other derivatives not held for trading	\$817	\$698	\$626	\$614	\$845	\$842	\$676	\$1,103	\$1,037	\$1,142	\$1,007	\$1,314

**FFIEC 051 Call Report Schedule RC-R\*\***

Notional principal amounts of over-the-counter derivative contracts covered by the regulatory capital rules	3Q24	2Q24	1Q24	4Q23	3Q23	2Q23	1Q23	4Q22	3Q22	2Q22	1Q22	4Q21
Interest rate	Data Not Reported	\$23,617	Data Not Reported	\$20,246	Data Not Reported	\$20,844	Data Not Reported	\$12,839	Data Not Reported	\$14,092	Data Not Reported	\$14,005
Foreign exchange rate	Data Not Reported	\$9	Data Not Reported	\$7	Data Not Reported	\$5	Data Not Reported	\$5	Data Not Reported	\$4	Data Not Reported	\$4
Credit (investment grade reference asset)	Data Not Reported	\$89	Data Not Reported	\$75	Data Not Reported	\$80	Data Not Reported	\$188	Data Not Reported	\$265	Data Not Reported	\$230
Credit (non-investment grade reference asset)	Data Not Reported	\$324	Data Not Reported	\$302	Data Not Reported	\$251	Data Not Reported	\$212	Data Not Reported	\$176	Data Not Reported	\$168
Equity	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0
Precious metals	Data Not Reported	\$4	Data Not Reported	\$4	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$4
Other	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0

\* Beginning September 30, 2019, the eligibility to file the FFIEC 051 call report expanded from banks with total assets less than \$1 billion to include banks with less than \$5 billion in total assets.

\*\* Beginning September 30, 2019, banks filing the FFIEC 051 call report complete this information from schedule RC-R in the June and December reports only.

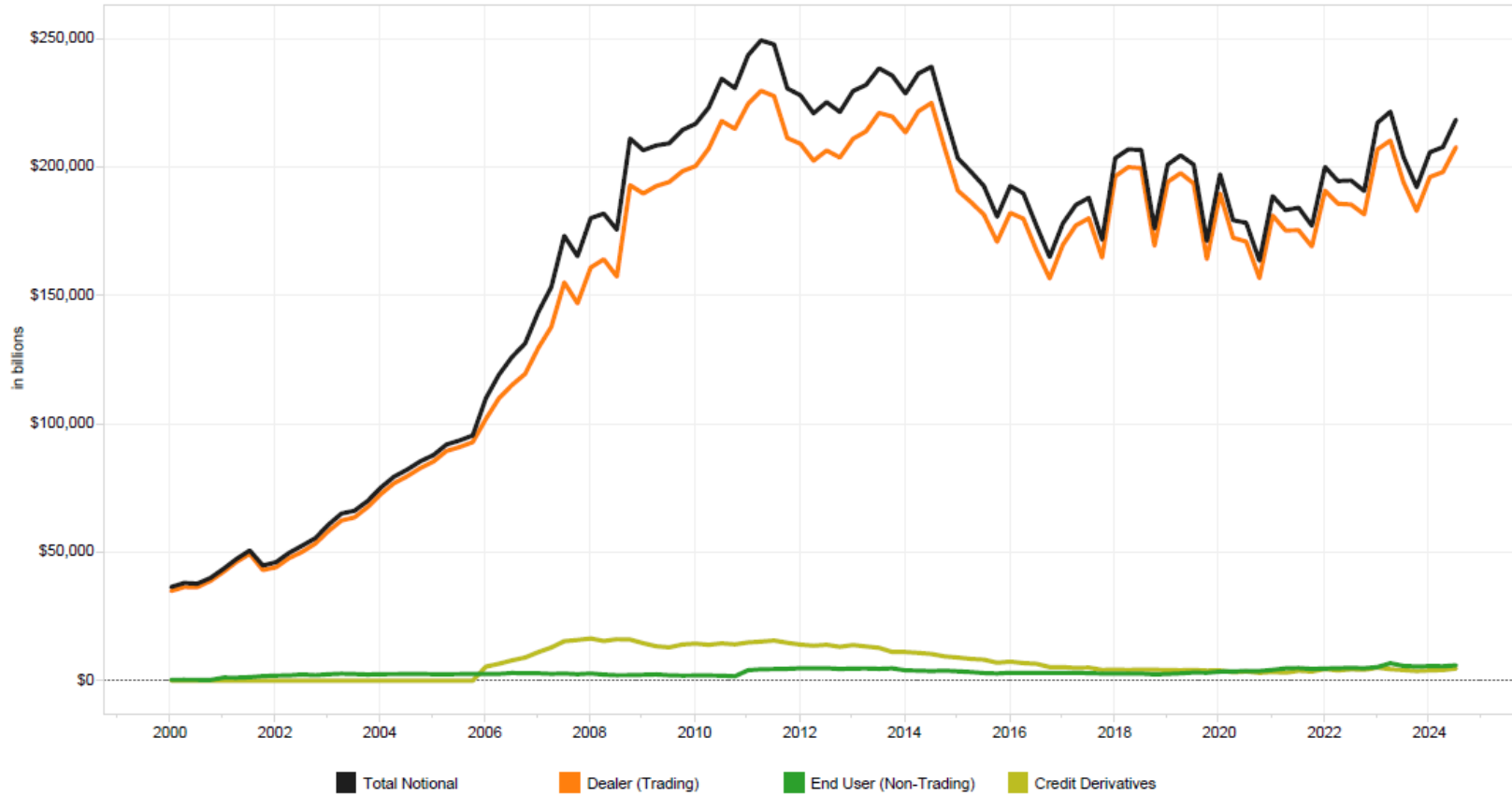
Source: Call reports, Schedule SU and Schedule RC-R

Notional principal amounts of centrally cleared derivative contracts covered by the regulatory capital rules	3Q24	2Q24	1Q24	4Q23	3Q23	2Q23	1Q23	4Q22	3Q22	2Q22	1Q22	4Q21
Interest rate	Data Not Reported	\$90	Data Not Reported	\$69	Data Not Reported	\$90	Data Not Reported	\$79	Data Not Reported	\$108	Data Not Reported	\$21
Foreign exchange rate	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0
Credit (investment grade reference asset)	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0
Credit (non-investment grade reference asset)	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0
Equity	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0
Precious metals	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0
Other	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0	Data Not Reported	\$0

Current Credit Exposure	3Q24	2Q24	1Q24	4Q23	3Q23	2Q23	1Q23	4Q22	3Q22	2Q22	1Q22	4Q21
Current credit exposure across all derivative contracts covered by the regulatory capital rules	\$466		\$354		\$455		\$493		\$363		\$233	\$466



**Figure 6: Derivative Notional Amounts by Type**  
Insured U.S. Commercial Banks and Savings Associations



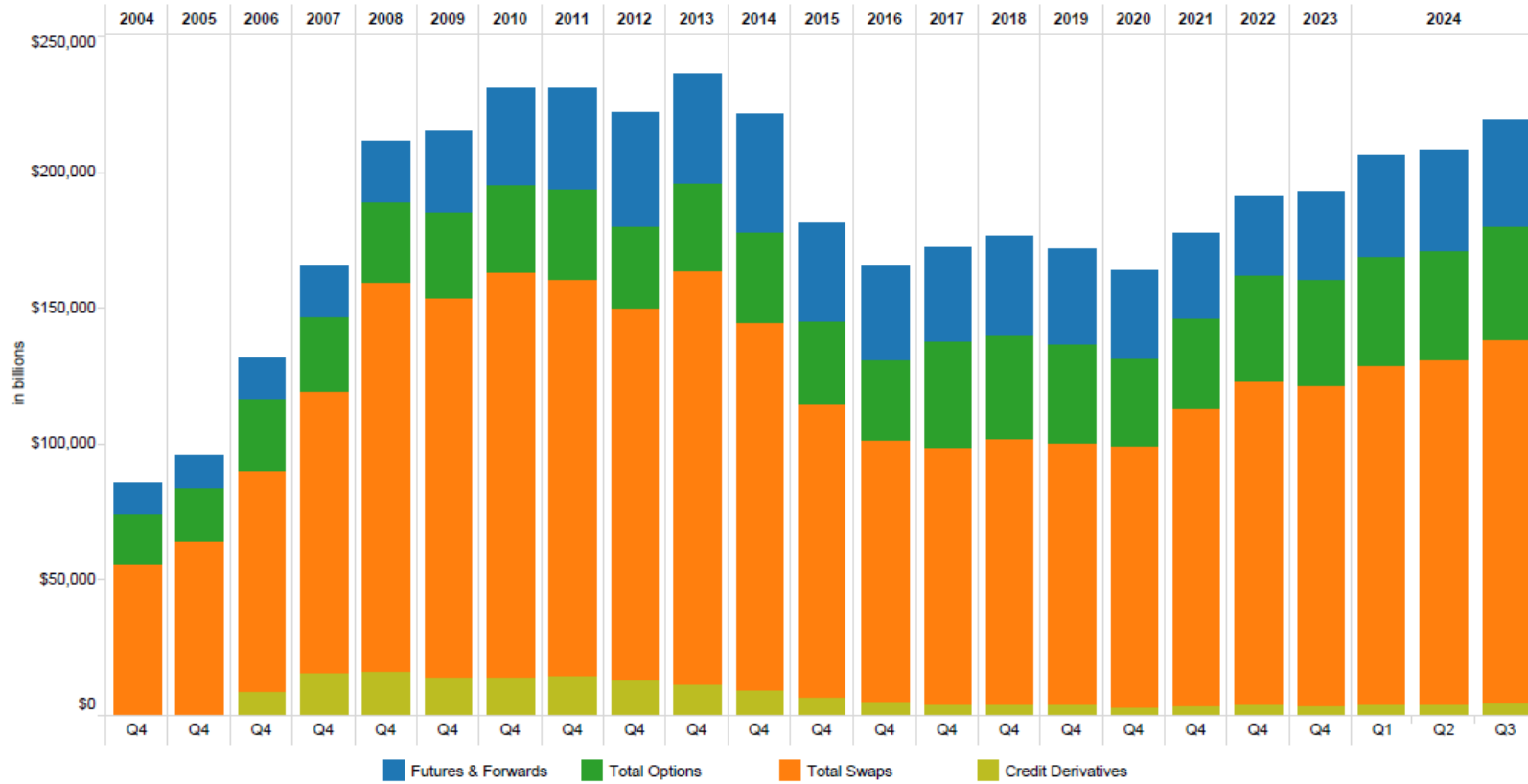
In billions of dollars

	2021				2022				2023				2024		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Total Notional	\$188,990	\$183,501	\$184,480	\$177,464	\$200,354	\$194,852	\$195,084	\$190,978	\$217,602	\$221,915	\$204,293	\$192,464	\$206,091	\$208,098	\$218,849
Dealer (Trading)	181,421	175,607	175,695	169,360	191,121	186,016	185,703	181,875	207,222	210,643	194,426	183,203	196,440	198,382	208,112
End User (Non-Trading)	4,211	4,791	4,933	4,563	4,729	4,870	4,992	4,861	5,301	6,798	5,752	5,515	5,653	5,604	5,985
Credit Derivatives	3,359	3,104	3,852	3,540	4,504	3,966	4,390	4,241	5,079	4,474	4,115	3,746	3,999	4,112	4,752

Note: Total derivative notionals are now reported including credit derivatives, for which regulatory reporting does not differentiate between trading and nontrading.

Source: Call reports, Schedule RC-L

**Figure 7: Derivative Contracts by Product\***  
Insured U.S. Commercial Banks and Savings Associations



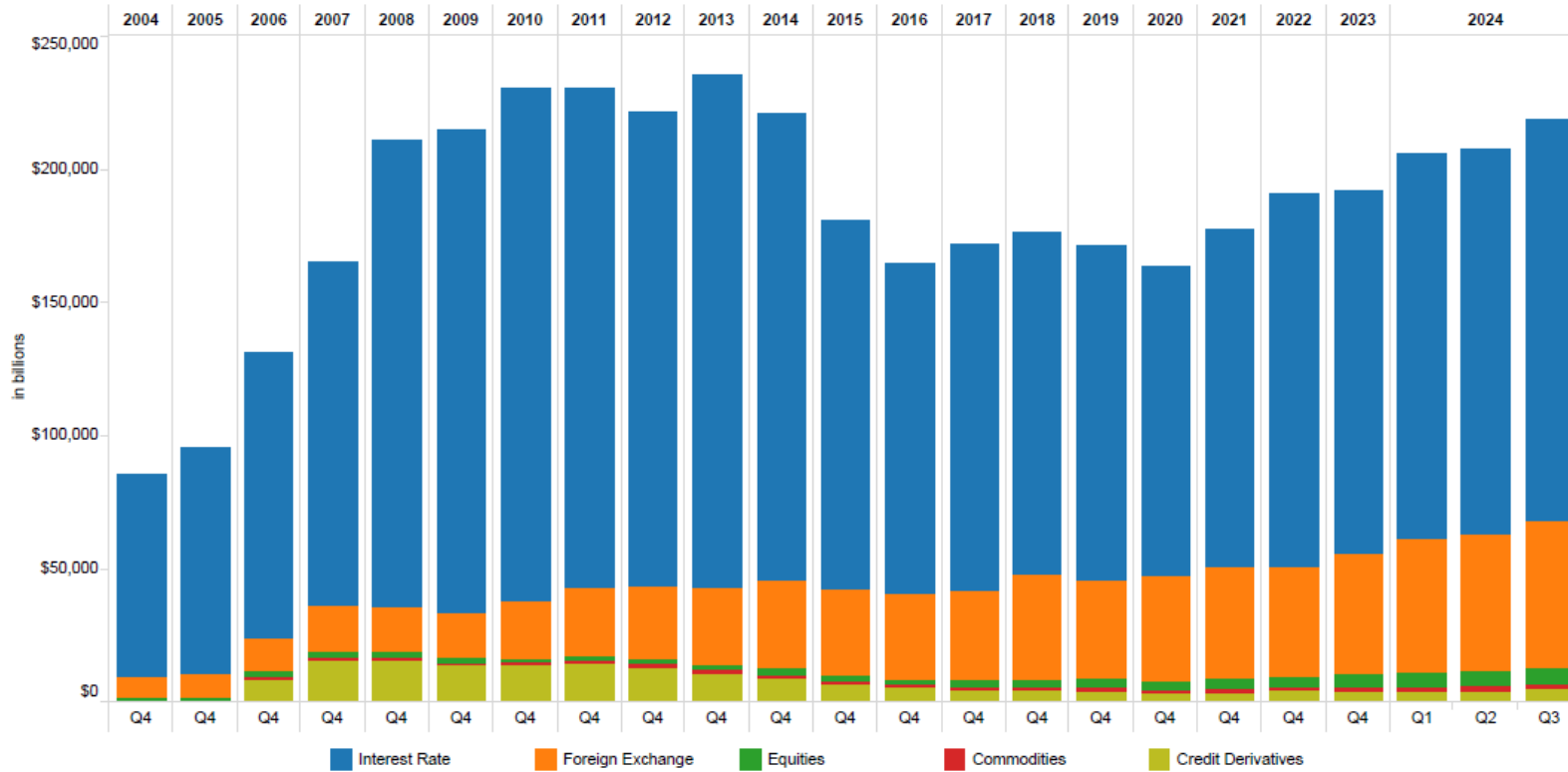
In billions of dollars

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q1	Q2	Q3
<b>Futures &amp; Forwards</b>	\$29,652	\$35,539	\$37,469	\$41,621	\$40,027	\$43,380	\$35,691	\$34,201	\$34,162	\$36,145	\$34,789	\$32,350	\$31,180	\$28,749	\$31,807	\$36,822	\$36,701	\$38,971
<b>Total Options</b>	31,884	32,078	32,505	30,375	32,305	33,081	30,889	29,373	38,841	38,009	36,117	31,991	33,453	39,389	39,608	40,378	40,203	41,675
<b>Total Swaps</b>	139,138	149,331	146,266	136,608	152,469	135,169	107,392	96,384	94,784	97,930	96,614	96,423	109,290	118,598	117,303	124,893	127,082	133,452
<b>Credit Derivatives</b>	14,112	14,151	14,759	13,190	11,191	9,449	6,986	5,293	4,186	4,270	3,945	3,034	3,540	4,241	3,746	3,999	4,112	4,752
<b>Total Notional</b>	214,786	231,099	230,998	221,794	235,992	221,078	180,959	165,252	171,974	176,354	171,465	163,799	177,464	190,978	192,464	206,091	208,098	218,849

\* Notional amount of total: futures, exchange-traded options, OTC options, forwards, and swaps.

Source: Call reports, Schedule RC-L

**Figure 8: Derivative Contracts by Type\***  
Insured U.S. Commercial Banks and Savings Associations



In billions of dollars

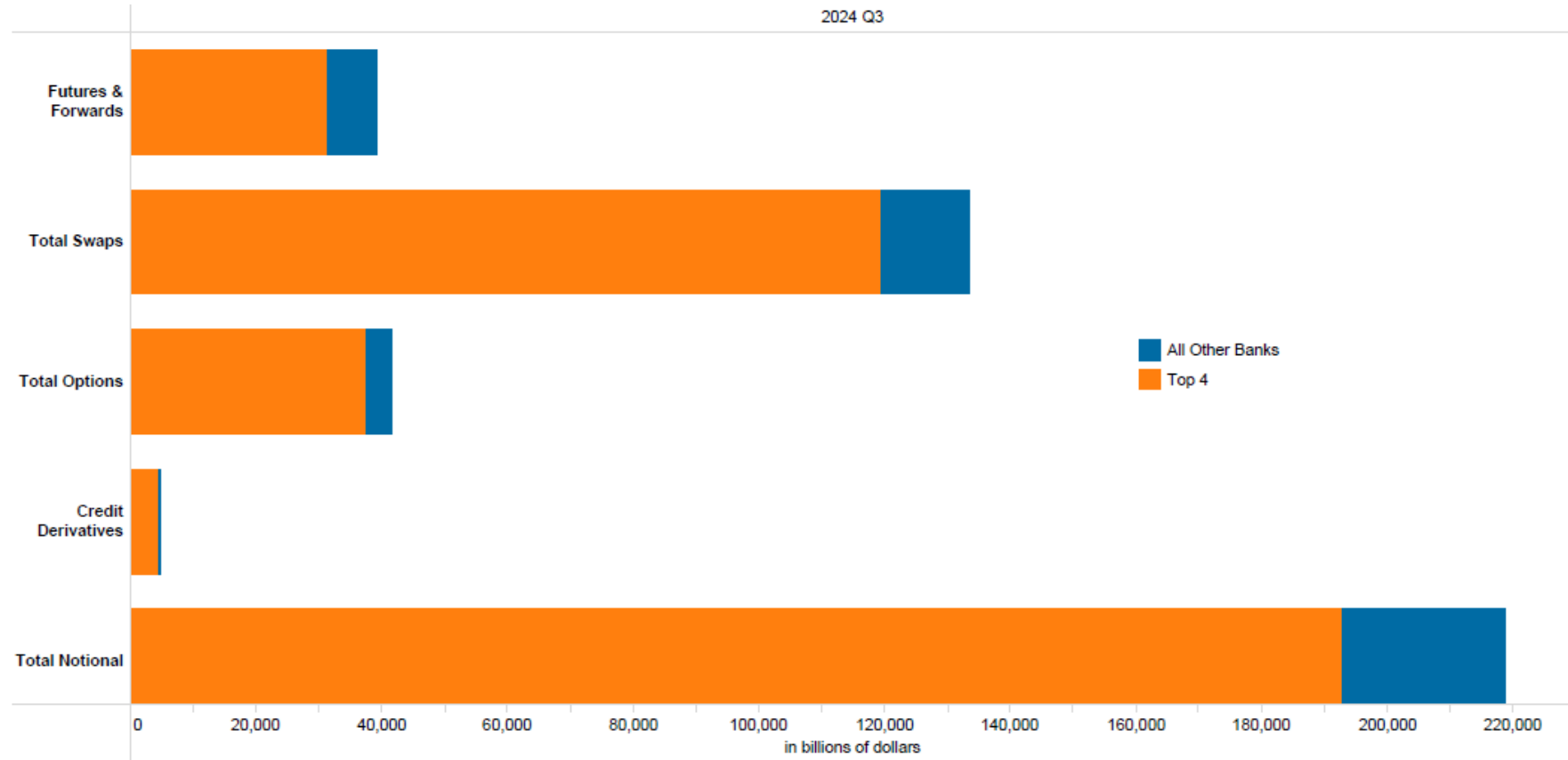
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q1	Q2	Q3
Interest Rate	\$193,399	\$187,866	\$177,650	\$193,084	\$174,687	\$138,369	\$124,488	\$130,417	\$128,175	\$125,065	\$116,000	\$126,236	\$139,756	\$136,274	\$144,427	\$144,959	\$150,476
Foreign Exchange	20,990	25,436	27,587	28,480	33,183	32,100	31,737	32,903	39,220	37,170	39,596	41,847	41,124	45,278	49,856	51,021	55,012
Equities	1,364	1,606	1,970	2,028	2,537	2,395	2,475	3,080	3,374	3,796	3,775	4,256	4,424	5,674	6,253	6,308	6,801
Commodities	1,195	1,330	1,397	1,209	1,222	1,108	1,257	1,388	1,315	1,488	1,395	1,584	1,433	1,493	1,557	1,699	1,808
Credit Derivatives	14,151	14,759	13,190	11,191	9,449	6,986	5,293	4,186	4,270	3,945	3,034	3,540	4,241	3,746	3,999	4,112	4,752
<b>Total Notional</b>	<b>231,099</b>	<b>230,998</b>	<b>221,794</b>	<b>235,992</b>	<b>221,078</b>	<b>180,959</b>	<b>165,252</b>	<b>171,974</b>	<b>176,354</b>	<b>171,465</b>	<b>163,799</b>	<b>177,464</b>	<b>190,978</b>	<b>192,464</b>	<b>206,091</b>	<b>208,098</b>	<b>218,849</b>

\* Notional amount of total: futures, exchange-traded options, OTC options, forwards, and swaps.

Note: As of 2006 Q2 equities and commodities are shown as separate categories. They were previously shown as "Other Derivs"

Source: Call reports, Schedule RC-L

**Figure 9: Four Banks Dominate in Derivatives\***  
 Insured U.S. Commercial Banks and Savings Associations



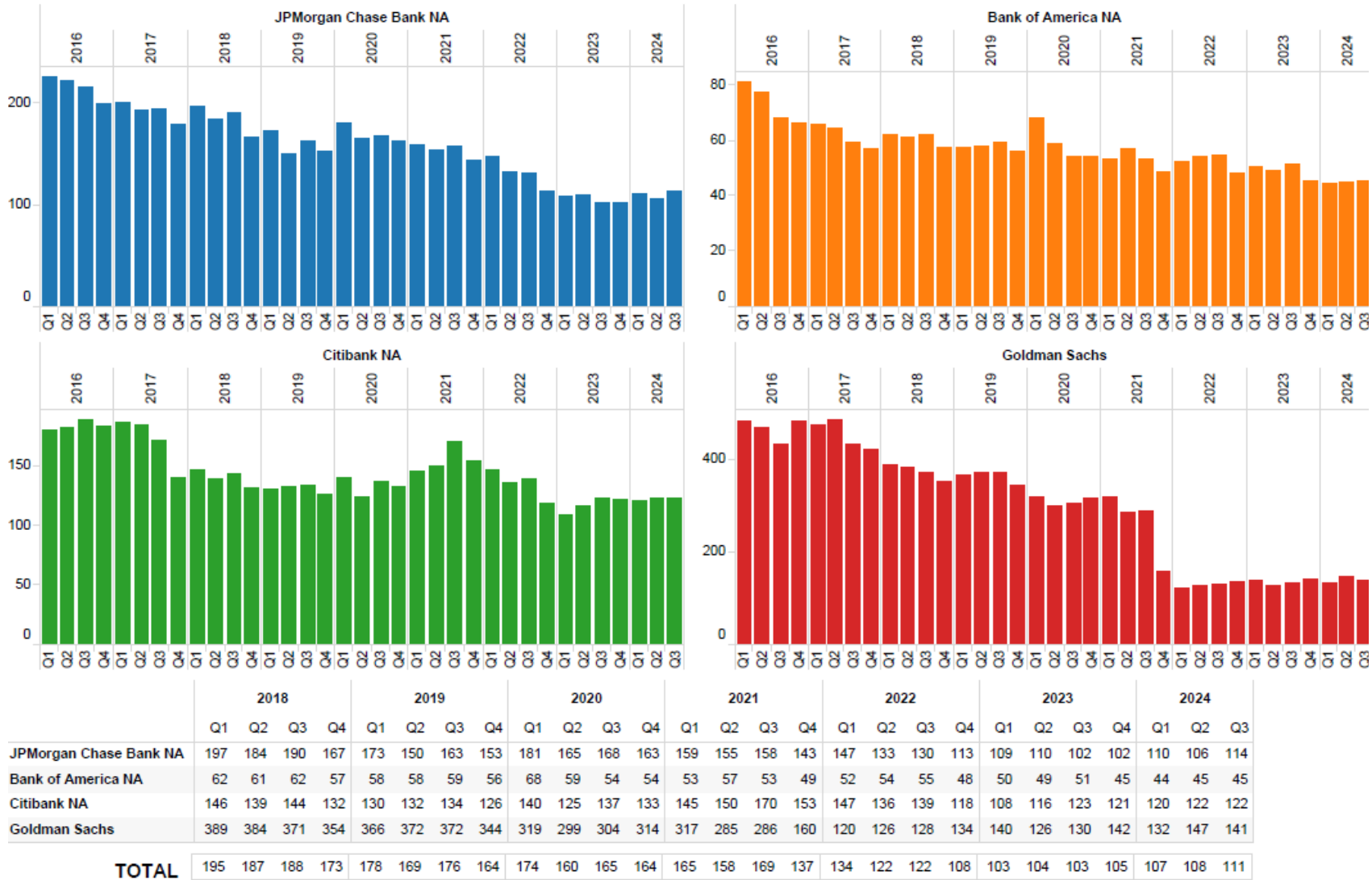
In billions of dollars

	Top 4	All Other Banks	Grand Total
Futures & Forwards	\$31,310	\$7,661	\$38,971
Total Swaps	119,547	13,905	133,452
Total Options	37,370	4,305	41,675
Credit Derivatives	4,498	254	4,752
Total Notional	192,725	26,125	218,849

\* Notional amount of total: futures, exchange-traded options, OTC options, forwards, and swaps. See table 13 for a list of the top four banks.

Source: Call reports, Schedule RC-L

**Figure 10: Credit Exposure to Risk-Based Capital (in Percentage)**  
 Top Four Insured U.S. Commercial Banks and Savings Associations by Derivative Holdings

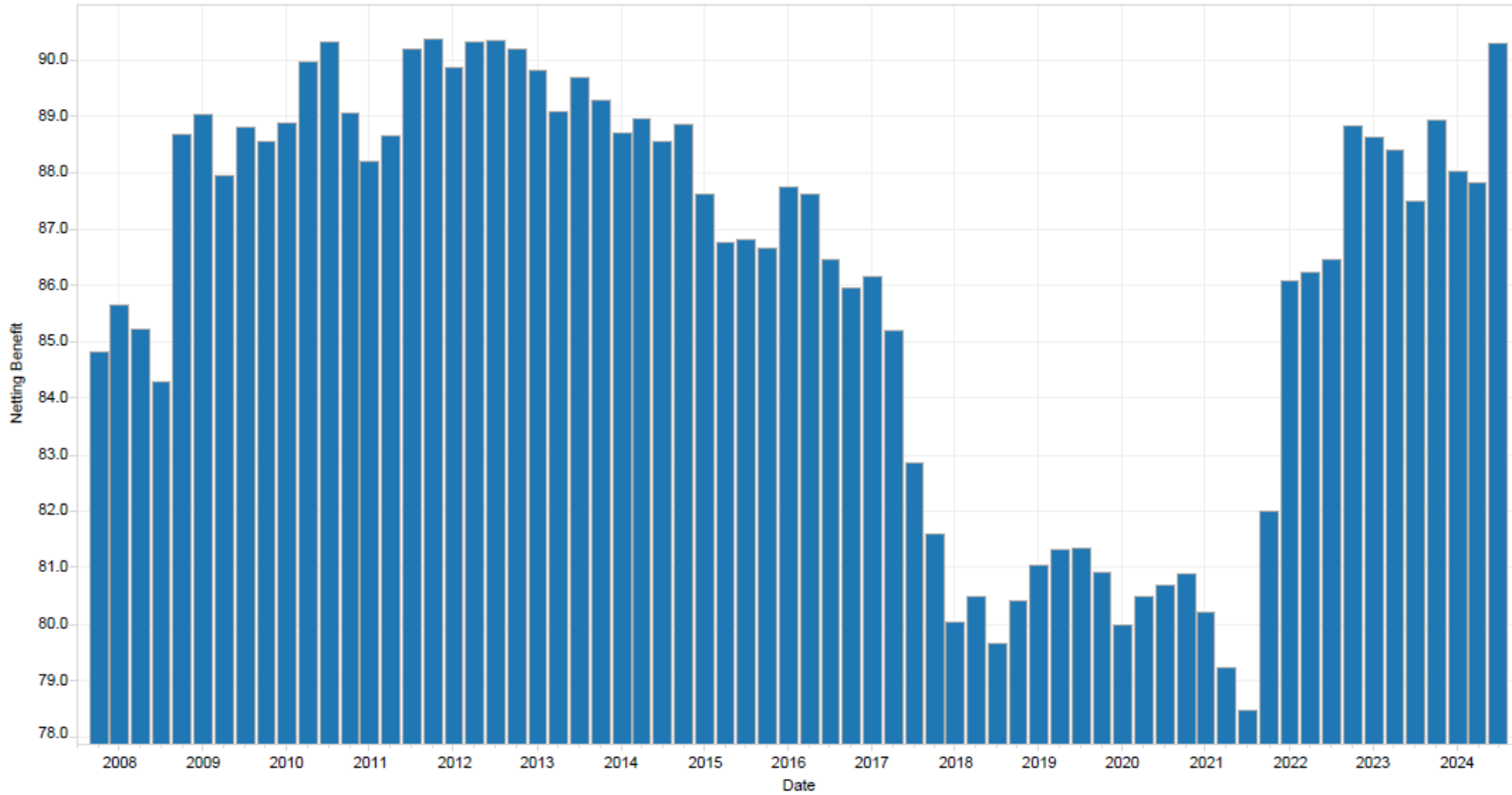


Note: Beginning January 1, 2022, the largest banks are required to calculate their derivative exposure amount for regulatory capital purposes using the Standardized Approach for Counterparty Credit Risk (SA-CCR). Refer to the call report instructions and OCC Bulletin 2020-7, "Standardized Approach for Counterparty Credit Risk: Final Rule," for additional information on the SA-CCR exposure calculation.

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

Source: Call reports, Schedule RC-R

**Figure 11: Netting Benefit\*: Amount of Gross Credit Exposure Eliminated Through Bilateral Netting (in Percentage)**  
 Insured U.S. Commercial Banks and Savings Associations by Derivative Holdings



**Netting Benefit**

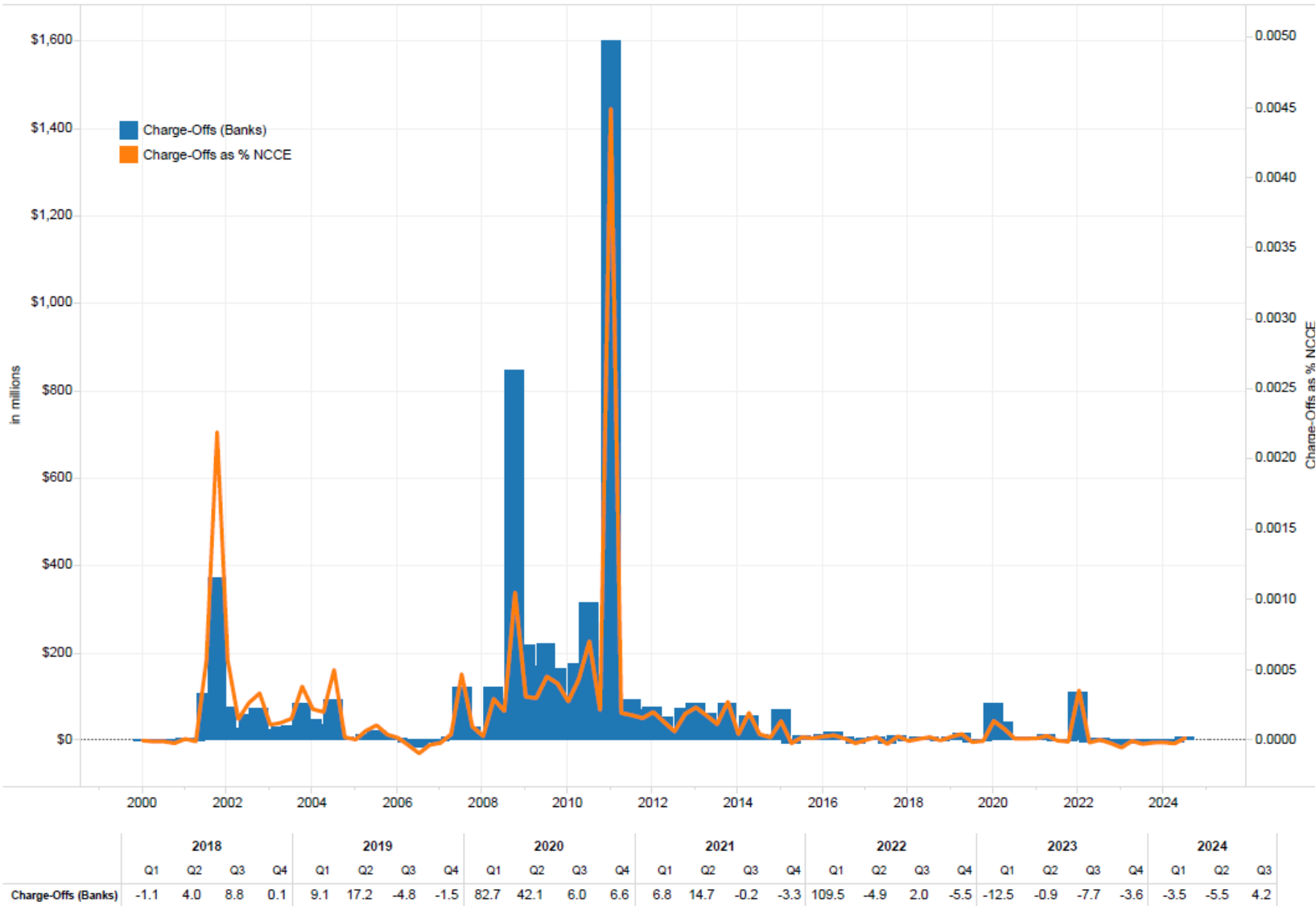
2016				2017				2018				2019				2020				2021				2022				2023				2024		
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3				
87.7	87.6	86.5	86.0	86.2	85.2	82.9	81.6	80.0	80.5	79.7	80.4	81.0	81.3	81.4	80.9	80.0	80.5	80.7	80.9	80.2	79.2	78.5	82.0	86.1	86.3	86.5	88.8	88.6	88.4	87.5	88.9	88.0	87.8	90.3

\* The netting benefit is defined as the GPFV from call report Schedule RC-L minus the Net Current Credit Exposure from call report Schedule RC-R divided by the GPFV.

Note: Beginning January 1, 2022, the largest banks are required to calculate their derivative exposure amount for regulatory capital purposes using the Standardized Approach for Counterparty Credit Risk (SA-CCR). Refer to the call report instructions and OCC Bulletin 2020-7, "Standardized Approach for Counterparty Credit Risk: Final Rule," for additional information on the SA-CCR exposure calculation.

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

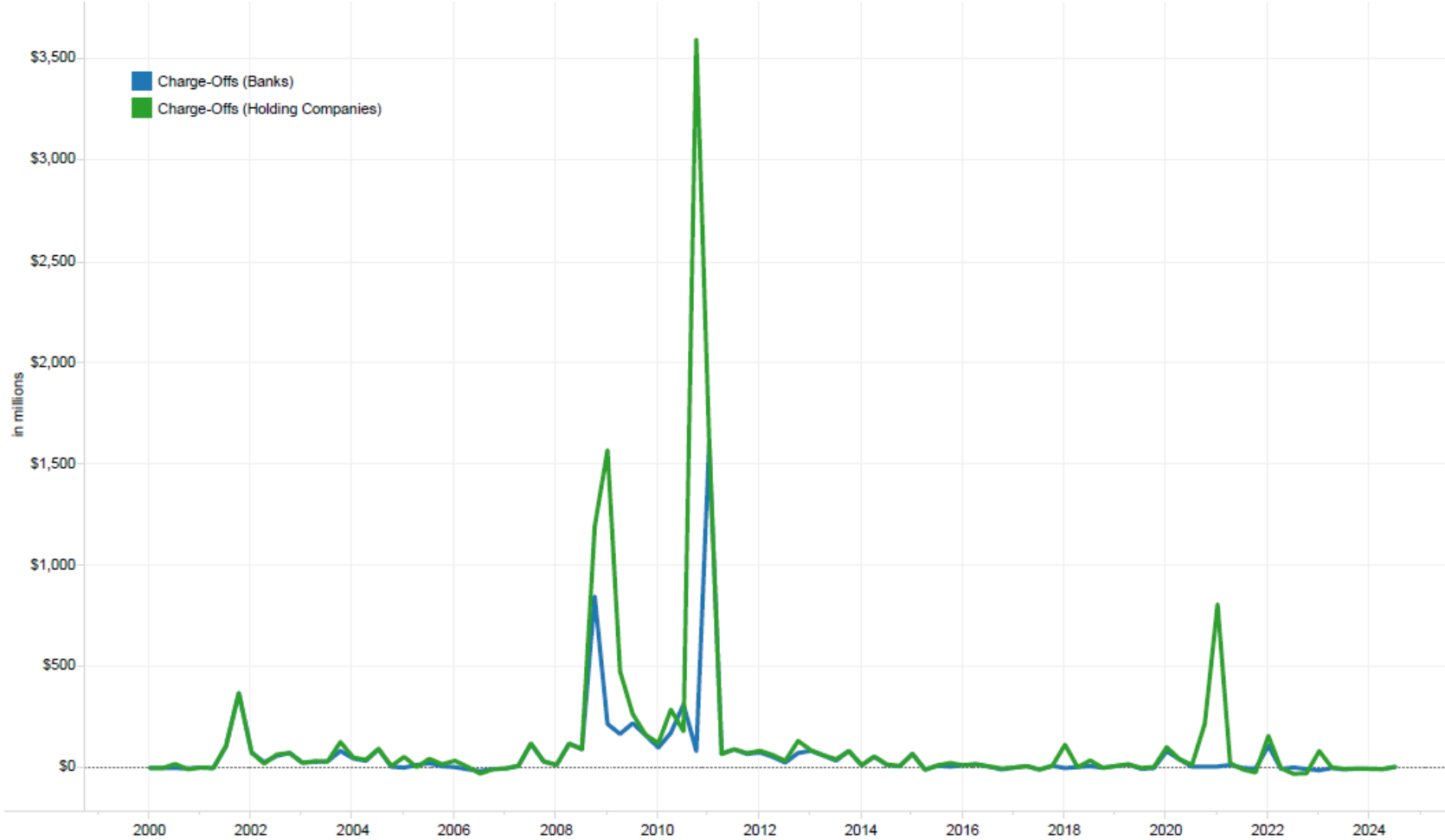
**Figure 12: Quarterly Charge-Offs/(Recoveries) From Derivatives—Bank Insured U.S. Commercial Banks and Savings Associations With Derivatives**



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

Source: Call reports, Schedule RI, NCCE: Pre-2009 Q2 (RC-R); 2009 Q2– 2014 Q4 (RC-L); 2015 Q1 onward (RC-R)

**Figure 13: Quarterly Charge-Offs/(Recoveries) From Derivatives—Holding Company**  
 Insured U.S. Commercial Banks and Savings Associations With Derivatives Compared With Holding Companies



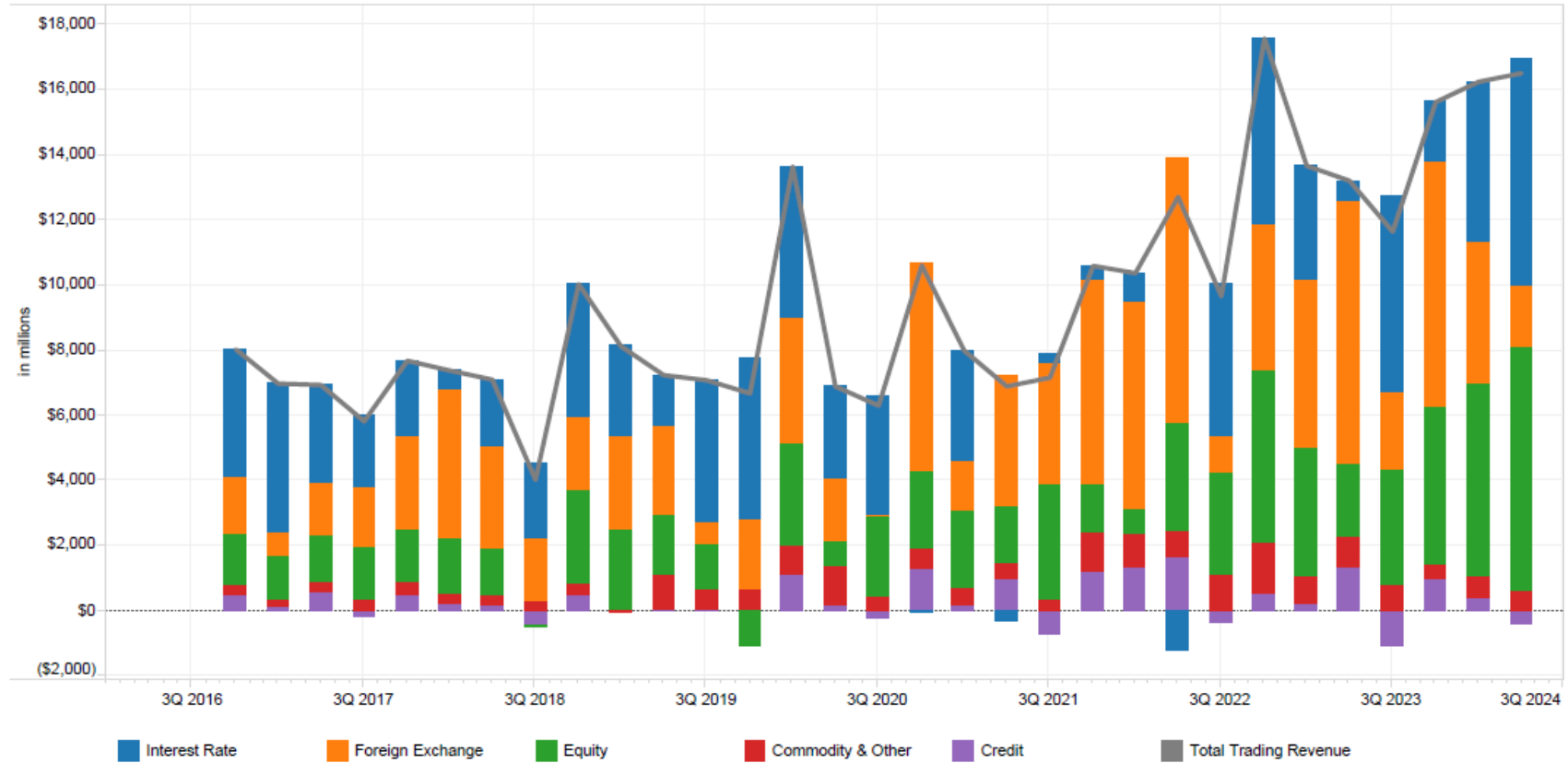
	2019				2020				2021				2022				2023				2024		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Charge-Offs (Banks)	9.1	17.2	-4.8	-1.5	82.7	42.1	6.0	6.6	6.8	14.7	-0.2	-3.3	109.5	-4.9	2.0	-5.5	-12.5	-0.9	-7.7	-3.6	-3.5	-5.5	4.2
Charge-Offs (Holding Companies)	9.5	17.9	-0.3	4.1	102.1	44.2	14.6	218.3	807.7	23.7	-8.2	-22.5	158.0	-1.8	-29.4	-27.1	83.1	2.5	-4.9	-3.2	-5.1	-6.1	5.6

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

Source: Call reports, Schedule RI and Y-9, Schedule HI



**Figure 14a: Quarterly Trading Revenue (Cash and Derivative Positions)\*—Bank Insured U.S. Commercial Banks and Savings Associations**



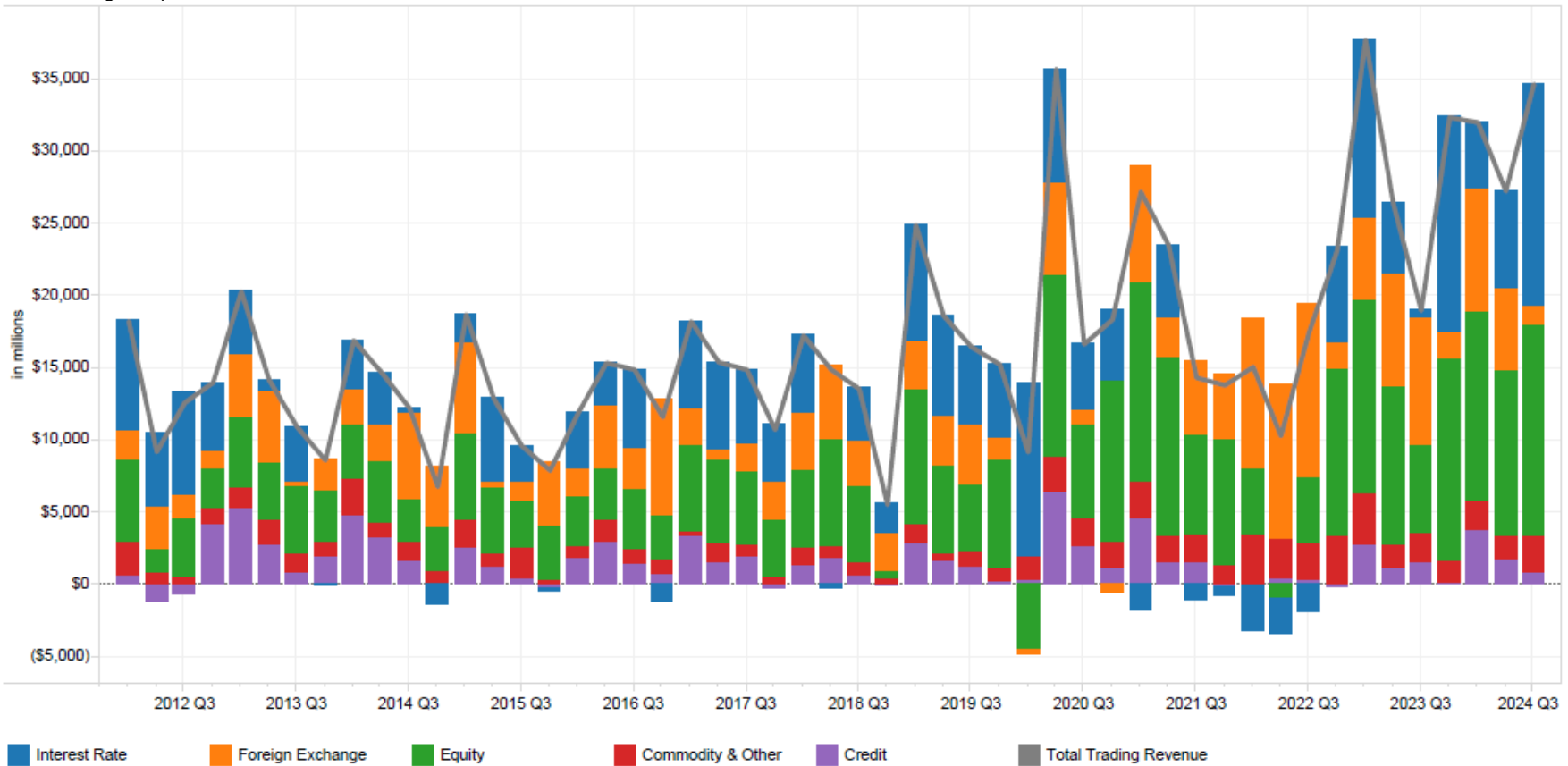
In millions of dollars

	2020				2021				2022				2023				2024		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Interest Rate	\$4,942	\$4,634	\$2,821	\$3,616	(\$42)	\$3,369	(\$329)	\$273	\$403	\$874	(\$1,197)	\$4,653	\$5,721	\$3,471	\$630	\$6,016	\$1,817	\$4,927	\$6,952
Foreign Exchange	2,167	3,841	1,942	18	6,343	1,546	3,998	3,747	6,341	6,363	8,153	1,134	4,439	5,174	8,036	2,334	7,551	4,377	1,857
Equity	-1,040	3,139	750	2,480	2,388	2,384	1,729	3,534	1,458	773	3,306	3,100	5,334	3,996	2,262	3,603	4,814	5,912	7,517
Commodity & Other	646	905	1,226	434	622	549	531	347	1,161	1,029	774	1,153	1,570	824	942	773	504	657	611
Credit	-34	1,129	154	-243	1,300	150	967	-737	1,235	1,334	1,678	-368	516	204	1,342	-1,077	944	376	-426
<b>Total Trading Revenue</b>	<b>6,681</b>	<b>13,648</b>	<b>6,893</b>	<b>6,305</b>	<b>10,611</b>	<b>7,999</b>	<b>6,896</b>	<b>7,164</b>	<b>10,598</b>	<b>10,373</b>	<b>12,714</b>	<b>9,671</b>	<b>17,581</b>	<b>13,668</b>	<b>13,211</b>	<b>11,649</b>	<b>15,630</b>	<b>16,249</b>	<b>16,512</b>

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

Source: Call reports, Schedule RI

**Figure 14b: Quarterly Trading Revenue (Cash and Derivative Positions)\*—Holding Company**  
Bank Holding Companies



In millions of dollars

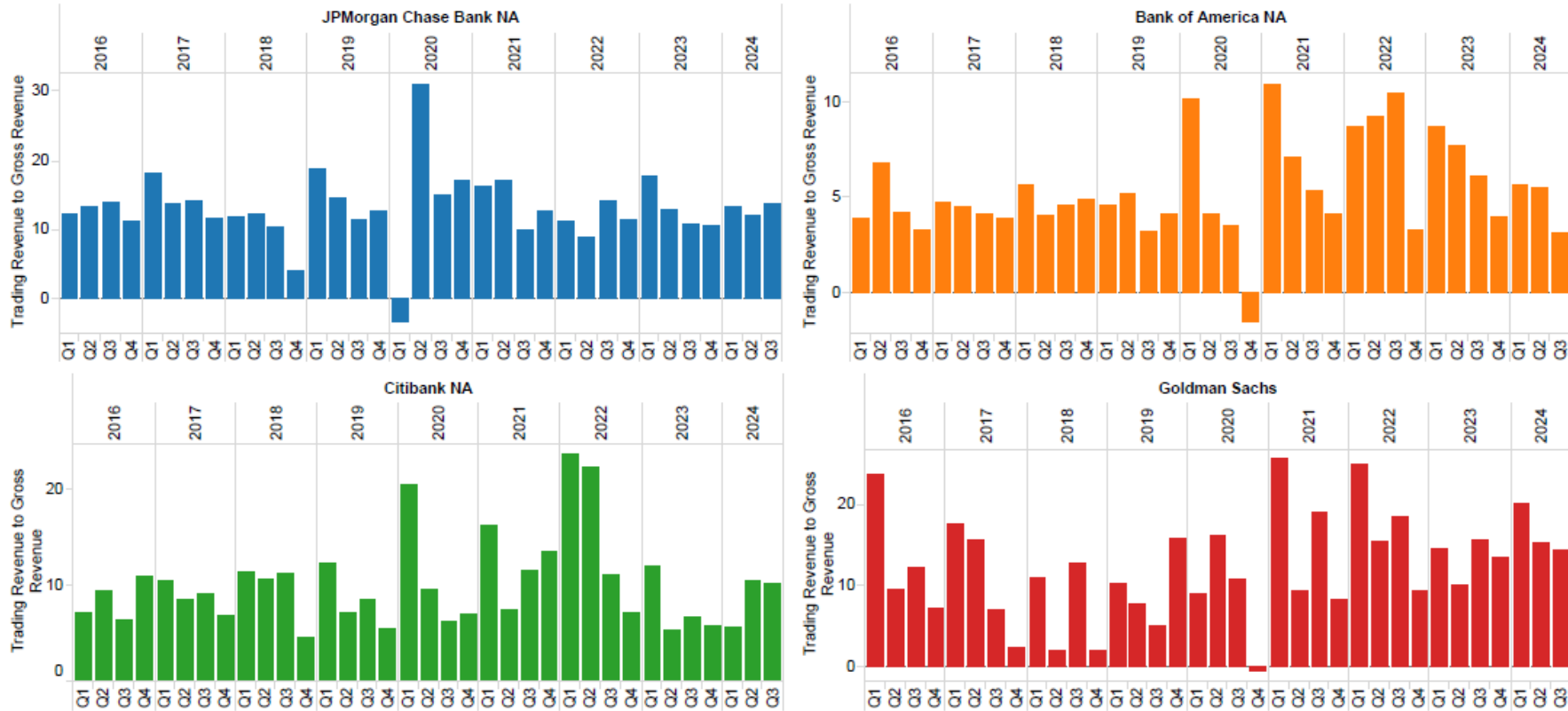
	2020				2021				2022				2023				2024		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Interest Rate	\$12,036	\$7,801	\$4,582	\$4,855	(\$1,828)	\$5,001	(\$1,182)	(\$569)	(\$3,137)	(\$2,365)	(\$1,976)	\$6,649	\$12,304	\$4,773	\$522	\$14,872	\$4,491	\$6,632	\$15,401
Foreign Exchange	-302	6,374	1,037	-628	8,051	2,732	5,144	4,496	10,267	10,574	11,900	1,810	5,760	7,902	8,752	1,768	8,638	5,697	1,310
Equity	-4,499	12,604	6,424	11,126	13,753	12,353	6,835	8,745	4,546	-1,063	4,672	11,535	13,377	10,925	6,084	14,019	13,059	11,573	14,526
Commodity & Other	1,664	2,486	1,912	1,804	2,665	1,802	1,978	1,340	3,498	2,698	2,533	3,378	3,471	1,615	2,025	1,607	1,990	1,545	2,496
Credit	257	6,410	2,675	1,181	4,531	1,595	1,530	-225	-129	438	286	-249	2,770	1,158	1,577	53	3,800	1,777	893
<b>Total Trading Revenue</b>	<b>9,157</b>	<b>35,676</b>	<b>16,631</b>	<b>18,337</b>	<b>27,172</b>	<b>23,483</b>	<b>14,305</b>	<b>13,786</b>	<b>15,046</b>	<b>10,281</b>	<b>17,417</b>	<b>23,123</b>	<b>37,681</b>	<b>26,374</b>	<b>18,960</b>	<b>32,319</b>	<b>31,977</b>	<b>27,224</b>	<b>34,627</b>

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

Source: Y9, Schedule HI

**Figure 15: Quarterly Trading Revenue (Cash and Derivative Positions) as a Percentage of Gross Revenue (in Percentage)\***

Top Four Insured U.S. Commercial Banks and Savings Associations by Derivative Holdings



Trading Revenue to Gross Revenue\*

	2018				2019				2020				2021				2022				2023			2024			
	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	11.90	12.19	10.26	3.92	18.57	14.57	11.30	12.62	-3.33	30.88	14.83	16.96	16.12	16.90	9.84	12.70	11.13	8.86	14.06	11.38	17.66	12.79	10.83	10.50	13.25	11.96	13.72
Bank of America NA	5.62	4.04	4.54	4.90	4.60	5.14	3.20	4.09	10.13	4.14	3.55	-1.52	10.89	7.10	5.33	4.08	8.74	9.23	10.45	3.30	8.70	7.71	6.09	3.95	5.63	5.50	3.10
Citibank NA	11.33	10.69	11.26	4.66	12.32	7.23	8.48	5.56	20.50	9.63	6.27	7.08	16.24	7.42	11.57	13.44	23.64	22.30	11.05	7.15	12.01	5.44	6.66	5.77	5.71	10.52	10.21
Goldman Sachs	10.85	1.84	12.77	1.86	10.31	7.78	4.98	15.90	8.96	16.21	10.68	-0.56	25.61	9.27	19.13	8.19	24.97	15.46	18.52	9.30	14.72	10.12	15.74	13.43	20.25	15.39	14.38
<b>TOTAL</b>	<b>9.77</b>	<b>8.95</b>	<b>8.82</b>	<b>4.36</b>	<b>12.43</b>	<b>9.60</b>	<b>8.01</b>	<b>8.61</b>	<b>7.44</b>	<b>18.00</b>	<b>9.49</b>	<b>8.91</b>	<b>15.11</b>	<b>11.75</b>	<b>9.49</b>	<b>10.36</b>	<b>14.32</b>	<b>12.72</b>	<b>12.68</b>	<b>8.11</b>	<b>13.78</b>	<b>9.67</b>	<b>9.08</b>	<b>8.01</b>	<b>10.24</b>	<b>10.27</b>	<b>10.27</b>

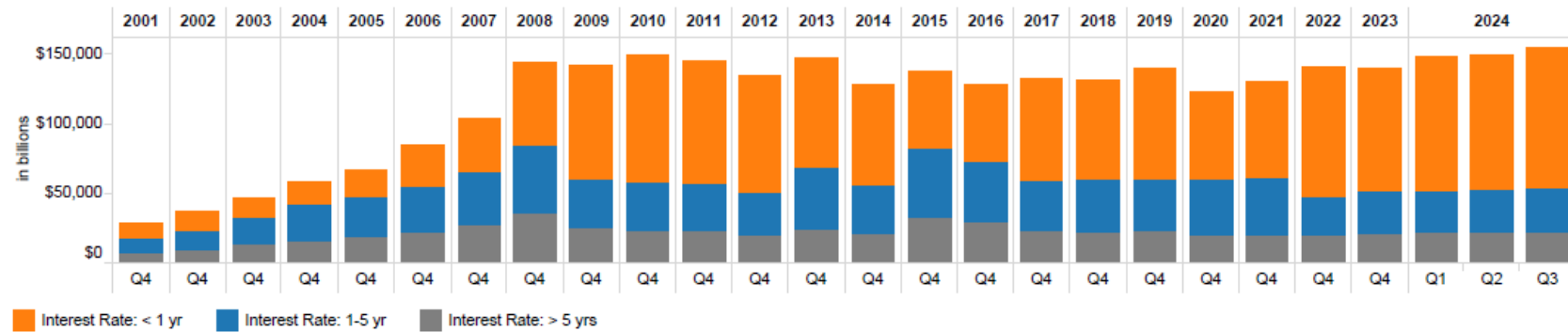
\* The trading revenue figures are for cash and derivative activities. Revenue figures are quarterly, not year-to-date numbers.

Note: Gross revenue equals interest income plus non-interest income.

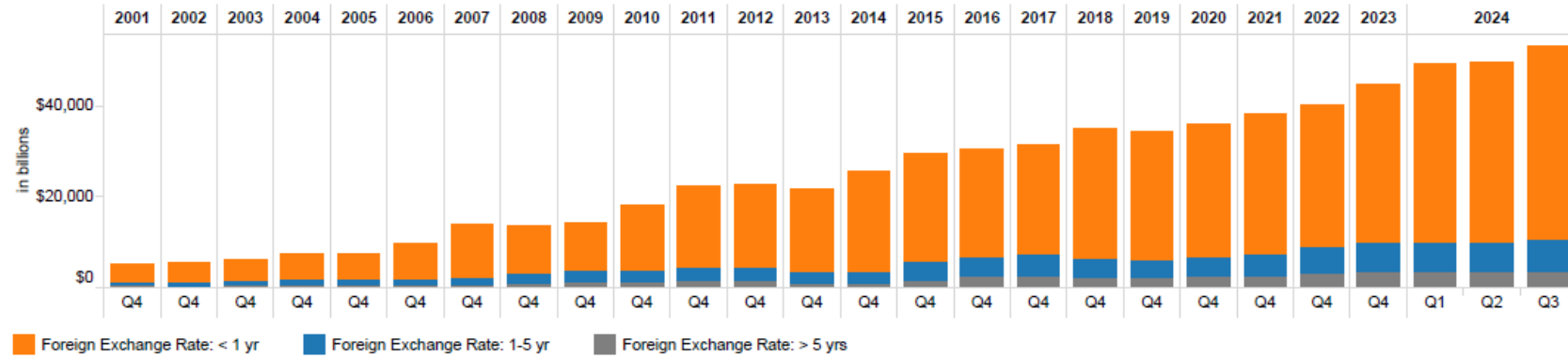
Source: Call reports, Schedule RI

**Figure 16: Notional Amounts of Interest Rate and Foreign Exchange Rate Contracts by Maturity**  
Insured U.S. Commercial Banks and Savings Associations

**Interest Rate**



**Foreign Exchange Rate**



In billions of dollars

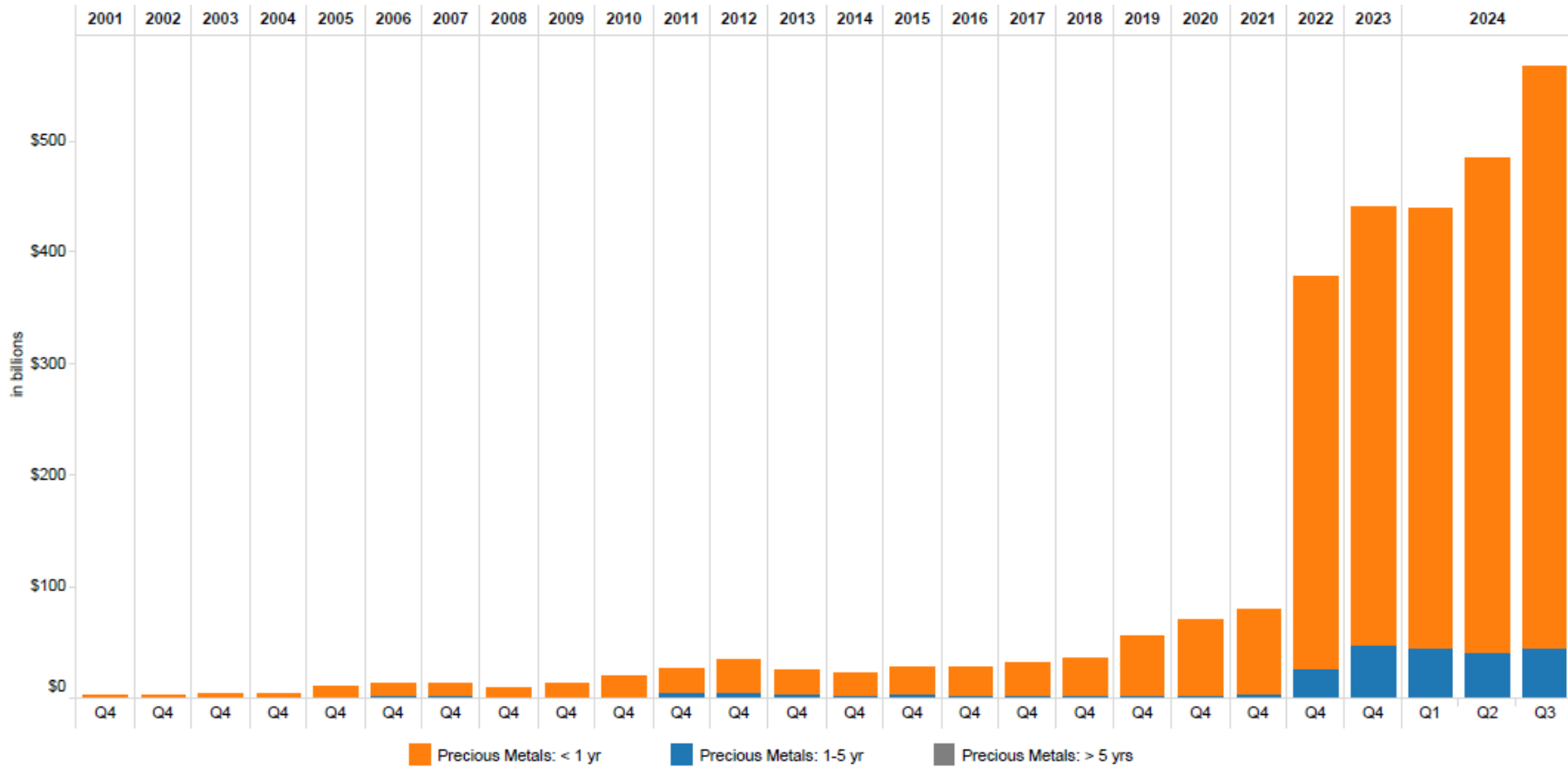
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q1	Q2	Q3
Interest Rate: < 1 yr	\$87,812	\$82,948	\$77,758	\$71,808	\$55,054	\$55,061	\$72,589	\$71,492	\$79,132	\$62,444	\$68,044	\$92,693	\$87,574	\$96,124	\$95,825	\$100,843
Interest Rate: 1-5 yr	32,750	30,191	44,157	33,727	49,406	43,261	36,154	36,681	35,854	39,198	41,244	27,371	29,655	29,104	29,544	30,350
Interest Rate: > 5 yrs	24,168	21,175	24,630	22,214	32,981	29,762	23,565	23,244	24,259	20,838	20,464	20,661	21,809	22,393	23,261	23,173
Foreign Exchange Rate: < 1 yr	17,632	18,386	18,372	22,145	24,130	23,912	24,380	28,891	28,241	29,434	30,954	31,271	34,341	39,005	39,180	42,292
Foreign Exchange Rate: 1-5 yr	3,117	2,910	2,341	2,587	3,986	4,454	4,805	4,219	4,052	4,404	4,864	5,996	6,862	6,727	6,855	7,441
Foreign Exchange Rate: > 5 yrs	1,503	1,480	1,029	969	1,648	2,420	2,525	2,096	2,146	2,402	2,552	3,146	3,501	3,486	3,423	3,597

Note: Beginning January 1, 2022, the largest banks are required to calculate their derivative exposure amount for regulatory capital purposes using the Standardized Approach for Counterparty Credit Risk (SA-CCR). Refer to the call report instructions and OCC Bulletin 2020-7, "Standardized Approach for Counterparty Credit Risk: Final Rule," for additional information on the SA-CCR exposure calculation.

Source: Call reports, Schedule RC-R

**Figure 17: Notional Amounts of Precious Metal Contracts by Maturity**  
Insured U.S. Commercial Banks and Savings Associations

Precious Metals



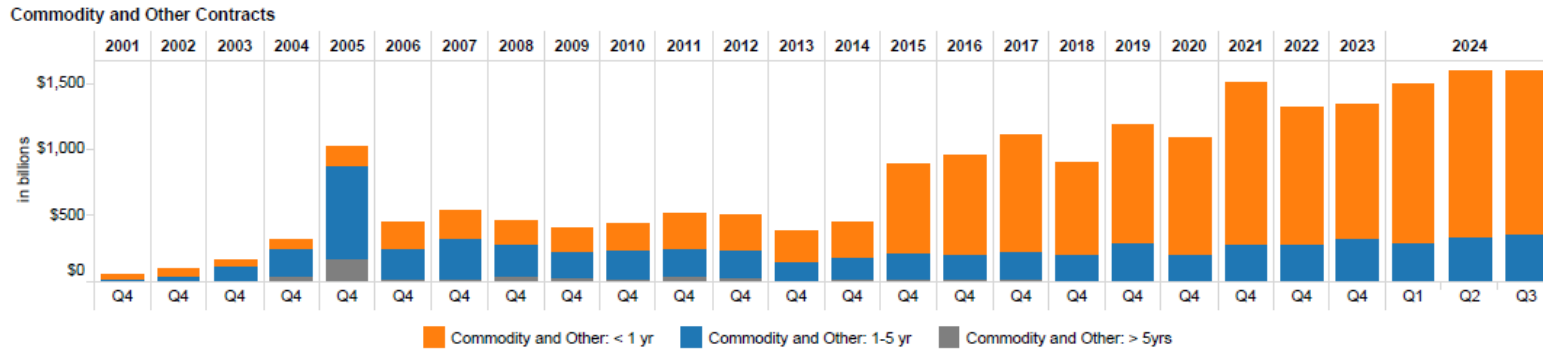
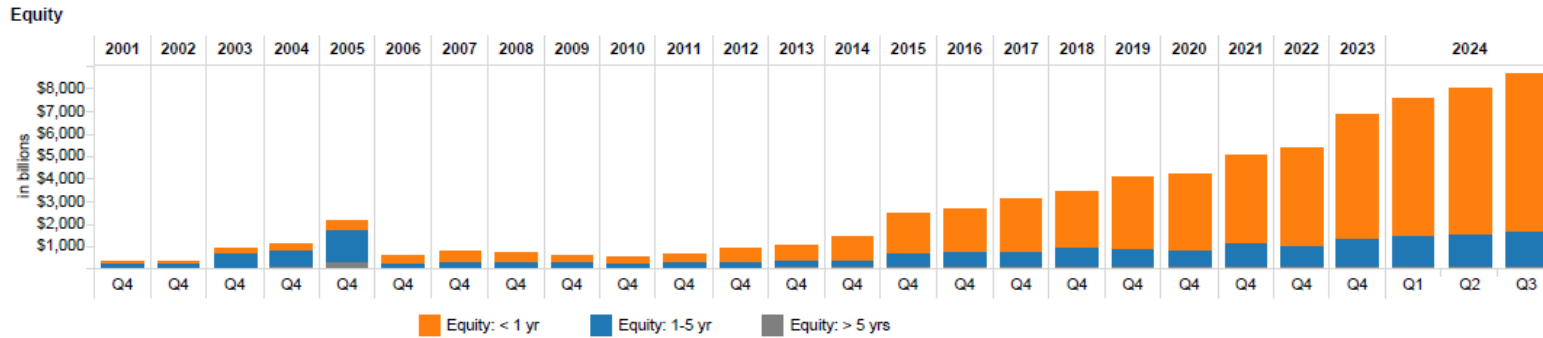
In billions of dollars

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q1	Q2	Q3
Precious Metals: < 1 yr	\$10.72	\$7.55	\$11.55	\$17.47	\$21.12	\$27.68	\$21.41	\$19.29	\$23.51	\$25.07	\$28.62	\$33.62	\$52.58	\$67.80	\$75.78	\$352.12	\$393.20	\$394.80	\$443.17	\$521.63
Precious Metals: 1-5 yr	2.1	1.5	1.2	1.9	4.7	5.8	3.8	2.8	3.9	2.5	2.4	2.3	2.1	2.5	3.5	26.0	47.5	43.8	40.3	44.9
Precious Metals: > 5 yrs	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Note: Beginning January 1, 2022, the largest banks are required to calculate their derivative exposure amount for regulatory capital purposes using the Standardized Approach for Counterparty Credit Risk (SA-CCR). Under SA-CCR gold derivatives are considered precious metals derivative contracts rather than an exchange rate derivative contract, resulting in an increase in reported precious metals derivative contracts compared with prior quarters. Refer to the call report instructions and OCC Bulletin 2020-7, "Standardized Approach for Counterparty Credit Risk: Final Rule," for additional information on the SA-CCR exposure calculation.

Source: Call reports, Schedule RC-R

**Figure 18: Notional Amounts of Equity Contracts and Commodity and Other Contracts by Maturity**  
Insured U.S. Commercial Banks and Savings Associations



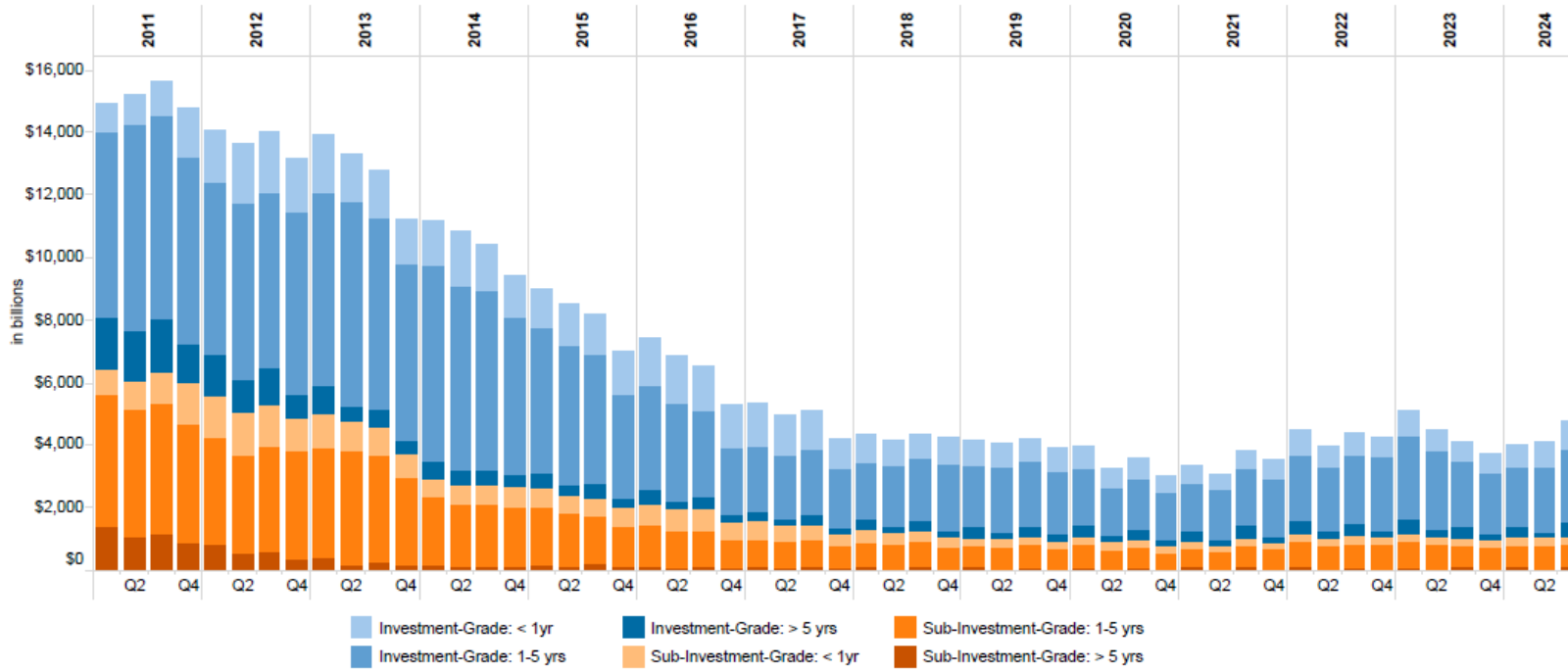
In billions of dollars

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q1	Q2	Q3
Commodity and Other: < 1 yr	\$185	\$206	\$179	\$176	\$203	\$261	\$235	\$257	\$668	\$750	\$883	\$688	\$884	\$879	\$1,216	\$1,038	\$1,021	\$1,202	\$1,249	\$1,236	
Commodity and Other: 1-5 yr	235	297	233	198	209	209	144	164	197	179	202	198	286	198	279	272	314	287	330	342	
Commodity and Other: > 5 yrs	20	25	43	33	25	46	28	6	20	22	23	25	9	10	9	7	7	7	6	10	12
Equity: < 1 yr	341	473	409	312	296	427	627	645	996	1,743	1,842	2,296	2,449	3,084	3,287	3,881	4,335	5,469	6,047	6,414	6,912
Equity: 1-5 yr	221	297	256	228	191	210	262	291	352	628	677	733	864	844	771	1,055	999	1,304	1,401	1,459	1,587
Equity: > 5 yrs	45	70	72	82	85	94	82	136	101	130	123	113	139	136	139	145	99	99	111	143	156

Note: Beginning January 1, 2022, the largest banks are required to calculate their derivative exposure amount for regulatory capital purposes using the Standardized Approach for Counterparty Credit Risk (SA-CCR). Refer to the call report instructions and OCC Bulletin 2020-7, "Standardized Approach for Counterparty Credit Risk: Final Rule," for additional information on the SA-CCR exposure calculation.

Source: Call reports, Schedule RC-R

**Figure 19: Notional Amounts of Credit Derivative Contracts by Credit Quality and Maturity**  
Insured U.S. Commercial Banks and Savings Associations

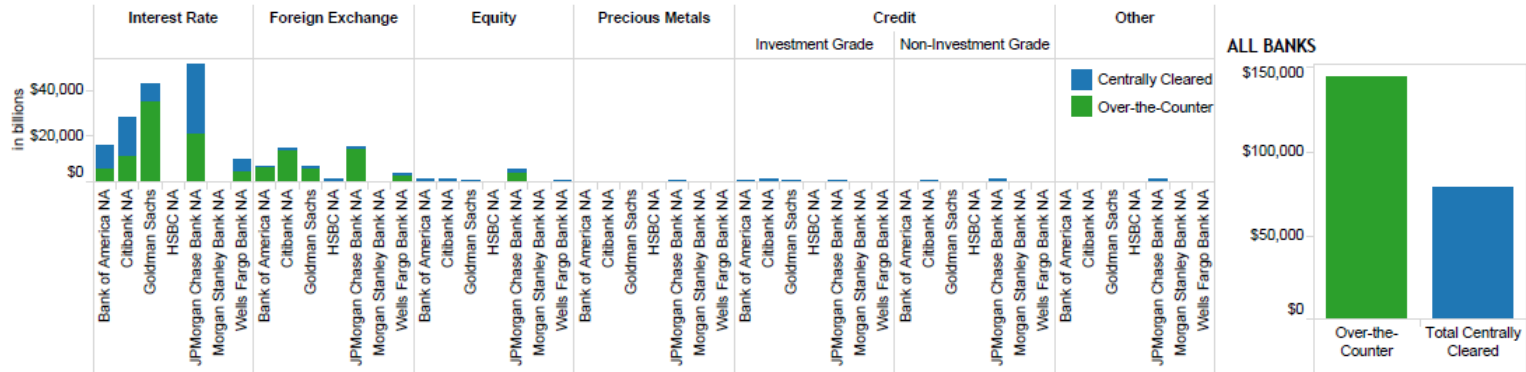


In billions of dollars

	2020				2021				2022				2023				2024		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Investment-Grade: < 1yr	\$726	\$619	\$648	\$554	\$546	\$539	\$565	\$601	\$795	\$642	\$692	\$617	\$769	\$658	\$595	\$635	\$680	\$813	\$895
Investment-Grade: 1-5 yrs	1,799	1,523	1,637	1,521	1,545	1,589	1,846	1,864	2,109	2,076	2,190	2,362	2,688	2,507	2,109	1,966	1,923	2,062	2,332
Investment-Grade: > 5 yrs	367	171	336	160	332	160	418	187	449	198	408	210	440	217	377	176	334	167	429
<b>Total Investment Grade</b>	<b>\$2,891</b>	<b>\$2,313</b>	<b>\$2,622</b>	<b>\$2,235</b>	<b>\$2,423</b>	<b>\$2,289</b>	<b>\$2,829</b>	<b>\$2,651</b>	<b>\$3,352</b>	<b>\$2,916</b>	<b>\$3,291</b>	<b>\$3,189</b>	<b>\$3,897</b>	<b>\$3,382</b>	<b>\$3,080</b>	<b>\$2,777</b>	<b>\$2,937</b>	<b>\$3,041</b>	<b>\$3,656</b>
	2020				2021				2022				2023				2024		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Sub-Investment-Grade: < 1yr	\$247	\$278	\$233	\$218	\$245	\$215	\$244	\$208	\$225	\$248	\$247	\$221	\$252	\$238	\$218	\$232	\$260	\$273	\$253
Sub-Investment-Grade: 1-5 yrs	743	608	618	533	570	551	654	632	777	751	747	778	826	804	696	683	683	736	712
Sub-Investment-Grade: > 5 yrs	105	56	108	48	119	49	125	49	150	51	105	53	104	51	120	53	119	61	132
<b>Total Sub-Investment Grade</b>	<b>\$1,095</b>	<b>\$942</b>	<b>\$959</b>	<b>\$799</b>	<b>\$935</b>	<b>\$815</b>	<b>\$1,023</b>	<b>\$889</b>	<b>\$1,152</b>	<b>\$1,049</b>	<b>\$1,099</b>	<b>\$1,052</b>	<b>\$1,182</b>	<b>\$1,092</b>	<b>\$1,035</b>	<b>\$968</b>	<b>\$1,061</b>	<b>\$1,070</b>	<b>\$1,096</b>

Source: Call reports, Schedule RC-L

**Figure 20: Notional Amounts of Over-the-Counter and Centrally Cleared Derivative Contracts**  
Insured U.S. Commercial Banks and Savings Associations



In billions of dollars

Bank Name	Interest Rate		Foreign Exchange		Equity		Precious Metals		Credit				Other		Total Centrally Cleared	Over-the-Counter	Total Notional
	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Investment Grade		Non-Investment Grade		Centrally Cleared	Over-the-Counter			
									Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter					
JPMorgan Chase Bank NA	29,998	21,211	697	14,894	1,249	4,089	0	325	284	254	570	540	82	989	32,880	42,303	75,183
Citibank NA	16,859	11,667	503	14,282	214	680	30	118	199	1,048	56	283	110	98	17,972	28,177	46,148
Bank of America NA	10,162	5,771	155	6,766	396	748	13	71	190	267	60	106	8	48	10,965	13,778	24,763
Goldman Sachs	7,908	35,500	273	6,490	62	711	0	0	74	417	16	146	0	53	8,333	43,317	51,650
HSBC NA	83	41	52	1,079	0	20	0	3	2	5	0	1	0	0	137	1,149	1,286
Wells Fargo Bank NA	4,961	4,937	7	3,466	140	265	0	5	0	32	0	17	0	76	5,108	8,798	13,906
Morgan Stanley Bank NA	2	155	0	124	0	52	0	0	0	17	0	8	0	0	2	356	357
<b>Grand Total</b>	<b>69,973</b>	<b>79,282</b>	<b>1,687</b>	<b>47,102</b>	<b>2,061</b>	<b>6,565</b>	<b>43</b>	<b>523</b>	<b>750</b>	<b>2,039</b>	<b>703</b>	<b>1,100</b>	<b>200</b>	<b>1,264</b>	<b>75,416</b>	<b>137,877</b>	<b>213,293</b>
<b>ALL OTHER</b>	<b>3,031</b>	<b>2,080</b>	<b>30</b>	<b>4,511</b>	<b>0</b>	<b>29</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>37</b>	<b>0</b>	<b>31</b>	<b>27</b>	<b>100</b>	<b>3,089</b>	<b>6,788</b>	<b>9,877</b>
<b>TOTAL</b>	<b>73,004</b>	<b>81,362</b>	<b>1,717</b>	<b>51,613</b>	<b>2,061</b>	<b>6,594</b>	<b>43</b>	<b>523</b>	<b>751</b>	<b>2,077</b>	<b>703</b>	<b>1,131</b>	<b>226</b>	<b>1,364</b>	<b>78,505</b>	<b>144,664</b>	<b>223,169</b>

% of Total

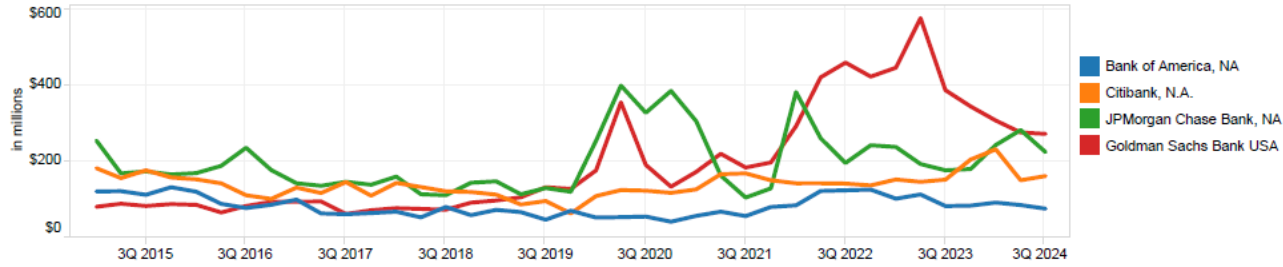
Bank Name	Interest Rate		Foreign Exchange		Equity		Precious Metals		Credit				Other		Total Centrally Cleared as a % of Total Notional	Total Over-the-Counter as a % of Total Notional
	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Investment Grade		Non-Investment Grade		Centrally Cleared	Over-the-Counter		
									Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter				
JPMorgan Chase Bank NA	59%	41%	4%	96%	23%	77%	0%	100%	53%	47%	51%	49%	8%	92%	44%	56%
Citibank NA	59%	41%	3%	97%	24%	76%	20%	80%	16%	84%	16%	84%	53%	47%	39%	61%
Bank of America NA	64%	36%	2%	98%	35%	65%	15%	85%	42%	58%	36%	64%	14%	86%	44%	56%
Goldman Sachs	18%	82%	4%	96%	8%	92%	0%	100%	15%	85%	10%	90%	0%	100%	16%	84%
HSBC NA	67%	33%	5%	95%	0%	100%	0%	100%	26%	74%	34%	66%	0%	100%	11%	89%
Wells Fargo Bank NA	50%	50%	0%	100%	35%	65%	0%	100%	1%	99%	0%	100%	0%	100%	37%	63%
Morgan Stanley Bank NA	1%	99%	0%	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	100%	1%	99%

Source: Call reports, Schedule RC-R



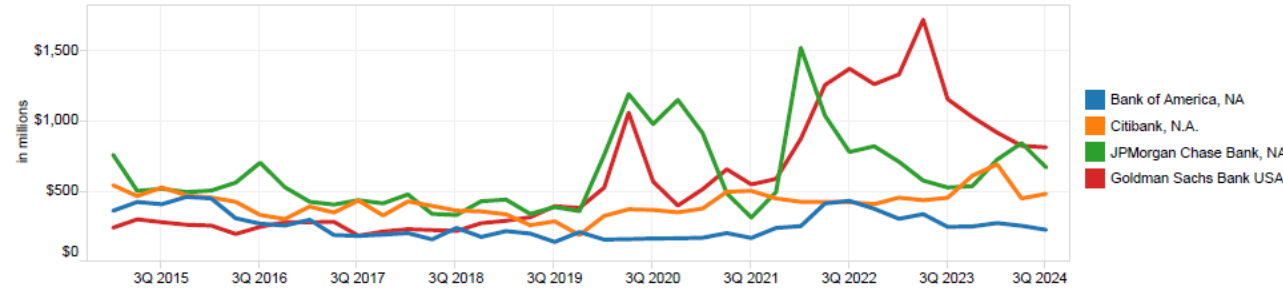
**Figure 21: Average 60-Day Value-at-Risk**

Average 60 Day VaR



	2018				2019				2020				2021				2022				2023				2024		
	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, NA	\$68	\$53	\$81	\$59	\$73	\$67	\$47	\$71	\$53	\$54	\$55	\$42	\$57	\$68	\$57	\$80	\$85	\$122	\$124	\$126	\$102	\$113	\$83	\$84	\$92	\$85	\$76
Citibank, N.A.	144	133	122	120	113	87	96	64	109	125	123	118	127	167	169	151	143	143	142	137	153	146	152	205	232	151	162
JPMorgan Chase Bank, NA	160	114	111	144	148	114	130	120	254	399	328	385	306	163	105	129	382	261	196	242	238	193	177	180	243	282	224
Goldman Sachs Bank USA	77	75	73	92	97	106	132	128	176	355	191	134	173	220	184	197	293	421	459	423	446	576	387	344	307	276	272

VaR Capital Requirement



	2019				2020				2021				2022				2023				2024		
	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, NA	\$219	\$201	\$141	\$212	\$158	\$161	\$166	\$167	\$171	\$204	\$170	\$241	\$254	\$416	\$435	\$378	\$307	\$340	\$249	\$252	\$276	\$256	\$228
Citibank, N.A.	338	261	288	191	327	374	370	353	380	500	506	452	428	428	425	411	458	439	457	615	695	452	485
JPMorgan Chase Bank, NA	443	341	390	361	762	1,197	983	1,155	917	489	315	498	1,528	1,043	784	824	714	580	530	540	729	847	673
Goldman Sachs Bank USA	292	317	397	384	529	1,065	572	401	518	660	552	592	878	1,262	1,378	1,268	1,338	1,728	1,161	1,033	922	828	817

Source: Market Risk Regulatory Report for Institutions Subject to the Market Risk Capital Rule—FFIEC 102