Office of the
Comptroller of the Currency

Quarterly Report on Bank Trading and Derivatives Activities

Fourth Quarter 2024

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

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Contents

About This Report

The Office of the Comptroller of the Currency's (OCC) quarterly report on bank trading and 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.[1] A total of 1,202 insured U.S. national and state commercial banks and savings associations reported trading and derivatives activities at the end of the fourth quarter of 2024.[2] A small group of large financial institutions continues to dominate trading and derivatives activity in the U.S. commercial banking system. During the fourth quarter of 2024, four large commercial banks represented 86.5 percent of the total banking industry notional amounts and 71.1 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 117th 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.

Executive Summary

- Insured U.S. commercial banks and savings associations (collectively, banks) reported trading revenue of $14.8 billion in the fourth quarter of 2024, $1.8 billion less (10.6 percent) than in the previous quarter and $3.1 billion more (26.7 percent) than a year earlier (see table 1).
- Initial credit exposure from derivatives before netting decreased in the fourth quarter of 2024 compared with the third quarter of 2024, while NCCE increased $33 billion, or 14.1 percent, to $270.0 billion (see table 5).
- Derivative notional amounts decreased in the fourth quarter of 2024 by $32.2 trillion, or 14.7 percent, to $186.5 trillion (see table 10).
- Derivative contracts remained concentrated in interest rate products, which totaled $125.9 trillion or 67.5 percent of total derivative notional amounts (see table 10).

[1] Values in the tables and figures in this report may not add up to the totals because of rounding.

[2] Institutions with less than $5 billion of total assets 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 $14.8 billion in trading revenue in the fourth quarter of 2024, $1.8 billion less (10.6 percent) than in the previous quarter and $3.1 billion more (26.7 percent) than a year earlier (see table 1). The quarter-over-quarter decrease in trading revenue was due to decreases in revenue from interest rate, equity, and commodity and other 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	4Q 2024	3Q 2024	Q/Q Change	Q/Q % Change	4Q 2023	Y/Y Change	Y/Y % Change
Interest rate	-$464	$6,952	-$7,416	-106.7%	$6,016	-$6,481	-107.7%
Foreign exchange	$9,111	$1,857	$7,253	390.5%	$2,334	$6,777	290.4%
Equity	$5,459	$7,517	-$2,059	-27.4%	$3,603	$1,856	51.5%
Commodity and other	$345	$611	-$267	-43.6%	$773	-$428	-55.4%
Credit	$305	-$426	$731	171.7%	-$1,077	$1,383	128.4%
Total trading revenue	**$14,755**	**$16,512**	**-$1,757**	**-10.6%**	**$11,649**	**$3,106**	**26.7%**

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 $20.7 billion in the fourth quarter of 2024 was $14.7 billion less (41.6 percent) than in the previous quarter. The quarter-over-quarter decrease in trading revenue was due to decreases in revenue from interest rate, equity, and commodity and other instruments. Year-over-year holding company trading revenue decreased by $11.6 billion (36.0 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	4Q 2024	3Q 2024	Q/Q Change	Q/Q % Change	4Q 2023	Y/Y Change	Y/Y % Change
Interest rate	-$7,379	$15,775	-$23,154	-146.8%	$14,872	-$22,251	-149.6%
Foreign exchange	$12,574	$1,395	$11,179	801.1%	$1,768	$10,806	611.2%
Equity	$12,043	$14,808	-$2,765	-18.7%	$14,019	-$1,975	-14.1%
Commodity and other	$1,254	$2,487	-$1,233	-49.6%	$1,607	-$353	-22.0%
Credit	$2,178	$948	$1,230	129.8%	$53	$2,125	3,980.2%
Total BHC trading revenue	**$20,671**	**$35,415**	**-$14,743**	**-41.6%**	**$32,319**	**-$11,648**	**-36.0%**

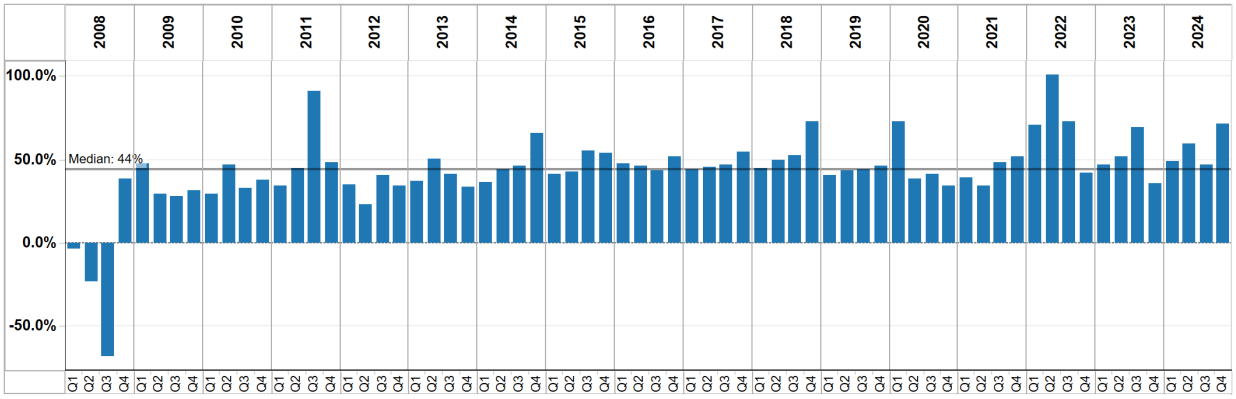
Source: Consolidated Financial Statements for Holding Companies—FR Y-9C, Schedule HI

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 holding company charters by the former investment banks, the percentage of bank trading revenue to consolidated BHC trading revenue has generally declined, resulting in a median of 44 percent over the past 17 years. 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 fourth quarter of 2024, banks generated 71.4 percent of consolidated holding company trading revenue, an increase from 47.7 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 several 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 decreased by $53.0 billion (2.2 percent) in the fourth quarter of 2024 to $2.4 trillion, primarily driven by a $241.0 billion (15.6 percent) decrease in receivables from interest rate contracts and a $31.0 billion (14.9 percent) decrease in receivables from equity contracts (see table 3a). GNFV decreased $114.0 billion (4.7 percent) to $2.3 trillion during the quarter, driven by a $251.0 billion (17.0 percent) decrease in payables from interest rate contracts and a $38.0 billion (16.2 percent) decrease in payables from equity contracts (see table 3b).

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

Trading instruments	4Q 2024	3Q 2024	Q/Q Change	Q/Q % Change	4Q 2023	Y/Y Change	Y/Y % Change
Interest rate	$1,301	$1,541	-$241	-15.6%	$1,331	-$30	-2.2%
FX	$828	$595	$233	39.1%	$614	$214	34.9%
Equity	$176	$207	-$31	-14.9%	$149	$27	18.3%
Commodity and other	$40	$55	-$15	-27.4%	$42	-$2	-4.6%
Credit	$43	$42	$1	2.1%	$36	$7	19.8%
GPFV	**$2,387**	**$2,441**	**-$53**	**-2.2%**	**$2,171**	**$216**	**10.0%**

Source: Call reports, Schedule RC-L

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

Trading instruments	4Q 2024	3Q 2024	Q/Q Change	Q/Q % Change	4Q 2023	Y/Y Change	Y/Y % Change
Interest rate	$1,227	$1,478	-$251	-17.0%	$1,274	-$47	-3.7%
FX	$800	$608	$192	31.7%	$629	$171	27.3%
Equity	$195	$233	-$38	-16.2%	$158	$37	23.4%
Commodity & other	$36	$51	-$15	-28.9%	$41	-$5	-12.0%
Credit	$46	$49	-$3	-6.8%	$42	$4	9.5%
GNFV	**$2,305**	**$2,419**	**-$114**	**-4.7%**	**$2,144**	**$160**	**7.5%**

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
Total contracts	**10**	**$150**	**NCCE to Bank A from Counterparty 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 increased by $33 billion (14.1 percent) to $270 billion in the fourth quarter of 2024 (see table 5).[3] Legally enforceable netting agreements allowed banks to reduce GPFV exposures by 88.7 percent ($2.1 trillion) in the fourth quarter of 2024.

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

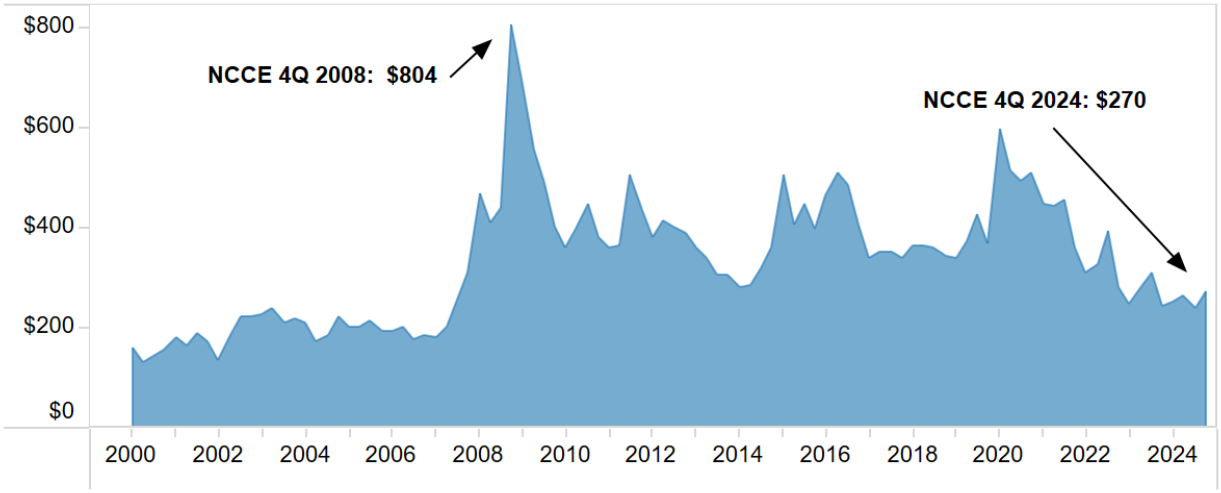
Netting benefit ratio	4Q 2024	3Q 2024	Q/Q change	Q/Q % change
GPFV	$2,387	$2,441	-$53	-2.2%
NCCE RC-R	$270	$237	$33	14.1%
Netting benefit RC-R	**$2,118**	**$2,204**	**-$87**	**-3.9%**
Netting benefit % RC-R	**88.7%**	**90.3%**		**-1.6%**

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

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

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 fourth quarter of 2024 at $270.0 billion exhibiting more normal market activity.

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



Source: Call reports, Schedule RC-R

The bulk of NCCE in the financial system is concentrated in banks and securities firms (39.1 percent) and in corporations and other counterparties (55.3 percent) (see table 6). The combined exposure to hedge funds and sovereign governments was small (5.6 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
4Q 2024	39.1%	2.1%	3.5%	55.3%
3Q 2024	37.6%	2.3%	5.3%	54.9%
2Q 2024	39.9%	1.5%	4.0%	54.5%
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 126.2 percent of their total NCCE at the end of the fourth quarter of 2024, down from 140.8 percent in the third quarter of 2024 (see table 7). Collateral held against hedge fund exposures decreased in the fourth quarter to 654.0 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 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 %
4Q 2024	131.1%	654.0%	80.7%	105.7%	126.2%
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%	104.8%	127.8%
4Q 2023	141.8%	574.3%	79.1%	90.8%	118.8%
4Q 2022	115.2%	477.1%	61.7%	83.3%	102.5%
4Q 2021	129.8%	692.2%	69.3%	76.3%	108.7%
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

Most of the collateral held by banks against NCCE is very liquid with 59.8 percent held in cash (both U.S. dollar and other currencies) and an additional 10.8 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
4Q 2024	44.3%	15.5%	10.2%	0.6%	4.8%	7.9%	16.7%
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
4Q 2024 average 60-day VaR	$246	$189	$78	$333
3Q 2024 average 60-day VaR	$224	$162	$76	$272
Q/Q change	$22	$27	$2	$61
4Q 2024 total risk-based capital	$296,041	$165,581	$209,256	$66,231

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

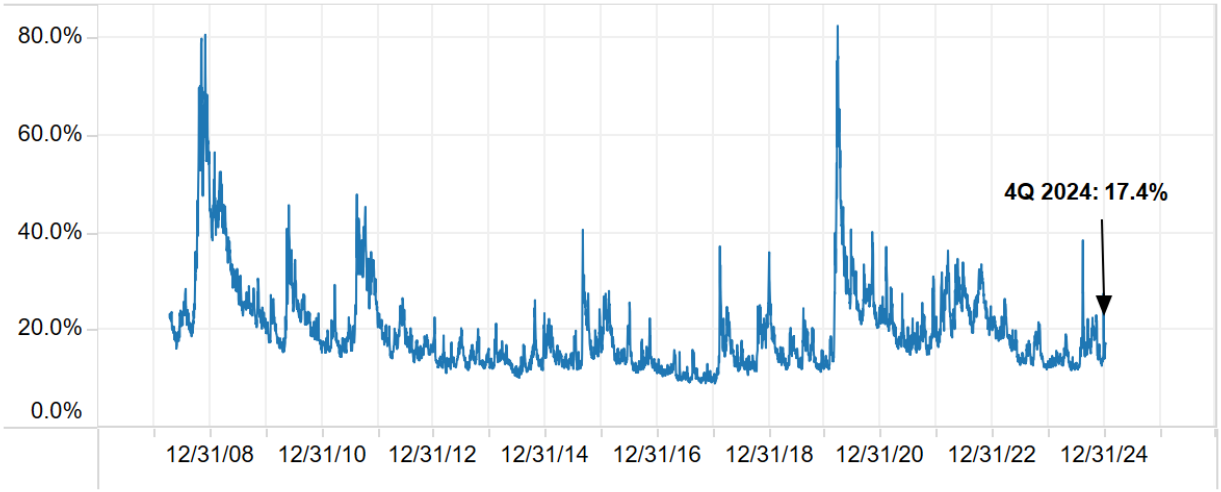
Value-at-risk capital requirement	JPMorgan Chase Bank NA	Citibank NA	Bank of America NA	Goldman Sachs Bank USA
4Q 2024 VaR capital requirement	$738	$566	$234	$1,000
3Q 2024 VaR capital requirement	$673	$485	$228	$817
Q/Q change	$65	$81	$6	$184
4Q 2024 total risk-based capital	$296,041	$165,581	$209,256	$66,231

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,[4] 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 shows that an extended period of low volatility following the end of the 2008 financial crisis 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 17.4 percent at the end of the fourth quarter of 2024.

Figure 3: Volatility Index (VIX)



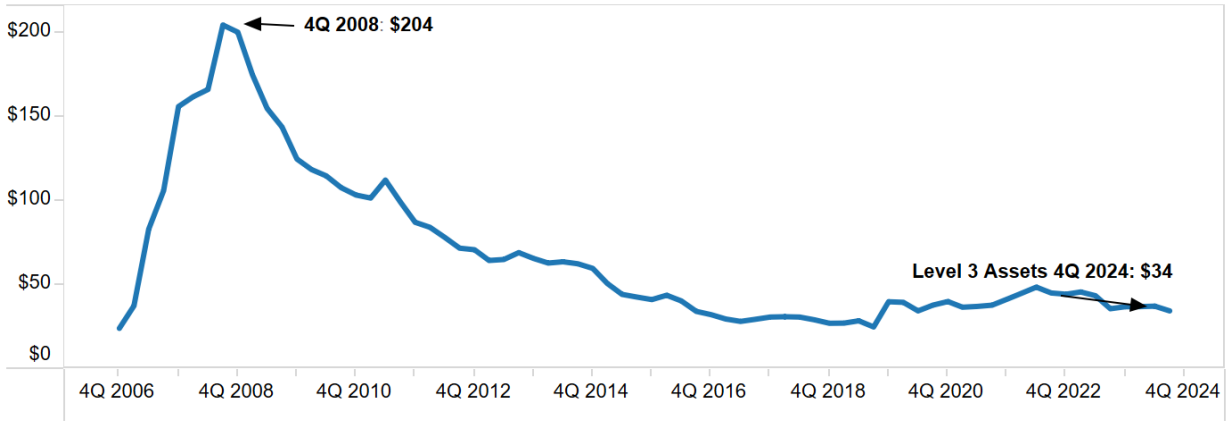
Source: Bloomberg

[4] 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 fourth quarter of 2024, banks held $34 billion of level 3 trading assets, down 7.6 percent from the previous quarter and 3.6 percent lower than a year ago. Level 3 trading assets are $170 billion (83.3 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 fourth quarter decreased by $32.2 trillion (14.7 percent) to $186.5 trillion from the previous quarter (see table 10). The decrease in the notional amount of derivative contracts by underlying risk exposure was driven by decreases across all instruments. Interest rate notional amounts continued to represent the majority of banks' derivative holdings at $125.5 trillion, or 67.5 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	4Q 2024	3Q 2024	Q/Q Change	Q/Q % Change	4Q 2023	Y/Y Change	Y/Y % Change
Interest rate	$125,925	$150,366	-$24,441	-16.3%	$136,274	-$10,350	-7.6%
FX	$48,327	$55,012	-$6,685	-12.2%	$45,278	$3,050	6.7%
Equity	$6,443	$6,801	-$359	-5.3%	$5,674	$769	13.6%
Commodity and other	$1,677	$1,808	-$130	-7.2%	$1,493	$185	12.4%
Credit derivatives	$4,134	$4,752	-$618	-13.0%	$3,746	$388	10.4%
Total notional	**$186,505**	**$218,739**	**-$32,234**	**-14.7%**	**$192,464**	**-$5,959**	**-3.1%**

Source: Call reports, Schedule RC-L

The decrease in the total notional amount of derivative contracts by contract type was primarily driven by decreases in swap contracts and futures and forwards (see table 11). Swap contracts remained the leading derivatives contract type at 60.1 percent of all notional amounts.

The four banks with the most derivative activity hold 86.5 percent of all bank derivatives (table 17 and figure 9 in the appendix), while the largest 25 banks account for nearly 100 percent of all contracts (table 15).

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

Trading instrument	4Q 2024	3Q 2024	Q/Q Change	Q/Q % Change	4Q 2023	Y/Y Change	Y/Y % Change
Futures and forwards	$31,732	$38,971	-$7,238	-18.6%	$31,807	-$75	-0.2%
Swaps	$112,129	$133,342	-$21,212	-15.9%	$117,303	-$5,174	-4.4%
Options	$38,510	$41,675	-$3,165	-7.6%	$39,608	-$1,097	-2.8%
Credit derivatives	$4,134	$4,752	-$618	-13.0%	$3,746	$388	10.4%
Total notional	**$186,505**	**$218,739**	**-$32,234**	**-14.7%**	**$192,464**	**-$5,959**	**-3.1%**

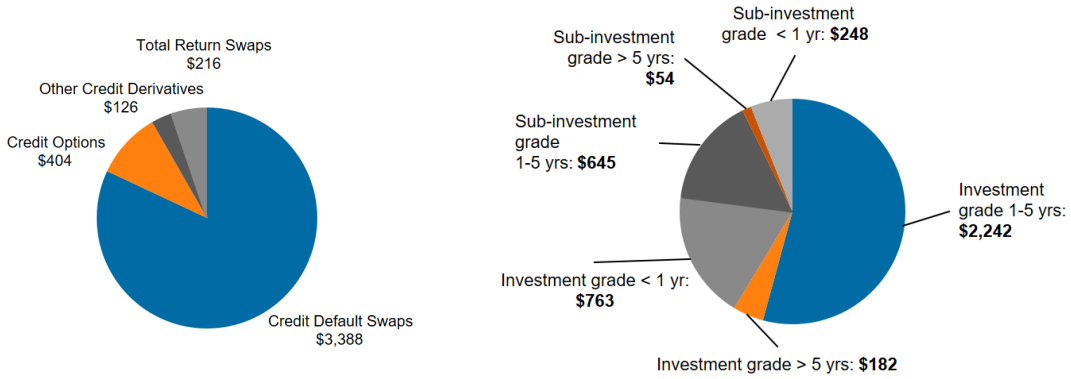
Source: Call reports, Schedule RC-L

Credit Derivatives

The notional amounts of credit derivatives decreased $618 billion (13.0 percent) to $4.1 trillion in the fourth 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 $3.4 trillion (82.0 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 $2.2 trillion or 54.2 percent of all credit derivative notional amounts. Contracts of all tenors that reference investment-grade entities are $3.2 trillion or 77.1 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 121 banks that net sold credit protection (i.e., assumed credit risk) was $1.9 trillion, down $315.7 billion (14.0 percent) from the third quarter of 2024 (see table 24 in the appendix). The notional amount for the 97 banks that net purchased credit protection (i.e., hedged credit risk) was $2.2 trillion, $302.4 billion lower (12.2 percent) than in the third quarter of 2024 (see table 24 in the appendix).

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 fourth quarter of 2024, 32.5 percent of banks' derivative holdings were centrally cleared (see table 12). From a market factor perspective, 44.3 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 26.5 percent of credit derivative transactions were centrally cleared during the fourth quarter of 2024.

Centrally cleared derivative transactions were heavily concentrated at qualifying central counterparties, with 79.2 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
4Q 2024	44.3%	3.5%	20.8%	10.2%	26.5%	12.9%	32.5%
3Q 2024	47.3%	3.2%	23.8%	7.7%	31.2%	14.3%	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.

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.

Appendix: Index of Tables and Figures

Tables

Figures

Table 13: Notional Amounts of Derivative Contracts

Top 25 Commercial Banks, Savings Associations, and Trust Companies in Derivatives, in Millions of Dollars, December 31, 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	$3,459,261	$47,362,114	$1,157,054	$947,351	$7,765,405	$27,528,901	$8,752,759	$1,210,644	$641,913
GOLDMAN SACHS BANK USA	558,235	45,884,908	1,472,989	792,664	4,144,961	28,201,139	10,688,802	584,353	774,639
CITIBANK NATIONAL ASSN	1,696,818	45,528,684	536,911	806,435	5,313,651	29,331,536	8,007,523	1,532,628	375,940
BANK OF AMERICA NA	2,589,060	22,627,847	307,033	433,418	3,942,544	13,402,178	3,987,819	554,855	409,739
WELLS FARGO BANK NA	1,705,538	13,533,246	604,339	522,803	2,222,997	7,415,635	2,665,576	101,896	24,511
STATE STREET BANK&TRUST CO	348,989	2,695,408	47,581	0	2,576,343	45,602	25,882	0	46,863
U S BANK NATIONAL ASSN	662,906	1,291,901	658	350	79,168	997,241	197,255	17,228	5,479
HSBC NA	164,820	1,275,902	15,266	1,304	494,187	680,042	65,907	19,196	32,603
BANK OF NEW YORK MELLON	335,955	1,120,109	13,819	44	301,999	752,877	51,046	324	76,284
PNC BANK NATIONAL ASSN	556,139	725,363	9,962	11,313	25,700	593,377	72,155	12,855	2,102
TRUIST BANK	523,132	431,118	7,688	19,566	25,347	310,913	58,531	9,073	376
NORTHERN TRUST CO	154,948	394,259	0	0	366,959	26,737	563	0	1,383
MORGAN STANLEY BANK NA	230,712	359,533	1,962	40	67,759	237,600	28,021	24,151	1,918
TD BANK NATIONAL ASSN	372,778	339,606	0	0	1,999	337,544	63	0	0
CAPITAL ONE NATIONAL ASSN	487,193	290,313	24,152	0	13,971	177,892	67,633	6,665	413
CITIZENS BANK NATIONAL ASSN	217,179	281,781	1,285	0	8,638	234,469	35,093	2,297	79
REGIONS BANK	155,918	176,741	373	0	3,793	142,193	25,239	5,143	15
FIFTH THIRD BANK NA	212,197	169,821	2,238	502	5,537	100,292	56,644	4,608	308
BMO BANK NATIONAL ASSN	263,653	156,235	0	0	3,019	150,428	2,788	1	176
KEYBANK NATIONAL ASSN	184,461	148,133	670	0	5,292	128,224	13,886	60	335
HUNTINGTON NATIONAL BANK	203,428	108,534	785	0	6,647	81,494	15,539	4,069	22
MANUFACTURERS&TRADERS TR CO	207,556	86,021	0	0	2,592	79,424	4,004	0	120
COMERICA BANK	79,332	71,028	0	0	3,238	55,477	10,538	1,775	276
UBS BANK USA	119,112	57,701	0	0	0	57,701	0	0	0
SANTANDER BANK N A	102,701	57,670	0	0	2,157	49,069	6,430	13	34
TOP 25 COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES	$15,592,021	$185,173,975	$4,204,765	$3,535,790	$27,383,903	$111,117,986	$34,839,697	$4,091,834	$2,395,528
OTHER COMMERCIAL BANKS, SAs & TCs WITH DERIVATIVES	6,053,623	1,331,503	20,063	4,029	123,568	1,011,190	130,895	41,758	678
Total all commercial banks, SAs & TCs with derivatives	21,645,644	186,505,477	4,224,828	3,539,818	27,507,471	112,129,176	34,970,592	4,133,592	2,396,206

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, December 31, 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.	$4,002,814	$47,090,036	$1,260,444	$1,812,970	$8,576,737	$25,943,774	$8,305,505	$1,190,606	$631,491
CITIGROUP INC.	2,352,945	42,547,285	652,899	3,862,084	6,040,669	23,385,213	7,635,845	970,575	374,755
BANK OF AMERICA CORPORATION	3,261,789	39,121,613	734,427	1,510,985	6,962,391	23,751,381	5,186,596	975,833	257,762
GOLDMAN SACHS GROUP, INC., THE	1,675,972	36,922,310	2,026,807	2,482,515	4,432,483	17,030,212	9,668,768	1,281,525	213,118
MORGAN STANLEY	1,215,071	27,096,997	928,410	1,559,090	2,688,602	13,761,949	7,382,608	776,338	40,748
WELLS FARGO & COMPANY	1,929,845	13,925,401	622,904	587,512	2,710,278	7,252,162	2,662,473	90,072	24,476
MIZUHO AMERICAS LLC	82,775	10,124,296	35,205	40,118	461,629	9,020,104	545,230	22,010	3,254
SMBC AMERICAS HOLDINGS, INC.	39,357	6,173,610	567,467	861,470	214,396	2,783,875	1,744,975	1,429	120
STATE STREET CORPORATION	353,240	2,683,263	47,736	0	2,576,343	33,302	25,882	0	46,863
U.S. BANCORP	678,318	1,281,819	658	350	77,854	988,474	197,255	17,228	5,479
HSBC NORTH AMERICA HOLDINGS INC.	230,030	1,258,778	1,431	0	494,649	671,401	72,100	19,196	32,603
RBC US GROUP HOLDINGS LLC	168,951	1,116,542	250,584	461,003	22,627	381,683	106	539	257
BANK OF NEW YORK MELLON CORPORATION, THE	416,064	1,097,443	14,015	44	311,672	720,341	51,047	324	76,269
BARCLAYS US LLC	191,486	828,478	51,459	323,619	424,665	27,725	210	800	0
PNC FINANCIAL SERVICES GROUP, INC., THE	560,051	700,060	10,075	11,313	28,629	564,923	72,155	12,965	2,102
BMO FINANCIAL CORP.	292,581	628,572	133,443	62,978	276,457	152,177	2,788	729	184
TRUIST FINANCIAL CORPORATION	531,176	415,944	7,688	19,566	25,423	295,178	58,531	9,558	376
TD GROUP US HOLDINGS LLC	540,335	408,523	34,062	7,551	9,547	356,510	852	0	0
NORTHERN TRUST CORPORATION	155,508	392,259	0	0	366,959	24,737	563	0	1,383
CAPITAL ONE FINANCIAL CORPORATION	490,144	325,365	24,152	0	14,418	212,496	67,633	6,665	413
CITIZENS FINANCIAL GROUP, INC.	217,936	281,781	1,285	0	8,638	234,469	35,093	2,297	79
FIFTH THIRD BANCORP	212,927	174,026	2,238	502	5,537	104,497	56,644	4,608	308
REGIONS FINANCIAL CORPORATION	157,460	173,738	373	0	3,940	139,043	25,239	5,143	15
KEYCORP	187,184	155,415	723	0	7,996	132,750	13,886	60	335
AMERIPRISE FINANCIAL, INC.	181,416	155,313	7,120	1,369	500	44,656	98,545	3,122	1
Top 25 holding companies with derivatives	$20,125,374	$235,078,866	$7,415,606	$13,605,038	$36,743,038	$128,013,033	$43,910,530	$5,391,622	$1,712,391

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, December 31, 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	$3,459,261	$47,362,114	4.4	95.6	62.8	27.4	5.6	1.7	2.6
GOLDMAN SACHS BANK USA	558,235	45,884,908	4.9	95.1	82.1	14.8	1.7	0.1	1.3
CITIBANK NATIONAL ASSN	1,696,818	45,528,684	3.0	97.0	63.1	29.7	2.9	1.0	3.4
BANK OF AMERICA NA	2,589,060	22,627,847	3.3	96.7	64.3	27.6	5.2	0.5	2.5
WELLS FARGO BANK NA	1,705,538	13,533,246	8.3	91.7	69.9	25.8	2.9	0.7	0.8
STATE STREET BANK&TRUST CO	348,989	2,695,408	1.8	98.2	3.4	95.6	0.0	0.9	0.0
U S BANK NATIONAL ASSN	662,906	1,291,901	0.1	99.9	88.6	8.7	0.0	1.3	1.3
HSBC NA	164,820	1,275,902	1.3	98.7	10.4	85.1	1.6	1.4	1.5
BANK OF NEW YORK MELLON	335,955	1,120,109	1.2	98.8	22.9	76.6	0.5	0.0	0.0
PNC BANK NATIONAL ASSN	556,139	725,363	2.9	97.1	91.1	4.3	0.7	2.1	1.8
TRUIST BANK	523,132	431,118	6.3	93.7	78.7	6.9	9.7	2.5	2.1
NORTHERN TRUST CO	154,948	394,259	0.0	100.0	6.8	93.1	0.1	0.0	0.0
MORGAN STANLEY BANK NA	230,712	359,533	0.6	99.4	45.7	27.3	20.3	0.0	6.7
TD BANK NATIONAL ASSN	372,778	339,606	0.0	100.0	99.4	0.6	0.0	0.0	0.0
CAPITAL ONE NATIONAL ASSN	487,193	290,313	8.3	91.7	83.8	7.2	0.0	6.7	2.3
CITIZENS BANK NATIONAL ASSN	217,179	281,781	0.5	99.5	86.4	12.3	0.0	0.4	0.8
REGIONS BANK	155,918	176,741	0.2	99.8	93.0	1.8	0.0	2.3	2.9
FIFTH THIRD BANK NA	212,197	169,821	1.6	98.4	63.2	22.6	1.5	10.0	2.7
BMO BANK NATIONAL ASSN	263,653	156,235	0.0	100.0	96.6	1.9	1.5	0.0	0.0
KEYBANK NATIONAL ASSN	184,461	148,133	0.5	99.5	89.6	4.4	0.0	5.9	0.0
HUNTINGTON NATIONAL BANK	203,428	108,534	0.7	99.3	89.7	5.3	0.7	0.6	3.7
MANUFACTURERS&TRADERS TR CO	207,556	86,021	0.0	100.0	98.3	1.7	0.0	0.0	0.0
COMERICA BANK	79,332	71,028	0.0	100.0	74.2	4.6	0.0	18.7	2.5
UBS BANK USA	119,112	57,701	0.0	100.0	100.0	0.0	0.0	0.0	0.0
SANTANDER BANK N A	102,701	57,670	0.0	100.0	88.6	11.3	0.0	0.0	0.0
Top 25 commercial banks, SAs & TCs with derivatives	$15,592,021	$185,173,975	$7,740,555	$177,433,420	$124,695,029	$48,288,525	$6,441,805	$1,656,782	$4,091,834
Other commercial banks, SAs & TCs with derivatives	6,053,623	1,331,503	24,092	1,307,411	1,229,684	38,731	848	20,482	41,758
Total all commercial banks, SAs & TCs with derivatives	21,645,644	186,505,477	7,764,646	178,740,831	125,924,713	48,327,256	6,442,654	1,677,263	4,133,592
Top 25 Commercial Banks, SAs & TCs with derivatives: percentage of total		99.3	4.2	95.1	66.9	25.9	3.5	0.9	2.2
Other commercial banks, SAs & TCs with derivatives: percentage of total		0.7	0.0	0.7	0.7	0.0	0.0	0.0	0.0
Total all commercial banks, SAs & TCs with derivatives: percentage of total		100.0	4.2	95.8	67.5	25.9	3.5	0.9	2.2

Note: Currently, the call report does not differentiate credit derivatives by OTC or exchange-traded. Credit derivatives have been included in the "OTC" 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, December 31, 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	$3,459,261	$47,362,114	$296,041	$99,808	$232,144	$331,952	112
GOLDMAN SACHS BANK USA	558,235	45,884,908	66,231	13,312	79,363	92,675	140
CITIBANK NATIONAL ASSN	1,696,818	45,528,684	165,581	47,376	133,803	181,179	109
BANK OF AMERICA NA	2,589,060	22,627,847	209,256	31,364	59,955	91,319	44
WELLS FARGO BANK NA	1,705,538	13,533,246	167,936	16,560	48,013	64,573	38
STATE STREET BANK&TRUST CO	348,989	2,695,408	19,886	10,644	23,141	33,785	170
U S BANK NATIONAL ASSN	662,906	1,291,901	69,947	5,076	7,046	12,122	17
HSBC NA	164,820	1,275,902	19,036	5,132	2,648	7,780	41
BANK OF NEW YORK MELLON	335,955	1,120,109	21,203	7,418	9,473	16,891	80
PNC BANK NATIONAL ASSN	556,139	725,363	55,574	4,859	-2,012	2,847	5
TRUIST BANK	523,132	431,118	58,172	402	3,503	3,905	7
NORTHERN TRUST CO	154,948	394,259	11,242	5,370	4,541	9,911	88
MORGAN STANLEY BANK NA	230,712	359,533	22,993	2,765	5,130	7,895	34
TD BANK NATIONAL ASSN	372,778	339,606	40,120	49	1,407	1,456	4
CAPITAL ONE NATIONAL ASSN	487,193	290,313	56,937	2,432	5,258	7,690	14
CITIZENS BANK NATIONAL ASSN	217,179	281,781	23,362	361	1,799	2,159	9
REGIONS BANK	155,918	176,741	16,081	292	628	920	6
FIFTH THIRD BANK NA	212,197	169,821	23,116	1,090	2,824	3,914	17
BMO BANK NATIONAL ASSN	263,653	156,235	28,294	226	244	470	2
KEYBANK NATIONAL ASSN	184,461	148,133	20,518	307	737	1,044	5
HUNTINGTON NATIONAL BANK	203,428	108,534	20,240	704	924	1,628	8
MANUFACTURERS&TRADERS TR CO	207,556	86,021	21,387	209	232	441	2
COMERICA BANK	79,332	71,028	9,799	295	1,213	1,508	15
UBS BANK USA	119,112	57,701	10,419	0	129	129	1
SANTANDER BANK N A	102,701	57,670	12,686	872	430	1,302	10
Top 25 commercial banks, SAs & TCs with derivatives	$15,592,021	$185,173,975	$1,466,057	$256,924	$622,573	$879,496	60
Other commercial banks, SAs & TCs with derivatives	6,053,623	1,331,503	646,352	13,023	10,512	23,535	4
Total all commercial banks, SAs & TCs with derivatives	21,645,644	186,505,477	2,112,409	269,946	633,085	903,031	43

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, December 31, 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	$3,459,261	$47,362,114	$45,253,535	98.1	$897,935	1.9
GOLDMAN SACHS BANK USA	558,235	45,884,908	45,256,118	99.9	44,437	0.1
CITIBANK NATIONAL ASSN	1,696,818	45,528,684	43,883,215	99.7	112,841	0.3
BANK OF AMERICA NA	2,589,060	22,627,847	20,523,425	93.0	1,549,567	7.0
Top four commercial banks, SAs & TCs with derivatives	$8,303,374	$161,403,553	$154,916,293	98.3	$2,604,780	1.7
Other commercial banks, SAs & TCs with derivatives	13,342,270	25,101,924	21,639,882	87.1	3,210,930	12.9
Total all commercial banks, SAs & TCs with derivatives	21,645,644	186,505,477	176,556,176	96.8	5,815,710	3.2

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, December 31, 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	$3,459,261	$47,362,114	$711,502	$685,010	$6,996	$2,374	$11,391	$14,482
GOLDMAN SACHS BANK USA	558,235	45,884,908	705,476	691,625	206	17	7,153	8,048
CITIBANK NATIONAL ASSN	1,696,818	45,528,684	467,198	453,241	3,030	1,667	17,620	16,851
BANK OF AMERICA NA	2,589,060	22,627,847	185,342	169,172	31,429	35,081	5,016	4,330
Top four commercial banks, SAs & TCs with derivatives	$8,303,374	$161,403,553	$2,069,518	$1,999,048	$41,661	$39,139	$41,180	$43,711
Other commercial banks, SAs & TCs with derivatives	13,342,270	25,101,924	202,490	198,441	30,868	22,306	1,739	1,865
Total all commercial banks, SAs & TCs with derivatives	21,645,644	186,505,477	2,272,008	2,197,489	72,529	61,445	42,919	45,576

* 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), December 31, 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	$3,459,261	$47,362,114	6,829	1,159	802	4,660	198	10
GOLDMAN SACHS BANK USA	558,235	45,884,908	833	-1,941	2,805	-241	11	199
CITIBANK NATIONAL ASSN	1,696,818	45,528,684	2,071	908	1,362	-146	-35	-18
BANK OF AMERICA NA	2,589,060	22,627,847	2,403	402	1,392	535	66	8
Top four commercial banks, SAs & TCs with derivatives	$8,303,374	$161,403,553	12,136	528	6,361	4,808	240	199
Other commercial banks, SAs & TCs with derivatives	13,342,270	25,101,924	2,619	-992	2,750	651	105	106
Total all commercial banks, SAs & TCs with derivatives	21,645,644	186,505,477	14,755	-464	9,111	5,459	345	305

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, December 31, 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	$3,459,261	$47,362,114	$28,174,263	$7,047,952	$6,112,134	$41,334,349	$9,330,119	$2,567,997	$1,193,374	$13,091,490
GOLDMAN SACHS BANK USA	558,235	45,884,908	17,806,827	7,976,251	7,682,918	33,465,996	5,026,883	1,094,627	741,235	6,862,745
CITIBANK NATIONAL ASSN	1,696,818	45,528,684	18,221,263	4,363,874	3,186,105	25,771,242	9,463,865	2,124,872	909,887	12,498,624
BANK OF AMERICA NA	2,589,060	22,627,847	6,535,856	5,031,803	3,299,366	14,867,025	5,151,344	590,583	347,778	6,089,705
Top four commercial banks, SAs & TCs with derivatives	$8,303,374	$161,403,553	$70,738,209	$24,419,880	$20,280,523	$115,438,612	$28,972,211	$6,378,079	$3,192,274	$38,542,564
Other commercial banks, SAs & TCs with derivatives	13,342,270	25,101,924	10,708,031	3,120,318	991,291	14,819,640	8,278,663	415,836	108,322	8,802,821
Total all commercial banks, SAs & TCs with derivatives	21,645,644	186,505,477	81,446,240	27,540,198	21,271,814	130,258,252	37,250,874	6,793,915	3,300,596	47,345,385

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, December 31, 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	$3,459,261	$47,362,114	$267,423	$19,663	$2	$287,088
GOLDMAN SACHS BANK USA	558,235	45,884,908	224	126	0	350
CITIBANK NATIONAL ASSN	1,696,818	45,528,684	154,885	8,509	4	163,398
BANK OF AMERICA NA	2,589,060	22,627,847	52,863	4,795	0	57,658
Top four commercial banks, SAs & TCs with derivatives	$8,303,374	$161,403,553	$475,395	$33,093	$6	$508,494
Other commercial banks, SAs & TCs with derivatives	13,342,270	25,101,924	8,671	854	0	9,525
Total all commercial banks, SAs & TCs with derivatives	21,645,644	186,505,477	484,066	33,947	6	518,019

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, December 31, 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 tears	Equity maturity > 5 years	Equity: all maturities
JPMORGAN CHASE BANK NA	$3,459,261	$47,362,114	$872,763	$129,225	$8,742	$1,010,730	$3,861,139	$730,615	$78,557	$4,670,311
GOLDMAN SACHS BANK USA	558,235	45,884,908	38,214	6,811	302	45,327	615,169	89,141	31,331	735,641
CITIBANK NATIONAL ASSN	1,696,818	45,528,684	128,701	42,786	1,068	172,555	609,762	178,031	8,893	796,686
BANK OF AMERICA NA	2,589,060	22,627,847	46,508	10,379	1,101	57,988	885,203	268,852	20,718	1,174,773
Top four commercial banks, SAs & TCs with derivatives	$8,303,374	$161,403,553	$1,086,186	$189,201	$11,213	$1,286,600	$5,971,273	$1,266,639	$139,499	$7,377,411
Other commercial banks, SAs & TCs with derivatives	13,342,270	25,101,924	111,728	87,406	4,507	203,642	363,792	166,568	9,565	539,926
Total all commercial banks, SAs & TCs with derivatives	21,645,644	186,505,477	1,197,914	276,607	15,720	1,490,242	6,335,065	1,433,207	149,064	7,917,337

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, December 31, 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	$3,459,261	$47,362,114	$1,210,644	$280,787	$594,063	$65,291	$940,141	$94,403	$166,810	$9,290	$270,503
GOLDMAN SACHS BANK USA	558,235	45,884,908	584,353	60,155	311,554	48,920	420,629	30,587	114,784	18,353	163,724
CITIBANK NATIONAL ASSN	1,696,818	45,528,684	1,532,628	243,589	981,113	31,816	1,256,518	59,194	203,984	12,932	276,110
BANK OF AMERICA NA	2,589,060	22,627,847	554,855	125,647	253,078	26,312	405,037	50,194	96,306	3,318	149,818
Top four commercial banks, SAs & TCs with derivatives	$8,303,374	$161,403,553	$3,882,480	$710,178	$2,139,808	$172,339	$3,022,325	$234,378	$581,884	$43,893	$860,155
Other commercial banks, SAs & TCs with derivatives	13,342,270	25,101,924	251,112	52,942	101,708	9,721	164,371	13,375	63,508	9,858	86,741
Total all commercial banks, SAs & TCs with derivatives	21,645,644	186,505,477	4,133,592	763,120	2,241,516	182,060	3,186,696	247,753	645,392	53,751	946,896

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, December 31, 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	$3,459,261	$47,362,114	$1,210,644	$634,757	$575,887	$482,297	$54,385	$93,394	$4,681	$450,753	$22,168	$102,740	$226
GOLDMAN SACHS BANK USA	558,235	45,884,908	584,353	316,708	267,645	297,198	6,109	13,260	141	250,206	4,940	12,365	134
CITIBANK NATIONAL ASSN	1,696,818	45,528,684	1,532,628	802,757	729,871	724,431	36,347	41,979	0	677,829	13,357	38,685	0
BANK OF AMERICA NA	2,589,060	22,627,847	554,855	290,237	264,618	222,334	16,983	50,920	0	211,771	2,710	50,137	0
WELLS FARGO BANK NA	1,705,538	13,533,246	101,896	55,814	46,082	9,173	25,242	125	21,274	9,013	28,350	0	8,719
STATE STREET BANK&TRUST CO	348,989	2,695,408	0	0	0	0	0	0	0	0	0	0	0
U S BANK NATIONAL ASSN	662,906	1,291,901	17,228	7,319	9,910	3,982	0	0	3,337	459	0	0	9,451
HSBC NA	164,820	1,275,902	19,196	12,369	6,827	9,401	2,968	0	0	6,827	0	0	0
BANK OF NEW YORK MELLON	335,955	1,120,109	324	324	0	324	0	0	0	0	0	0	0
PNC BANK NATIONAL ASSN	556,139	725,363	12,855	5,500	7,356	100	0	0	5,400	0	0	0	7,356
TRUIST BANK	523,132	431,118	9,073	2,935	6,138	200	1,485	0	1,250	0	0	0	6,138
NORTHERN TRUST CO	154,948	394,259	0	0	0	0	0	0	0	0	0	0	0
MORGAN STANLEY BANK NA	230,712	359,533	24,151	21,291	2,860	20,752	539	0	0	2,792	68	0	0
TD BANK NATIONAL ASSN	372,778	339,606	0	0	0	0	0	0	0	0	0	0	0
CAPITAL ONE NATIONAL ASSN	487,193	290,313	6,665	3,966	2,699	0	0	0	3,966	0	0	0	2,699
CITIZENS BANK NATIONAL ASSN	217,179	281,781	2,297	0	2,297	0	0	0	0	0	0	0	2,297
REGIONS BANK	155,918	176,741	5,143	1,717	3,426	0	0	0	1,717	0	0	0	3,426
FIFTH THIRD BANK NA	212,197	169,821	4,608	1,361	3,247	0	0	0	1,361	0	0	0	3,247
BMO BANK NATIONAL ASSN	263,653	156,235	1	0	0	0	0	0	0	0	0	0	0
KEYBANK NATIONAL ASSN	184,461	148,133	60	12	48	12	0	0	0	2	46	0	0
HUNTINGTON NATIONAL BANK	203,428	108,534	4,069	2,441	1,627	247	0	0	2,195	0	0	0	1,627
MANUFACTURERS&TRADERS TR CO	207,556	86,021	0	0	0	0	0	0	0	0	0	0	0
COMERICA BANK	79,332	71,028	1,775	725	1,050	725	0	0	0	1,050	0	0	0
UBS BANK USA	119,112	57,701	0	0	0	0	0	0	0	0	0	0	0
SANTANDER BANK N A	102,701	57,670	13	3	10	3	0	0	0	10	0	0	0
Top 25 commercial banks, SAs & TCs with derivatives	$15,592,021	$185,173,975	$4,091,834	$2,160,236	$1,931,598	$1,771,179	$144,058	$199,678	$45,321	$1,610,712	$71,639	$203,927	$45,320
Other commercial banks, SAs & TCs with derivatives	6,053,623	1,331,503	41,758	27,396	14,362	3,039	149	0	24,208	3,069	120	0	11,173
Total all commercial banks, SAs & TCs with derivatives	21,645,644	186,505,477	4,133,592	2,187,631	1,945,961	1,774,217	144,206	199,678	69,530	1,613,781	71,760	203,927	56,493
Top 25 commercial banks, SAs & TCs with derivatives: percentage of total			99.0	52.3	46.7	42.8	3.5	4.8	1.1	39.0	1.7	4.9	1.1
Other commercial banks, SAs & TCs with derivatives: percentage of total			1.0	0.7	0.3	0.1	0.0	0.0	0.6	0.1	0.0	0.0	0.3
Total all commercial banks, SAs & TCs with derivatives: percentage of total			100.0	52.9	47.1	42.9	3.5	4.8	1.7	39.0	1.7	4.9	1.4

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, December 31, 2024

Gross notional amount of derivatives	4Q24	3Q24	2Q24	1Q24	4Q23	3Q23	2Q23	1Q23	4Q22	3Q22	2Q22	1Q22
Total gross notional amount of interest rate derivatives held for trading	$5,818	$5,854	$5,850	$5,774	$5,586	$5,325	$5,242	$5,016	$4,792	$4,915	$4,953	$4,994
Total gross notional amount of all other derivatives held for trading	$59	$59	$61	$51	$149	$50	$47	$51	$43	$42	$35	$39
Total gross notional amount of interest rate derivatives not held for trading	$31,313	$34,792	$32,196	$29,189	$26,068	$122,763	$21,050	$17,819	$14,395	$16,786	$19,499	$21,308
Total gross notional amount of all other derivatives not held for trading	$858	$817	$698	$626	$614	$845	$842	$676	$1,103	$1,037	$1,142	$1,007

FFIEC 051 Call Report Schedule SU

FFIEC 051 Call Report Schedule RC-R**

Notional principal amounts of over-the-counter derivative contracts covered by the regulatory capital rules	4Q24	3Q24	2Q24	1Q24	4Q23	3Q23	2Q23	1Q23	4Q22	3Q22	2Q22	1Q22
Interest rate	$23,259	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
Foreign exchange rate	$11	Data Not Reported	$9	Data Not Reported	$7	Data Not Reported	$5	Data Not Reported	$5	Data Not Reported	$4	Data Not Reported
Credit (investment grade reference asset)	$86	Data Not Reported	$89	Data Not Reported	$75	Data Not Reported	$80	Data Not Reported	$188	Data Not Reported	$265	Data Not Reported
Credit (non-investment grade reference asset)	$291	Data Not Reported	$324	Data Not Reported	$302	Data Not Reported	$251	Data Not Reported	$212	Data Not Reported	$176	Data Not Reported
Equity	$15	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported
Precious metals	$11	Data Not Reported	$4	Data Not Reported	$4	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported
Other	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported

Notional principal amounts of centrally cleared derivative contracts covered by the regulatory capital rules	4Q24	3Q24	2Q24	1Q24	4Q23	3Q23	2Q23	1Q23	4Q22	3Q22	2Q22	1Q22
Interest rate	$84	Data Not Reported	$90	Data Not Reported	$69	Data Not Reported	$90	Data Not Reported	$79	Data Not Reported	$108	Data Not Reported
Foreign exchange rate	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported
Credit (investment grade reference asset)	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported
Credit (non-investment grade reference asset)	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported
Equity	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported
Precious metals	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported
Other	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported	$0	Data Not Reported

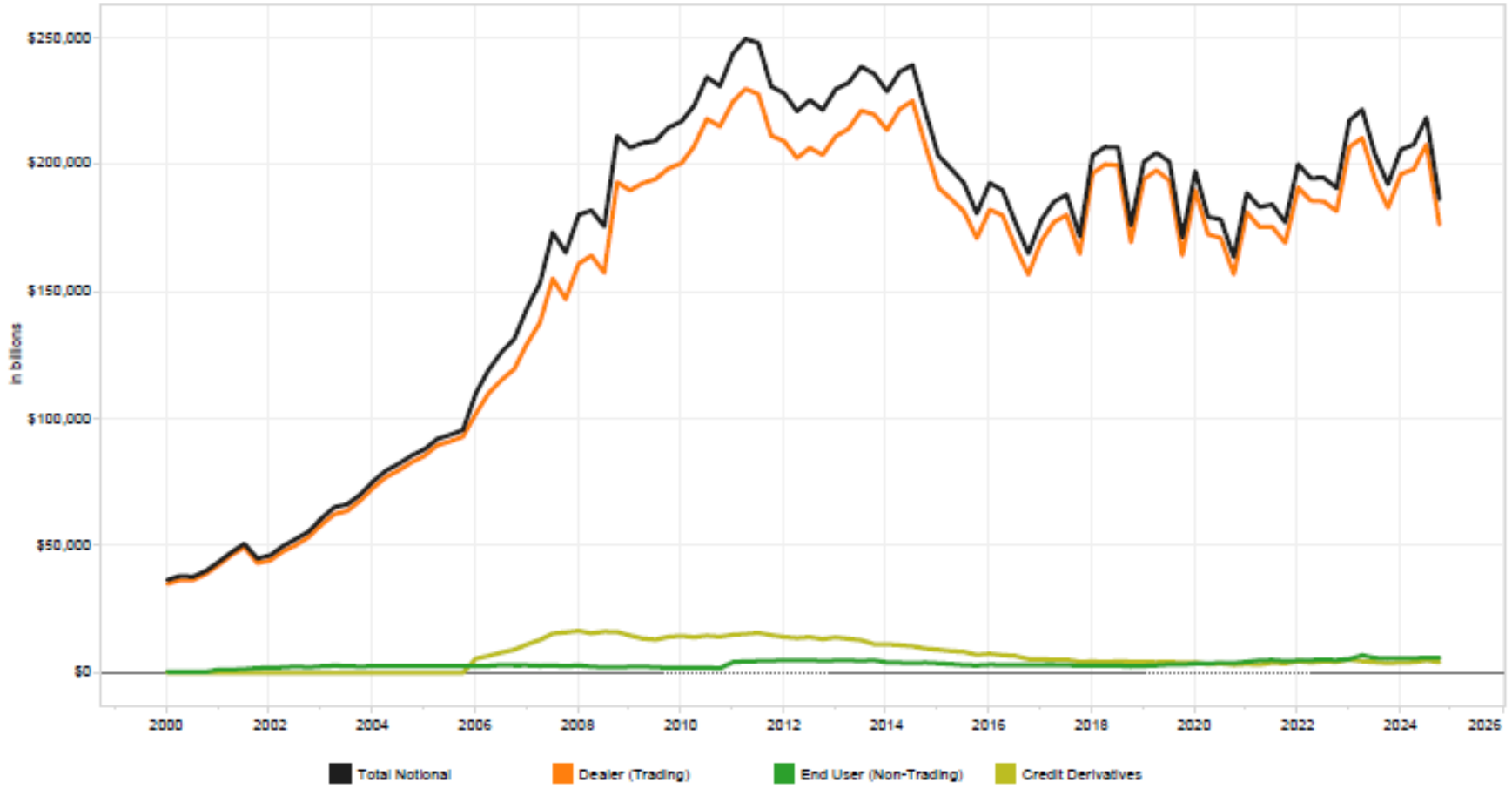
* Beginning September 30, 2019, the eligibility to file the FFIEC 051 call report expanded from banks with total assets less than $1 billion to include banks with less than $5 billion in total assets.

** 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

Current Credit Exposure	4Q24	3Q24	2Q24	1Q24	4Q23	3Q23	2Q23	1Q23	4Q22	3Q22	2Q22	1Q22
Current credit exposure across all derivative contracts covered by the regulatory capital rules	$407	Data Not Reported	$466	Data Not Reported	$354	Data Not Reported	$455	Data Not Reported	$493	Data Not Reported	$363	Data Not Reported

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



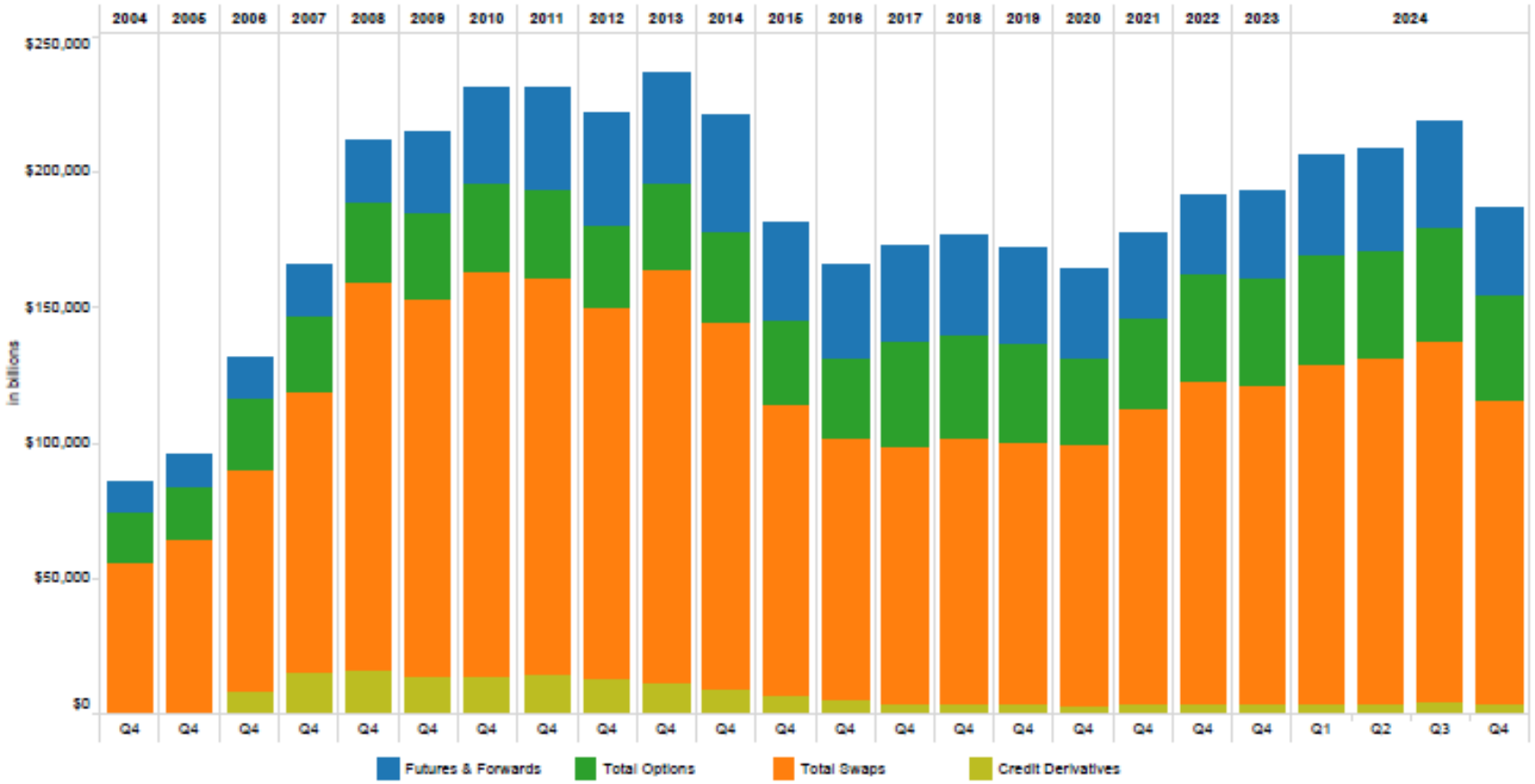
In billions of dollars

	2021				2022				2023				2024			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
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	$218,739	$186,505
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	176,556
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	5,875	5,816
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	4,134

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

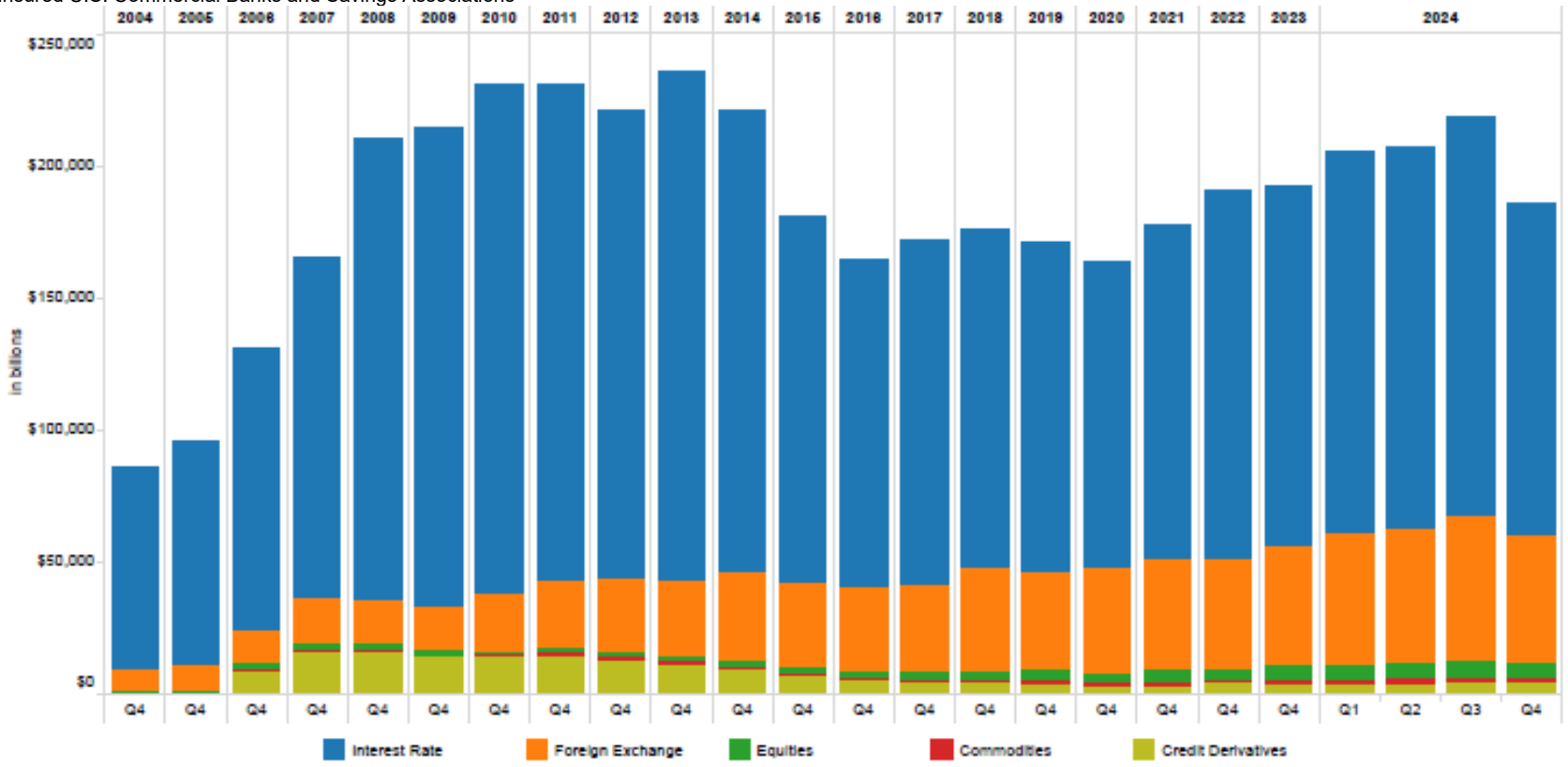
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024			
	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q1	Q2	Q3	Q4
Futures & Forwards	$29,652	$35,539	$37,469	$41,621	$40,027	$43,380	$35,691	$34,201	$34,162	$36,145	$34,789	$32,350	$31,180	$28,749	$31,807	$36,822	$36,701	$38,971	$31,732
Total Options	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	38,510
Total Swaps	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	133,342	112,129
Credit Derivatives	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	4,134
Total Notional	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	218,739	186,505

* 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

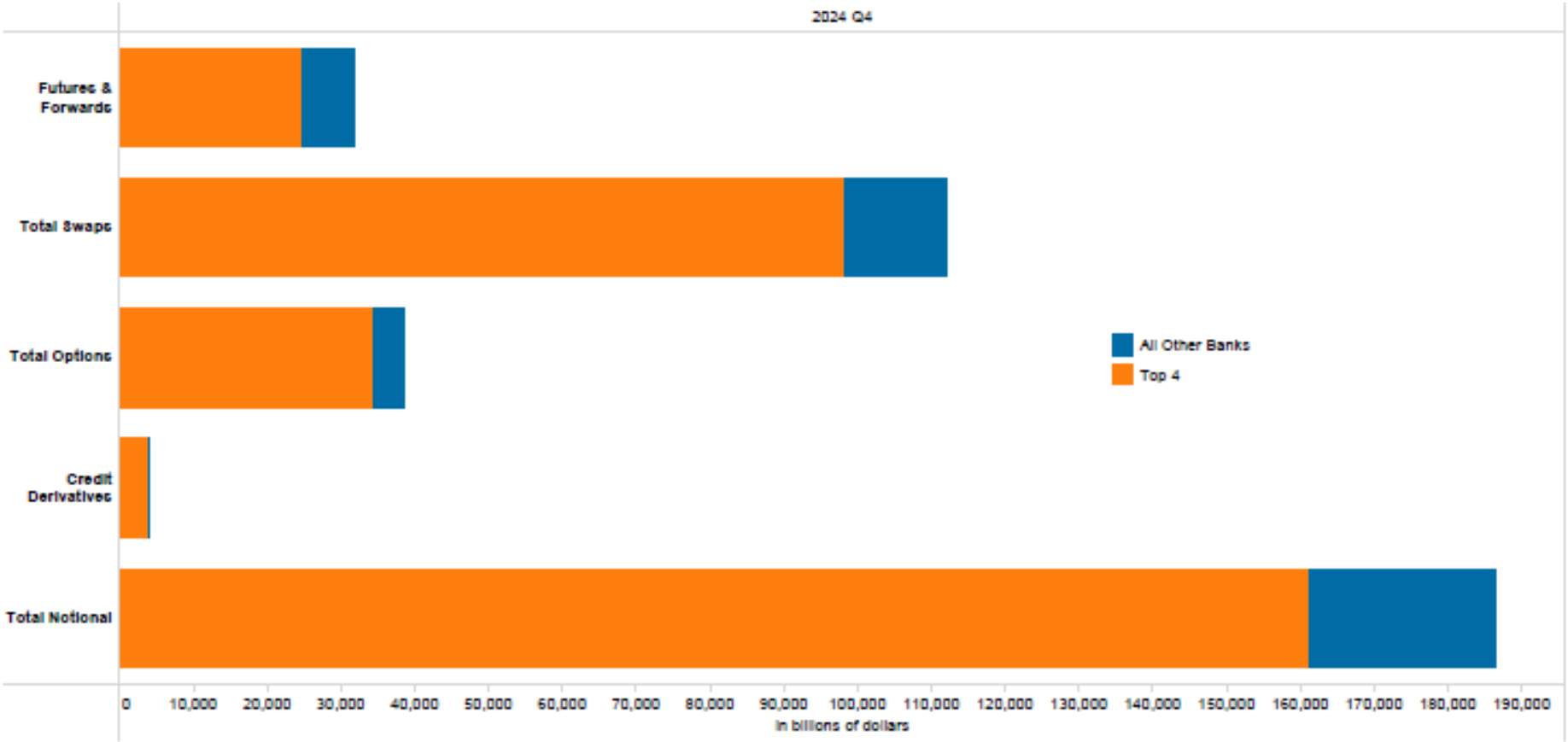
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024			
	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q4	Q1	Q2	Q3	Q4
Interest Rate	$193,399	$187,866	$177,650	$193,084	$174,687	$138,369	$124,488	$130,417	$128,175	$125,065	$116,000	$126,236	$139,756	$136,274	$144,427	$144,959	$150,366	$125,925
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	48,327
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	6,443
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	1,677
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	4,134
Total Notional	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	218,739	186,505

* 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



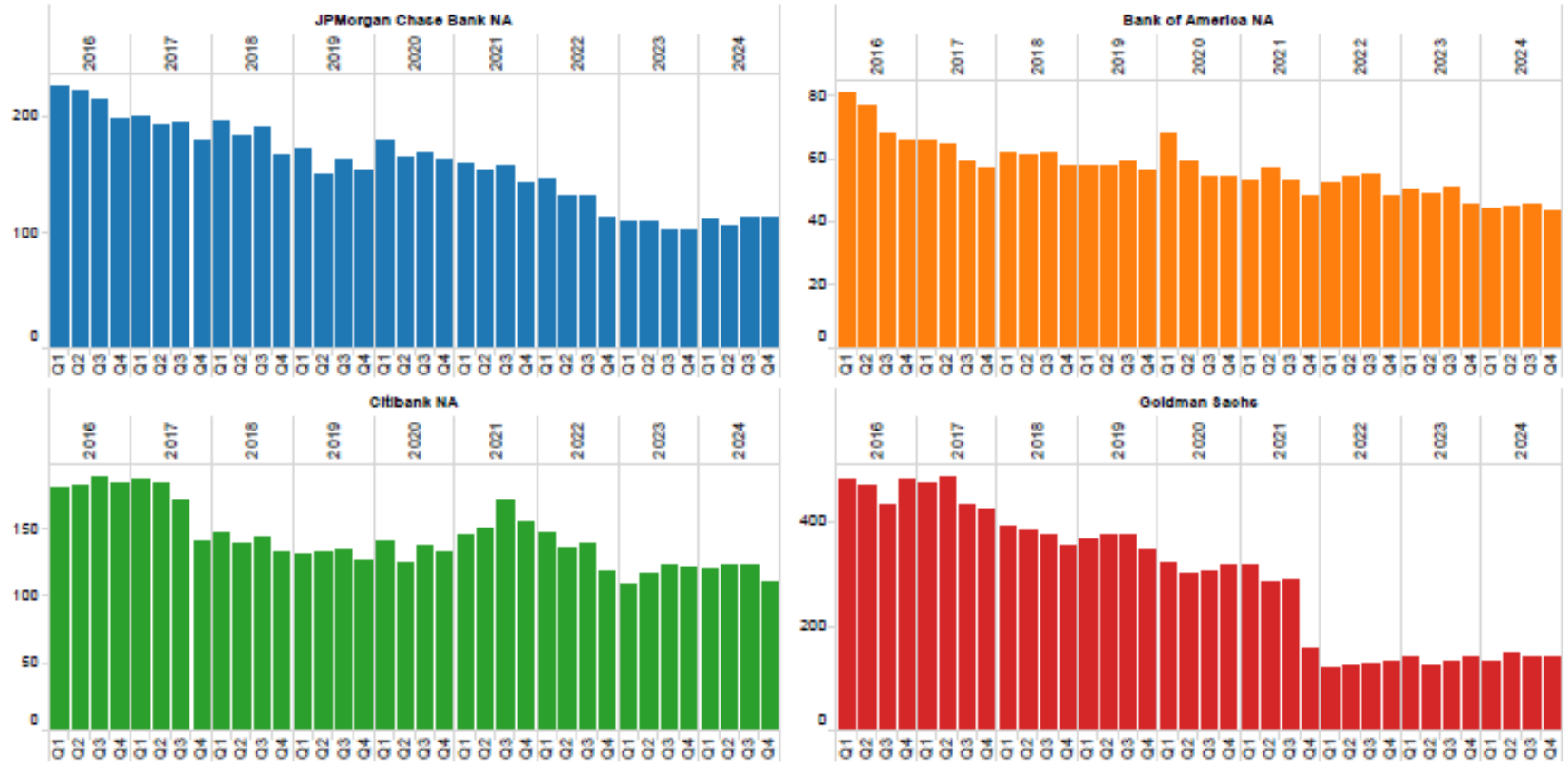
In billions of dollars

	Top 4	All Other Banks	Grand Total
Futures & Forwards	$24,641	$7,092	$31,732
Total Swaps	98,464	13,665	112,129
Total Options	34,417	4,094	38,510
Credit Derivatives	3,882	251	4,134
Total Notional	161,404	25,102	186,505

* 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

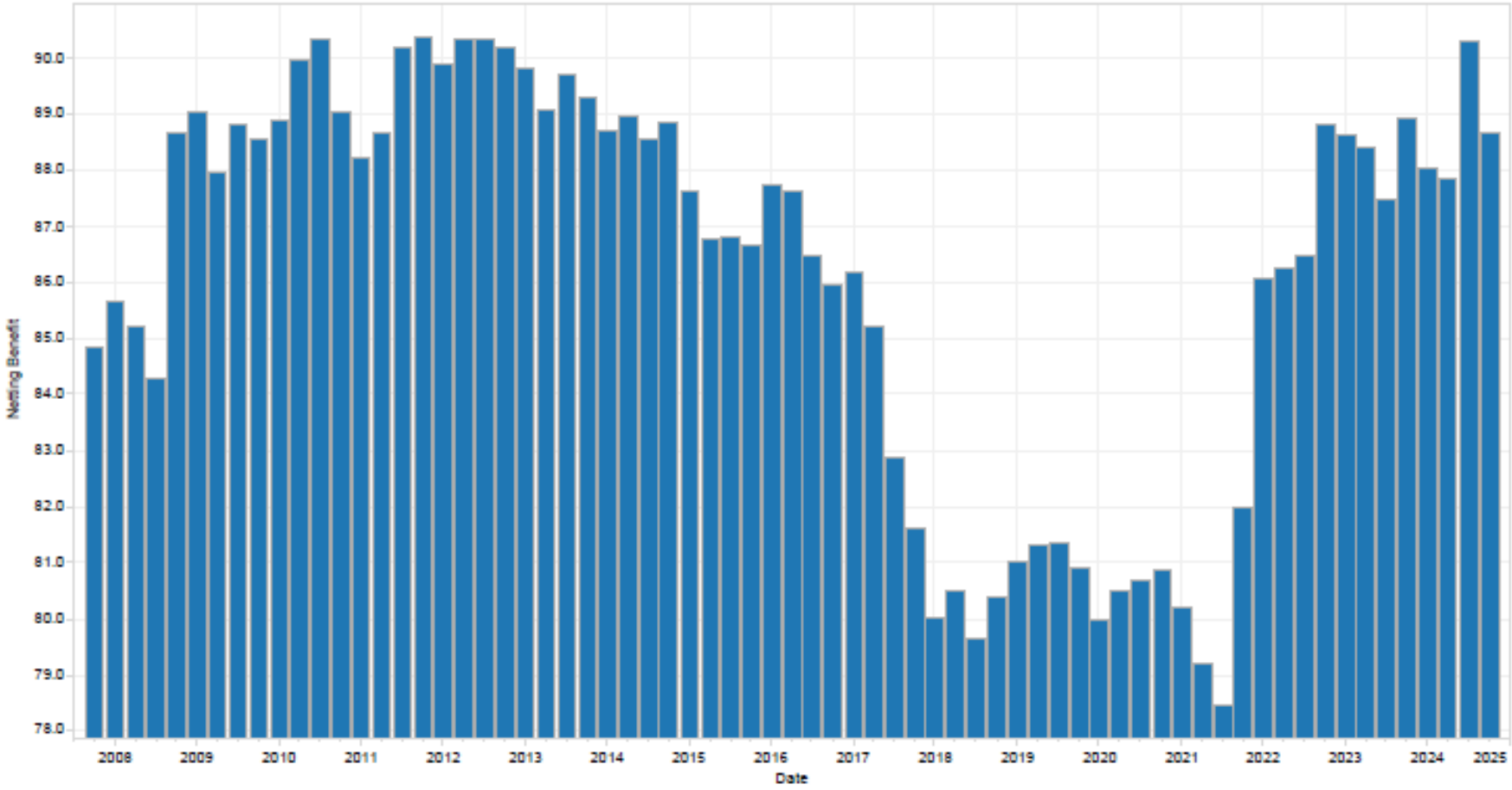


	2018				2019				2020				2021				2022				2023				2024			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
JPMorgan Chase Bank NA	197	184	190	167	173	150	163	153	181	165	168	163	159	155	158	143	147	133	130	113	109	110	102	102	110	106	114	112
Bank of America NA	62	61	62	57	58	58	59	56	68	59	54	54	53	57	53	49	52	54	55	48	50	49	51	45	44	45	45	44
Citibank NA	146	139	144	132	130	132	134	126	140	125	137	133	145	150	170	153	147	136	139	118	108	116	123	121	120	122	122	109
Goldman Sachs	389	384	371	354	366	372	372	344	319	299	304	314	317	285	286	160	120	126	128	134	140	126	130	142	132	147	141	140
TOTAL	195	187	188	173	178	169	176	164	174	160	165	164	165	158	169	137	134	122	122	108	103	104	103	105	107	108	111	106

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

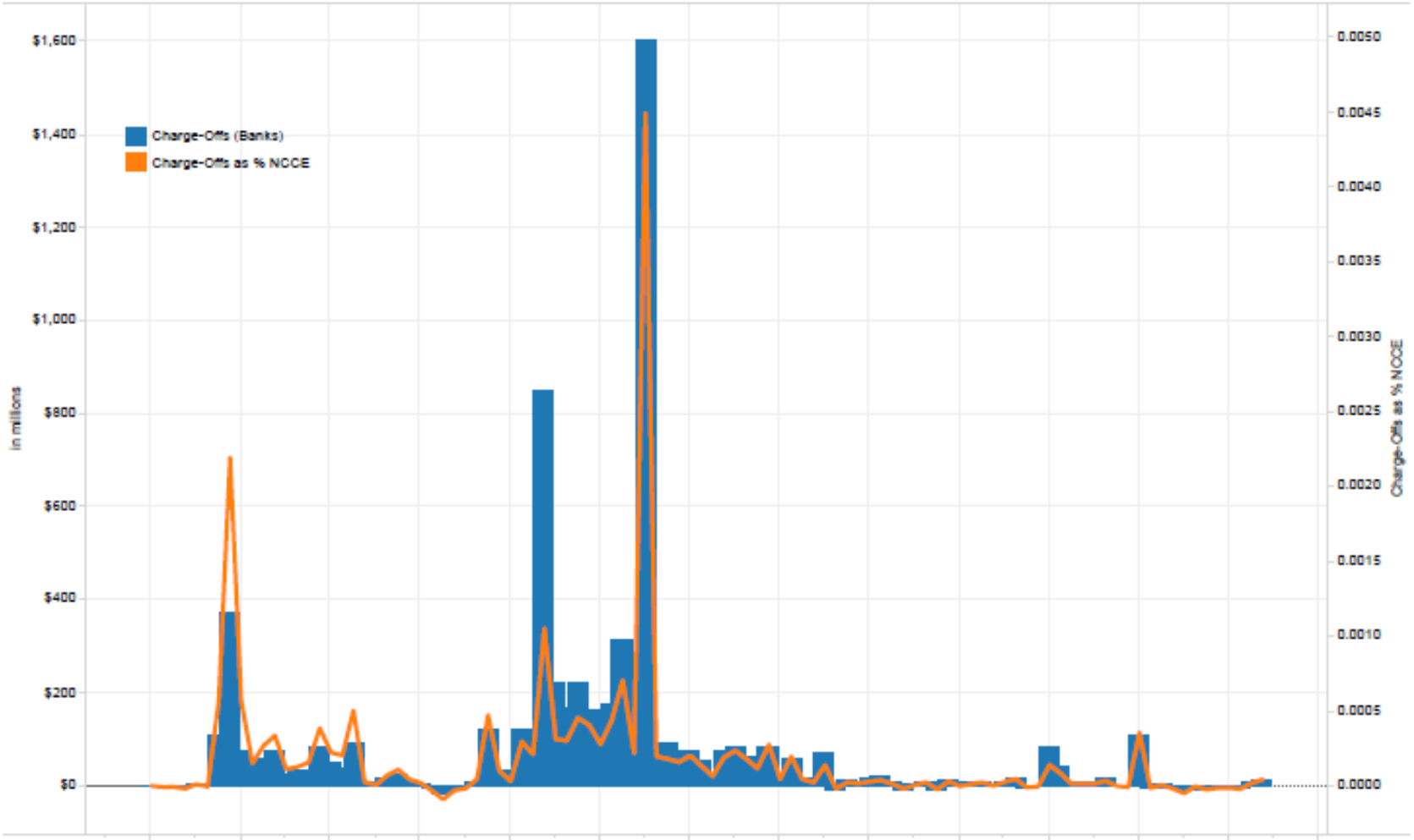
2016				2017				2018				2019				2020				2021				2022				2023				2024			
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
87.7	87.6	86.5	86.0	86.2	85.2	82.9	81.6	80.0	80.5	79.7	80.4	81.0	81.3	81.4	80.9	80.0	80.5	80.7	80.9	80.2	79.2	78.5	82.0	86.1	86.3	86.5	88.8	88.6	88.4	87.5	88.9	88.0	87.8	90.3	88.7

* 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

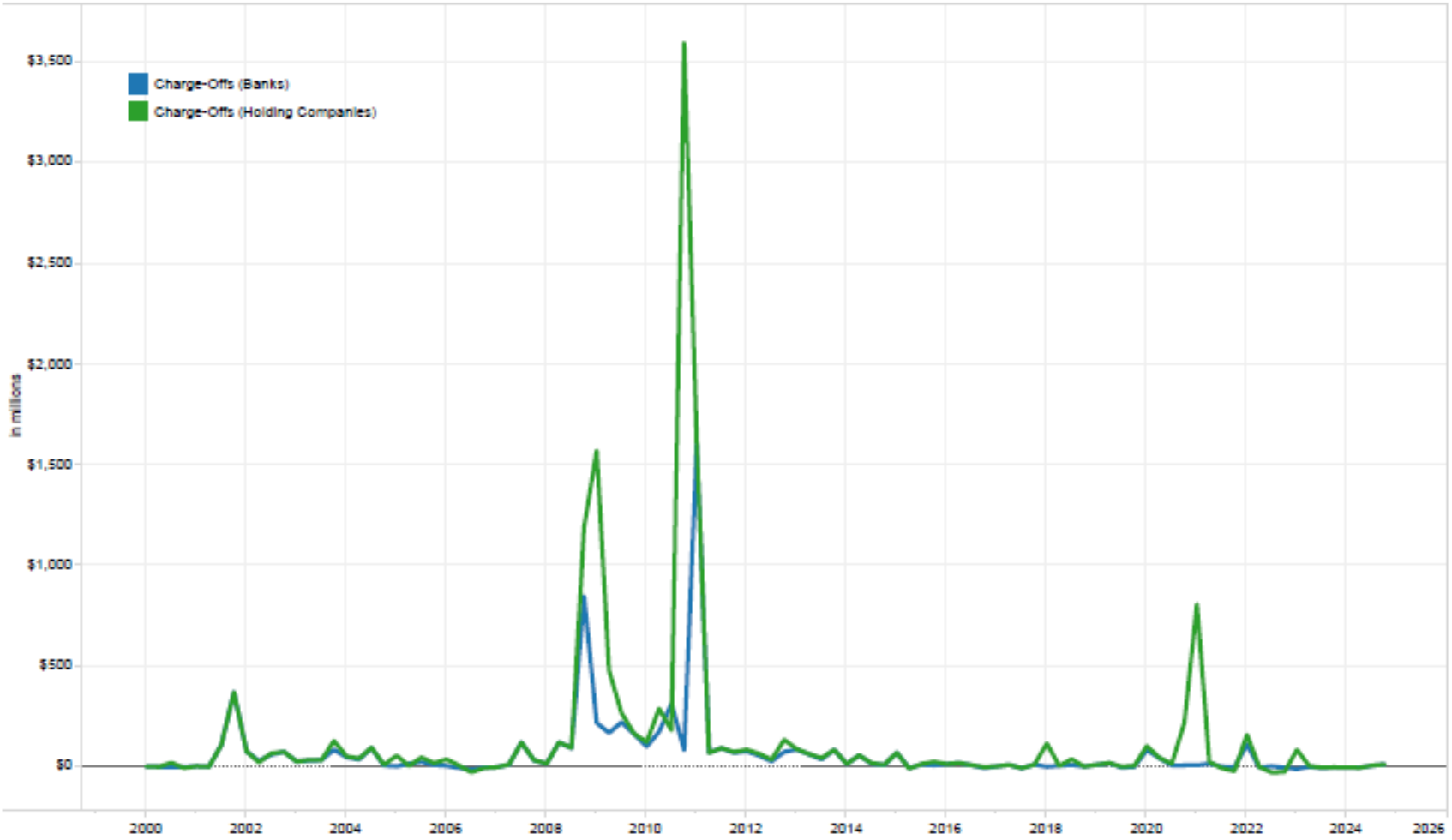


	2018				2019				2020				2021				2022				2023				2024			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Charge-Offs (Banks)	-1.1	4.0	8.8	0.1	9.1	17.2	-4.8	-1.5	82.7	42.1	6.0	6.6	6.8	14.7	-0.2	-3.3	109.5	-4.9	2.0	-5.5	-12.5	-0.9	-7.7	-3.6	-3.5	-5.5	4.2	11.7

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

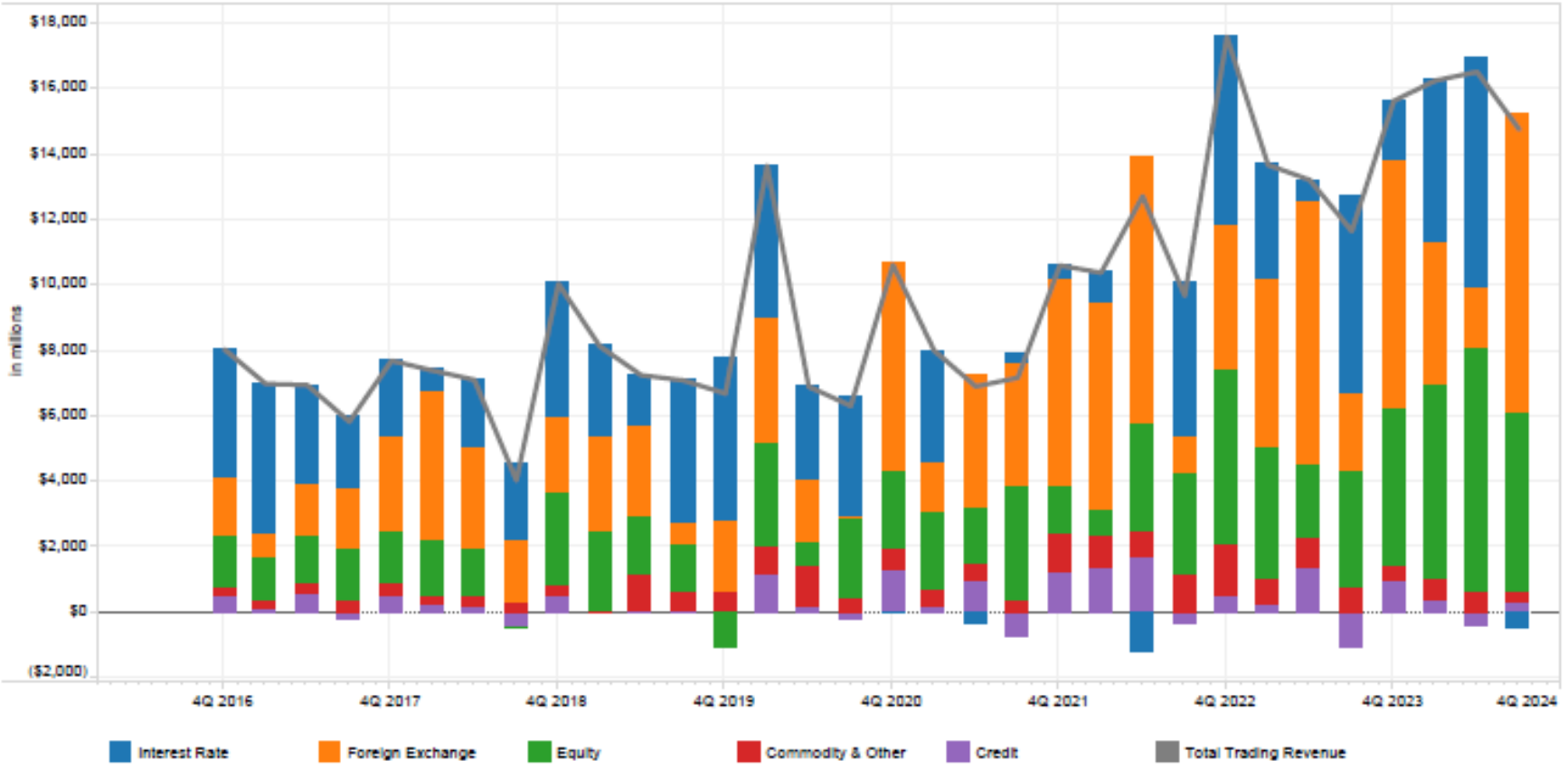


	2019				2020				2021				2022				2023				2024			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Charge-Offs (Banks)	9.1	17.2	-4.8	-1.5	82.7	42.1	6.0	6.6	6.8	14.7	-0.2	-3.3	109.5	-4.9	2.0	-5.5	-12.5	-0.9	-7.7	-3.6	-3.5	-5.5	4.2	11.7
Charge-Offs (Holding Companies)	9.5	17.9	-0.3	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	10.6

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

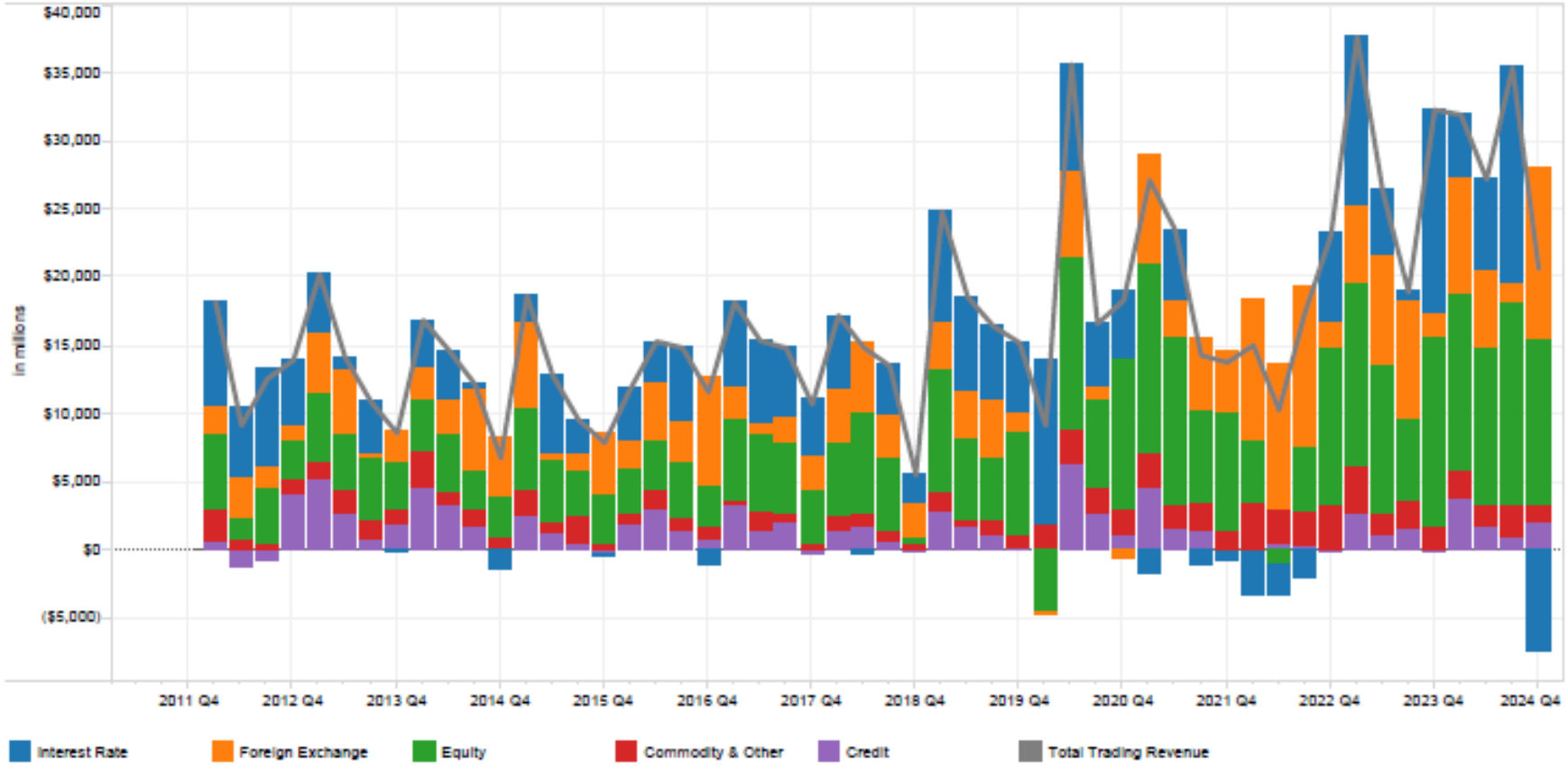
	2021				2022				2023				2024			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Interest Rate	($42)	$3,369	($329)	$273	$403	$874	($1,197)	$4,653	$5,721	$3,471	$630	$6,016	$1,817	$4,927	$6,952	($464)
Foreign Exchange	6,343	1,546	3,998	3,747	6,341	6,363	8,153	1,134	4,439	5,174	8,036	2,334	7,551	4,377	1,857	9,111
Equity	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	5,459
Commodity & Other	622	549	531	347	1,161	1,029	774	1,153	1,570	824	942	773	504	657	611	345
Credit	1,300	150	967	-737	1,235	1,334	1,678	-368	516	204	1,342	-1,077	944	376	-426	305
Total Trading Revenue	10,611	7,999	6,896	7,164	10,598	10,373	12,714	9,671	17,581	13,668	13,211	11,649	15,630	16,249	16,512	14,755

* 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

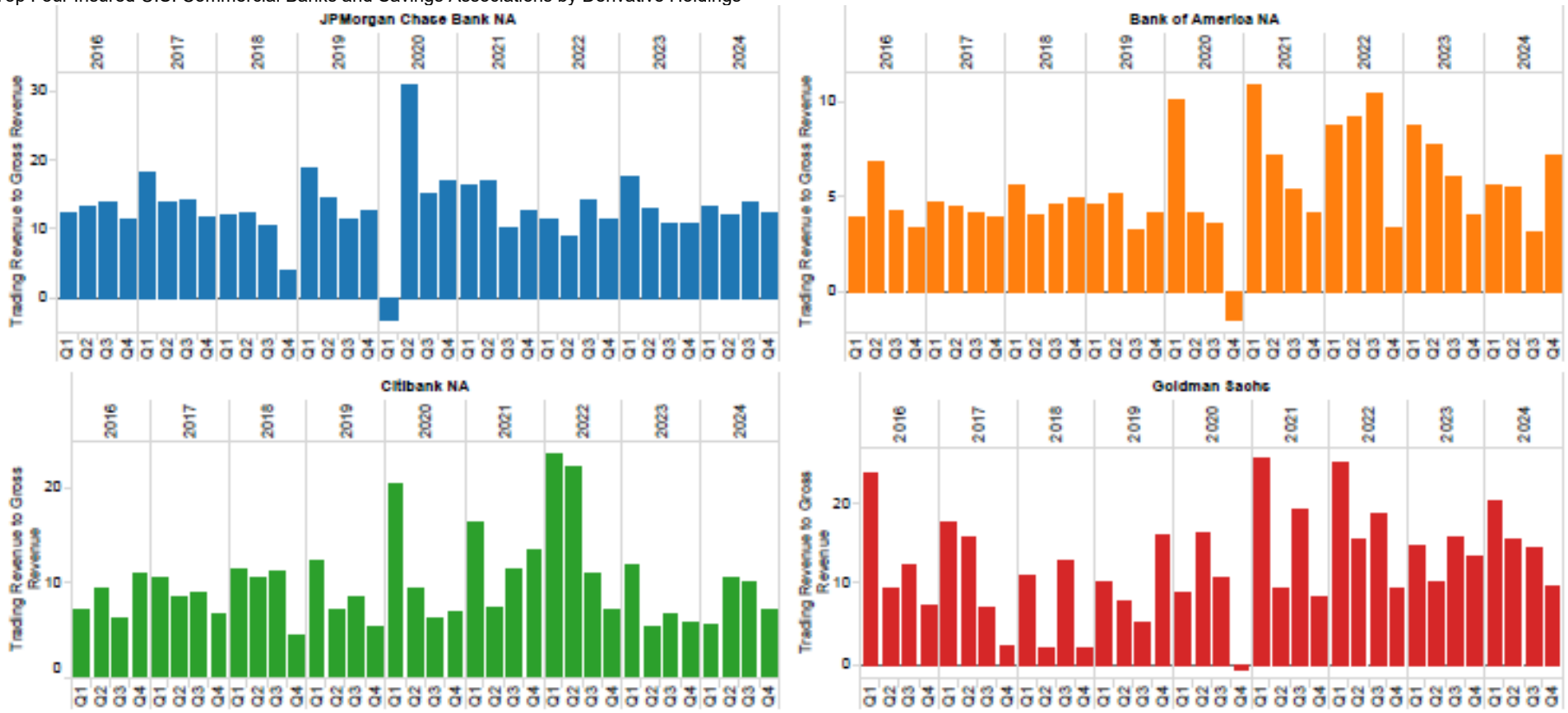
	2021				2022				2023				2024			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Interest Rate	($1,828)	$5,001	($1,182)	($569)	($3,137)	($2,365)	($1,976)	$6,649	$12,304	$4,773	$522	$14,872	$4,491	$6,632	$15,775	($7,379)
Foreign Exchange	8,051	2,732	5,144	4,496	10,267	10,574	11,900	1,810	5,760	7,902	8,752	1,768	8,638	5,697	1,395	12,574
Equity	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	14,808	12,043
Commodity & Other	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	2,487	1,254
Credit	4,531	1,595	1,530	-225	-129	438	286	-249	2,770	1,158	1,577	53	3,800	1,777	948	2,178
Total Trading Revenue	27,172	23,483	14,305	13,786	15,046	10,281	17,417	23,123	37,681	26,374	18,960	32,319	31,977	27,224	35,415	20,671

* 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



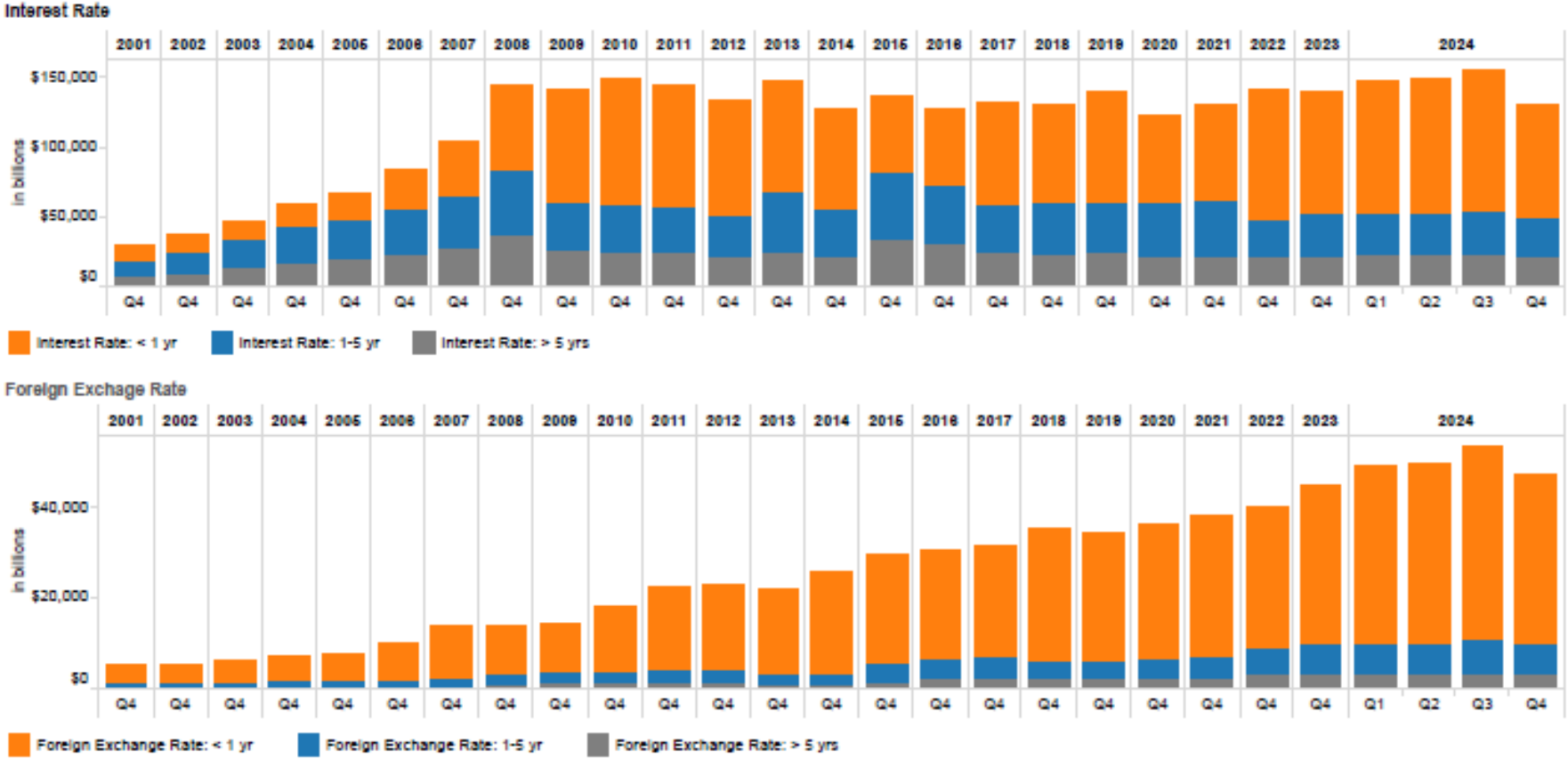
Trading Revenue to Gross Revenue*

	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	Q4	Q1	Q2	Q3	Q4
JPMorgan Chase Bank NA	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	12.11
Bank of America NA	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	7.23
Citibank NA	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	7.39
Goldman Sachs	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	9.67
TOTAL	12.43	9.60	8.01	8.61	7.44	18.00	9.49	8.91	15.11	11.75	9.49	10.36	14.32	12.72	12.68	8.11	13.78	9.67	9.08	8.01	10.24	10.27	10.27	9.61

* 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

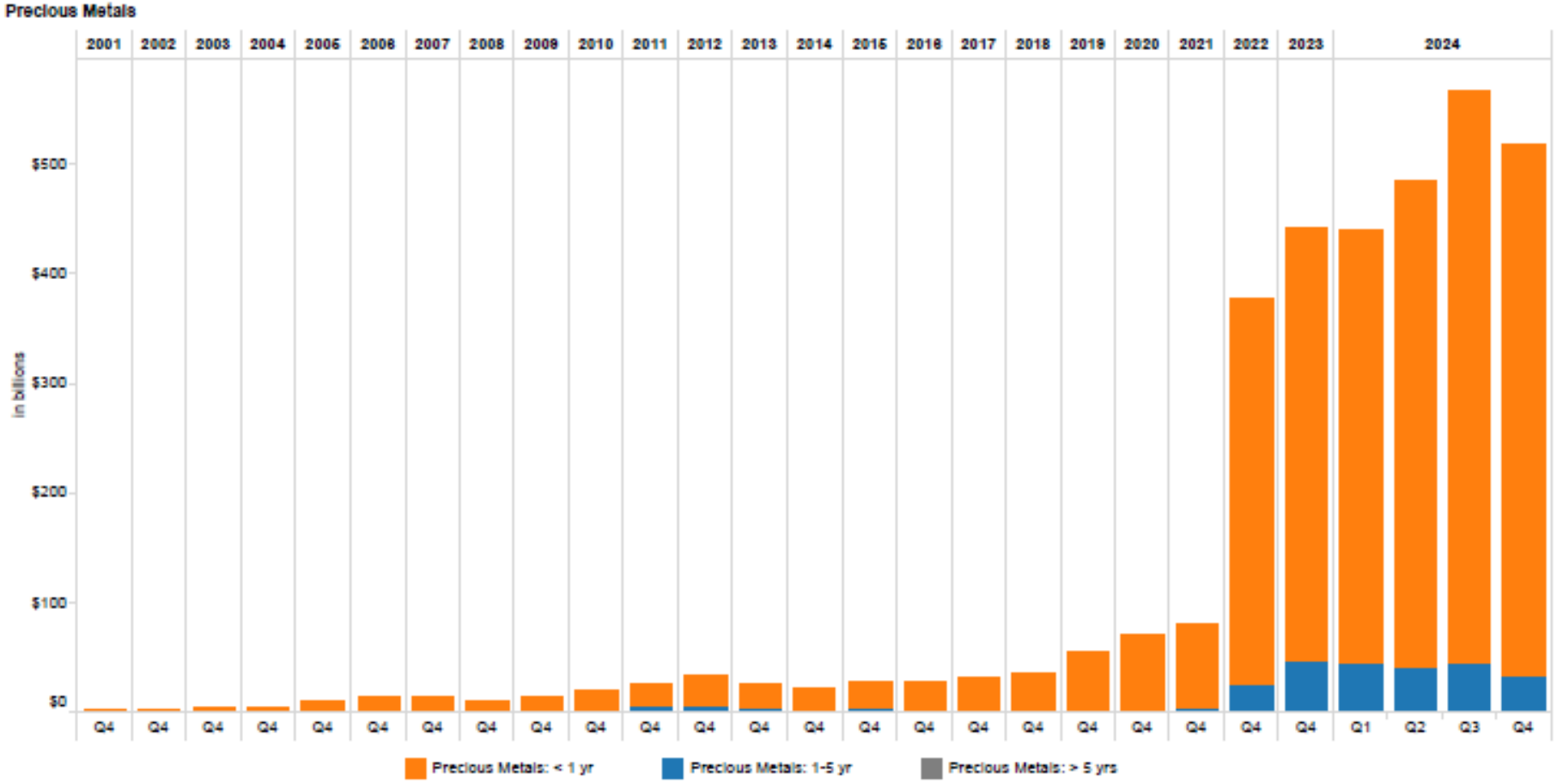


In billions of dollars

	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	Q1	Q2	Q3	Q4
Interest Rate: < 1 yr	$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	$81,446
Interest Rate: 1-5 yr	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	27,540
Interest Rate: > 5 yrs	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	21,272
Foreign Exchange Rate: < 1 yr	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	37,251
Foreign Exchange Rate: 1-5 yr	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	6,794
Foreign Exchange Rate: > 5 yrs	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	3,301

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

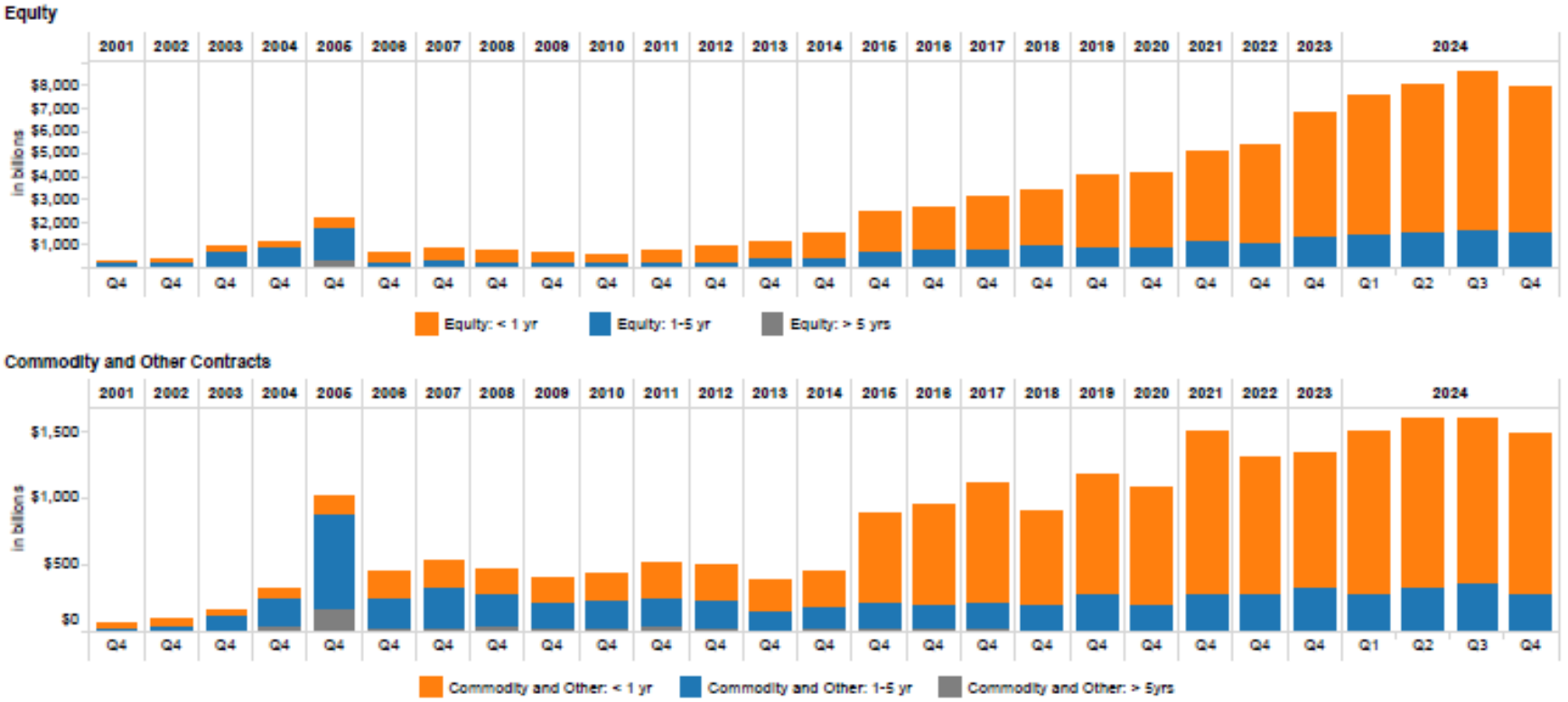


In billions of dollars

	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	Q1	Q2	Q3	Q4
Precious Metals: < 1 yr	$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	$484.07
Precious Metals: 1-5 yr	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	33.9
Precious Metals: > 5 yrs	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	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



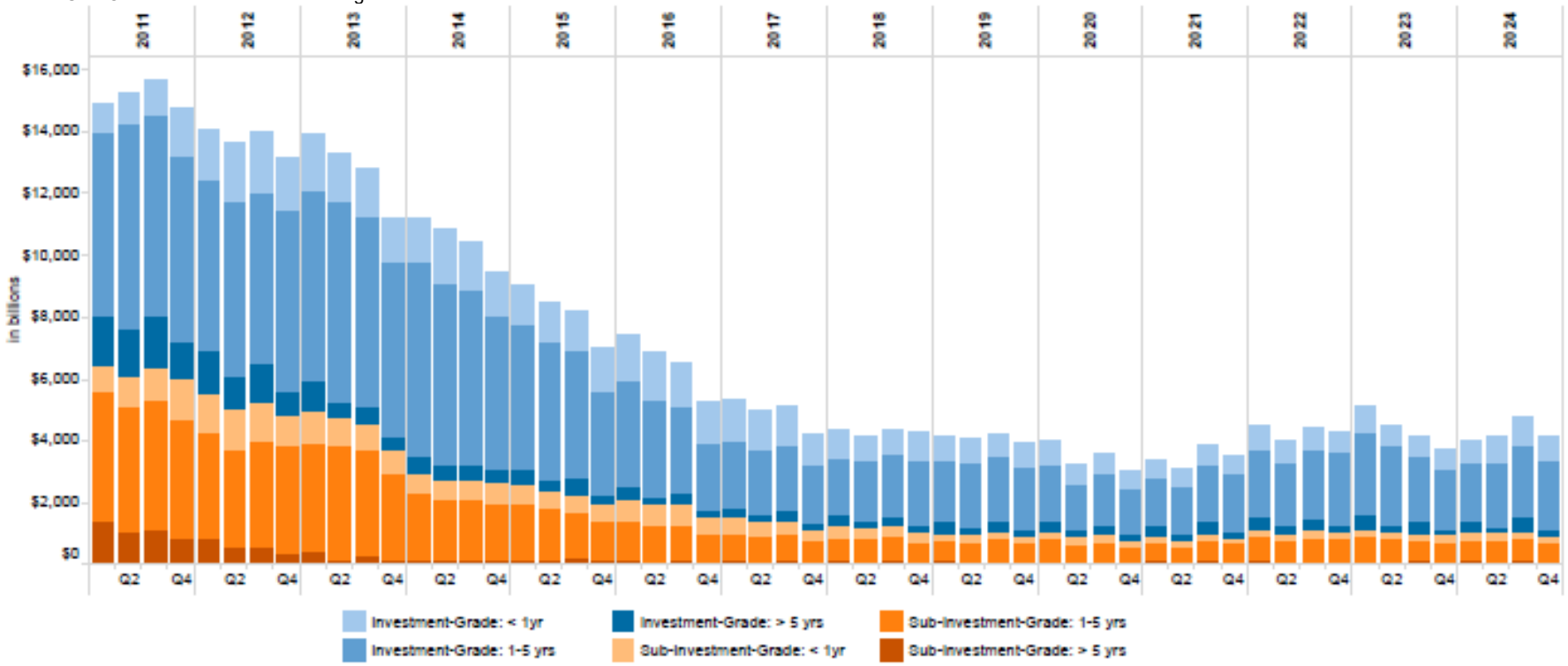
In billions of dollars

	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	Q4
Commodity and Other: < 1 yr	$206	$179	$176	$203	$261	$261	$235	$257	$668	$750	$883	$688	$884	$879	$1,216	$1,038	$1,021	$1,202	$1,249	$1,236	$1,198
Commodity and Other: 1-5 yr	297	233	198	209	209	208	144	164	197	179	202	198	286	198	279	272	314	287	330	342	277
Commodity and Other: > 5yrs	25	43	33	25	46	28	6	20	22	23	25	9	10	9	7	7	7	6	10	12	16
Equity: < 1 yr	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	6,335
Equity: 1-5 yr	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	1,433
Equity: > 5 yrs	70	72	82	85	94	82	136	101	130	123	113	139	136	139	145	99	99	111	143	156	149

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



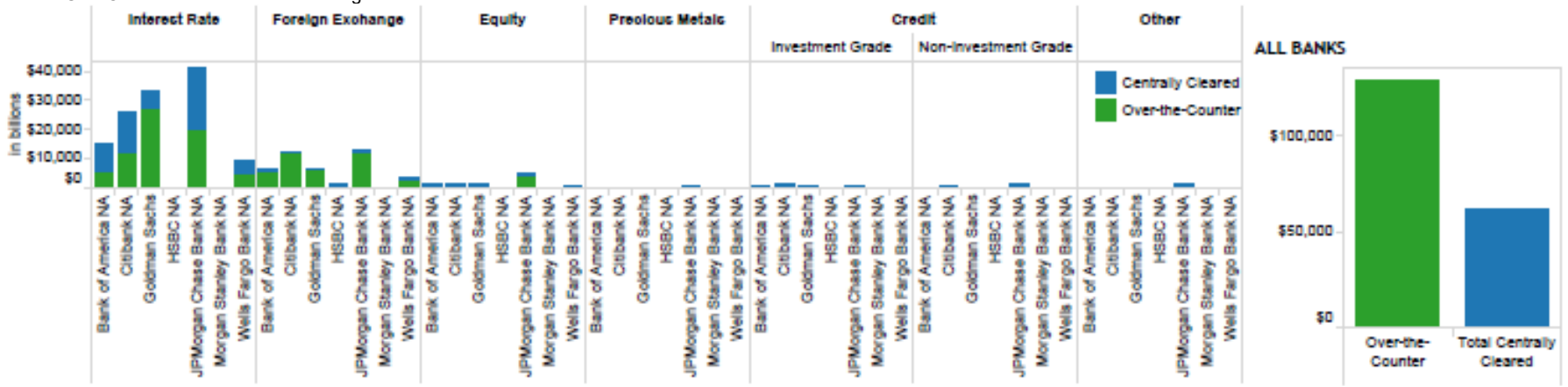
In billions of dollars

	2020				2021				2022				2023				2024			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Investment-Grade: < 1yr	$726	$619	$648	$554	$546	$539	$565	$601	$795	$642	$692	$617	$769	$658	$595	$635	$680	$813	$895	$763
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	2,242
Investment-Grade: > 5 yrs	367	171	336	160	332	160	418	187	449	198	408	210	440	217	377	176	334	167	429	182
Total Investment Grade	$2,891	$2,313	$2,622	$2,235	$2,423	$2,289	$2,829	$2,651	$3,352	$2,916	$3,291	$3,189	$3,897	$3,382	$3,080	$2,777	$2,937	$3,041	$3,656	$3,187

	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
Sub-Investment-Grade: < 1yr	$247	$278	$233	$218	$245	$215	$244	$208	$225	$248	$247	$221	$252	$238	$218	$232	$260	$273	$253	$248
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	645
Sub-Investment-Grade: > 5 yrs	105	56	108	48	119	49	125	49	150	51	105	53	104	51	120	53	119	61	132	54
Total Sub-Investment Grade	$1,095	$942	$959	$799	$935	$815	$1,023	$889	$1,152	$1,049	$1,099	$1,052	$1,182	$1,092	$1,035	$968	$1,061	$1,070	$1,096	$947

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

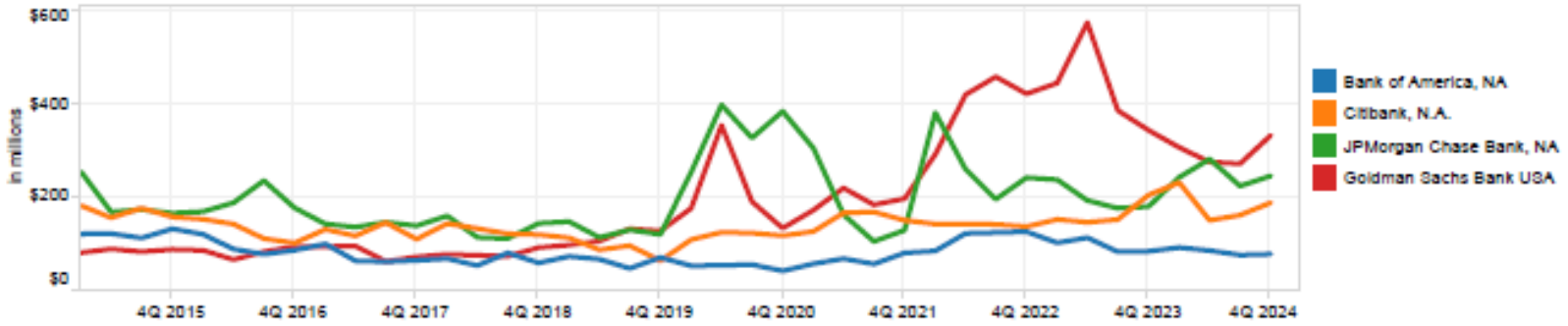
Bank Name	Interest Rate		Foreign Exchange		Equity		Precious Metals		Credit				Other		Total Centrally Cleared	Over-the-Counter	Total Notional
									Investment Grade		Non-investment Grade						
	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter			
JPMorgan Chase Bank NA	21,409	19,925	649	12,442	908	3,763	0	287	261	255	349	447	77	934	23,653	38,053	61,706
Citibank NA	13,786	11,985	451	12,048	173	624	43	120	164	1,028	36	231	87	86	14,741	26,121	40,862
Bank of America NA	8,942	5,925	169	5,921	363	811	9	48	171	242	56	112	6	52	9,717	13,110	22,828
Goldman Sachs	5,771	27,695	297	6,565	48	687	0	0	25	399	12	136	0	45	6,154	35,528	41,682
HSBC NA	90	43	52	1,045	0	21	0	4	3	7	1	2	0	0	146	1,121	1,268
Wells Fargo Bank NA	4,622	4,779	20	3,479	154	267	0	6	1	30	0	15	0	78	4,796	8,654	13,449
Morgan Stanley Bank NA	2	155	0	89	0	69	0	0	0	16	0	9	0	0	2	337	339
Grand Total	54,623	70,506	1,639	41,589	1,646	6,242	53	465	625	1,976	454	951	170	1,195	59,209	122,923	182,132
ALL OTHER	3,066	2,063	22	4,096	0	30	0	0	2	37	0	32	22	103	3,112	6,361	9,473
TOTAL	57,689	72,569	1,661	45,684	1,646	6,271	53	465	626	2,013	454	983	192	1,298	62,321	129,284	191,606

% of Total

Bank Name	Interest Rate		Foreign Exchange		Equity		Precious Metals		Credit				Other		Total Centrally Cleared as a % of Total Notional	Total Over-the-Counter as a % of Total Notional
									Investment Grade		Non-investment Grade					
	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter	Centrally Cleared	Over-the-Counter		
JPMorgan Chase Bank NA	52%	48%	5%	95%	19%	81%	0%	100%	51%	49%	44%	56%	8%	92%	38%	62%
Citibank NA	53%	47%	4%	96%	22%	78%	27%	73%	14%	86%	13%	87%	50%	50%	36%	64%
Bank of America NA	60%	40%	3%	97%	31%	69%	16%	84%	41%	59%	33%	67%	11%	89%	43%	57%
Goldman Sachs	17%	83%	4%	96%	7%	93%	0%	100%	6%	94%	8%	92%	0%	100%	15%	85%
HSBC NA	68%	32%	5%	95%	0%	100%	0%	100%	30%	70%	34%	66%	0%	100%	12%	88%
Wells Fargo Bank NA	49%	51%	1%	99%	36%	64%	0%	100%	2%	98%	1%	99%	0%	100%	36%	64%
Morgan Stanley Bank NA	1%	99%	0%	100%	0%	100%			0%	100%	0%	100%	0%	100%	1%	99%

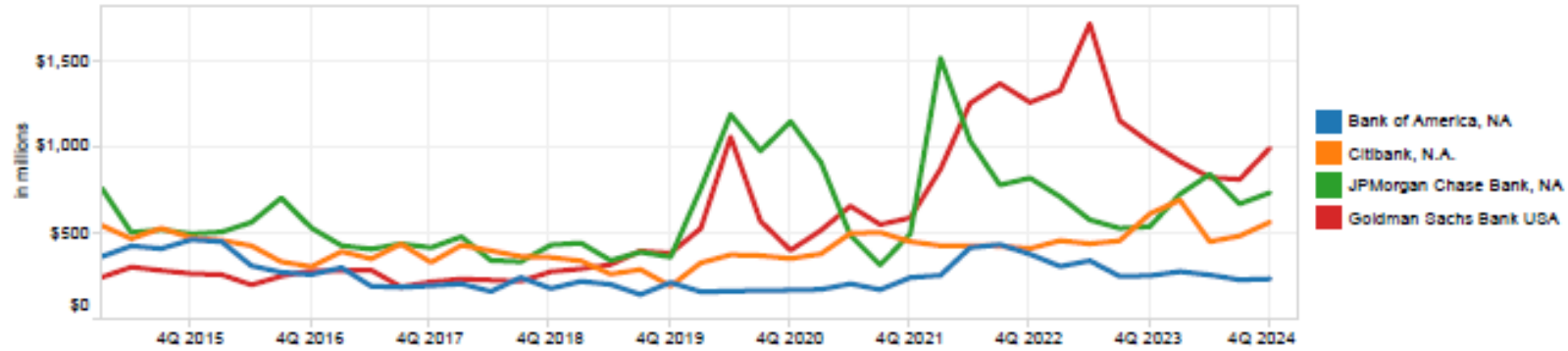
Source: Call reports, Schedule RC-R

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



	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
Bank of America, NA	$73	$67	$47	$71	$53	$54	$55	$42	$57	$68	$57	$80	$85	$122	$124	$126	$102	$113	$83	$84	$92	$85	$76	$78
Citibank, N.A.	113	87	96	64	109	125	123	118	127	167	169	151	143	143	142	137	153	146	152	205	232	151	162	189
JPMorgan Chase Bank, NA	148	114	130	120	254	399	328	385	306	163	105	129	382	261	196	242	238	193	177	180	243	282	224	246
Goldman Sachs Bank USA	97	106	132	128	176	355	191	134	173	220	184	197	293	421	459	423	446	576	387	344	307	276	272	333

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	Q4
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	$234
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	566
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	738
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	1,000

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