

QDEB Q4

COMMERCIAL / MULTIFAMILY QUARTERLY DATABOOK | Q4 2022

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COMMERCIAL/MULTIFAMILY
QUARTERLY DATABOOK
Q4 2022

MBA[®]

MORTGAGE BANKERS ASSOCIATION

MBA COMMERCIAL REAL ESTATE/MULTIFAMILY FINANCE

QUARTERLY DATABOOK

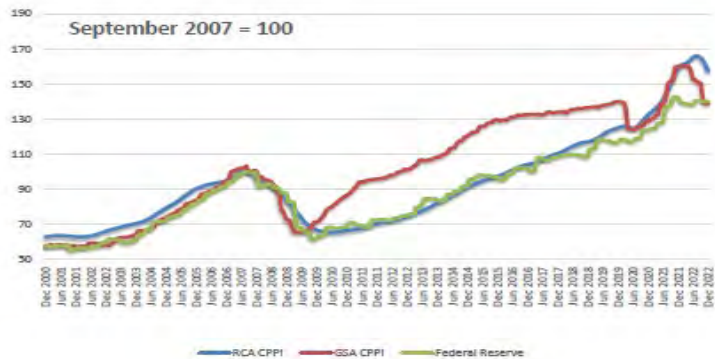


MORTGAGE BANKERS ASSOCIATION

Fourth Quarter 2022

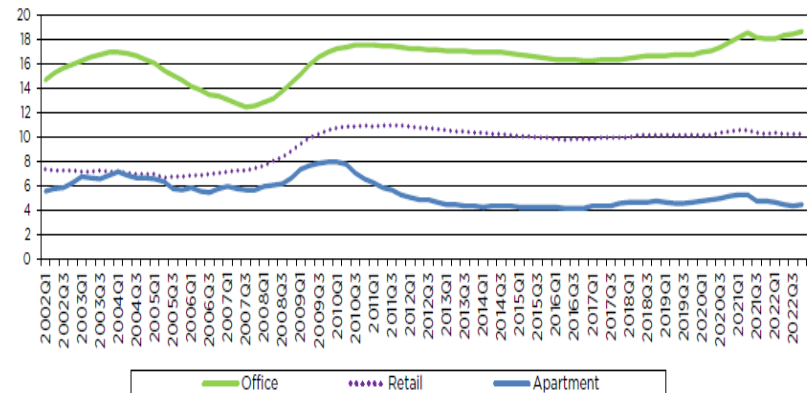
Selected Charts

Price Indices



Source: MBA, Federal Reserve Board, MSCI Real Assets, and Green Street Advisors

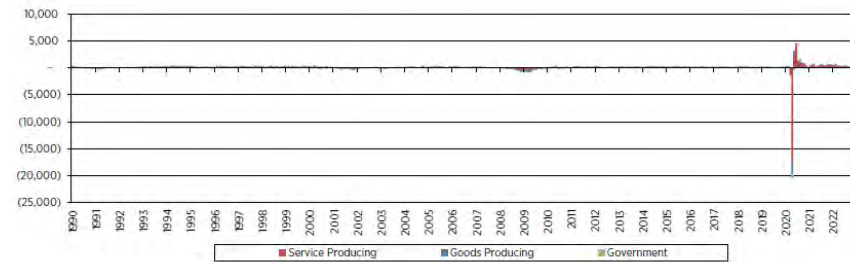
Average Vacancy Rates By Property Type



Source: REIS

Month-over-month Change in At-Place Employment

Thousands of jobs



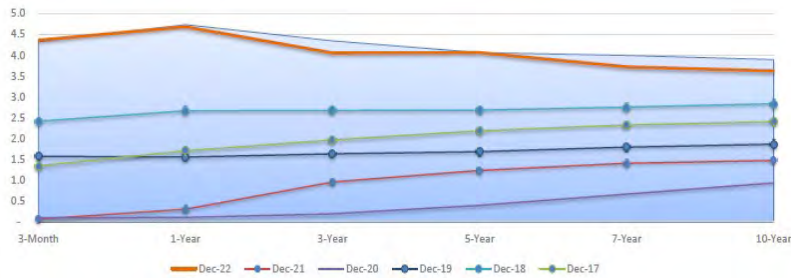
Source: Bureau of Labor Statistics

Ten-year Treasury and 10-year Swaps Percent



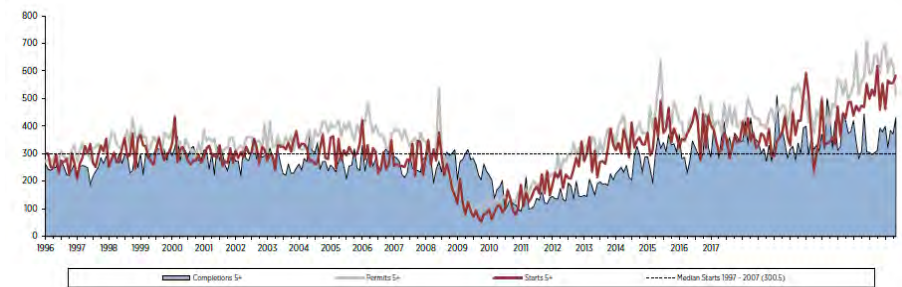
Source: Federal Reserve Board & JP Morgan Securities

Treasury Yield Curve Percent



Source: Federal Reserve Board

Multifamily Permits, Starts and Completions Thousands, Seasonally adjusted annual rate



Source: Census Bureau

The Commercial Real Estate/ Multifamily Finance Quarterly Data Book is a quarterly compendium of the latest MBA research on the commercial/multifamily finance markets. The latest version of the Data Book can be downloaded from the MBA website at:

<http://www.mba.org/crefresearch>

MBA Commercial Real Estate/Multifamily Finance
Quarterly Data Book
 Fourth Quarter 2022
 March 31, 2022



MORTGAGE BANKERS ASSOCIATION

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1. Outlook

Introduction

ECONOMY

There is a great deal of uncertainty about the future path of the U.S. economy, partially driven by -- and partially contributing to -- decisions that will be made by the Federal Reserve.

The economy ended 2022 on a strong note, with inflation-adjusted gross domestic product growing at a seasonally adjusted annual rate of 3.2 percent in Q3 and 2.6 percent in Q4. That growth came after declines of 1.6 percent in Q1 and 0.6 percent in Q2, leading to growth of just 0.9 percent for 2022 as a whole.

That year-end strength was also seen in labor markets. Firms added a seasonally adjusted net 324,000 jobs in October, 290,000 in November and 239,000 in December, before kicking 2023 off with an even more robust 504,000 in January and 311,000 in February. The 2022 growth pushed the unemployment rate down to 3.5 percent in December before an uptick in the overall labor force drew unemployment back up to 3.6 percent (still a very low number) in February.

All that growth has continued to put upward pressure on prices. In February, core prices as measured by the CPI were 5.5 percent higher than they had been a year earlier. That's down from a 6.6 percent rate of growth in September, but still much higher than the Federal Reserve's target of 2 percent.

The uncertainty, both about the direction of the economy and how the Fed might react, has heightened interest rate volatility. The Fed has lifted the lower limit of the Fed Funds target rate from 0.0 in February 2022 to 4.75 as of their March 2023 meeting. With many questions about where the economy may be headed from here, there are also questions about whether the Fed will continue to raise and hold the Fed Funds rate to the 5.1 percent year-end 2023 level shown as the median projection in the latest economic projections of FRB members and bank presidents, or whether they will need to adjust course.

In either case, the Fed's actions and the uncertainty they are bringing has led to significant volatility. The difference between the highest and lowest average daily yields for Ten-year Treasuries during October was 43 basis points (bps) in January, 56 bps in February and has been 73 bps in March. The monthly average in 2021 was 24 bps and in 2020 25 bps.

CRE FUNDAMENTALS

Different property types are experiencing very different space market conditions.

Office markets are under the greatest scrutiny as hybrid and other pandemic-fueled work patterns have disrupted the regular flow of leasing. According to Moody's, the Q4 office vacancy rate was 18.7 percent - the highest in their series going back to at least 2002. Where it goes from here will depend on a variety of factors, including growth of the workforce and how employers do (and don't) change their per-employee space needs going forward. It's also important to note that not all office is created equal and that some properties will likely power through these market changes while others will face significant adjustments.

Retail properties have also seen increased differentiation, with marked differences between subtypes like grocery-anchored centers and class-B malls. From an investor and lender perspective, industrial and multifamily probably remain the most sought after property types. Both markets are very tight, although they are also each absorbing strong development pipelines. As an example, at 6.5 percent, the multifamily rental vacancy rate in Q4 2022 was among the lowest levels ever recorded. At the same time, the 941,000 multifamily units under construction in February represent the largest pipeline in that series' history.

OUTLOOK

ENVIRONMENT

PRODUCTION

OUTSTANDING

RELEASES

SALES AND VALUES

Increases and volatility in interest rates and uncertainty about property values have slowed commercial real estate transactions. Last year (2022) started off strong, with Q1 sales 72 percent higher than the previous year and Q2 sales up 34 percent from a year earlier. As changes in interest rates and property values began to bite, volume slowed, with Q3 volume down 15 percent and Q4 down 61 percent from the year earlier. For the year as a whole sales activity was 14 percent lower than 2021

The slowdown was felt across property types, with Q4 sales down 69 percent from a year earlier for apartment properties, 65 percent for office, 58 percent for industrial and 57 percent for retail. It is worth noting that Q4 2021 was by a large margin the strongest quarter in history for sales activity.

Part of the challenge for the market comes from a lack of clarity around property values. According to the MSCI/Real Capital Analytics and the National Council of Real Estate Investment Fiduciaries (NCREIF), commercial property values ended the fourth quarter down 4 percent from the 2022 highs. According to Green Street Advisors they were down 14 percent. It seems clear that the reported values are lagging what the market is working through and it is hard to track market activity when there is a dearth of market activity.

Real Capital Analytics January data showed January cap rates still at all time-lows for apartment (4.7%) and within 10 basis points of record lows for industrial properties (5.4%), and retail (6.4%) and within 20 basis points for office (6.4%). Given that the Ten-year Treasury yield averaged 3.5 percent in January, that would imply the spread between apartment cap rates and the Ten-year Treasury yields was roughly 200 basis points tight of its average over the last two decades - not likely given current market conditions.

We expect the reported data on values to slowly catch-up with the market realities, although that will be dependent on an increase in transactions to be able to benchmark against.

MORTGAGE ORIGINATIONS

Borrowing and lending backed by commercial and multifamily properties also slipped to close out 2022. The last quarter of the year typically sees the highest volumes, but the chill caused by rising interest rates, questions about property valuations, and increased economic uncertainty made the fourth quarter of 2022 the weakest of the year. Depositories were the one major capital source to increase volumes from the previous year, but even their fourth quarter activity was roughly half of what it was a year earlier. The overall picture is one of slower borrowing in the face of what have been significant shifts in the market.

Decreases in originations for industrial, office, multifamily, and retail, properties led the overall drop in commercial/multifamily lending volumes when compared to the fourth quarter of 2021. There was a 69 percent year-over-year decrease in the dollar volume of loans for industrial properties, a 56 percent decrease for office properties, a 52 percent decrease for multifamily properties, a 46 percent decrease for hotel properties, and a 44 percent decrease for retail properties. Health care property loan originations increased 4 percent compared to the fourth quarter of 2021.

Among investor types, the dollar volume of loans originated for commercial mortgage-backed securities (CMBS) decreased by 92 percent year-over-year. There was a 60 percent decrease for investor-driven lenders, a 53 percent decrease in life insurance company loans, a 47 percent decrease for depositories, and a 13 percent decrease in the dollar volume of government sponsored enterprises (GSEs - Fannie Mae and Freddie Mac) loans.

A preliminary measure of commercial and multifamily mortgage bankers' originations volumes shows activity in 2022 was 10 percent lower than in 2021. By property type, mortgage bankers originations for office properties decreased 30 percent from 2021, industrial properties decreased 12 percent, and multifamily properties decreased 11 percent. Retail properties increased 16 percent, hotel properties increased 16 percent, and health care property originations increased 23 percent.

Among investor types from 2022 compared to 2021, mortgage bankers originations for CMBS decreased 63 percent, originations for life

OUTLOOK	ENVIRONMENT	PRODUCTION	OUTSTANDING	RELEASES
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insurance companies decreased 19 percent, loans for investor-driven lenders decreased 9 percent, and loans for GSEs decreased 4 percent. Depository loans increased 22 percent.

As more data comes in, MBA will be updating and releasing final 2022 volumes.

MBA's updated forecast is built on a base case of economic weakness at the start of 2023 with a moderation in interest rates and an overall improvement in the economy as the year goes on. Given changes in interest rates and investment yields over the last year, new deals and loans are sizing differently than in previous years. These new changes will take time for buyers and sellers to digest, and we expect the logjam to suppress volumes this year.

We expect loan maturities and outstanding adjustable-rate loans to lead the testing of today's market conditions. For long-term loans, the last decade has seen tremendous growth in property incomes and values - both of which will support properties' abilities to support new loans. Properties with interest rate resets and shorter-term loans that transacted or refinanced more recently will be much more dependent on the particulars of that loan and property.

Total commercial and multifamily mortgage borrowing and lending is expected to fall to \$684 billion this year, which is a 15 percent decline from an expected 2022 total of \$804 billion. Multifamily lending alone (which is included in the total figures) is expected to drop to \$384 billion in 2023 - a 16 percent decline from last year's expected total of \$459 billion. MBA anticipates borrowing and lending will rebound in 2024 to \$906 billion in total commercial real estate lending, with \$486 billion of that total in multifamily lending.

MORTGAGE DEBT OUTSTANDING

Commercial and multifamily mortgage debt outstanding grew at another strong clip in 2022. The rate of growth was the second largest since 2007 - just below 2021's pace. Among capital sources, depositories led the growth, increasing their holdings of commercial and multifamily mortgages by 12 percent. Additionally, growth in multifamily mortgage balances accounted for almost half of the annual increase.

Total mortgage debt outstanding rose by 1.7 percent (\$77.9 billion) in fourth-quarter 2022. Multifamily mortgage debt grew by \$35.6 billion (1.8 percent) to \$1.96 trillion during the fourth quarter and by \$148.2 billion (8.2 percent) for the entire year.

In the fourth quarter of 2022, commercial banks saw the largest rise in dollar terms in their holdings of commercial/multifamily mortgage debt, with an increase of \$38.5 billion (2.2 percent). Agency and GSE portfolios and MBS increased their holdings by \$27.3 billion (2.9 percent), life insurance companies increased their holdings by \$10.8 billion (1.6 percent), and REITs increased their holdings by \$5.6 billion (3.2 percent). CMBS, CDO and other ABS issues saw the largest decline (1.2 percent) in their holdings by \$7.4 billion.

The \$35.6 billion rise in multifamily mortgage debt outstanding between the third and fourth quarters of 2022 represented a 1.8 percent increase. In dollar terms, agency and GSE portfolios and MBS saw the largest increase, at \$27.3 billion (2.9 percent), in their holdings of multifamily mortgage debt. Commercial banks increased their holdings of multifamily mortgage debt by \$14.3 billion (2.4 percent), and life insurance companies increased holdings by \$2.1 billion (1.1 percent). CMBS, CDO and other ABS issues saw the largest decline (11.9 percent) in their holdings, by \$8.1 billion.

LOAN MATURITIES

Commercial and multifamily mortgages tend to be relatively long-lived in nature. In 2023, only one-in-eight dollars of non-bank-held CRE loans will be maturing. Some property types, in particular hotels, motels, and offices, have higher shares of their debt coming due in the near term, while others, such as multifamily, have lower shares. Among capital sources, investor-driven lenders and the CMBS market have more of their loans coming due in the near-term while life companies, the GSEs, and FHA have fewer. Given current dislocations in the market, loan maturities will be a key mechanism that will force adjustments to changes in interest rates and property values since those loans were originally made.

Loan maturities of non-bank-held loans vary significantly by investor and property type groups. Just \$13.9 billion (2 percent) of the outstanding balance of multifamily and health care mortgages held or guaranteed by

OUTLOOK	ENVIRONMENT	PRODUCTION	OUTSTANDING	RELEASES
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Fannie Mae, Freddie Mac, FHA, and Ginnie Mae will mature in 2023. Life insurance companies will see \$42.2 billion (7 percent) of their outstanding mortgage balances mature in 2023. By contrast, \$163.3 billion (22 percent) of the outstanding balance of mortgages in CMBS, CLOs or other ABS, and \$111.8 billion (26 percent) of the mortgages held by credit companies, in warehouse or by other lenders will mature in 2023.

By property type, 5 percent of non-bank mortgages backed by multifamily properties will mature in 2023, as will 11 percent of those backed by retail and healthcare properties. Among loans backed by industrial properties, 16 percent will come due in 2023, as will 22 percent of office loans and 32 percent of hotel/motel loans.

This year, for the first time, we have expanded our loan maturity analysis to include an estimate of the maturity profile of all commercial and multifamily mortgages - including the more than \$1.7 trillion on bank balance sheets.

The analysis estimates that of approximately \$4.4 trillion of outstanding commercial/multifamily mortgages, \$728 billion (16%) matures in 2023 with another \$659 billion (15%) maturing in 2024. Hotels/motels see the largest share of their loans maturing in 2023 (34%) followed by office (25%). Multifamily is the property type with the smallest share of outstanding mortgage debt maturing this year, 9 percent.

Among capital sources, 26 percent of the outstanding balance of loans held by credit companies and other investor-driven lenders will mature this year, as will 23 percent of the balances held by depositories and 22 percent held in CMBS. Only 7 percent of life company loans and 2 percent of GSE/FHA loans come due this year.

LOAN PERFORMANCE

Commercial and multifamily mortgage delinquency rates remained low at the end of 2022. There were slight upticks among loans in CMBS, life companies, and banks and decreases for Fannie Mae and Freddie Mac but the overall performance remained positive. It is likely that as higher interest rates and softer property values work through the system this

year - prompted by maturing and adjustable-rate loans - loan performance will adjust.

Based on the unpaid principal balance (UPB) of loans, delinquency rates for each group at the end of the fourth quarter of 2022 were as follows: Banks and thrifts (90 or more days delinquent or in non-accrual): 0.45 percent, an increase of 0.01 percentage points from the third quarter of 2022;

- Life company portfolios (60 or more days delinquent): 0.11 percent, an increase of 0.02 percentage points from the third quarter of 2022;
- Fannie Mae (60 or more days delinquent): 0.24 percent, a decrease of 0.02 percentage points from the third quarter of 2022;
- Freddie Mac (60 or more days delinquent): 0.12 percent, a decrease of 0.01 percentage points from the third quarter of 2022; and
- CMBS (30 or more days delinquent or in REO): 2.90 percent, an increase of 0.13 percentage points from the third quarter of 2022.

Looking at data from MBA's own survey of commercial and multifamily loan performance, The balance of commercial and multifamily mortgages that are not current increased in December 2022 (compared to September 2022).

98% of outstanding loan balances were current or less than 30 days late at the end of the fourth quarter, down from 98.3% at the end of the third quarter of 2022.

- 1.6% were 90+ days delinquent or in REO, up from 1.4% six months earlier.
- 0.1% were 60-90 days delinquent, unchanged from the previous quarter.
- 0.3% were 30-60 days delinquent, up from 0.2%.

Loans backed by lodging and retail properties continue to see the greatest stress. Both also saw upticks in delinquency rates.

- 6.1% of the balance of lodging loans were 30 days or more delinquent, up from 5.5% at the end of September 2022.
- 5.4% of the balance of retail loan balances were delinquent, up from 5.3%.
- 1.6% of the balance of office property loans were delinquent, up from 1.5%.
- 0.3% of the balance of industrial property loans were delinquent, down from 0.6%.
- 0.5% of multifamily balances were delinquent, up from 0.4%.

Because of the concentration of hotel and retail loans, CMBS loan delinquency rates are higher than other capital sources, but they also saw improvement.

- 3.2% of CMBS loan balances were 30 days or more delinquent, down from 3.3% in September 2022.
- Non-current rates for other capital sources were more moderate.
- 0.8% of FHA multifamily and health care loan balances were 30 days or more delinquent, up from 0.6%.
- 0.4% of life company loan balances were delinquent, flat from 0.4%.
- 0.2% of GSE loan balances were delinquent, down from 0.3%.

MBA's CREF Loan Performance survey collected information on commercial and multifamily mortgage portfolios as of December 31, 2022. This month's results build on similar surveys conducted since April 2020. Participants reported on \$2.4 trillion of loans in December 2022, representing more than half of the total \$4.4 trillion in commercial and multifamily mortgage debt outstanding (MDO).

MBA Economic Forecast

March 20, 2023

	2022				2023				2024				2022	2023	2024	2025
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
<i>Percent Change, SAAR</i>																
Real Gross Domestic Product	-1.6	-0.6	3.2	2.7	-0.1	-0.6	1.0	1.9	2.0	1.9	1.8	1.8	0.9	0.5	1.9	1.8
Personal Consumption Expenditures	1.3	2.0	2.3	1.4	2.2	-0.6	1.2	1.4	1.5	1.3	1.5	1.8	1.8	1.0	1.5	2.2
Business Fixed Investment	7.9	0.1	6.2	3.3	-0.5	-1.5	0.1	1.4	1.5	1.8	1.3	1.2	4.3	-0.1	1.5	1.5
Residential Investment	-3.1	-17.8	-27.1	-25.9	-5.5	-6.5	7.1	10.3	14.4	15.5	12.8	9.8	-19.0	1.1	13.1	4.5
Govt. Consumption & Investment	-2.3	-1.6	3.7	3.6	2.0	0.7	1.9	1.0	1.0	0.9	0.8	0.9	0.8	1.4	0.9	0.8
Net Exports (Bil. Chain 2012\$)	-1260.3	-1207.6	-1063.8	-1037.3	-1033.9	-1027.6	-1018.3	-1014.6	-1038.4	-1060.5	-1076.4	-1094.2	-1142.3	-1023.6	-1067.4	-1144.7
Inventory Investment (Bil. Chain 2012\$)	182.4	93.7	32.9	115.9	32.1	33.3	4.6	8.4	23.8	38.4	45.3	50.2	106.2	19.6	39.4	56.5
Consumer Prices (YOY)	8.0	8.6	8.3	7.1	5.7	4.2	3.9	3.5	3.1	2.7	2.3	2.2	7.1	3.5	2.2	2.0
<i>Percent</i>																
Unemployment Rate	3.8	3.6	3.5	3.6	3.6	4.0	4.3	4.8	4.8	4.6	4.5	4.4	3.6	4.2	4.6	4.2
Federal Funds Rate	0.375	1.625	3.125	4.375	4.875	4.875	4.875	4.875	4.375	4.125	3.875	3.625	4.375	4.875	3.625	2.375
10-Year Treasury Yield	1.9	2.9	3.1	3.8	3.6	3.4	3.3	3.1	3.1	3.1	2.9	2.8	3.8	3.1	2.8	2.5

Notes:

The Fed Funds Rate forecast is shown as the mid point of the Fed Funds range at the end of the period.

All data except interest rates are seasonally adjusted

The 10-Year Treasury Yield is the average for the quarter, while the annual value is the Q4 value

Forecast produced with the assistance of the Macroeconomic Advisers' model

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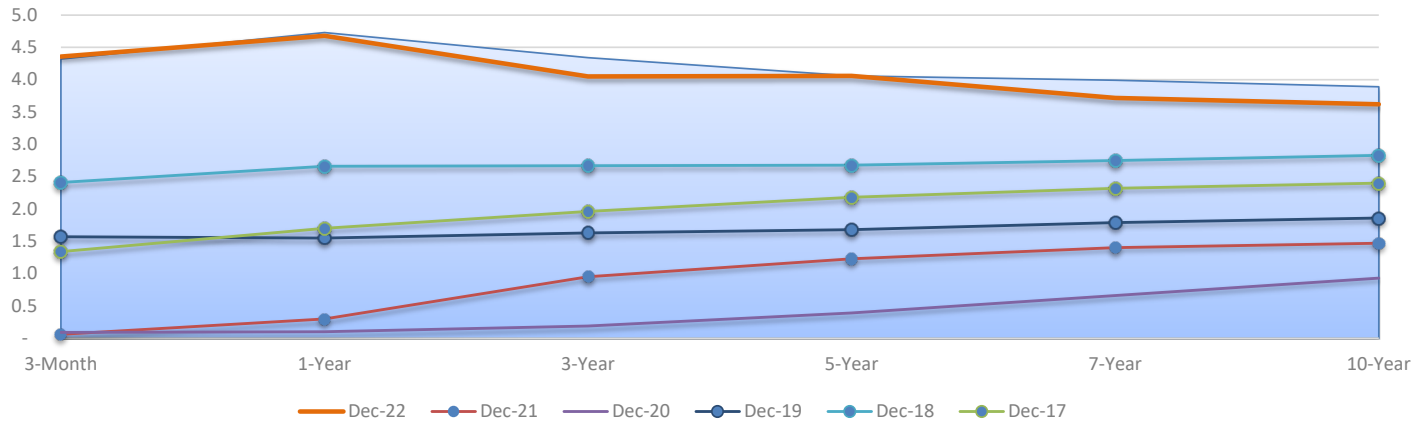


OUTLOOK	ENVIRONMENT	PRODUCTION	OUTSTANDING	RELEASES
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TREASURY YIELDS AND BANK RATES

Federal Reserve Statistical Release H-15

Treasury Yield Curve



Ten Year Treasury and Ten Year Swaps



Source: Federal Reserve Board H-15 Report and JP Morgan Securities
 Yields on actively traded issues adjusted to constant maturities.

TREASURY YIELDS AND BANK RATES

Federal Reserve Statistical Release H-15

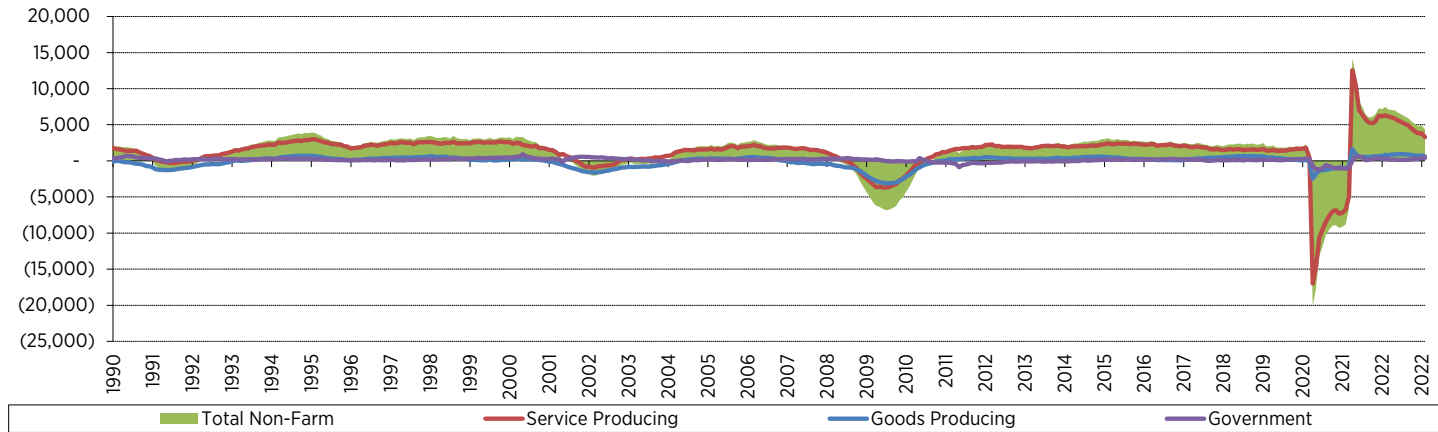
	3-Month Treasury	1-Year Treasury	3-Year Treasury	5-Year Treasury	7-Year Treasury	10-Year Treasury	10-Year Swap
Dec-17	1.34	1.70	1.96	2.18	2.32	2.40	2.40
Dec-18	2.41	2.66	2.67	2.68	2.75	2.83	2.76
Dec-19	1.57	1.55	1.63	1.68	1.79	1.86	1.83
Dec-20	0.09	0.10	0.19	0.39	0.66	0.93	0.92
Dec-21	0.06	0.30	0.95	1.23	1.40	1.47	1.56
Dec-22	4.36	4.68	4.05	3.76	3.72	3.62	3.79
Dec-21	0.06	0.30	0.95	1.23	1.40	1.47	1.56
Jan-22	0.15	0.55	1.25	1.54	1.70	1.76	1.85
Feb-22	0.31	1.00	1.65	1.81	1.91	1.93	2.07
Mar-22	0.45	1.34	2.09	2.11	2.15	2.13	2.57
Apr-22	0.76	1.89	2.72	2.78	2.80	2.75	2.98
May-22	0.99	2.06	2.79	2.87	2.92	2.90	2.82
Jun-22	1.54	2.65	3.15	3.19	3.21	3.14	3.14
Jul-22	2.30	3.02	3.03	2.96	2.97	2.90	2.71
Aug-22	2.72	3.28	3.23	3.03	2.98	2.90	3.11
Sep-22	3.22	3.89	3.88	3.70	3.64	3.52	3.86
Oct-22	3.87	4.43	4.38	4.18	4.09	3.98	4.05
Nov-22	4.32	4.73	4.34	4.06	3.99	3.89	3.67
Dec-22	4.36	4.68	4.05	3.76	3.72	3.62	3.79
Change in Rate Dec- 21 to Dec- 22	4.30	4.38	3.10	2.53	2.32	2.15	2.23

Source: Federal Reserve Board H-15 Report and JP Morgan Securities
Yields on actively traded issues adjusted to constant maturities.

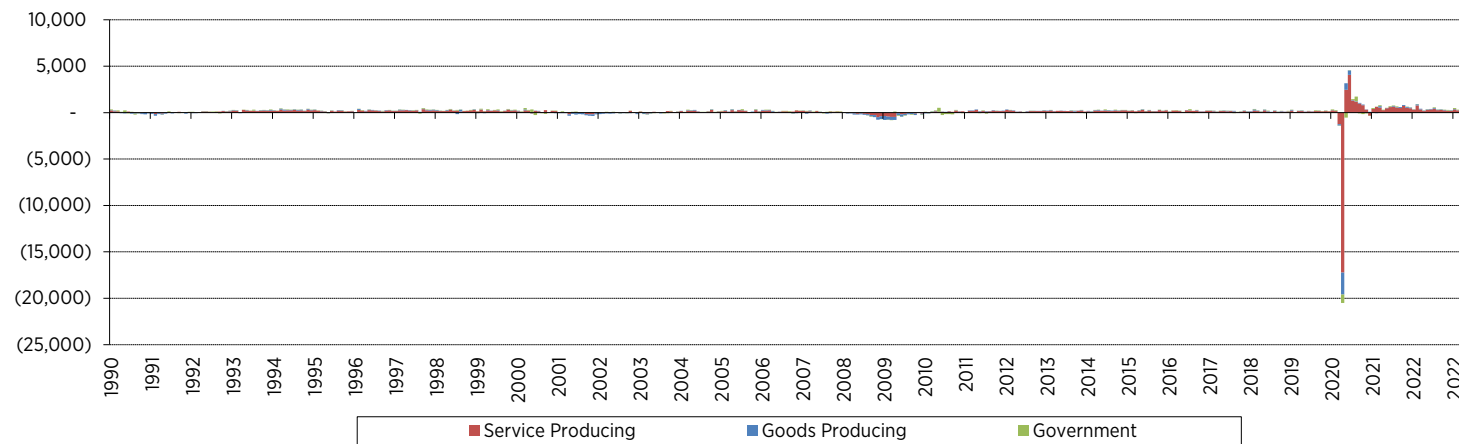
EMPLOYEES ON NONFARM PAYROLLS

Number of Employees on Nonfarm Payrolls
Seasonally Adjusted, Thousands of Employees

Year-over-year Change



Month-over-month Change



Source: Bureau of Labor Statistics

EMPLOYEES ON NONFARM PAYROLLS

Number of Employees on Nonfarm Payrolls
Seasonally Adjusted, Thousands of Employees

	Private		Government	Total Nonfarm
	Service Producing	Goods Producing		
Dec 2018	106,359	20,935	22,511	149,805
Dec 2019	108,018	21,023	22,723	151,764
Dec 2020	100,693	20,111	21,671	142,475
Dec 2021	106,929	20,757	22,056	149,742
Dec 2022	110,743	21,461	22,331	154,535
Apr 2022	108,513	21,064	22,101	151,678
May 2022	108,795	21,125	22,122	152,042
Jun 2022	109,127	21,175	22,110	152,412
Jul 2022	109,549	21,246	22,185	152,980
Aug 2022	109,818	21,283	22,231	153,332
Sep 2022	110,118	21,327	22,237	153,682
Oct 2022	110,360	21,384	22,262	154,006
Nov 2022	110,547	21,425	22,324	154,296
Dec 2022	110,743	21,461	22,331	154,535
Percent change				
Dec 2021 to Dec 2022	3.6%	3.4%	1.2%	3.2%
	Change			
	<i>Year-over-year</i>			
Dec 2017	1,537	496	80	2,113
Dec 2018	1,539	618	127	2,284
Dec 2019	1,659	88	212	1,959
Dec 2020	(7,325)	(912)	(1,052)	(9,289)
Dec 2021	6,236	646	385	7,267
Dec 2022	3,814	704	275	4,793
	<i>Month-over-month</i>			
Feb 2022	776	121	7	904
Mar 2022	332	91	(9)	414
Apr 2022	159	67	28	254
May 2022	282	61	21	364
Jun 2022	332	50	(12)	370
Jul 2022	422	71	75	568
Aug 2022	269	37	46	352
Sep 2022	300	44	6	350
Oct 2022	242	57	25	324
Nov 2022	187	41	62	290
Dec 2022	196	36	7	239

Source: Bureau of Labor Statistics

OUTLOOK

ENVIRONMENT

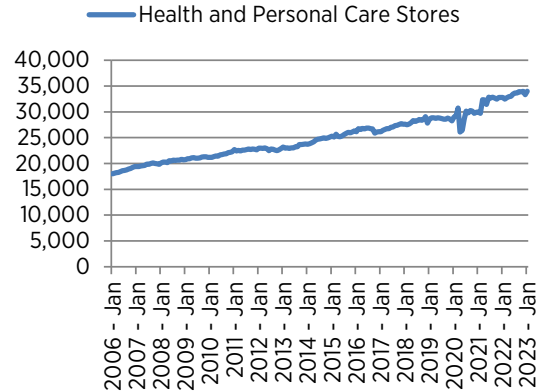
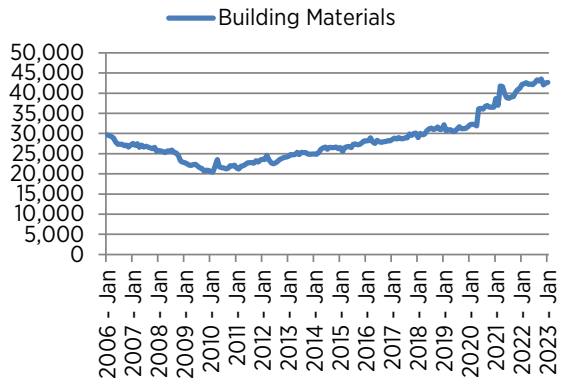
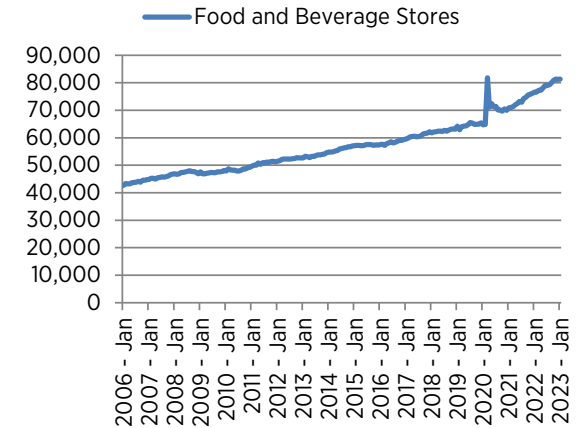
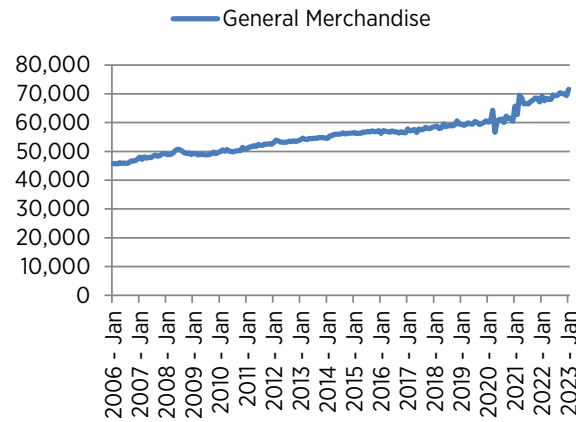
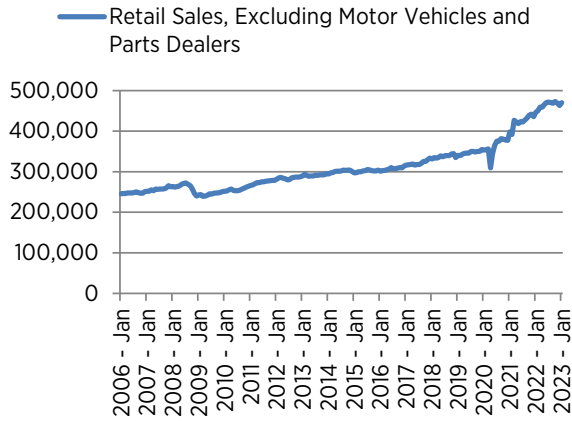
PRODUCTION

OUTSTANDING

RELEASES

MONTHLY RETAIL SALES

Seasonally Adjusted
By Kind of Business, \$millions



Source: U.S. Census Bureau

MONTHLY RETAIL SALES

Seasonally Adjusted

By Kind of Business, \$millions

Total excludes motor vehicle and parts dealers

	Selected Businesses					Total	% Change
	General Merchandise	Food & Beverage	Building Materials	Health & Personal	Clothing & Accessories		
							Year-Over-Year
2018	707,592	750,469	367,552	337,802	267,674	4,053,474	5.07%
2019	716,993	775,450	373,864	344,214	269,224	4,165,276	2.76%
2020	730,126	847,971	420,266	350,166	201,980	4,351,093	4.46%
2021	805,451	880,352	477,105	384,986	291,556	5,082,732	16.82%
2022	829,757	946,607	510,647	399,812	311,857	5,567,650	9.54%
							Month-over-Month
2022 - Jun	69,621	79,000	42,131	33,426	26,004	471,041	1.21%
2022 - Jul	69,346	78,968	42,597	33,641	25,889	471,341	0.06%
2022 - Aug	69,558	79,317	43,314	33,649	26,145	470,231	-0.24%
2022 - Sep	70,343	79,984	43,000	33,932	26,403	468,891	-0.28%
2022 - Oct	70,128	80,957	43,516	33,869	26,310	473,170	0.91%
2022 - Nov	70,003	81,348	42,074	33,971	26,248	468,775	-0.93%
2022 - Dec	69,410	81,248	42,541	33,354	26,082	463,649	-1.09%
2023 - Jan	71,602	81,311	42,675	33,997	26,739	470,006	1.37%
Percent change							
2022 - Jan to 2023 - Jan	3.4%	6.1%	1.2%	3.6%	6.3%	5.3%	

Source: U.S. Census Bureau

OUTLOOK

ENVIRONMENT

PRODUCTION

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RELEASES

2. Commercial/Multifamily Finance Environment

Extract of Commercial Real Estate Comments from the Federal Reserve Board's Beige Book
March 8, 2023

This report was prepared at the Federal Reserve Bank of New York based on information collected on or before February 27, 2023. This document summarizes comments received from contacts outside the Federal Reserve System and is not a commentary on the views of Federal Reserve officials.

NATIONAL SUMMARY

Overall economic activity increased slightly in early 2023. Six Districts reported little or no change in economic activity since the last report, while six indicated economic activity expanded at a modest pace. On balance, supply chain disruptions continued to ease. Consumer spending generally held steady, though a few Districts reported moderate to strong growth in retail sales during what is typically a slow period. Auto sales were little changed, on balance, though inventory levels continued to improve. Several Districts indicated that high inflation and higher interest rates continued to reduce consumers' discretionary income and purchasing power, and some concern was expressed about rising credit card debt. Travel and tourism activity remained fairly strong in most Districts. Manufacturing activity stabilized following a period of contraction. While housing markets remained subdued, restrained by exceptionally low inventory, an unexpected uptick in activity beyond the seasonal norm was seen in some Districts along the eastern seaboard. Commercial real estate activity was steady, with some growth in the industrial market but ongoing weakness in the office market. Demand for nonfinancial services was steady overall but picked up in a few Districts. On balance, loan demand declined, credit standards tightened, and delinquency rates edged up. Energy activity was flat to down slightly, and agricultural conditions were mixed. Amid heightened uncertainty, contacts did not expect economic conditions to improve much in the months ahead.

FIRST DISTRICT—BOSTON

The commercial real estate market in the First District has been relatively stable since the beginning of 2023. The industrial market continued to see low vacancy rates and high leasing demand, but nonetheless rents have levelled off recently. Though the office market remained weak—a Hartford contact described the market as "abysmal"—another contact noted a slight increase in leasing interest for larger spaces in downtown Boston, and leasing was stable in Providence. In the retail market, food and beverage establishments experienced relatively strong leasing demand, while vacancies continued to pile up for department stores and big-box retail. Credit conditions tightened further, for example, as construction loans faced increased capital requirements. The only significant construction activity pertained to industrial properties. Most contacts expected commercial real estate activity to weaken moving forward, with the industrial market outperforming other sectors. The office class was predicted to weaken further, mainly as the result of pending lease maturations and the likelihood of high-profile loan defaults, and downward pressure on rents was expected.

SECOND DISTRICT—NEW YORK

Commercial real estate markets were little changed in early 2023. Office vacancy and availability rates edged up in New York City and northern New Jersey and were steady across upstate New York. Office rents were flat across the District. Retail vacancy and availability rates held steady, though retail rents fell slightly. Vacancy and availability rates edged up from low levels in the industrial market and rents trended up modestly.

Construction contacts reported some stabilization in business conditions but remained pessimistic about the near-term outlook. New office construction starts remained at low levels in most of the District, though there was some pickup in northern New Jersey. New industrial construction starts were up in and around New York City but were little

OUTLOOK

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PRODUCTION

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RELEASES

changed elsewhere. Multi-family residential starts remained weak across the District.

THIRD DISTRICT—PHILADELPHIA

Market participants in commercial real estate continued to report steady current construction activity but noted additional softening of the pipeline as more projects are delayed, canceled, or redesigned. Leasing activity continued to slow modestly. While demand for warehousing and life sciences space remained strong, concerns about other commercial real estate prompted at least one large law firm to gear up for handling distressed properties.

FOURTH DISTRICT—CLEVELAND

Nonresidential construction contacts reported that demand softened further because of high interest rates for commercial projects. One general contractor noted that the projects that are moving forward have often been self-funded. Real estate developers also cited weaker demand as customers have become increasingly concerned about high interest rates and general economic uncertainty. Contacts said that these same factors would lead to further softening in demand in coming months.

FIFTH DISTRICT—RICHMOND

Commercial real estate activity remained unchanged since the last period. However, rent costs were moderating in certain sectors. Leasing rates for multifamily were starting to decrease, particularly for mid-priced units; high end apartment rents were unchanged. Retail leasing was strong this period especially for service and food businesses. New retail centers continued to be built and most were pre-leased, leading to lower vacancy rates. The industrial market continued to be strong with higher rental rates and good absorption levels. The supply of Class A space tightened, particularly in suburban markets. Commercial contractors noted that a general shortage of key components, including labor, remained a significant factor. Overall, commercial buyers remained hesitant to commit due to market uncertainty.

SIXTH DISTRICT—ATLANTA

Commercial real estate (CRE) contacts reported slowing market conditions in lower-tier office, multifamily, and certain segments of retail.

The downward trend in the office sector eased further as more employers required staff to return to the office; however, heightened levels of sublease space remained an impediment to market recovery. Concerns regarding declining CRE values accelerated. Contacts reported increases in operating expenses and slowing or negative net operating income and rent growth. Additionally, firms continued to report instances of declining asset prices and buyers seeking greater concessions.

SEVENTH DISTRICT—CHICAGO

Nonresidential construction was unchanged over the reporting period, with contacts noting solid demand from health care and the public sector but weaker demand for distribution center construction. High interest rates and input costs continued to hold back activity, while lead times remained long for critical products such as HVAC and power generation equipment. Commercial real estate activity was little changed over the reporting period. Demand for high quality space remained solid, with one contact highlighting strong interest in retail space previously occupied by big box tenants. Overall, prices and rents decreased modestly, while vacancies and the availability of sublease space were up moderately.

EIGHTH DISTRICT—ST. LOUIS

The commercial real estate sector has been mixed. Office demand remains low, but industrial demand remains high despite increased rents. Retail real estate has improved since the previous report, and one contact reported retail projects are back in demand for the first time since before the pandemic. Construction demand has slowed, with contacts reporting that many projects are on hold as investors wait out market uncertainty about rate hikes. One St. Louis contact reported increased construction activity as interest rates flattened.

NINTH DISTRICT—MINNEAPOLIS

Commercial construction fell slightly since the last report. Some of that slowdown was seasonal. A manufacturer of building products said that "November through January are our weakest months. But the trend is down." A Montana architecture firm said that large corporate clients have delayed project starts. Other contacts reported a smaller pipeline of future projects. A contractor in Minneapolis-St. Paul said, "Interest rate hikes have put a considerable damper on new construction projects....Projects aren't penciling out." Residential construction was

OUTLOOK	ENVIRONMENT	PRODUCTION	OUTSTANDING	RELEASES
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lower. Commercial real estate was flat since the last report. Office space continued to struggle overall despite a slow but ongoing return of workers to downtown offices. But overall vacancy rates grew as some large tenants downsized and space available for sublease increased. Industrial property remained strong, though higher financing costs reportedly had some developers reevaluating speculative projects. Residential real estate continued to crater. Most large markets in the District saw closed sales fall between 25 and 50 percent in December and January year over year.

TENTH DISTRICT—KANSAS CITY

Developers of multifamily housing indicated further deterioration of conditions from already depressed levels. Rising interest rates continue to be a challenge to financing multifamily housing projects, but contacts also highlighted recent volatility in rental rates as an additional headwind. Uncertainty about projected rent growth is reportedly very high, further hindering financing activities for new projects.

ELEVENTH DISTRICT—DALLAS

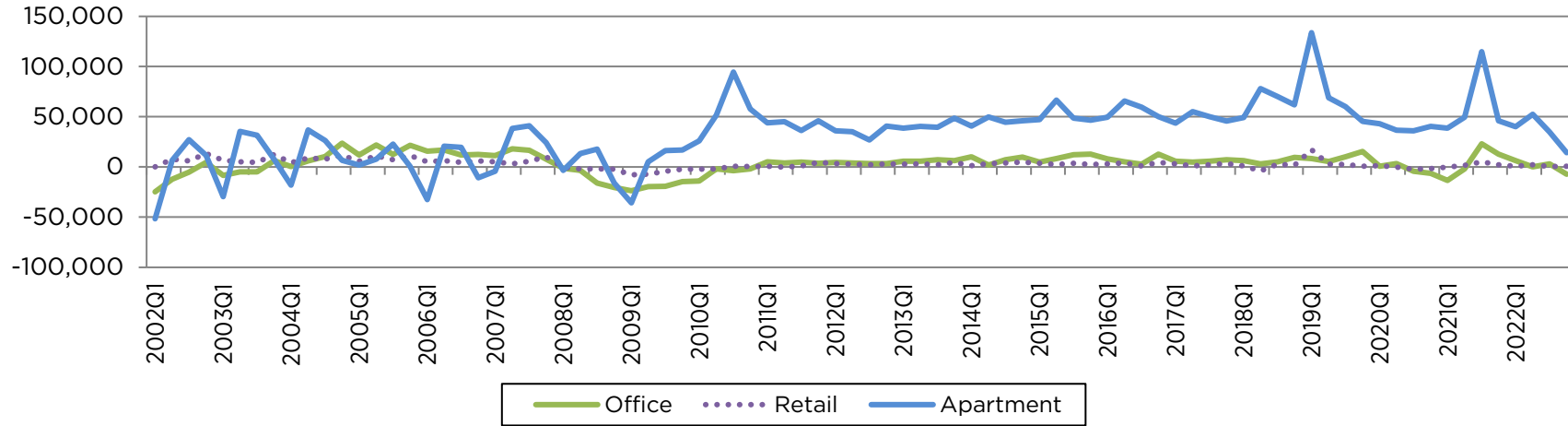
Demand for office space remained lackluster. Activity in the industrial market continued to be solid, but contacts were concerned about the elevated construction pipeline. The higher cost of capital, tighter lending standards, and economic uncertainty has made it difficult to price deals, diminishing investment sales activity.

TWELFTH DISTRICT—SAN FRANCISCO

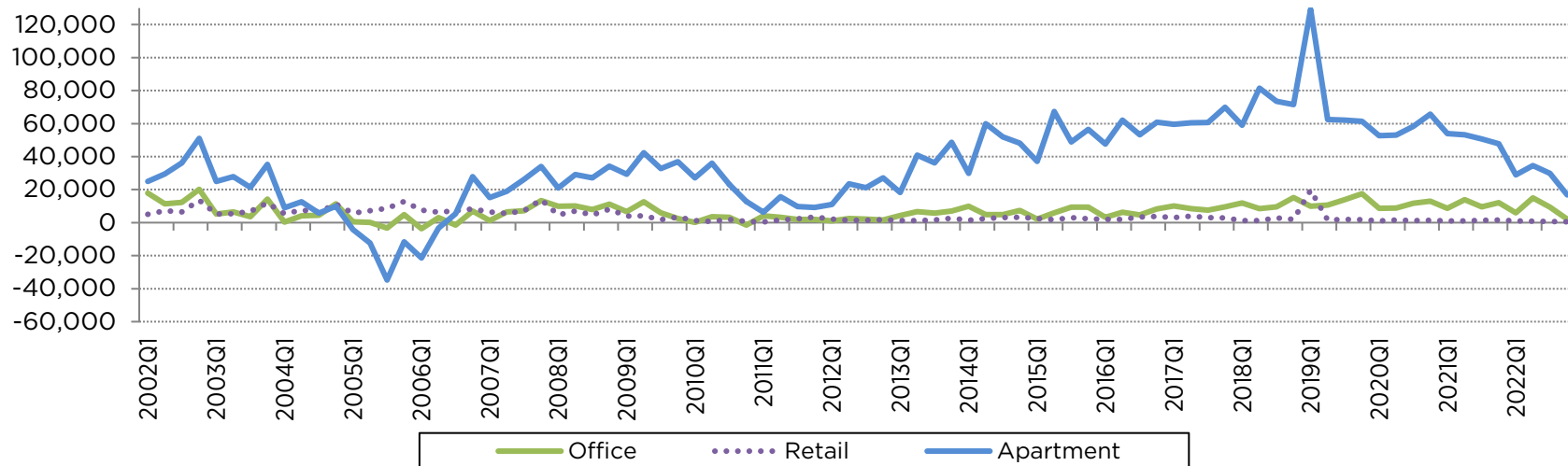
Activity in the commercial real estate market was little changed on net. Demand for office space showed continued weakness with low rents and high vacancies. A contact in Oregon reported slowing demand for warehouse and industrial space, though other contacts reported continued strength in these sectors. One contact in Nevada observed that businesses expressed interest in purchasing commercial spaces, rather than renting them.

NET INVENTORY CHANGE/NET ABSORPTION COMMERCIAL/MULTIFAMILY PROPERTIES

Net Absorption (Thousands of Square Feet)



Net Inventory Change (Thousands of Square Feet)



Source: REIS

COMMERCIAL/MULTIFAMILY PROPERTIES NET INVENTORY CHANGE LESS NET ABSORPTION

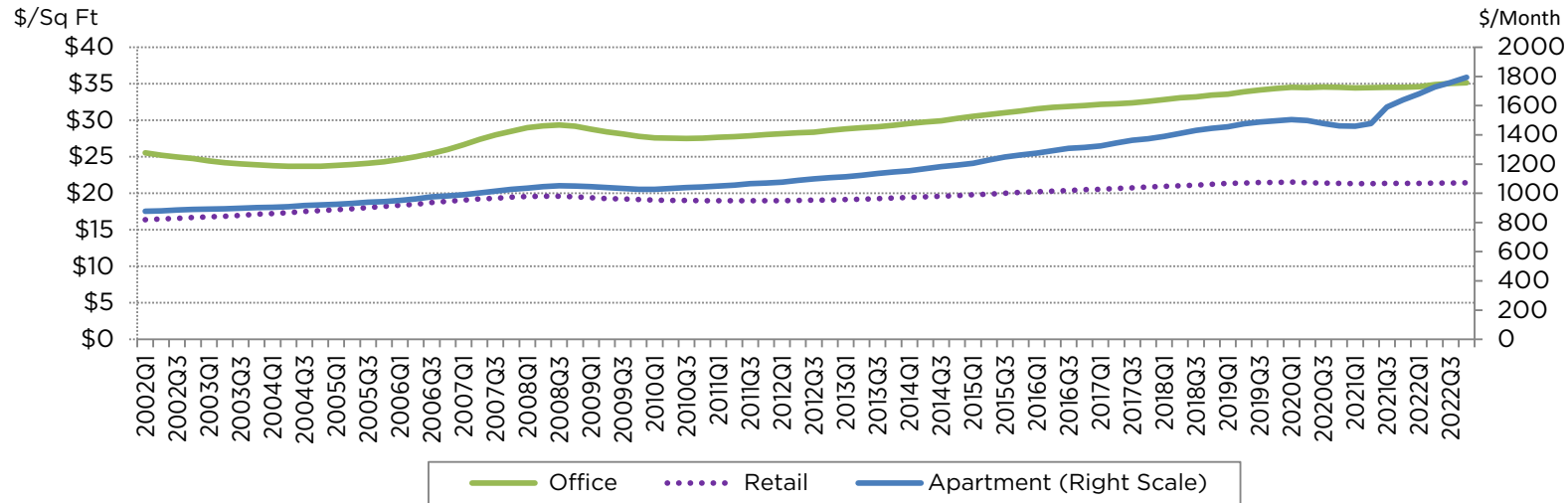
THOUSANDS OF SQUARE FEET

Year	Q1	Q2	Q3	Q4	Calendar Year	YTD Q4
<i>APARTMENT</i>						
2016	(1,970)	(3,503)	(6,265)	10,651	(1,087)	(1,087)
2017	15,833	5,143	10,308	24,111	55,395	55,395
2018	9,814	3,331	3,528	9,445	26,118	26,118
2019	(4,469)	(6,377)	2,016	15,782	6,952	6,952
2020	9,516	16,491	22,140	25,341	73,488	73,488
2021	15,254	3,498	(63,980)	1,899	(43,329)	(43,329)
2022	(11,176)	(18,090)	(4,922)	2,528	(31,660)	(31,660)
<i>OFFICE</i>						
2016	(4,919)	1,095	1,693	(4,657)	(6,788)	(6,788)
2017	4,396	3,575	1,961	2,207	12,139	12,139
2018	5,798	5,560	4,350	5,566	21,274	21,274
2019	1,431	5,330	3,593	2,161	12,515	12,515
2020	7,950	5,425	16,007	19,355	48,737	48,737
2021	22,170	15,803	(13,496)	(803)	23,674	23,674
2022	(325)	15,058	6,234	9,210	30,177	30,177
<i>RETAIL</i>						
2016	(1,177)	(1,943)	2,334	(811)	(1,597)	(1,597)
2017	75	2,853	854	(401)	3,381	3,381
2018	192	5,253	142	488	6,075	6,075
2019	2,510	(1,149)	(467)	1,067	1,961	1,961
2020	(343)	1,796	3,455	2,936	7,844	7,844
2021	1,237	(602)	(3,782)	(692)	(3,839)	(3,839)
2022	307	(1,254)	238	(145)	(854)	(854)

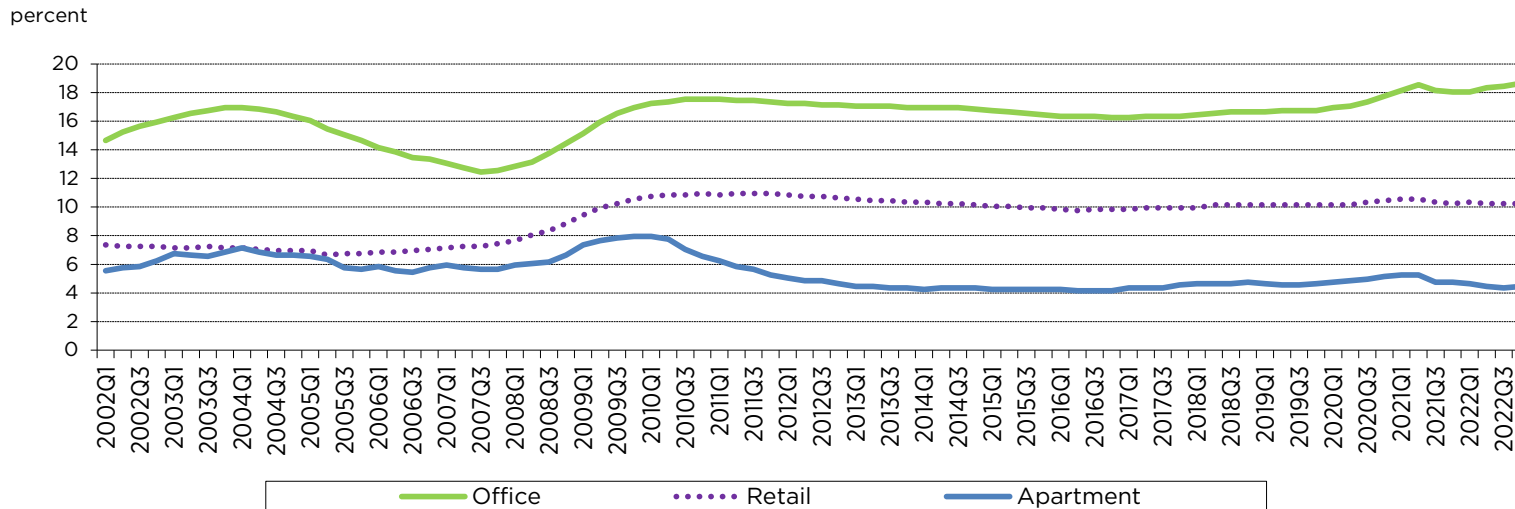
Source: REIS

AVERAGE RENTS AND VACANCY RATES AT COMMERCIAL/MULTIFAMILY PROPERTIES

Average Rents



Average Vacancy Rates



Source: REIS

AVERAGE RENTS AND VACANCY RATES AT COMMERCIAL/MULTIFAMILY PROPERTIES

Year	Average Asking Rents					Average Vacancy Rates (percent)					
	Q1	Q2	Q3	Q4	Q4 Year-over-year % change	Q1	Q2	Q3	Q4	Q4 Year-over-year change	
APARTMENT (per month)											
2016	\$ 1,274	\$ 1,292	\$ 1,308	\$ 1,313	4.0%	4.3	4.2	4.2	4.2	-0.1	
2017	\$ 1,325	\$ 1,345	\$ 1,364	\$ 1,374	4.6%	4.4	4.4	4.4	4.6	0.4	
2018	\$ 1,389	\$ 1,411	\$ 1,431	\$ 1,446	5.2%	4.7	4.7	4.7	4.8	0.2	
2019	\$ 1,455	\$ 1,475	\$ 1,489	\$ 1,497	3.5%	4.7	4.6	4.6	4.7	-0.1	
2020	\$ 1,504	\$ 1,499	\$ 1,477	\$ 1,462	-2.3%	4.8	4.9	5.0	5.2	0.5	
2021	\$ 1,460	\$ 1,477	\$ 1,591	\$ 1,639	12.1%	5.3	5.3	4.8	4.8	-0.4	
2022	\$ 1,680	\$ 1,728	\$ 1,759	\$ 1,794	9.5%	4.7	4.5	4.4	4.5	-0.3	
OFFICE (per sq. ft)											
2016	\$ 31.57	\$ 31.76	\$ 31.89	\$ 32.00	2.3%	16.4	16.4	16.4	16.3	-0.2	
2017	\$ 32.16	\$ 32.26	\$ 32.38	\$ 32.57	1.8%	16.3	16.4	16.4	16.4	0.1	
2018	\$ 32.85	\$ 33.09	\$ 33.22	\$ 33.46	2.7%	16.5	16.6	16.7	16.7	0.3	
2019	\$ 33.59	\$ 33.88	\$ 34.15	\$ 34.35	2.7%	16.7	16.8	16.8	16.8	0.1	
2020	\$ 34.50	\$ 34.49	\$ 34.56	\$ 34.53	0.5%	17.0	17.1	17.4	17.8	1.0	
2021	\$ 34.44	\$ 34.46	\$ 34.50	\$ 34.53	0.0%	18.2	18.6	18.2	18.1	0.3	
2022	\$ 34.61	\$ 34.89	\$ 35.05	\$ 35.14	1.8%	18.1	18.4	18.5	18.7	0.6	
RETAIL (per sq. ft)											
2016	\$ 20.22	\$ 20.30	\$ 20.39	\$ 20.48	1.8%	9.9	9.8	9.9	9.9	-0.1	
2017	\$ 20.56	\$ 20.66	\$ 20.76	\$ 20.88	2.0%	9.9	10.0	10.0	10.0	0.1	
2018	\$ 20.97	\$ 21.03	\$ 21.13	\$ 21.22	1.6%	10.0	10.2	10.2	10.2	0.2	
2019	\$ 21.34	\$ 21.42	\$ 21.48	\$ 21.50	1.3%	10.2	10.2	10.2	10.2	0.0	
2020	\$ 21.54	\$ 21.44	\$ 21.40	\$ 21.34	-0.7%	10.2	10.2	10.4	10.5	0.3	
2021	\$ 21.31	\$ 21.33	\$ 21.36	\$ 21.36	0.1%	10.6	10.6	10.4	10.3	-0.2	
2022	\$ 21.38	\$ 21.40	\$ 21.41	\$ 21.45	0.4%	10.4	10.3	10.3	10.3	0.0	

Source: REIS

OUTLOOK

ENVIRONMENT

PRODUCTION

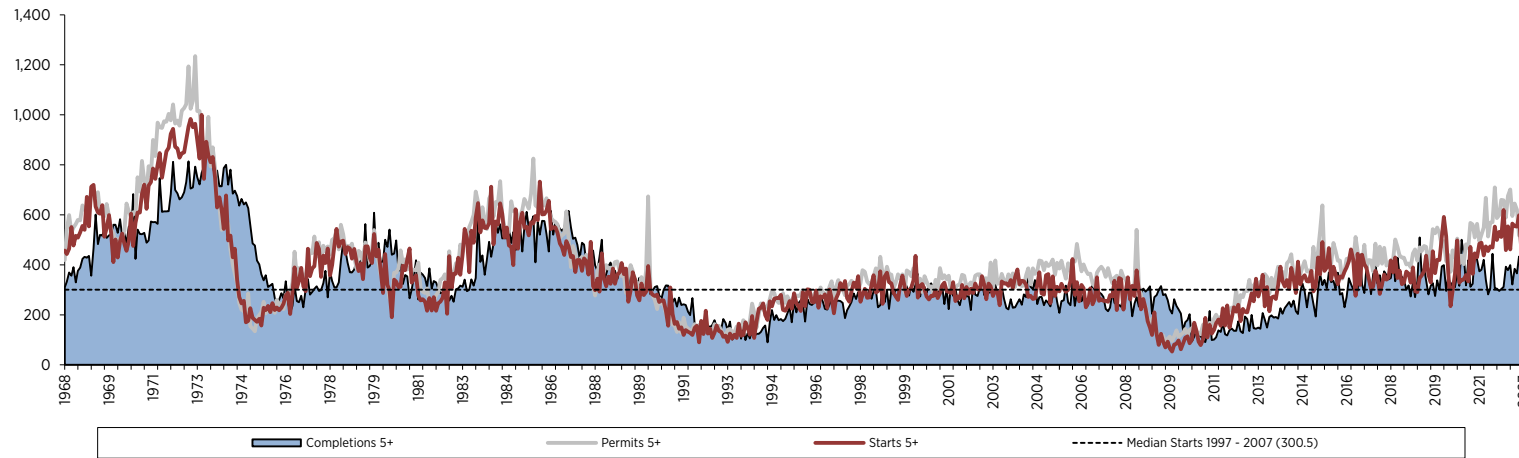
OUTSTANDING

RELEASES

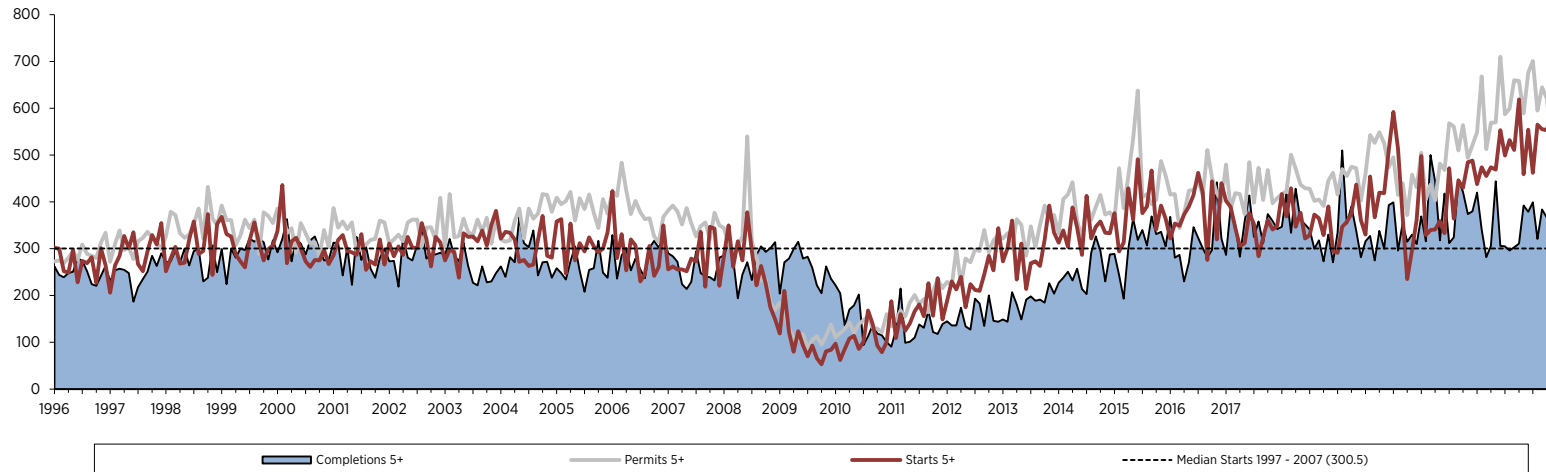
MULTIFAMILY BUILDING PERMITS, STARTS AND COMPLETIONS

Thousands of Units Permitted, Started and Completed
in Structures with 5 or More Units, Seasonally Adjusted Annual Rate

1968 to present



1996 to present



Source: U.S. Census Bureau

MULTIFAMILY BUILDING PERMITS, STARTS AND COMPLETIONS

Number of Units Permitted, Started and Completed in Structures with
5 or More Units, Seasonally Adjusted Annual Rate

	Thousands of Units			Percent Change		
	Permits	Starts	Completions	Permits	Starts	Completions
					<i>Year-over-year</i>	
2018	434	360	336	2.1%	5.1%	-3.3%
2019	481	389	343	11.0%	7.9%	2.2%
2020	445	377	365	-7.7%	-3.1%	6.4%
2021	569	462	364	28.0%	22.6%	-0.3%
2022	627	531	359	10.3%	14.9%	-1.3%
					<i>Month-over-month</i>	
Feb 2022	599	532	296	2.0%	6.6%	-3.0%
Mar 2022	660	511	303	10.2%	-3.9%	2.4%
Apr 2022	658	619	311	-0.3%	21.1%	2.6%
May 2022	589	459	392	-10.5%	-25.8%	26.0%
Jun 2022	676	554	379	14.8%	20.7%	-3.3%
Jul 2022	701	462	399	3.7%	-16.6%	5.3%
Aug 2022	595	565	321	-15.1%	22.3%	-19.5%
Sep 2022	645	555	384	8.4%	-1.8%	19.6%
Oct 2022	620	553	366	-3.9%	-0.4%	-4.7%
Nov 2022	518	598	433	-16.5%	8.1%	18.3%
Dec 2022	560	458	375	8.1%	-23.4%	-13.4%
Jan 2023	563	490	352	0.5%	7.0%	-6.1%
Feb 2023	700	608	509	24.3%	24.1%	44.6%
Percent change Feb 2022 to Feb 2023	16.9%	14.3%	72.0%			

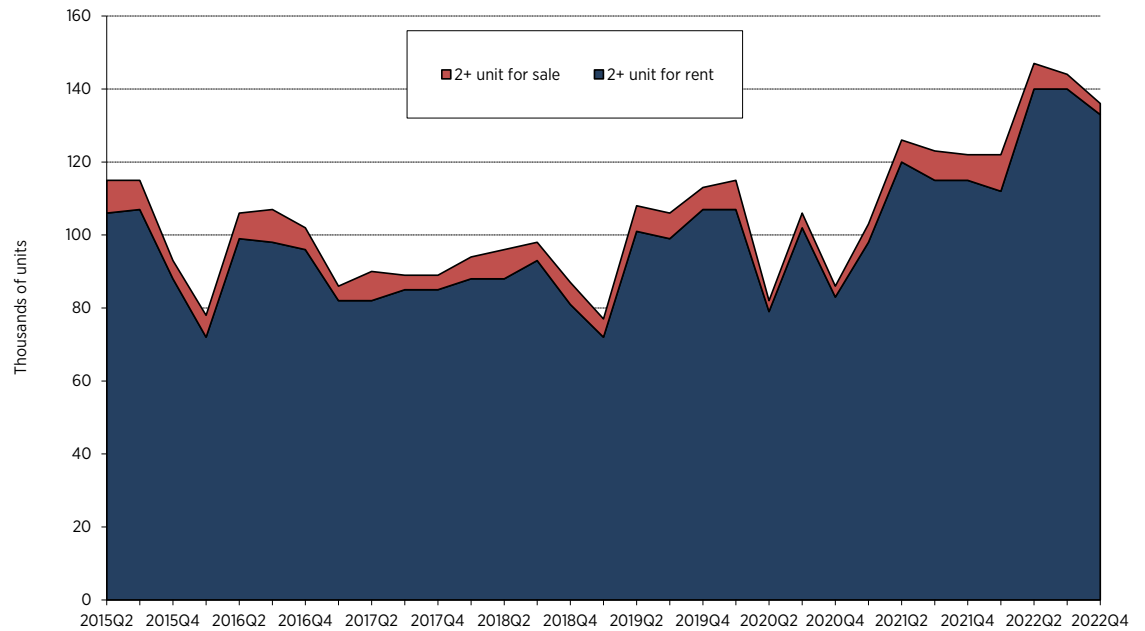
Source: U.S. Census Bureau

NEW PRIVATELY OWNED HOUSING UNITS STARTED, BY PURPOSE

Thousands of Units

Quarter	TOTAL	1-Family Units	Units in Buildings with 2 or More Units			
			Total	For Rent	For Sale	Percent for Rent
2013Q4	229	142	87	80	8	92%
2014Q1	206	134	72	67	5	93%
2014Q2	275	183	92	86	6	93%
2014Q3	282	178	104	97	7	93%
2014Q4	241	154	87	78	9	90%
2015Q1	215	140	75	71	4	95%
2015Q2	320	205	115	106	9	92%
2015Q3	318	203	115	107	8	93%
2015Q4	259	166	93	88	5	95%
2016Q1	249	170	79	72	6	91%
2016Q2	323	218	105	99	7	94%
2016Q3	312	206	106	98	9	92%
2016Q4	289	187	102	96	6	94%
2017Q1	267	181	86	82	4	95%
2017Q2	328	238	90	82	8	91%
2017Q3	319	230	89	85	4	96%
2017Q4	289	200	89	85	4	96%
2018Q1	289	195	94	88	6	94%
2018Q2	353	257	96	88	8	92%
2018Q3	336	238	98	93	5	95%
2018Q4	273	186	87	81	6	93%
2019Q1	266	189	77	72	5	94%
2019Q2	350	242	108	101	7	94%
2019Q3	348	243	105	99	7	94%
2019Q4	327	214	113	107	6	95%
2020Q1	329	214	115	107	8	93%
2020Q2	298	217	81	79	3	98%
2020Q3	387	281	106	102	4	96%
2020Q4	364	277	87	83	3	95%
2021Q1	357	255	102	98	5	96%
2021Q2	435	309	126	120	6	95%
2021Q3	419	296	123	115	8	93%
2021Q4	388	266	122	115	7	94%
2022Q1	390	267	123	112	10	91%
2022Q2	450	303	147	140	7	95%
2022Q3	386	242	144	140	4	97%
2022Q4	329	193	136	133	3	98%

Source: U.S. Census Bureau



Value of Commercial Real Estate Construction Put-In-Place

January 2023 Data

The value of selected commercial real estate (CRE)-related private construction put-in-place increased slightly in the month of January and was higher than the pace of construction in January 2022. The \$530.1 billion seasonally adjusted annual rate in January was 0.9 percent higher than the December 2022 rate, and 27.0 percent higher than the January 2022 pace. The pace of construction in January was 210 percent higher than its recession low.

Private MULTIFAMILY new construction activity increased in January. January's seasonally adjusted annual pace of \$120.5 billion was 0.4 percent higher than December's \$120.1 billion and 20.6 percent higher than last January's rate. The pace of construction in January was 623 percent higher than its recession low.

The value of private OFFICE construction put-in-place increased in January. January's seasonally adjusted annual pace of \$83.0 billion was 14.5 percent higher than last January's rate. The pace of construction in January was 282 percent higher than its recession low.

The value of private HEALTH CARE construction put-in-place decreased 0.3 percent in January. January's seasonally adjusted annual pace of \$44.1 billion was 12.1 percent higher than last January's rate. The pace of construction in January was 62 percent higher than its recession low.

The value of private RETAIL, WHOLESALE AND SELECTED SERVICES (referred to as COMMERCIAL by the Census Bureau) construction put-in-place decreased 3.2 percent in January. January's seasonally adjusted annual pace of \$121.4 billion was 22.1 percent higher than last January's rate. The pace of construction in January was 254 percent higher than its recession low.

The value of LODGING construction put-in-place increased 0.9 percent in January. January's seasonally adjusted annual pace of \$21.6 billion was 40.5 percent higher than last January's rate. The pace of construction in

January was 172 percent higher than its recession low and 43 percent below its pre-recession high.

The value of MANUFACTURING construction put-in-place increased 6.0 percent in January. January's seasonally adjusted annual pace of \$139.4 billion was 27.0 percent higher than last January's rate. The pace of construction in January was 210 percent higher than its recession low.

OUTLOOK

ENVIRONMENT

PRODUCTION

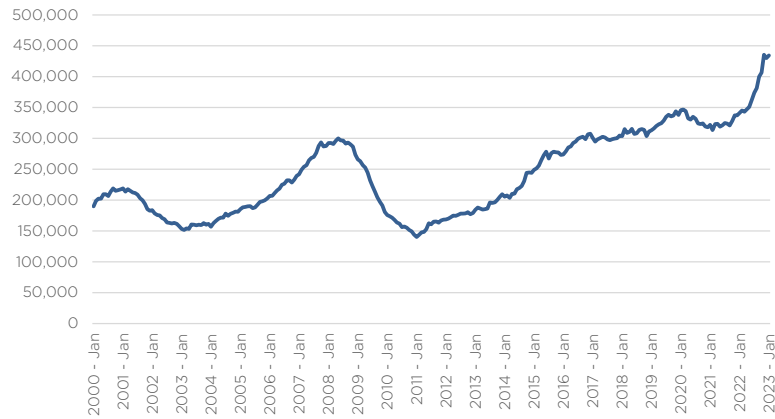
OUTSTANDING

RELEASES

VALUE OF CONSTRUCTION PUT-IN-PLACE

Seasonally Adjusted Annual Rate

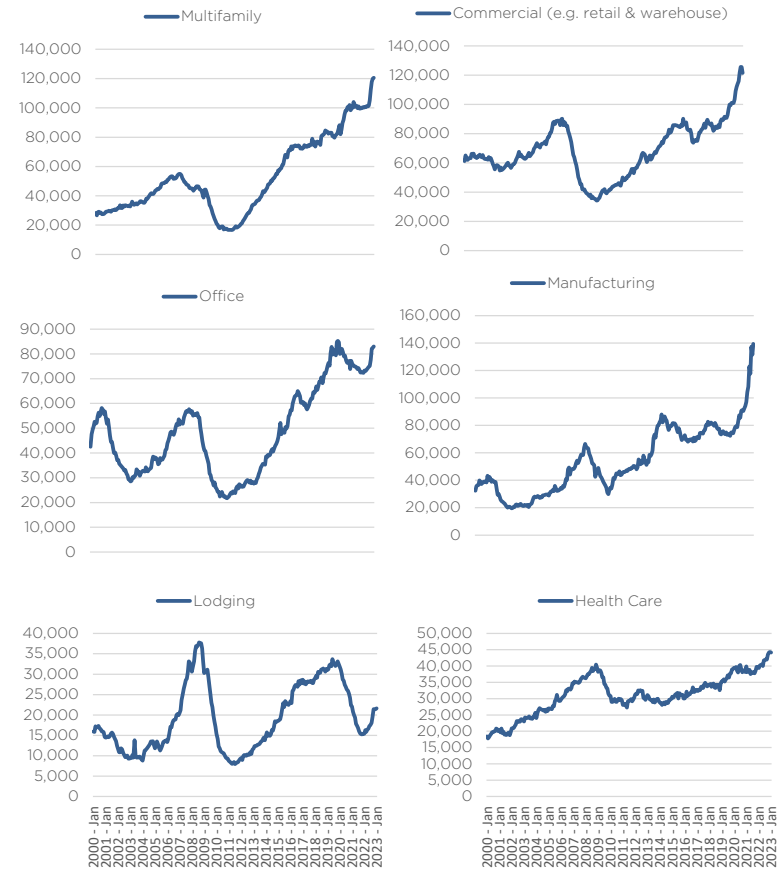
Value of Selected Private CRE-Related Construction Put-In-Place, in \$mil.



Year-Over-Year Change in Trailing Three Month Selected Private CRE-Related Construction in % Percent



Source: MBA, U.S. Census Bureau



OUTLOOK

ENVIRONMENT

PRODUCTION

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RELEASES

VALUE OF CONSTRUCTION PUT-IN-PLACE

Seasonally Adjusted Annual Rate

Value of Selected Private CRE-Related Construction Put-In-Place, \$millions

	Selected Private CRE-Related Types of Construction							% Change Month-over- Month
	Multifamily	Commercial	Office	Lodging	Health Care	Manufacturing	Total	
2021 - Oct	100,988	92,632	74,335	15,287	38,575	83,201	405,018	2.2%
2021 - Nov	99,486	96,745	73,484	15,235	39,760	87,402	412,112	1.8%
2021 - Dec	99,667	99,879	72,516	15,447	39,643	85,583	412,735	0.2%
2022 - Jan	99,917	99,494	72,472	15,369	39,379	90,632	417,263	1.1%
2022 - Feb	100,480	101,073	72,531	16,248	40,211	91,256	421,799	1.1%
2022 - Mar	100,190	100,763	72,311	15,868	40,322	90,430	419,884	-0.5%
2022 - Apr	100,519	100,932	73,302	16,427	40,527	92,353	424,060	1.0%
2022 - May	100,461	103,451	73,100	16,612	39,983	94,162	427,769	0.9%
2022 - Jun	101,293	109,073	73,562	17,255	41,720	97,127	440,030	2.9%
2022 - Jul	100,953	112,005	74,146	17,479	41,855	104,324	450,762	2.4%
2022 - Aug	101,376	114,008	74,777	18,039	42,067	108,210	458,477	1.7%
2022 - Sep	105,130	115,875	75,081	19,573	41,960	122,939	480,558	4.8%
2022 - Oct	112,249	121,701	77,601	21,401	43,507	117,692	494,151	2.8%
2022 - Nov	117,785	125,634	82,078	21,407	44,239	137,452	528,595	7.0%
2022 - Dec	120,050	125,443	82,562	21,409	44,288	131,497	525,249	-0.6%
2023 - Jan	120,522	121,449	82,993	21,597	44,140	139,404	530,105	0.9%
Dec - Jan	0.4%	-3.2%	0.5%	0.9%	-0.3%	6.0%	0.9%	
Jan - Jan	20.6%	22.1%	14.5%	40.5%	12.1%	53.8%	27.0%	
Trough to current	623%	254%	282%	172%	62%	365%	210%	
Peak to current	0%	-3%	-3%	-43%	0%	0%	0%	

Source: MBA, U.S. Census Bureau

OUTLOOK

ENVIRONMENT

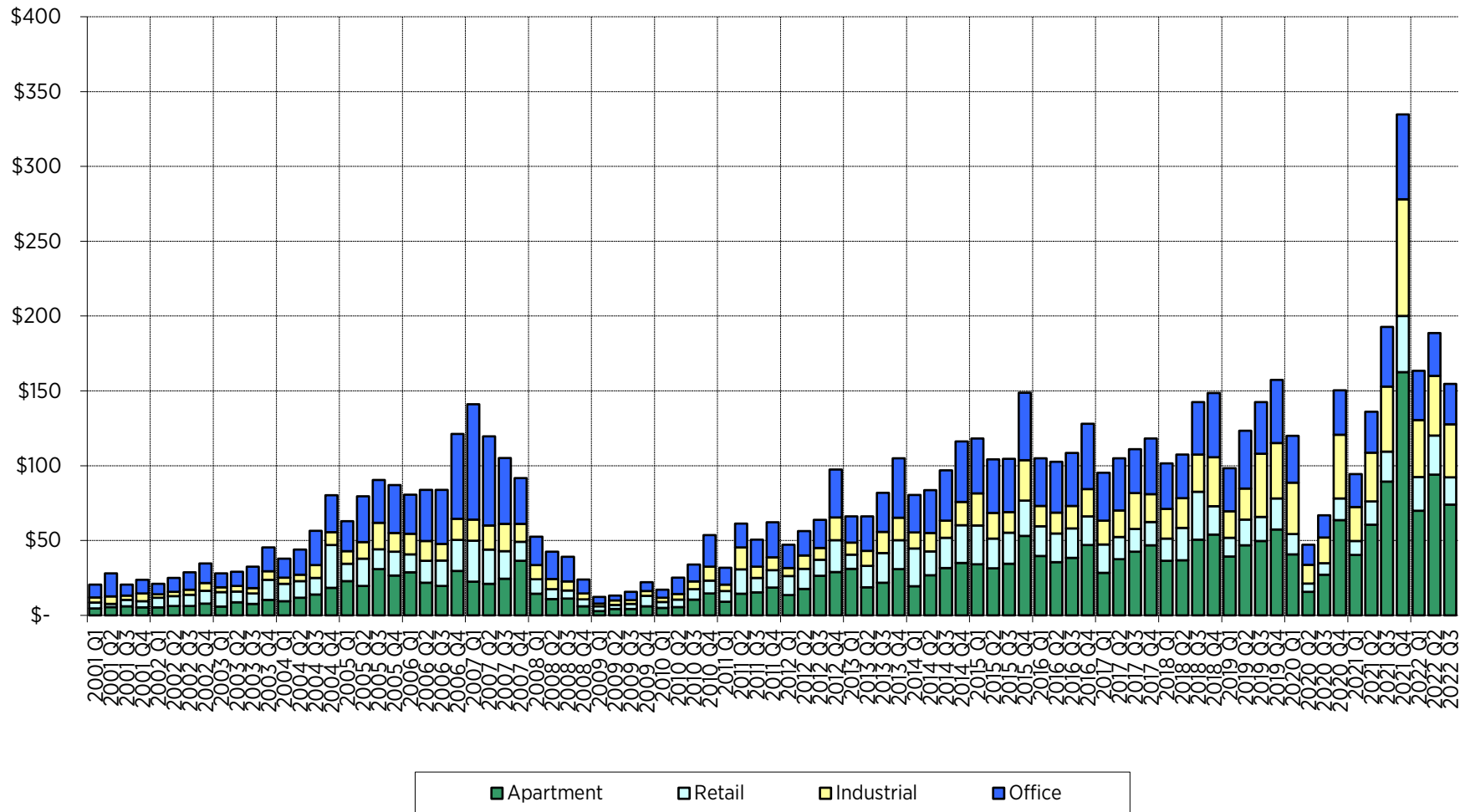
PRODUCTION

OUTSTANDING

RELEASES

QUARTERLY SALES OF LARGER (\$2.5 MILLION+) COMMERCIAL/MULTIFAMILY PROPERTIES

Billions of dollars, Properties and portfolios \$2.5 million and greater



Source: Real Capital Analytics.

COMMERCIAL/MULTIFAMILY QUARTERLY DATABOOK

Q4 2022

QUARTERLY SALES OF LARGER (\$2.5 MILLION+) COMMERCIAL/MULTIFAMILY PROPERTIES

Billions of dollars, Properties and portfolios \$2.5 million and greater

Year	Q1	Q2	Q3	Q4	Total		YTD Q4	
					Sales	Percent change	Sales	Percent change
APARTMENT								
2018	\$ 36.46	\$ 36.75	\$ 50.60	\$ 54.04	\$ 177.85	15%	\$ 177.85	15%
2019	\$ 39.40	\$ 46.88	\$ 49.75	\$ 57.38	\$ 193.41	9%	\$ 193.41	9%
2020	\$ 40.85	\$ 15.71	\$ 27.24	\$ 63.75	\$ 147.55	-24%	\$ 147.55	-24%
2021	\$ 40.32	\$ 60.65	\$ 89.46	\$ 163.04	\$ 353.46	140%	\$ 353.46	140%
2022	\$ 70.42	\$ 95.77	\$ 77.47	\$ 50.39	\$ 294.05	-17%	\$ 294.05	-17%
INDUSTRIAL								
2018	\$ 19.88	\$ 19.98	\$ 24.92	\$ 32.75	\$ 97.52	28%	\$ 97.52	28%
2019	\$ 17.68	\$ 20.80	\$ 42.19	\$ 36.94	\$ 117.61	21%	\$ 117.61	21%
2020	\$ 34.43	\$ 12.51	\$ 17.23	\$ 42.46	\$ 106.62	-9%	\$ 106.62	-9%
2021	\$ 22.88	\$ 32.58	\$ 43.62	\$ 78.26	\$ 177.34	66%	\$ 177.34	66%
2022	\$ 40.04	\$ 40.80	\$ 37.35	\$ 33.19	\$ 151.38	-15%	\$ 151.38	-15%
OFFICE								
2018	\$ 30.32	\$ 29.10	\$ 35.10	\$ 42.89	\$ 137.41	3%	\$ 137.41	3%
2019	\$ 28.82	\$ 38.60	\$ 34.63	\$ 42.14	\$ 144.19	5%	\$ 144.19	5%
2020	\$ 30.84	\$ 13.37	\$ 14.89	\$ 30.43	\$ 89.53	-38%	\$ 89.53	-38%
2021	\$ 22.60	\$ 27.75	\$ 40.81	\$ 56.08	\$ 147.24	64%	\$ 147.24	64%
2022	\$ 33.10	\$ 28.86	\$ 29.00	\$ 19.56	\$ 110.53	-25%	\$ 110.53	-25%
RETAIL								
2018	\$ 14.86	\$ 21.64	\$ 31.89	\$ 18.94	\$ 87.33	35%	\$ 87.33	35%
2019	\$ 12.40	\$ 17.06	\$ 16.01	\$ 20.83	\$ 66.31	-24%	\$ 66.31	-24%
2020	\$ 13.48	\$ 5.57	\$ 7.62	\$ 14.52	\$ 41.20	-38%	\$ 41.20	-38%
2021	\$ 9.27	\$ 15.52	\$ 19.95	\$ 37.66	\$ 82.40	100%	\$ 82.40	100%
2022	\$ 22.80	\$ 26.71	\$ 19.93	\$ 16.22	\$ 85.67	4%	\$ 85.67	4%
TOTAL								
2018	\$ 101.52	\$ 107.47	\$ 142.50	\$ 148.62	\$ 500.11	16%	\$ 500.11	16%
2019	\$ 98.30	\$ 123.35	\$ 142.58	\$ 157.29	\$ 521.51	4%	\$ 521.51	4%
2020	\$ 119.60	\$ 47.15	\$ 66.99	\$ 151.16	\$ 384.90	-26%	\$ 384.90	-26%
2021	\$ 95.07	\$ 136.50	\$ 193.83	\$ 335.04	\$ 760.44	98%	\$ 760.44	98%
2022	\$ 166.36	\$ 192.14	\$ 163.75	\$ 119.37	\$ 641.63	-16%	\$ 641.63	-16%

Source: Real Capital Analytics.

OUTLOOK

ENVIRONMENT

PRODUCTION

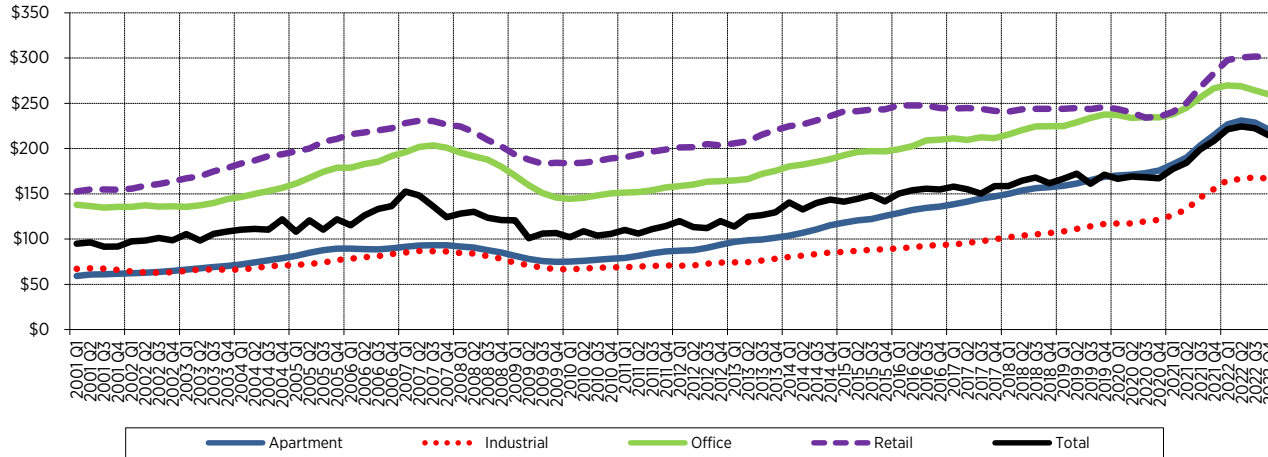
OUTSTANDING

RELEASES

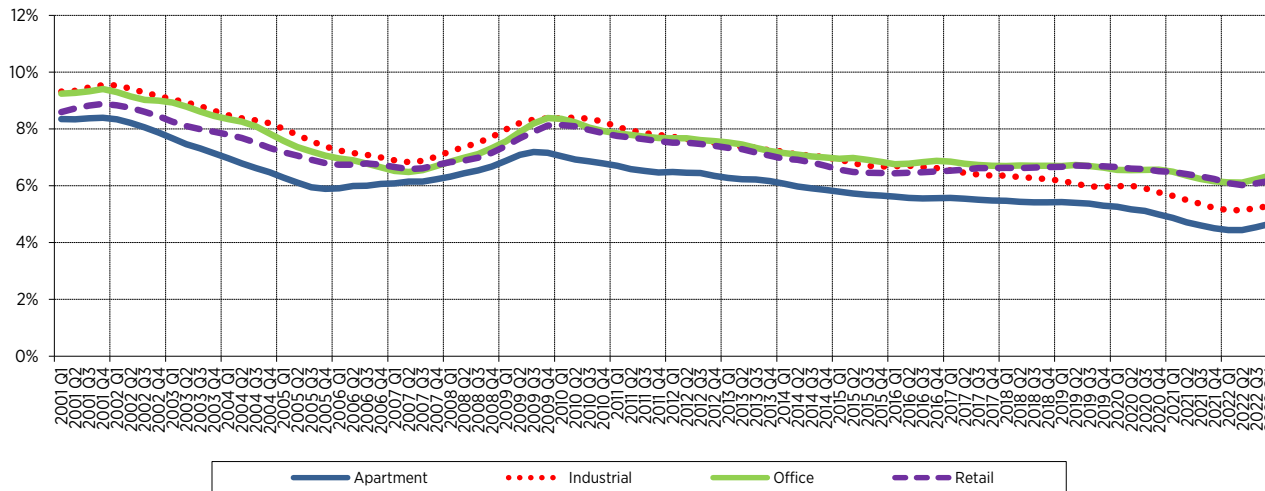
QUARTERLY SALES PRICES OF LARGER (\$2.5 MILLION+) COMMERCIAL/MULTIFAMILY PROPERTIES

Properties and portfolios \$2.5 million and greater

Sales price per unit or sq. ft. (\$/sq. ft. or \$1000/unit for apartment)



Capitalization Rate



Source: Real Capital Analytics.

OUTLOOK

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QUARTERLY SALES PRICES OF LARGER (\$2.5 MILLION+) COMMERCIAL/MULTIFAMILY PROPERTIES

Properties and portfolios \$2.5 million and greater

Year	Price per unit or sq. ft.					Q4 Year-over-year % change	Capitalization Rate				Q4 Year-over-year % change
	Q1	Q2	Q3	Q4	Q1		Q2	Q3	Q4		
APARTMENT											
	(\$1000/unit)										
2018	\$ 150	\$ 154	\$ 156	\$ 158	7%	5.5%	5.4%	5.4%	5.4%	-1%	
2019	\$ 159	\$ 161	\$ 165	\$ 169	7%	5.4%	5.4%	5.4%	5.3%	-2%	
2020	\$ 170	\$ 171	\$ 173	\$ 176	4%	5.3%	5.2%	5.1%	5.0%	-6%	
2021	\$ 183	\$ 190	\$ 203	\$ 215	22%	4.9%	4.7%	4.6%	4.5%	-10%	
2022	\$ 227	\$ 231	\$ 229	\$ 221	3%	4.4%	4.4%	4.5%	4.7%	3%	
INDUSTRIAL											
	(\$/sq. ft)										
2018	\$ 102	\$ 104	\$ 105	\$ 107	7%	6.4%	6.3%	6.3%	6.2%	-2%	
2019	\$ 108	\$ 111	\$ 114	\$ 117	10%	6.2%	6.1%	6.0%	6.0%	-4%	
2020	\$ 117	\$ 117	\$ 119	\$ 121	4%	6.0%	6.0%	5.9%	5.8%	-3%	
2021	\$ 126	\$ 133	\$ 146	\$ 155	28%	5.6%	5.5%	5.4%	5.2%	-10%	
2022	\$ 165	\$ 166	\$ 168	\$ 167	7%	5.1%	5.1%	5.2%	5.3%	1%	
OFFICE											
	(\$/sq. ft)										
2018	\$ 216	\$ 221	\$ 225	\$ 225	6%	6.7%	6.7%	6.7%	6.7%	0%	
2019	\$ 225	\$ 229	\$ 234	\$ 238	6%	6.7%	6.7%	6.7%	6.6%	-1%	
2020	\$ 237	\$ 234	\$ 235	\$ 235	-1%	6.6%	6.6%	6.6%	6.6%	-1%	
2021	\$ 238	\$ 245	\$ 256	\$ 267	14%	6.5%	6.4%	6.2%	6.2%	-6%	
2022	\$ 270	\$ 269	\$ 264	\$ 260	-2%	6.1%	6.1%	6.2%	6.4%	3%	
RETAIL											
	(\$/sq. ft)										
2018	\$ 241	\$ 243	\$ 244	\$ 244	1%	6.6%	6.6%	6.6%	6.7%	1%	
2019	\$ 244	\$ 245	\$ 244	\$ 246	1%	6.7%	6.7%	6.7%	6.7%	0%	
2020	\$ 244	\$ 240	\$ 234	\$ 235	-4%	6.7%	6.6%	6.6%	6.5%	-3%	
2021	\$ 241	\$ 250	\$ 267	\$ 283	20%	6.5%	6.4%	6.3%	6.5%	-1%	
2022	\$ 298	\$ 301	\$ 302	\$ 301	6%	6.1%	6.0%	6.1%	6.2%	-5%	
TOTAL											
	(\$1000/unit or \$/sq. ft)*										
2018	\$ 159	\$ 165	\$ 168	\$ 162	2%	6.2%	6.2%	6.2%	6.1%	0%	
2019	\$ 167	\$ 172	\$ 161	\$ 171	6%	6.1%	6.1%	6.0%	6.0%	-2%	
2020	\$ 166	\$ 169	\$ 168	\$ 167	-2%	6.0%	6.0%	5.8%	5.7%	-5%	
2021	\$ 178	\$ 184	\$ 199	\$ 208	25%	5.6%	5.4%	5.3%	5.1%	-9%	
2022	\$ 221	\$ 224	\$ 222	\$ 215	3%	5.2%	5.1%	5.2%	5.3%	3%	

Source: Real Capital Analytics.

OUTLOOK

ENVIRONMENT

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RELEASES

COMMERCIAL/MULTIFAMILY PROPERTY PRICES AS REFLECTED IN SELECTED INDICES

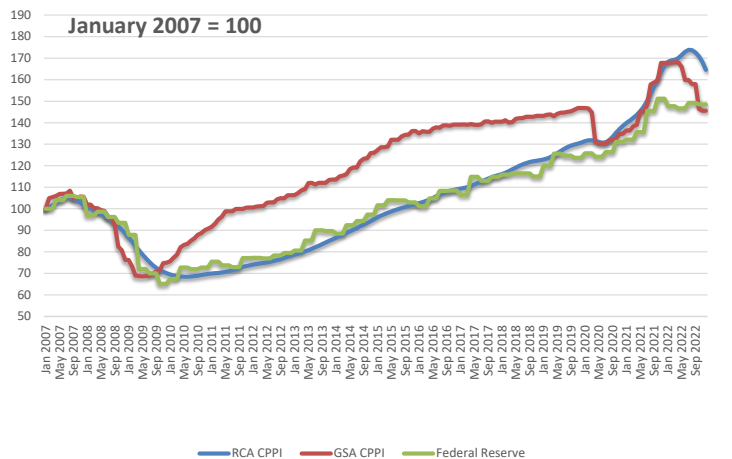
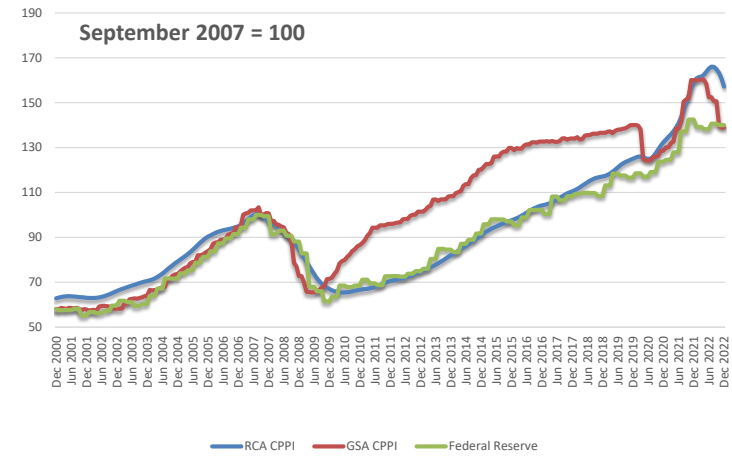
Changes in the MSCI Real Assets RCA CPPI, Green Street Advisors CPPI, Federal Reserve Board CRE Price Index

	Year-over-year Change		
	RCA CPPI	Green Street Advisors CPPI	Federal Reserve Board CRE Price Index
Year End 2013	9.7%	6.8%	12.8%
Year End 2014	10.9%	10.9%	8.5%
Year End 2015	7.4%	8.0%	5.8%
Year End 2016	6.7%	2.2%	5.4%
Year End 2017	6.0%	1.0%	5.9%
Year End 2018	6.0%	1.9%	0.1%
Year End 2019	6.7%	2.5%	7.5%
Year End 2020	5.9%	-8.1%	6.1%
Year End 2021	20.2%	24.4%	15.2%
Year End 2022	-1.2%	-13.2%	-1.8%

	Quarter-Over-Quarter		
	RCA CPPI	Green Street Advisors CPPI	Federal Reserve Board CRE Price Index
Q1 2019	1.2%	0.5%	4.4%
Q2 2019	2.3%	0.5%	4.6%
Q3 2019	2.0%	0.5%	-0.7%
Q4 2019	1.2%	1.0%	-0.8%
Q1 2020	0.8%	-1.4%	1.7%
Q2 2020	-0.9%	-10.1%	-1.3%
Q3 2020	2.1%	1.3%	1.8%
Q4 2020	3.8%	2.2%	3.8%
Q1 2021	2.7%	2.6%	0.7%
Q2 2021	3.7%	4.8%	2.7%
Q3 2021	6.4%	9.5%	7.3%
Q4 2021	6.2%	5.7%	3.9%
Q1 2022	1.6%	0.2%	-2.3%
Q2 2022	2.2%	-4.9%	-0.7%
Q3 2022	-0.2%	-1.2%	1.7%
Q4 2022	-4.7%	-7.8%	-0.5%
Current price relative to 2007 peak	156%	134%	140%

Source: Mortgage Bankers Association, Federal Reserve Board, MSCI Real Assets, and Green Street Advisors

*NCREIF TBI discontinued Q1 2020



3. Production

Quarterly Survey of Commercial/Multifamily Mortgage Bankers Originations
February 13, 2023

Commercial and multifamily mortgage loan originations were 54 percent lower in the fourth quarter of 2022 compared to a year ago, and decreased 23 percent from the third quarter of 2021, according to the Mortgage Bankers Association’s (MBA) Quarterly Survey of Commercial/Multifamily Mortgage Bankers Originations.

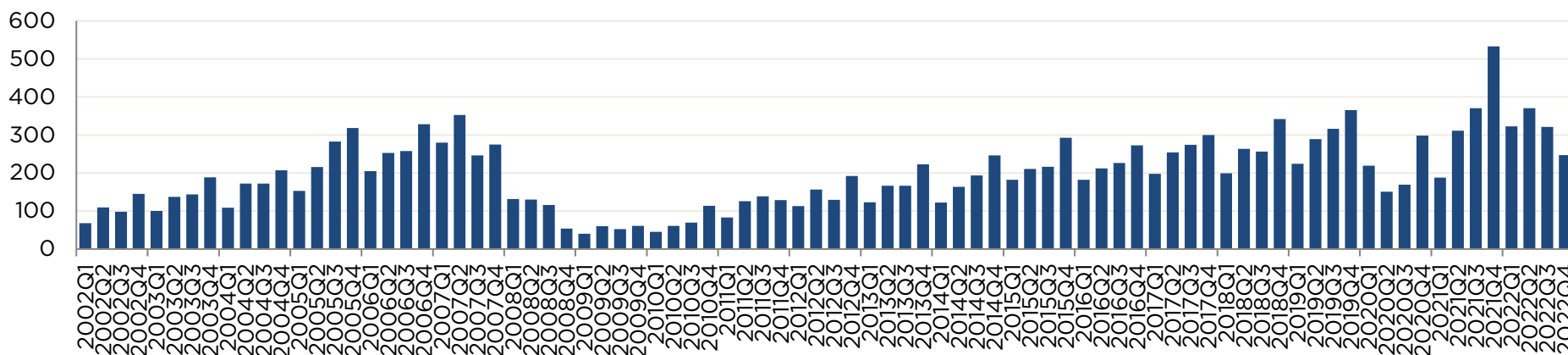
“Borrowing and lending backed by commercial and multifamily properties slipped further to close out 2022,” said Jamie Woodwell, MBA’s Head of Commercial Real Estate Research. “The last quarter of the year typically sees the highest volumes, but the chill caused by rising interest rates, questions about property valuations, and increased

economic uncertainty made the fourth quarter of 2022 the weakest of the year.”

Woodwell continued, “Depositories were the one major capital source to increase volumes from the previous year, but even its fourth quarter activity was roughly half of what it was a year earlier. The overall picture is one of slower borrowing in the face of what have been significant shifts in the market.”

ORIGINATIONS DECREASE 54 PERCENT IN THE FOURTH QUARTER OF 2022

Commercial/Multifamily Mortgage Bankers Originations Index
2001 quarterly average = 100



Decreases in originations for industrial, office, multifamily, and retail properties led the overall drop in commercial/multifamily lending volumes when compared to the fourth quarter of 2021. There was a 69 percent year-over-year decrease in the dollar volume of loans for industrial properties, a 56 percent decrease for office properties, a 52 percent decrease for multifamily properties, a 46 percent decrease for hotel properties, and a 44 percent decrease for retail properties. Health care property loan originations increased 4 percent compared to the fourth quarter of 2021.

Among investor types, the dollar volume of loans originated for commercial mortgage-backed securities (CMBS) decreased by 92 percent year-over-year. There was a 60 percent decrease for investor-driven lenders, a 53 percent decrease in life insurance company loans, a 47 percent decrease for depositories, and a 13 percent decrease in the dollar volume of government sponsored enterprises (GSEs – Fannie Mae and Freddie Mac) loans.

FOURTH QUARTER ORIGINATIONS DOWN 23 PERCENT FROM THE THIRD QUARTER OF 2022

On a quarterly basis, fourth-quarter originations for hotel properties decreased 39 percent compared to the third quarter 2022. There was a 38 percent decrease in originations for industrial properties, a 37 percent decrease for retail properties, and a 34 percent decrease for health care properties. Originations for multifamily decreased 23 percent, and originations for office properties increased 9 percent.

Among investor types, between the third and fourth quarters of 2022, the dollar volume of loans for investor-driven lenders decreased 38 percent, loans for CMBS decreased 35 percent, originations for depositories decreased 33 percent, and loans for life insurance companies decreased 5 percent. The dollar volume of loans for GSEs increased by 4 percent.

PRELIMINARY 2022 ORIGINATIONS 10 PERCENT LOWER THAN 2021

A preliminary measure of commercial and multifamily mortgage bankers' originations volumes shows activity in 2022 was 10 percent lower than in 2021. By property type, mortgage bankers originations for office properties decreased 30 percent from 2021, industrial properties decreased 12 percent, and multifamily properties decreased 11 percent. Retail properties increased 16 percent, hotel properties increased 16 percent, and health care property originations increased 23 percent.

Among investor types from 2022 compared to 2021, mortgage bankers originations for CMBS decreased 63 percent, originations for life insurance companies decreased 19 percent, loans for investor-driven lenders decreased 9 percent, and loans for GSEs decreased 4 percent. Depository loans increased 22 percent.

In late March, MBA will release its Annual Origination Summation report for 2022 with final origination figures for the year.

To view the report, please visit the following Web link: <https://www.mba.org/news-and-research/research-and-economics/commercial-multifamily-research/quarterly-commercial-multifamily-mortgage-bankers-originations-index>

Detailed statistics on the size and scope of the commercial/multifamily origination market are available from these MBA commercial/multifamily research reports.

- Commercial Real Estate/Multifamily Finance: Annual Origination Volume Summation, 2021
- Commercial Real Estate/Multifamily Finance Firms: Annual Origination Volumes, 2021
- Annual Report on Multifamily Lending, 2021
- Commercial/Multifamily Database Subscription

Commercial/Multifamily Mortgage Bankers Originations Index

	Origination Volume Index				Percent Change,				Origination Volume Index				Percent Change,		
	(2001 Avg Qtr = 100)				Year-over-year	Q3-to-Q4	YTD-YTD		(2001 Avg Qtr = 100)				Year-over-year	Q3-to-Q4	YTD-YTD
	Q1	Q2	Q3	Q4					Q1	Q2	Q3	Q4			
TOTAL								Multifamily							
2019	224	289	316	365	7%	15%	13%	2019	389	513	585	625	-4%	7%	8%
2020	219	151	169	298	-18%	76%	-30%	2020	446	388	403	712	14%	77%	-8%
2021	188	311	370	533	79%	44%	67%	2021	423	632	829	1,122	57%	35%	54%
2022	323	370	321	247	-54%	-23%	-10%	2022	665	786	696	536	-52%	-23%	-11%
CMBS/Conduits								Office							
2019	76	120	113	176	81%	56%	24%	2019	116	193	176	215	29%	22%	23%
2020	86	6	48	64	-64%	35%	-58%	2020	126	55	74	94	-56%	26%	-50%
2021	64	113	107	260	305%	144%	167%	2021	83	137	150	209	122%	39%	66%
2022	100	49	31	21	-92%	-35%	-63%	2022	108	123	85	92	-56%	9%	-30%
Depositories								Retail							
2019	344	466	514	589	13%	14%	20%	2019	111	128	144	185	13%	29%	-6%
2020	341	210	165	351	-40%	113%	-44%	2020	70	33	24	51	-72%	111%	-69%
2021	175	362	547	869	147%	59%	83%	2021	38	62	101	106	109%	6%	73%
2022	515	733	684	457	-47%	-33%	22%	2022	72	129	94	60	-44%	-37%	16%
Life Insurance Companies								Industrial							
2019	360	392	407	543	9%	33%	5%	2019	733	537	659	1,043	67%	58%	50%
2020	296	200	182	363	-33%	100%	-39%	2020	445	303	507	1,196	15%	136%	-18%
2021	252	487	501	593	63%	18%	76%	2021	736	1,296	1,300	2,545	113%	96%	140%
2022	456	465	292	278	-53%	-5%	-19%	2022	1,801	1,330	1,254	778	-69%	-38%	-12%
Fannie Mae/Freddie Mac								Hotel							
2019	497	692	739	615	-30%	-17%	-1%	2019	349	412	321	469	-25%	46%	-19%
2020	527	658	680	1,132	84%	67%	18%	2020	203	36	20	100	-79%	411%	-77%
2021	479	439	784	797	-30%	2%	-17%	2021	36	119	190	268	167%	42%	71%
2022	483	568	664	693	-13%	4%	-4%	2022	166	162	236	145	-46%	-39%	16%
Investor-Driven Lenders								Health Care							
2019	297	330	452	540	2%	20%	11%	2019	46	75	120	120	33%	0%	92%
2020	275	86	158	302	-44%	91%	-49%	2020	54	45	59	105	-12%	77%	-27%
2021	369	704	662	940	211%	42%	225%	2021	57	181	86	88	-17%	2%	56%
2022	654	788	611	380	-60%	-38%	-9%	2022	103	175	139	92	4%	-34%	23%

OUTLOOK

ENVIRONMENT

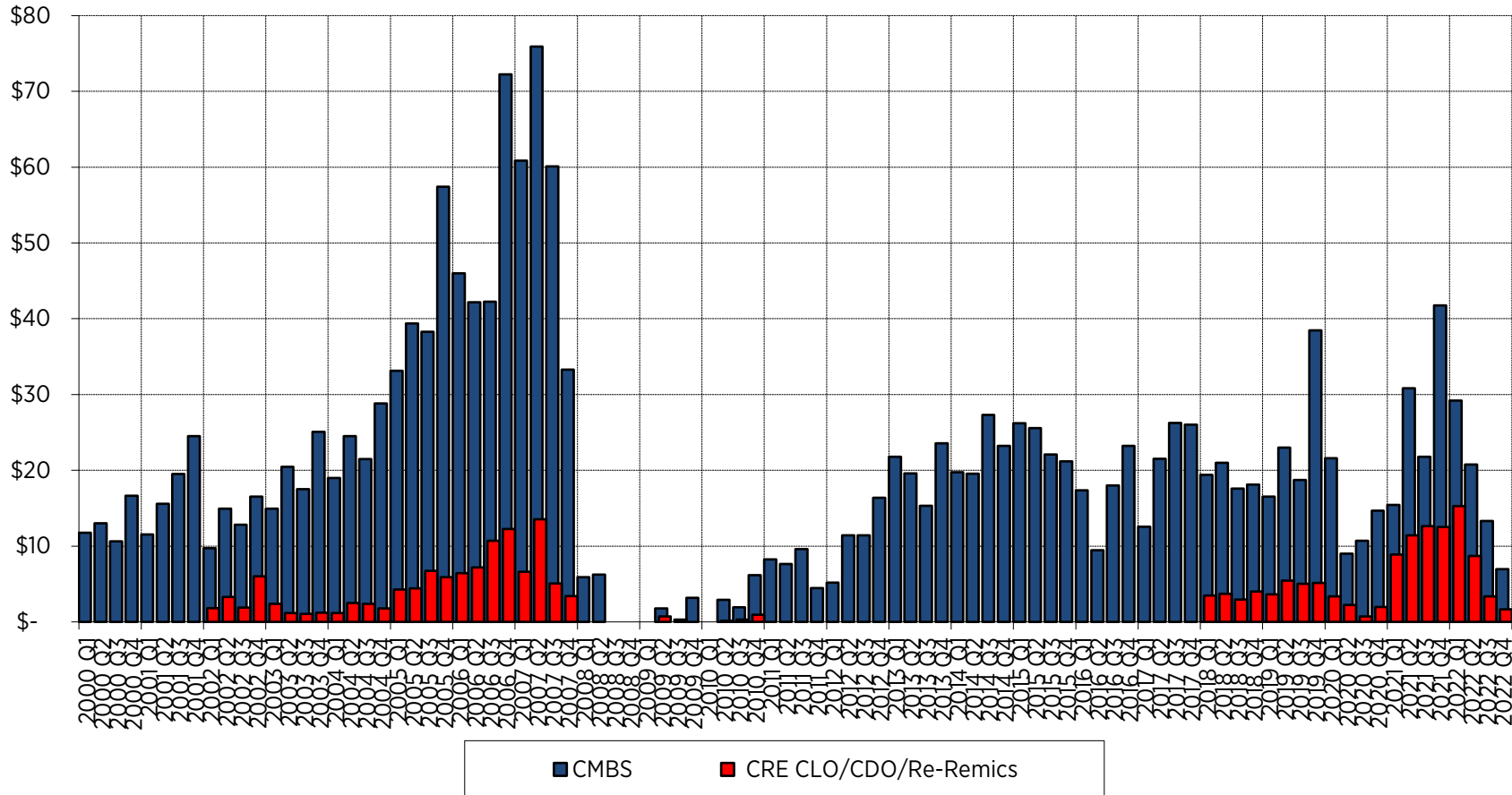
PRODUCTION

OUTSTANDING

RELEASES

**QUARTERLY ISSUANCE OF COMMERCIAL MORTGAGE BACKED SECURITIES (CMBS) and
COMMERCIAL REAL ESTATE COLLATERALIZED LOAN OBLIGATIONS (CLOs)**

Billions of Dollars



Source: Commercial Real Estate Direct

**QUARTERLY ISSUANCE OF COMMERCIAL MORTGAGE BACKED SECURITIES (CMBS) and
COMMERCIAL REAL ESTATE COLLATERALIZED DEBT OBLIGATIONS (CRE CDOs)/RE-REMICS**

Billions of Dollars

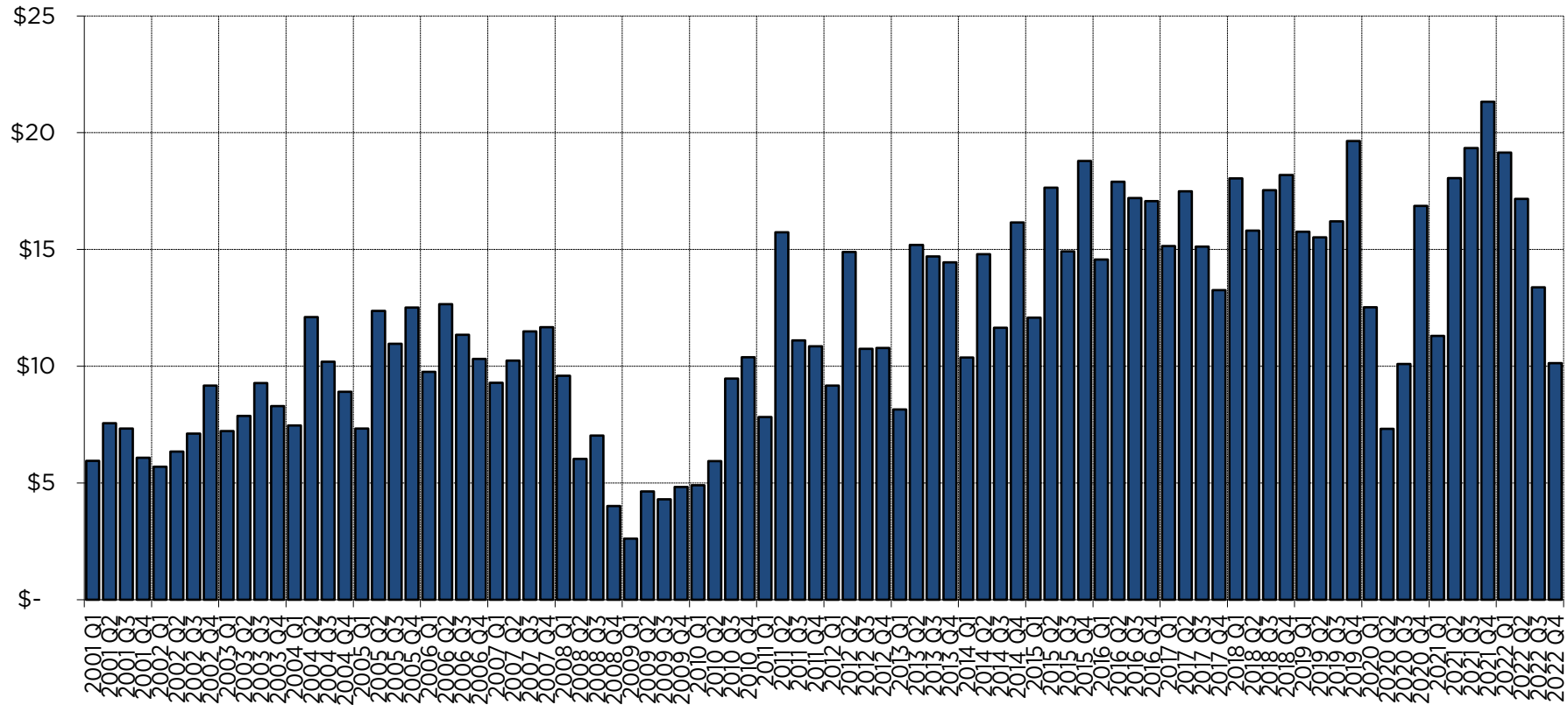
Year	Q1	Q2	Q3	Q4	Annual		YTD Q4		
					Total	Percent change	Total	Percent change	
<i>U.S. CMBS ISSUANCE</i>									
2015	\$ 26.23	\$ 25.57	\$ 22.08	\$ 21.18	\$ 95.07	6%	\$ 95.07	6%	
2016	\$ 17.38	\$ 9.46	\$ 17.99	\$ 23.23	\$ 68.06	-28%	\$ 68.06	-28%	
2017	\$ 12.55	\$ 21.54	\$ 26.26	\$ 26.04	\$ 86.39	27%	\$ 86.39	27%	
2018	\$ 19.40	\$ 20.99	\$ 17.60	\$ 18.11	\$ 76.10	-12%	\$ 76.10	-12%	
2019	\$ 16.54	\$ 23.00	\$ 18.72	\$ 38.48	\$ 96.74	27%	\$ 96.74	27%	
2020	\$ 21.60	\$ 9.01	\$ 10.72	\$ 14.68	\$ 56.01	-42%	\$ 56.01	-42%	
2021	\$ 15.43	\$ 30.84	\$ 21.79	\$ 41.74	\$ 109.80	96%	\$ 109.80	96%	
2022	\$ 29.19	\$ 20.78	\$ 13.30	\$ 6.95	\$ 70.23	-36%	\$ 70.23	-36%	
<i>* CRE CLO/CDO/RE-REMICS ISSUANCE</i>									
2015	\$ -	\$ -	\$ -	\$ -	\$ -	N/A	\$ -	N/A	
2016	\$ -	\$ -	\$ -	\$ -	\$ -	N/A	\$ -	N/A	
2017	\$ -	\$ -	\$ -	\$ -	\$ -	N/A	\$ -	N/A	
2018	\$ 3.48	\$ 3.70	\$ 2.96	\$ 4.01	\$ 14.15	N/A	\$ 14.15	N/A	
2019	\$ 3.62	\$ 5.46	\$ 5.03	\$ 5.13	\$ 19.24	36%	\$ 19.24	36%	
2020	\$ 3.37	\$ 2.25	\$ 0.74	\$ 1.95	\$ 8.31	-57%	\$ 8.31	-57%	
2021	\$ 8.90	\$ 11.41	\$ 12.62	\$ 12.51	\$ 45.44	447%	\$ 45.44	447%	
2022	\$ 15.27	\$ 8.70	\$ 3.39	\$ 1.68	\$ 29.03	-36%	\$ 29.03	-36%	

Source: Commercial Real Estate Direct

* In January 2018, the CRE CLO/CDO/Re-Remics data collection began.

QUARTERLY COMMERCIAL MORTGAGE COMMITMENTS BY LIFE INSURANCE COMPANIES

Billions of Dollars



Source: American Council of Life Insurance Companies (ACLI)
 a. Annual figures may not equal the sum of quarterly figures due to change in reporting.

QUARTERLY COMMERCIAL MORTGAGE COMMITMENTS BY LIFE INSURANCE COMPANIES

Billions of Dollars

Year	Q1	Q2	Q3	Q4	Annual (a)		YTD Q4	
					Total	Percent change	Total	Percent change
2001	\$ 5.95	\$ 7.56	\$ 7.33	\$ 6.08	\$ 26.92		\$ 26.92	
2002	\$ 5.69	\$ 6.34	\$ 7.12	\$ 9.17	\$ 28.32	5%	\$ 28.32	5%
2003	\$ 7.22	\$ 7.88	\$ 9.28	\$ 8.30	\$ 32.68	15%	\$ 32.68	15%
2004	\$ 7.46	\$ 12.11	\$ 10.20	\$ 8.91	\$ 38.67	18%	\$ 38.67	18%
2005	\$ 7.33	\$ 12.37	\$ 10.96	\$ 12.51	\$ 43.17	12%	\$ 43.17	12%
2006	\$ 9.76	\$ 12.66	\$ 11.35	\$ 10.31	\$ 44.08	2%	\$ 44.08	2%
2007	\$ 9.29	\$ 10.25	\$ 11.49	\$ 11.67	\$ 42.69	-3%	\$ 42.69	-3%
2008	\$ 9.59	\$ 6.03	\$ 7.03	\$ 4.02	\$ 26.67	-38%	\$ 26.67	-38%
2009	\$ 2.62	\$ 4.63	\$ 4.30	\$ 4.83	\$ 16.39	-39%	\$ 16.39	-39%
2010	\$ 4.90	\$ 5.94	\$ 9.47	\$ 10.39	\$ 30.71	87%	\$ 30.71	87%
2011	\$ 7.83	\$ 15.73	\$ 11.10	\$ 10.85	\$ 45.52	48%	\$ 45.52	48%
2012	\$ 9.18	\$ 14.90	\$ 10.75	\$ 10.78	\$ 45.60	0%	\$ 45.60	0%
2013	\$ 8.15	\$ 15.19	\$ 14.70	\$ 14.45	\$ 52.50	15%	\$ 52.50	15%
2014	\$ 10.38	\$ 14.80	\$ 11.64	\$ 16.16	\$ 52.98	1%	\$ 52.98	1%
2015	\$ 12.08	\$ 17.65	\$ 14.93	\$ 18.79	\$ 63.45	20%	\$ 63.45	20%
2016	\$ 14.57	\$ 17.90	\$ 17.20	\$ 17.07	\$ 66.73	5%	\$ 66.73	5%
2017	\$ 15.15	\$ 17.49	\$ 15.12	\$ 13.26	\$ 61.03	-9%	\$ 61.03	-9%
2018	\$ 18.05	\$ 15.81	\$ 17.54	\$ 18.19	\$ 69.58	14%	\$ 69.58	14%
2019	\$ 15.76	\$ 15.52	\$ 16.21	\$ 19.64	\$ 67.13	-4%	\$ 67.13	-4%
2020	\$ 12.52	\$ 7.32	\$ 10.10	\$ 16.86	\$ 46.80	-30%	\$ 46.80	-30%
2021	\$ 11.30	\$ 18.06	\$ 19.34	\$ 21.33	\$ 70.03	50%	\$ 70.03	50%
2022	\$ 19.16	\$ 17.17	\$ 13.37	\$ 10.13	\$ 59.83	-15%	\$ 59.83	-15%

Source: American Council of Life Insurance Companies (ACLI)

a. Annual figures may not equal the sum of quarterly figures due to changes in reporting.

4. Commercial/Multifamily Mortgage Debt Outstanding

March 21, 2023

The level of commercial/multifamily mortgage debt outstanding at the end of 2022 was \$324 billion (7.7 percent) higher than at the end of 2021, according to the Mortgage Bankers Association’s (MBA) latest Commercial/Multifamily Mortgage Debt Outstanding quarterly report.

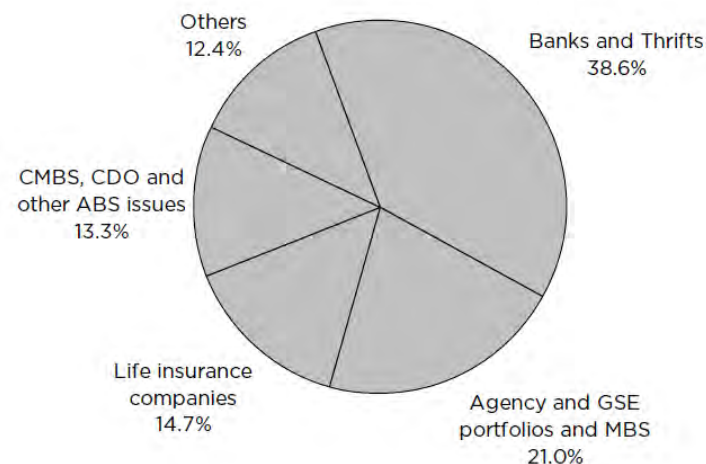
MBA’s report found that total mortgage debt outstanding rose by 1.7 percent (\$77.9 billion) in fourth-quarter 2022. Multifamily mortgage debt grew by \$35.6 billion (1.8 percent) to \$1.96 trillion during the fourth quarter, and by \$148.2 billion (8.2 percent) for the entire year.

“Commercial and multifamily mortgage debt outstanding grew at another strong clip in 2022,” said Jamie Woodwell, MBA’s Head of Commercial Real Estate Research. “The rate of growth was the second-largest since 2007 – just below 2021’s pace. Among capital sources, depositories led the growth, increasing their holdings of commercial and multifamily mortgages by 12 percent. Additionally, growth in multifamily mortgage balances accounted for almost half of the annual increase.”

The four major investor groups are: bank and thrift; commercial mortgage-backed securities (CMBS), collateralized debt obligation (CDO) and other asset backed securities (ABS) issues; federal agency and government sponsored enterprise (GSE) portfolios and mortgage-backed securities (MBS); and life insurance companies.

MBA’s analysis summarizes the holdings of loans or, if the loans are securitized, the form of the security. For example, many life insurance companies invest both in whole loans for which they hold the mortgage note (and which appear in this data under “Life Insurance Companies”), and in CMBS, CDOs and other ABS for which the security issuers and trustees hold the note (and which appear here under CMBS, CDO and other ABS issues).

Commercial Multifamily Mortgage Debt Outstanding
By Investor Group, Fourth Quarter 2022



Commercial banks continue to hold the largest share (39 percent) of commercial/multifamily mortgages at \$1.7 trillion. Agency and GSE portfolios and MBS are the second largest holders of commercial/multifamily mortgages, at \$953 billion (21 percent of the total). Life insurance companies hold \$666 billion (15 percent), and CMBS, CDO and other ABS issues hold \$603 billion (13 percent).

MULTIFAMILY MORTGAGE DEBT OUTSTANDING

Looking solely at multifamily mortgages, agency and GSE portfolios and MBS hold the largest share of total debt outstanding at \$953 billion (49 percent of the total), followed by commercial banks with \$598 billion (31 percent), life insurance companies with \$191 billion (10 percent), state and

local governments with \$112 billion (6 percent), and CMBS, CDO and other ABS issues with \$60 billion (3 percent).

CHANGES IN COMMERCIAL/MULTIFAMILY MORTGAGE DEBT OUTSTANDING

In the fourth quarter of 2022, commercial banks saw the largest rise in dollar terms in their holdings of commercial/multifamily mortgage debt, with an increase of \$38.5 billion (2.2 percent). Agency and GSE portfolios and MBS increased their holdings by \$27.3 billion (2.9 percent), Life insurance companies increased their holdings by \$10.8 billion (1.6 percent), and REITs increased their holdings by \$5.6 billion (3.2 percent). CMBS, CDO and other ABS issues saw the largest decline (1.2 percent) in their holdings, by \$7.4 billion.

In percentage terms, nonfinancial corporate business saw the largest increase - 3.5 percent - in their holdings of commercial/multifamily mortgages.

CHANGES IN MULTIFAMILY MORTGAGE DEBT OUTSTANDING

The \$35.6 billion rise in multifamily mortgage debt outstanding between the third and fourth quarters of 2022 represented a 1.8 percent increase. In dollar terms, agency and GSE portfolios and MBS saw the largest increase, at \$27.3 billion (2.9 percent), in their holdings of multifamily mortgage debt. Commercial banks increased their holdings of multifamily mortgage debt by \$14.3 billion (2.4 percent), and life insurance companies increased holdings by \$2.1 billion (1.1 percent). CMBS, CDO and other ABS issues saw the largest decline (11.9 percent) in their holdings, by \$8.1 billion.

In percentage terms, nonfinancial corporate business recorded the largest increase in holdings of multifamily mortgages (3.5 percent), and private pension funds saw the biggest decrease (50.8 percent).

CHANGES IN COMMERCIAL/MULTIFAMILY MORTGAGE DEBT OUTSTANDING DURING 2022

Between December 2021 and December 2022, commercial banks saw the largest gain in dollar terms in their holdings of commercial/multifamily mortgage debt - an increase of \$183 billion (11.7

percent). Agency and GSE portfolios and MBS increased their holdings of commercial/multifamily mortgages by \$52.3 billion (5.8 percent).

In percentage terms, REITs saw the largest increase (25.8 percent) in their holdings of commercial/multifamily mortgages.

CHANGES IN MULTIFAMILY MORTGAGE DEBT OUTSTANDING DURING 2022

The \$148.2 billion rise in multifamily mortgage debt outstanding during 2022 represents an 8.2 percent increase. In dollar terms, commercial banks saw the largest increase in their holdings of multifamily mortgage debt at 16.7 percent (\$85.8 billion). CMBS, CDO and other ABS issues saw the largest decrease in their holdings, down \$4.3 billion (6.7 percent).

The report's analysis is based on data from the Federal Reserve Board's Financial Accounts of the United States, the Federal Deposit Insurance Corporation's Quarterly Banking Profile, Trepp LLC, and data from Wells Fargo Securities. More information on this data series is contained in Appendix A.

YEAR END COMMERCIAL AND MULTIFAMILY MORTGAGE DEBT OUTSTANDING

Commercial and Multifamily Mortgage Debt Outstanding, by Sector

	Mortgage Debt Outstanding				Change		Sector Share of \$
	2022 Q4		2021 Q4		(\$millions)	Percent	
	(\$millions)	% of total	(\$millions)	% of total			
Bank and Thrift	1,749,284	38.6%	1,566,293	37.2%	182,991	11.7%	56.4%
Agency and GSE portfolios and MBS	953,465	21.0%	901,157	21.4%	52,308	5.8%	16.1%
Life insurance companies	665,974	14.7%	620,345	14.7%	45,629	7.4%	14.1%
CMBS, CDO and other ABS issues	602,659	13.3%	611,316	14.5%	-8,657	-1.4%	-2.7%
REITs	181,989	4.0%	144,722	3.4%	37,267	25.8%	11.5%
State and local government	134,162	3.0%	130,160	3.1%	4,002	3.1%	1.2%
Federal government	92,374	2.0%	89,021	2.1%	3,353	3.8%	1.0%
Nonfarm noncorporate business	38,504	0.8%	36,155	0.9%	2,349	6.5%	0.7%
Other insurance companies	30,350	0.7%	27,674	0.7%	2,676	9.7%	0.8%
Finance companies	29,005	0.6%	30,703	0.7%	-1,698	-5.5%	-0.5%
Private pension funds	24,805	0.5%	24,366	0.6%	439	1.8%	0.1%
Nonfinancial corporate business	23,511	0.5%	20,445	0.5%	3,066	15.0%	0.9%
State and local government retirement	4,775	0.1%	4,425	0.1%	350	7.9%	0.1%
Household sector	1,428	0.0%	1,324	0.0%	104	7.9%	0.0%
TOTAL	4,532,285		4,208,106		324,179	7.7%	

Source: MBA, Federal Reserve Board of Governors, Trepp LLC, and FDIC

Note: Beginning with the Q2 2014 release, MBA's analysis of mortgage debt outstanding modifies the data from the Federal Reserve's Financial Accounts of the United States with respect to loans held in commercial mortgage-backed securities (CMBS) and by real estate investment trusts (REITs). The corrections create differences with previous releases and with the Federal Reserve data. For more information, please see the Appendix to this report.

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YEAR END MULTIFAMILY MORTGAGE DEBT OUTSTANDING

Multifamily Mortgage Debt Outstanding, by Sector

	<u>Mortgage Debt Outstanding</u>				<u>Change</u>		<u>Sector Share of \$</u>
	<u>2022 Q4</u>		<u>2021 Q4</u>		<u>(\$millions)</u>	<u>Percent</u>	
	<u>(\$millions)</u>	<u>% of total</u>	<u>(\$millions)</u>	<u>% of total</u>			
Agency and GSE portfolios and MBS	953,465	48.6%	901,157	49.7%	52,308	5.8%	35.3%
Bank and Thrift	598,431	30.5%	512,648	28.3%	85,783	16.7%	57.9%
Life insurance companies	191,338	9.8%	179,077	9.9%	12,261	6.8%	8.3%
State and local government	112,318	5.7%	108,717	6.0%	3,601	3.3%	2.4%
CMBS, CDO and other ABS issues	59,696	3.0%	64,014	3.5%	-4,318	-6.7%	-2.9%
Nonfarm noncorporate business	21,406	1.1%	20,101	1.1%	1,305	6.5%	0.9%
Federal government	10,533	0.5%	10,854	0.6%	-321	-3.0%	-0.2%
REITs	5,986	0.3%	8,137	0.4%	-2,151	-26.4%	-1.5%
Finance companies	4,981	0.3%	5,251	0.3%	-270	-5.1%	-0.2%
State and local government retirement	2,238	0.1%	2,074	0.1%	164	7.9%	0.1%
Nonfinancial corporate business	881	0.0%	767	0.0%	114	14.9%	0.1%
Private pension funds	63	0.0%	323	0.0%	-260	-80.5%	-0.2%
TOTAL	1,961,336		1,813,120		148,216	8.2%	

Source: MBA, Federal Reserve Board of Governors, Trepp LLC, and FDIC

Note: Beginning with the Q2 2014 release, MBA's analysis of mortgage debt outstanding modifies the data from the Federal Reserve's Financial Accounts of the United States with respect to loans held in commercial mortgage-backed securities (CMBS) and by real estate investment trusts (REITs). The corrections create differences with previous releases and with the Federal Reserve data. For more information, please see the Appendix to this report.

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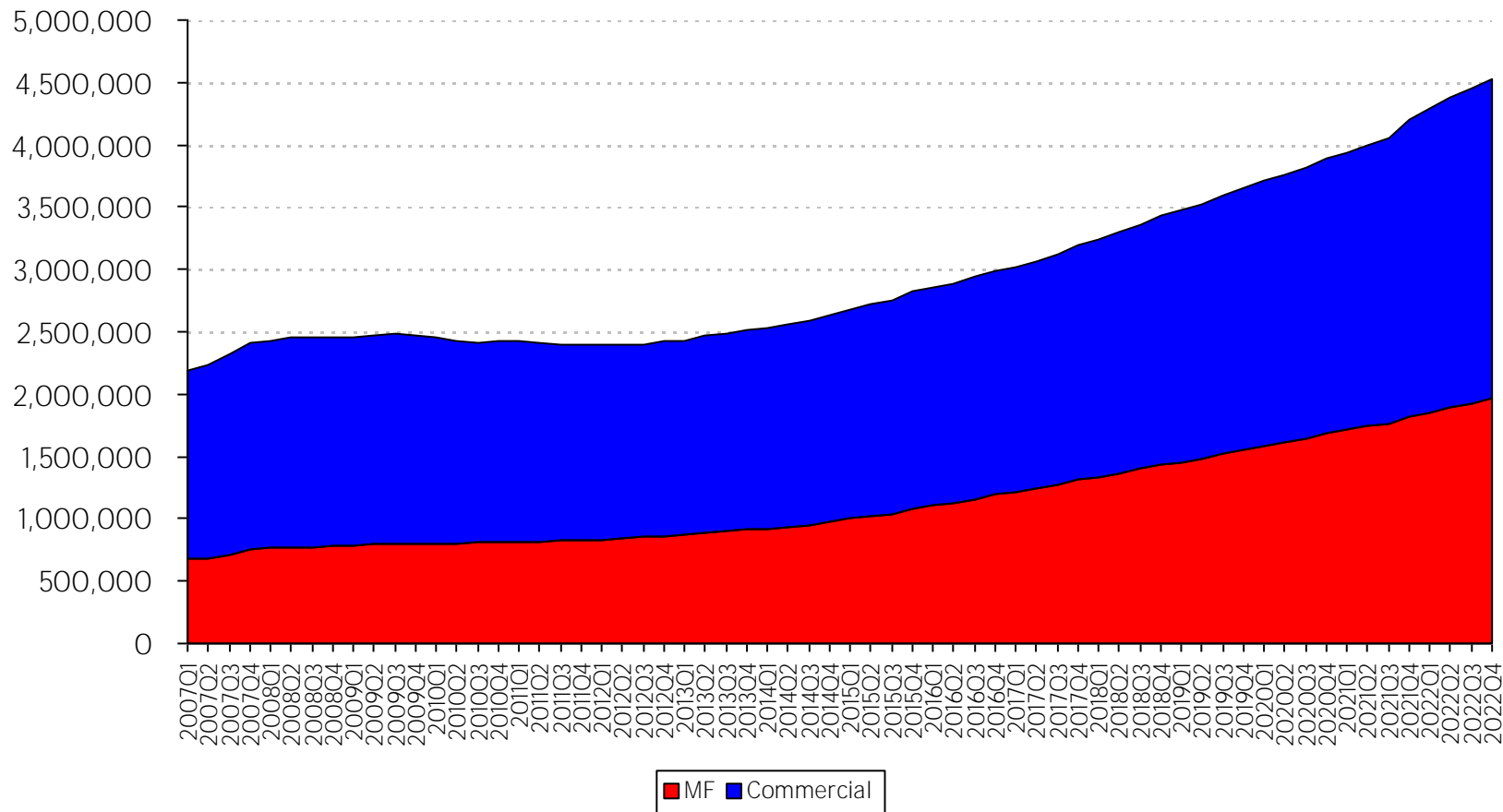
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COMMERCIAL AND MULTIFAMILY MORTGAGE DEBT OUTSTANDING

Total Commercial and Multifamily Mortgage Debt Outstanding, by Quarter

(\$millions)



Source: MBA, Federal Reserve Board of Governors, Trepp LLC, and FDIC

QUARTERLY COMMERCIAL AND MULTIFAMILY MORTGAGE DEBT OUTSTANDING

Commercial and Multifamily Mortgage Debt Outstanding, by Sector

	Mortgage Debt Outstanding				Change		Sector Share of \$ Change
	2022 Q4		2022 Q3		(\$millions)	Percent	
	(\$millions)	% of total	(\$millions)	% of total			
Bank and Thrift	1,749,284	38.6%	1,710,807	38.4%	38,477	2.2%	49.4%
Agency and GSE portfolios and MBS	953,465	21.0%	926,144	20.8%	27,321	2.9%	35.1%
Life insurance companies	665,974	14.7%	655,202	14.7%	10,772	1.6%	13.8%
CMBS, CDO and other ABS issues	602,659	13.3%	610,051	13.7%	-7,392	-1.2%	-9.5%
REITs	181,989	4.0%	176,417	4.0%	5,572	3.2%	7.2%
State and local government	134,162	3.0%	133,160	3.0%	1,002	0.8%	1.3%
Federal government	92,374	2.0%	90,791	2.0%	1,583	1.7%	2.0%
Nonfarm noncorporate business	38,504	0.8%	38,030	0.9%	474	1.2%	0.6%
Other insurance companies	30,350	0.7%	30,640	0.7%	-290	-0.9%	-0.4%
Finance companies	29,005	0.6%	29,670	0.7%	-665	-2.2%	-0.9%
Private pension funds	24,805	0.5%	24,686	0.6%	119	0.5%	0.2%
Nonfinancial corporate business	23,511	0.5%	22,705	0.5%	806	3.5%	1.0%
State and local government retirement funds	4,775	0.1%	4,709	0.1%	66	1.4%	0.1%
Household sector	1,428	0.0%	1,406	0.0%	22	1.6%	0.0%
TOTAL	4,532,285		4,454,418		77,867	1.7%	

Source: MBA, Federal Reserve Board of Governors, Trepp LLC, and FDIC

Note: Beginning with the Q2 2014 release, MBA's analysis of mortgage debt outstanding modifies the data from the Federal Reserve's Financial Accounts of the United States with respect to loans held in commercial mortgage-backed securities (CMBS) and by real estate investment trusts (REITs). The corrections create differences with previous releases and with the Federal Reserve data. For more information, please see the Appendix to this report.

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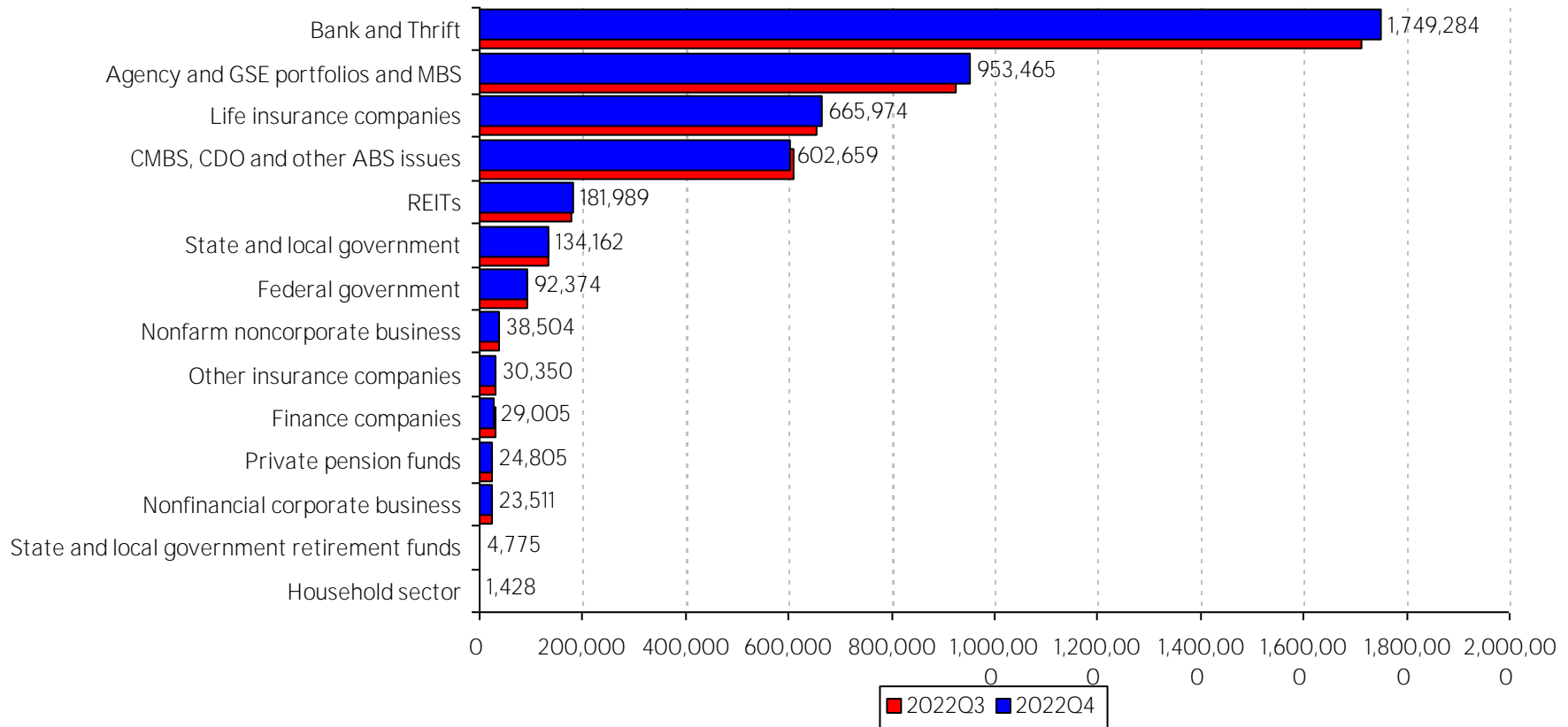
OUTSTANDING

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COMMERCIAL AND MULTIFAMILY MORTGAGE DEBT OUTSTANDING

Total Commercial and Multifamily Mortgage Debt Outstanding, by Sector

(\$millions)

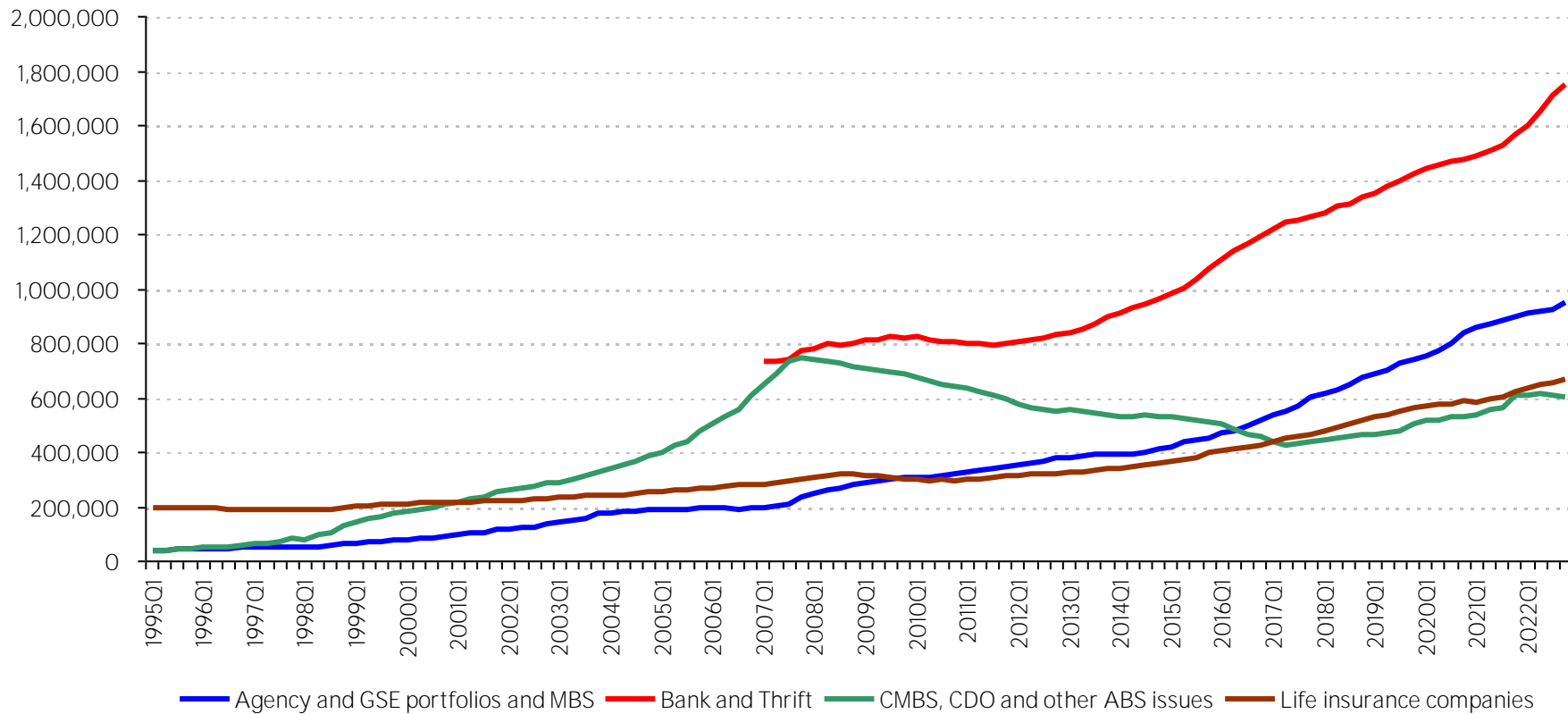


Source: MBA, Federal Reserve Board of Governors, Trepp LLC, and FDIC

COMMERCIAL AND MULTIFAMILY MORTGAGE DEBT OUTSTANDING

Total Commercial and Multifamily Mortgage Debt Outstanding, by Selected Sector by Quarter

(\$millions)

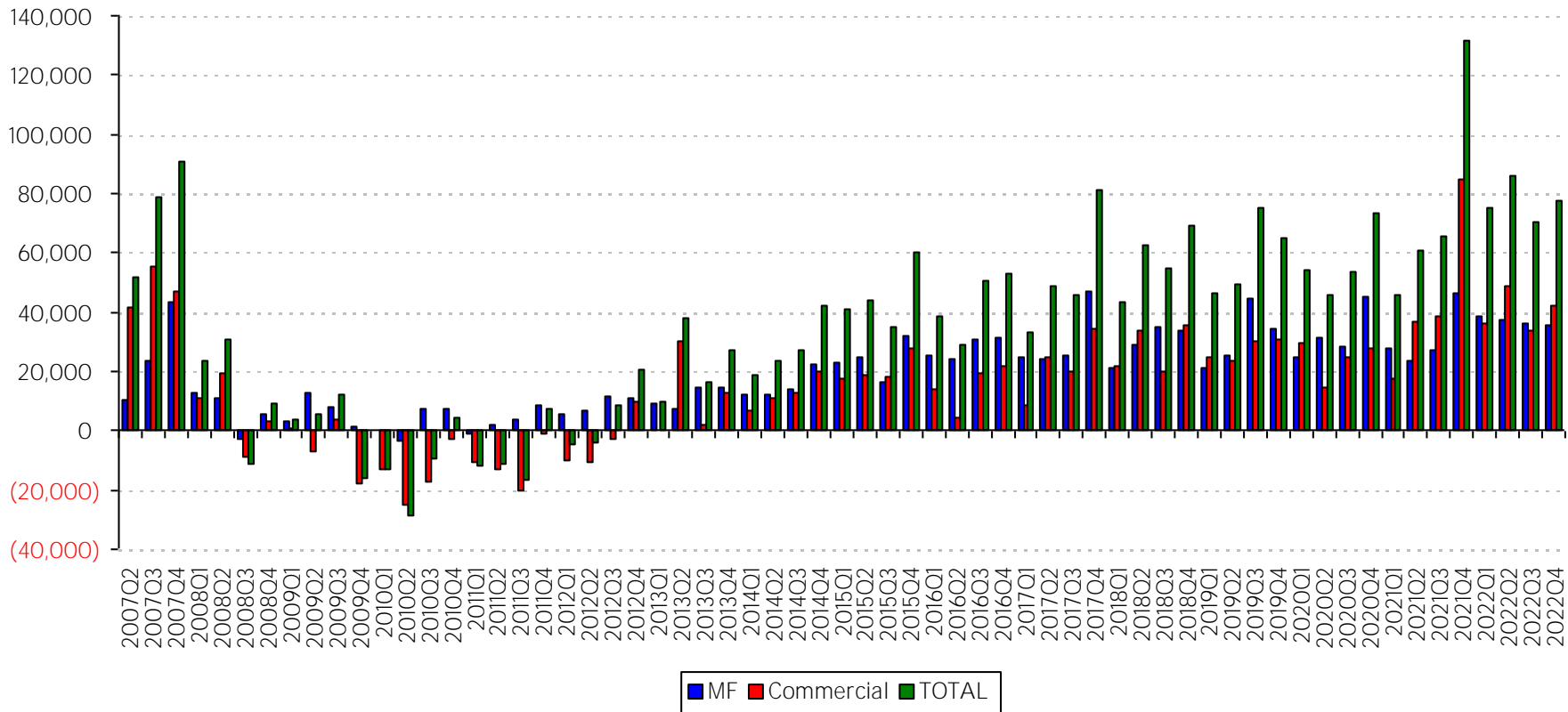


Source: MBA, Federal Reserve Board of Governors, Trepp LLC, and FDIC

COMMERCIAL AND MULTIFAMILY MORTGAGE FLOWS

Net Change in Commercial and Multifamily Mortgage Debt Outstanding, by Quarter

(\$millions)

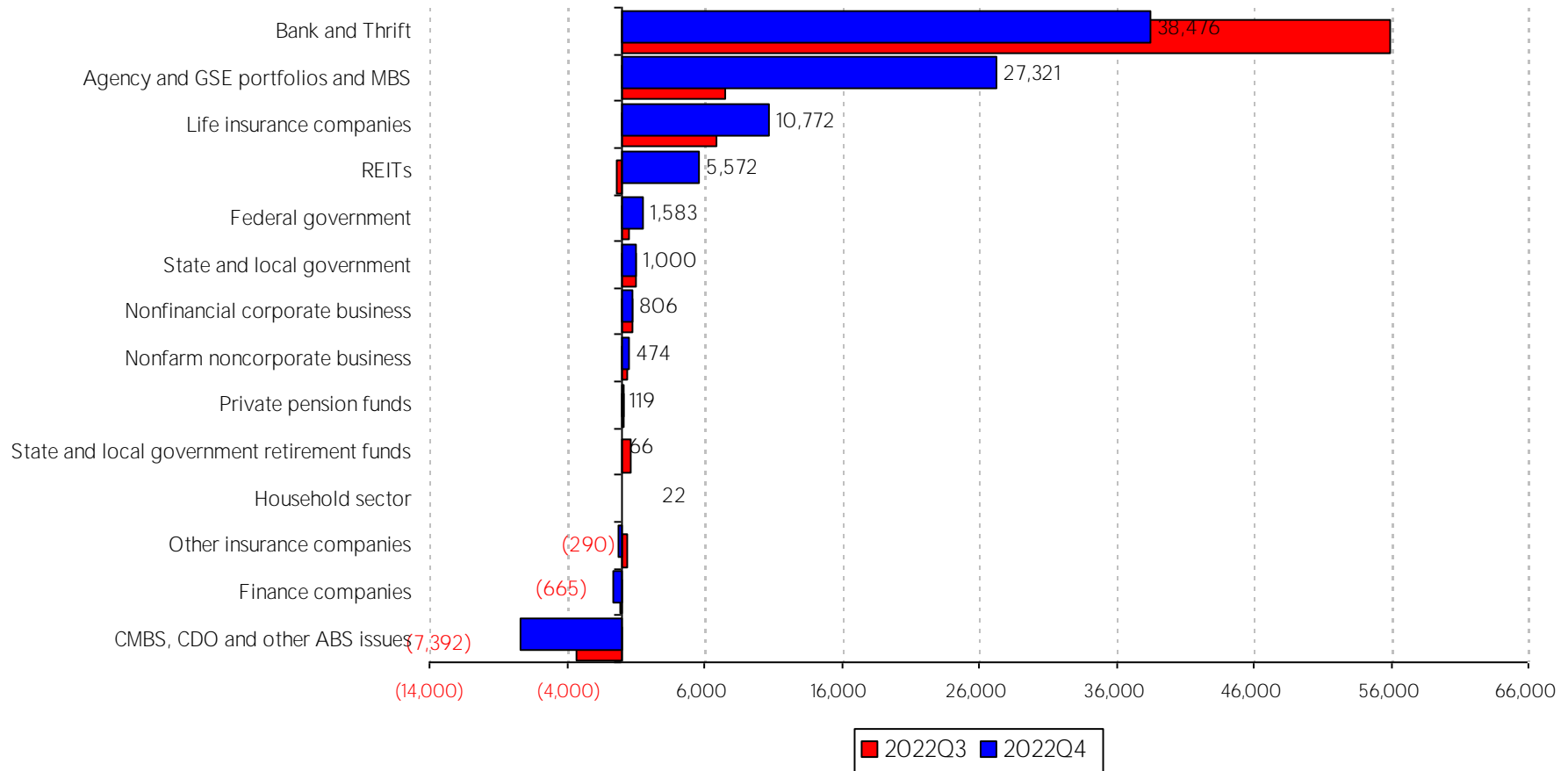


Source: MBA, Federal Reserve Board of Governors, Trepp LLC, and FDIC

COMMERCIAL AND MULTIFAMILY MORTGAGE FLOWS

Net Change in Commercial and Multifamily Mortgage Debt Outstanding, by Sector

(\$millions)

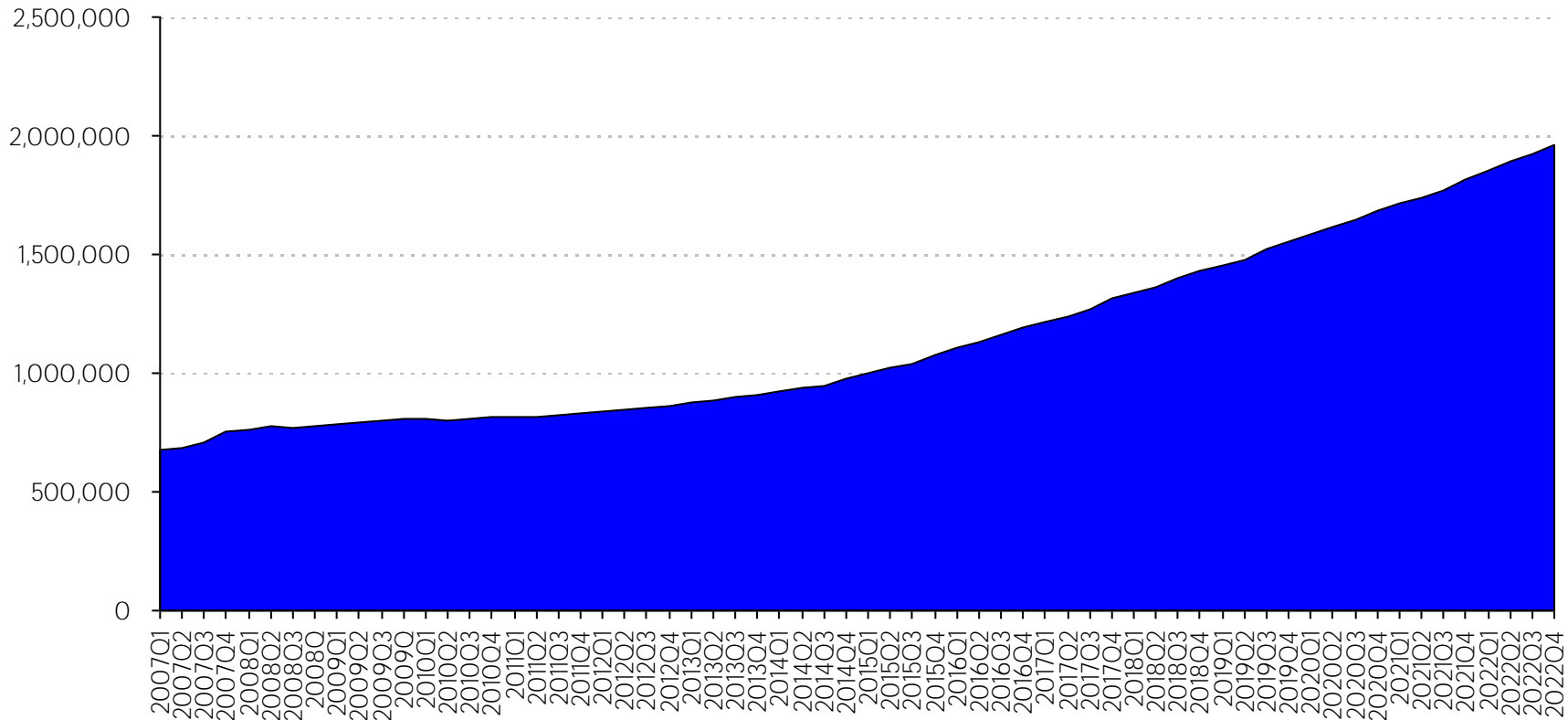


Source: MBA, Federal Reserve Board of Governors, Trepp LLC, and FDIC

MULTIFAMILY MORTGAGE DEBT OUTSTANDING

MULTIFAMILY MORTGAGE DEBT OUTSTANDING

Total Multifamily Mortgage Debt Outstanding, by Quarter
(\$millions)



Source: MBA, Federal Reserve Board of Governors, Trepp LLC, and FDIC

QUARTERLY MULTIFAMILY MORTGAGE DEBT OUTSTANDING

Multifamily Mortgage Debt Outstanding, by Sector

	Mortgage Debt Outstanding				Change		Sector Share of \$ Change
	2022 Q4		2022 Q3		(\$millions)	Percent	
	(\$millions)	% of total	(\$millions)	% of total			
Agency and GSE portfolios and MBS	953,465	48.6%	926,144	48.1%	27,321	2.9%	76.7%
Bank and Thrift	598,431	30.5%	584,137	30.3%	14,294	2.4%	40.1%
Life insurance companies	191,338	9.8%	189,285	9.8%	2,053	1.1%	5.8%
State and local government	112,318	5.7%	111,417	5.8%	901	0.8%	2.5%
CMBS, CDO and other ABS issues	59,696	3.0%	67,782	3.5%	-8,086	-11.9%	-22.7%
Nonfarm noncorporate business	21,406	1.1%	21,142	1.1%	264	1.2%	0.7%
Federal government	10,533	0.5%	10,639	0.6%	-106	-1.0%	-0.3%
REITs	5,986	0.3%	6,925	0.4%	-939	-13.6%	-2.6%
Finance companies	4,981	0.3%	5,066	0.3%	-85	-1.7%	-0.2%
State and local government retirement funds	2,238	0.1%	2,207	0.1%	31	1.4%	0.1%
Nonfinancial corporate business	881	0.0%	851	0.0%	30	3.5%	0.1%
Private pension funds	63	0.0%	128	0.0%	-65	-50.8%	-0.2%
TOTAL	1,961,336		1,925,723		35,613	1.8%	

Source: MBA, Federal Reserve Board of Governors, Trepp LLC, and FDIC

Note: Beginning with the Q2 2014 release, MBA's analysis of mortgage debt outstanding modifies the data from the Federal Reserve's Financial Accounts of the United States with respect to loans held in commercial mortgage-backed securities (CMBS) and by real estate investment trusts (REITs). The corrections create differences with previous releases and with the Federal Reserve data. For more information, please see the Appendix to this report.

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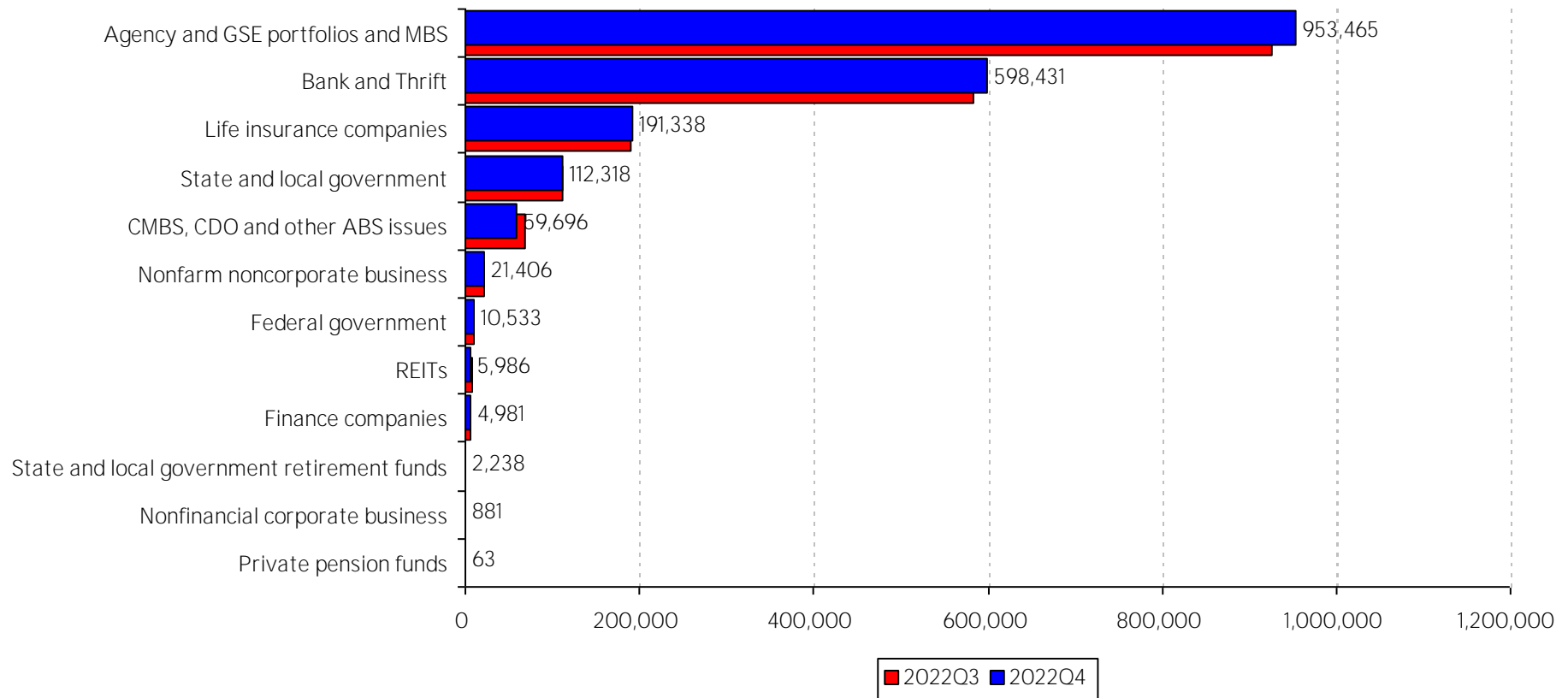
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MULTIFAMILY MORTGAGE DEBT OUTSTANDING

Total Multifamily Mortgage Debt Outstanding, by Sector
 (\$millions)

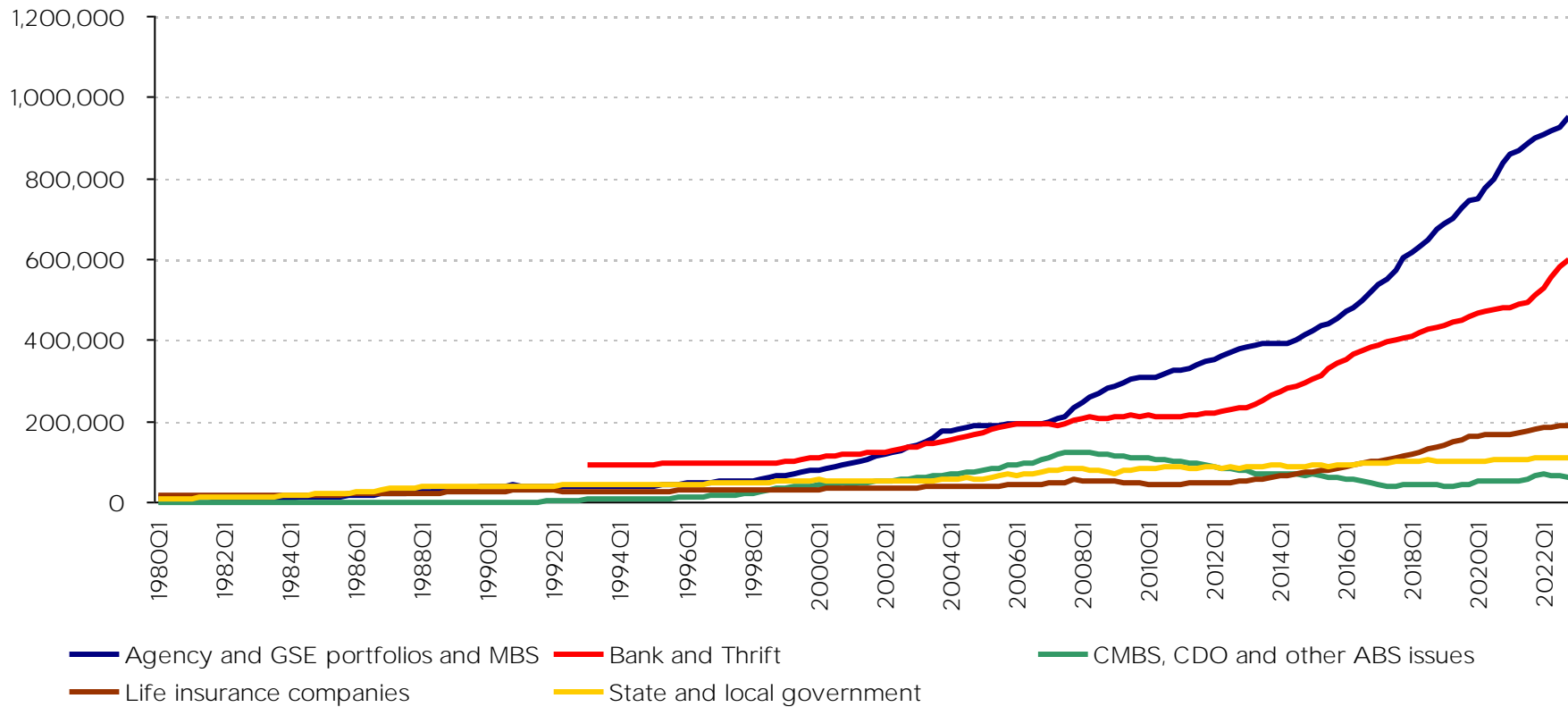


Source: MBA, Federal Reserve Board of Governors, Trepp LLC, and FDIC

MULTIFAMILY MORTGAGE DEBT OUTSTANDING

Total Multifamily Mortgage Debt Outstanding, by Selected Sector by Quarter

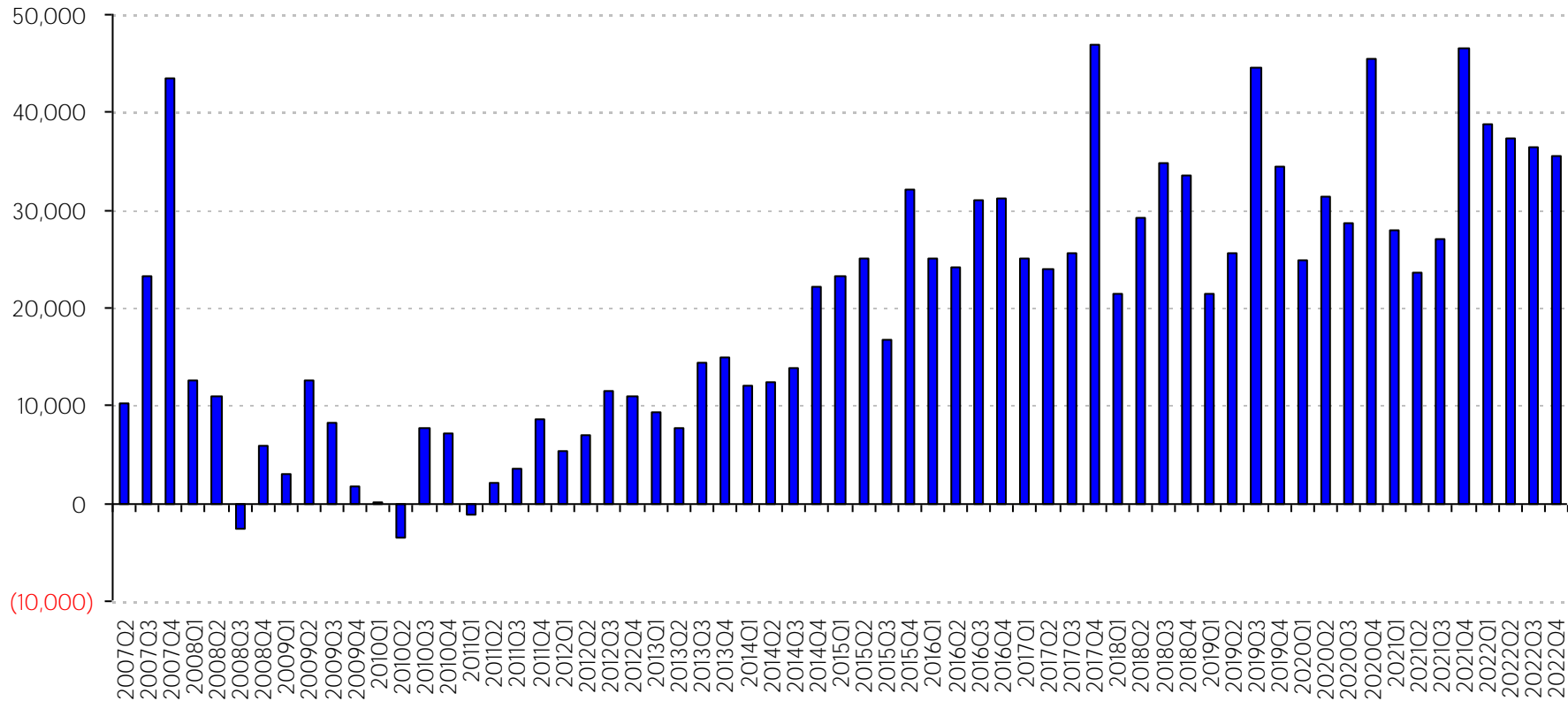
(\$millions)



Source: MBA, Federal Reserve Board of Governors, Trepp LLC, and FDIC

MULTIFAMILY MORTGAGE FLOWS

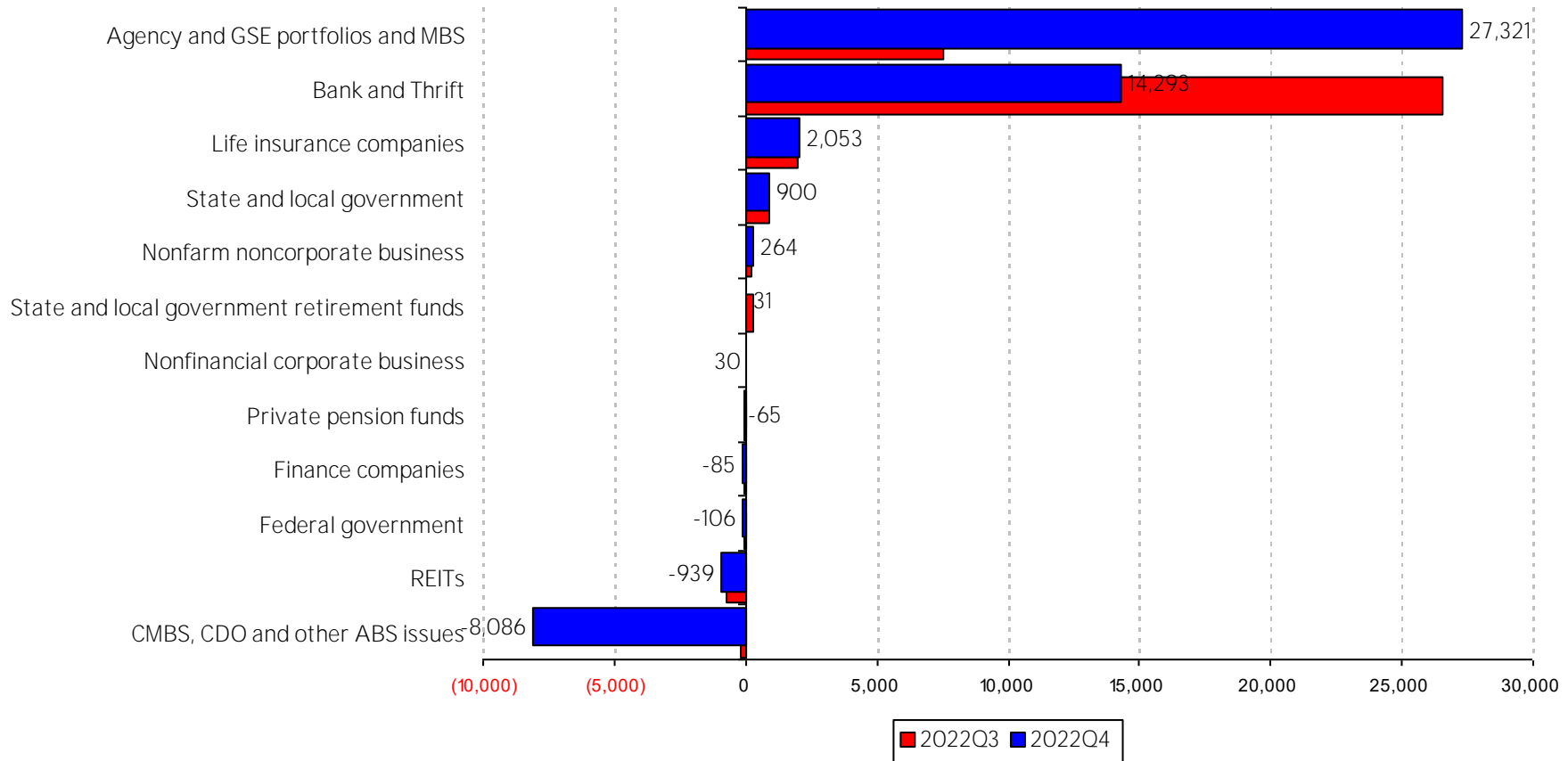
Net Change in Multifamily Mortgage Debt Outstanding, by Quarter
 (\$millions)



Source: MBA, Federal Reserve Board of Governors, Trepp LLC, and FDIC

MULTIFAMILY MORTGAGE FLOWS

Net Change in Multifamily Mortgage Debt Outstanding, by Sector
 (\$millions)



Source: MBA, Federal Reserve Board of Governors, Trepp LLC, and FDIC

APPENDIX A

MBA’s analysis is based on data from the Federal Reserve Board’s *Financial Accounts of the United States*, the Federal Deposit Insurance Corporation’s *Quarterly Banking Profile* and data from Wells Fargo Securities.

Bank Holdings

MBA’s analysis of commercial and multifamily mortgage debt outstanding was changed in the fourth quarter of 2010 to exclude two categories of loans that had previously been included;

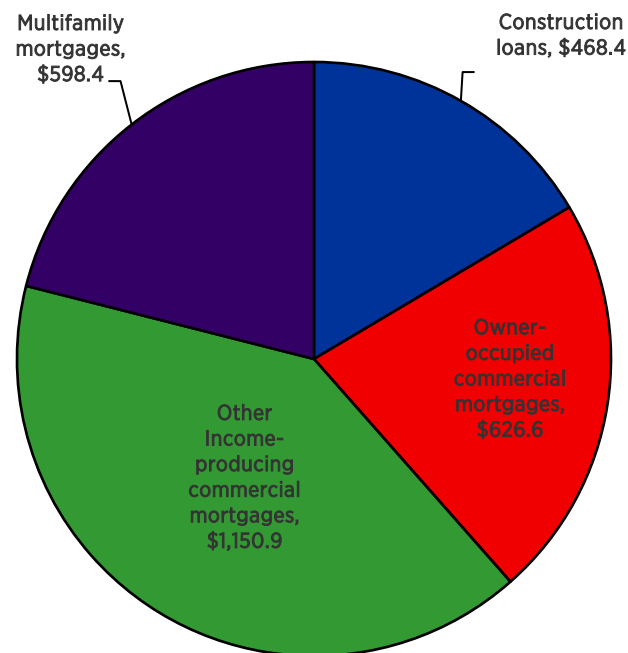
- a. loans for acquisition, development and construction and
- b. loans collateralized by owner-occupied commercial properties.

By excluding these loan types, MBA’s analysis more accurately reflects the balance of loans supported by office buildings, retail centers, apartment buildings and other income-producing properties that rely on rents and leases to make their payments.

For the fourth quarter 2022, the Federal Reserve Board’s Flow of Funds Accounts data attributed \$2.8 trillion of outstanding commercial and multifamily mortgages to banks and thrifts. Comparing this number to the FDIC’s Quarterly Banking Profile for the same period, one sees that banks and thrifts held \$598 billion of multifamily mortgages and \$1.8 trillion of non-farm nonresidential mortgages, of which 65 percent or \$1.2 trillion were income-producing. The combined \$1.7 trillion of mortgages backed by multifamily and other income-producing properties is included in this analysis. The \$2.8 trillion total reported by the Federal Reserve also includes \$627 billion of loans collateralized by owner-occupied commercial properties and another \$468 billion of loans backed by acquisition, development and construction projects (including those for single-family development), which are excluded in from this analysis.

Estimated Components of Federal Reserve’s Flow of Funds “Commercial and Multifamily Mortgages” Held by Banks and Thrifts

(\$Billions)



Source: MBA, Federal Reserve Board of Governors, and FDIC

Mortgages in CMBS and held by REITs

Beginning with its Q2 2014 release, the Federal Reserve's *Financial Accounts of the United States* adjusted its balance of commercial mortgages held in CMBS and by REITs to reflect the impact of FAS 167 and its implications for how entities report certain securitized mortgages on their balance sheets. The effect of this change was to inflate the balance of mortgages appearing under REITs by approximately \$130 billion and to reduce the balance appearing under CMBS by the same amount. From an accounting perspective, such changes are required, but the changes lead to a significant distortion of the size of the CMBS and REIT markets.

For CMBS, MBA corrects for this by relying on data from Wells Fargo Securities to size the balance of commercial and multifamily mortgages in CMBS. (The analysis continues to rely on the Financial Accounts of the United States to size multifamily balances held in CMBS, as the FAS 167 adjustments did not affect them.)

For REIT balances, MBA uses Fed data to reverse the FAS 167 inclusions and thus to report the mortgages, and not securitized assets, that REITs hold. The full corrected series are available as a part of MBA's CREF Database. Contact CREFResearch@mba.org for more information.

Commercial/Multifamily Mortgage Delinquencies

Commercial and Multifamily Mortgage Delinquency Rates Increased Slightly Through the Fourth Quarter of 2022

January 17, 2023

Delinquency rates for mortgages backed by commercial and multifamily properties increased slightly through the fourth quarter of 2022, according to the Mortgage Bankers Association's (MBA) latest CREF Loan Performance Survey.

"Commercial and multifamily mortgages continued to perform well through the fourth quarter of 2022, albeit with a slight increase in the share of loans that are delinquent," said Jamie Woodwell, MBA's Head of Commercial Real Estate Research. "Delinquency rates increased by small amounts for most property types even while the overall rate of delinquency remains low."

Woodwell continued, "CRE markets are going through a period of adjustment brought on by the increase in interest rates and investment yields spawned by the Federal Reserve's actions in 2022, as well as by uncertainty about the direction of the economy in 2023. As those changes continue to ripple through the CRE space, equity, and debt markets, it's likely delinquency rates will rise from what have been, in some cases, record lows."

Key Findings from MBA's CREF Loan Performance Survey for December 2022:

The balance of commercial and multifamily mortgages that are not current increased in December 2022 (compared to September 2022).

- 98% of outstanding loan balances were current or less than 30 days late at the end of the fourth quarter, down from 98.3% at the end of the third quarter of 2022.

- 1.6% were 90+ days delinquent or in REO, up from 1.4% six months earlier.
- 0.1% were 60-90 days delinquent, unchanged from the previous quarter.
- 0.3% were 30-60 days delinquent, up from 0.2%.

Loans backed by lodging and retail properties continue to see the greatest stress. Both also saw upticks in delinquency rates.

- 6.1% of the balance of lodging loans were 30 days or more delinquent, up from 5.5% at the end of September 2022.
- 5.4% of the balance of retail loan balances were delinquent, up from 5.3%.
- 1.6% of the balance of office property loans were delinquent, up from 1.5%.
- 0.3% of the balance of industrial property loans were delinquent, down from 0.6%.
- 0.5% of multifamily balances were delinquent, up from 0.4%.

Because of the concentration of hotel and retail loans, CMBS loan delinquency rates are higher than other capital sources, but they also saw improvement.

- 3.2% of CMBS loan balances were 30 days or more delinquent, down from 3.3% in September 2022.
- Non-current rates for other capital sources were more moderate.
- 0.8% of FHA multifamily and health care loan balances were 30 days or more delinquent, up from 0.6%.
- 0.4% of life company loan balances were delinquent, flat from 0.4%.

OUTLOOK

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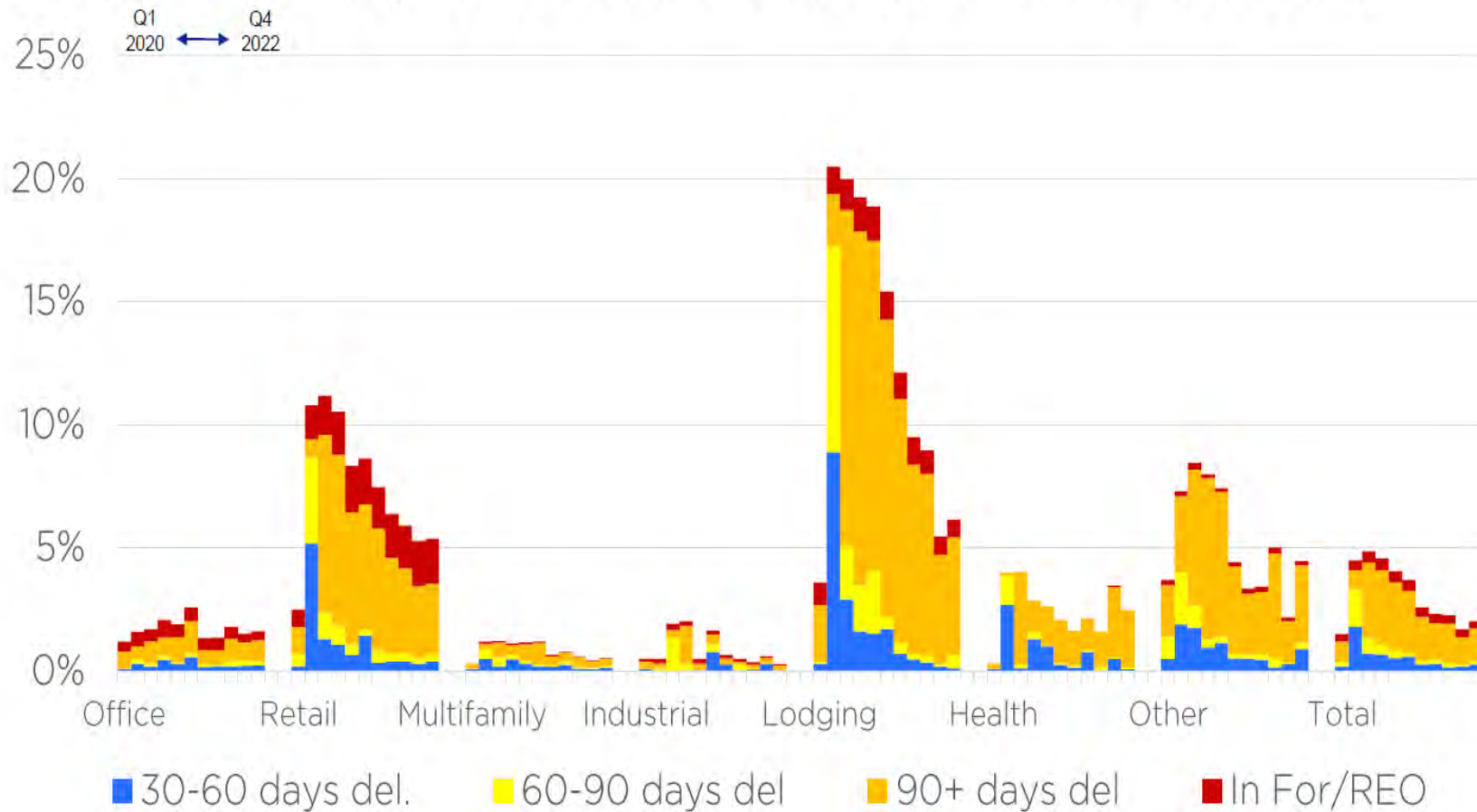
- 0.2% of GSE loan balances were delinquent, down from 0.3%.

MBA's CREF Loan Performance survey collected information on commercial and multifamily mortgage portfolios as of December 31, 2022. This month's results build on similar surveys conducted since April 2020. Participants reported on \$2.4 trillion of loans in December 2022, representing more than half of the total \$4.4 trillion in commercial and multifamily mortgage debt outstanding (MDO).

For more information on MBA's CREF Loan Performance Survey, please visit:

www.mba.org/store/products/research/general/report/commercial-real-estate-finance-loan-performance-survey.

End-of-quarter Delinquency Status, by Property Type, Share of Total Unpaid Principal Balance, April 2020 – December 2022 (Note: no data for Q2 2022)



Commercial/Multifamily Mortgage Delinquencies

Commercial and Multifamily Mortgage Delinquency Remain Low in Fourth Quarter 2022

Fourth Quarter 2022

Commercial and multifamily mortgage delinquencies remained low in the fourth quarter of 2022, according to the Mortgage Bankers Association's (MBA) latest Commercial/Multifamily Delinquency Report.

“Commercial and multifamily mortgage delinquency rates remained low at the end of 2022,” said Jamie Woodwell, MBA's Head of Commercial Real Estate Research. “There were slight upticks among loans in CMBS, life companies, and banks and decreases for Fannie Mae and Freddie Mac but the overall performance remained positive. It is likely that as higher interest rates and softer property values work through the system this year - prompted by maturing and adjustable-rate loans - loan performance will adjust.”

MBA's quarterly analysis looks at commercial/multifamily delinquency rates for five of the largest investor-groups: commercial banks and thrifts, commercial mortgage-backed securities (CMBS), life insurance companies, and Fannie Mae and Freddie Mac. Together, these groups hold more than 80 percent of commercial/multifamily mortgage debt outstanding. MBA's analysis incorporates the measures used by each individual investor group to track the performance of their loans. Because each investor group tracks delinquencies in its own way, delinquency rates are not comparable from one group to another. As an example, Fannie Mae reports loans receiving payment forbearance as delinquent, while Freddie Mac excludes those loans if the borrower is in compliance with the forbearance agreement.

Based on the unpaid principal balance (UPB) of loans, delinquency rates for each group at the end of the fourth quarter of 2022 were as follows:

- Banks and thrifts (90 or more days delinquent or in non-accrual): 0.45 percent, an increase of 0.01 percentage points from the third quarter of 2022;
- Life company portfolios (60 or more days delinquent): 0.11 percent, an increase of 0.02 percentage points from the third quarter of 2022;
- Fannie Mae (60 or more days delinquent): 0.24 percent, a decrease of 0.02 percentage points from the third quarter of 2022;
- Freddie Mac (60 or more days delinquent): 0.12 percent, a decrease of 0.01 percentage points from the third quarter of 2022; and
- CMBS (30 or more days delinquent or in REO): 2.90 percent, an increase of 0.13 percentage points from the third quarter of 2022.

Construction and development loans are generally not included in the numbers presented in this report but are included in many regulatory definitions of 'commercial real estate' despite the fact they are often backed by single-family residential development projects rather than by office buildings, apartment buildings, shopping centers, or other income-producing properties. The FDIC delinquency rates for bank and thrift held mortgages reported here do include loans backed by owner-occupied commercial properties. Differences between the delinquencies measures are detailed in Appendix A. To download current report go to: <https://www.mba.org/news-and-research/research-and-economics/commercial-multifamily-research/commercial-multifamily-mortgage-delinquency-rates>.

To better understand the ways the COVID pandemic is and is not affecting commercial mortgage performance, MBA worked with its servicer members to develop the CREF Loan Performance Survey. For more information on the most recent results and the historical series go

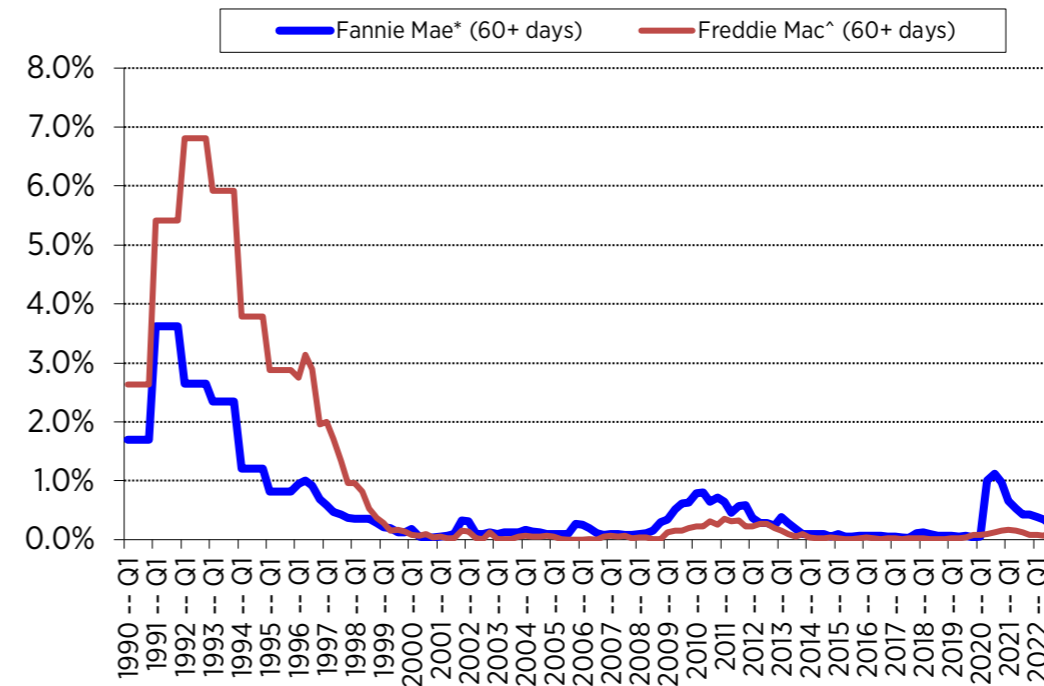
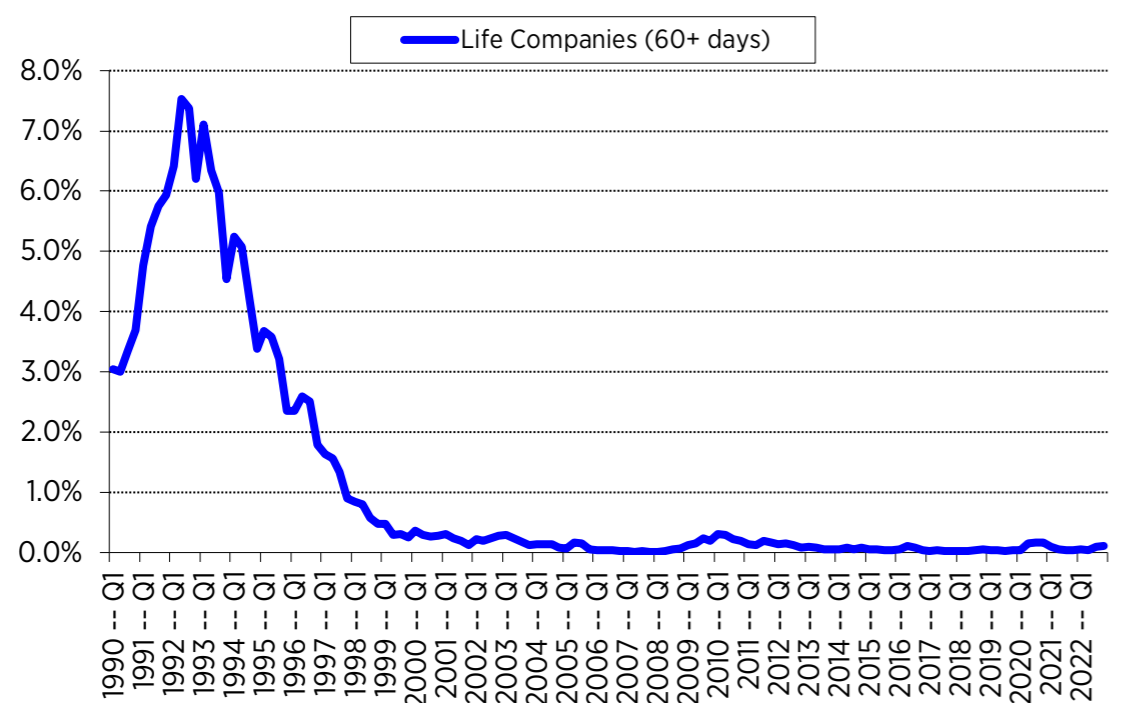
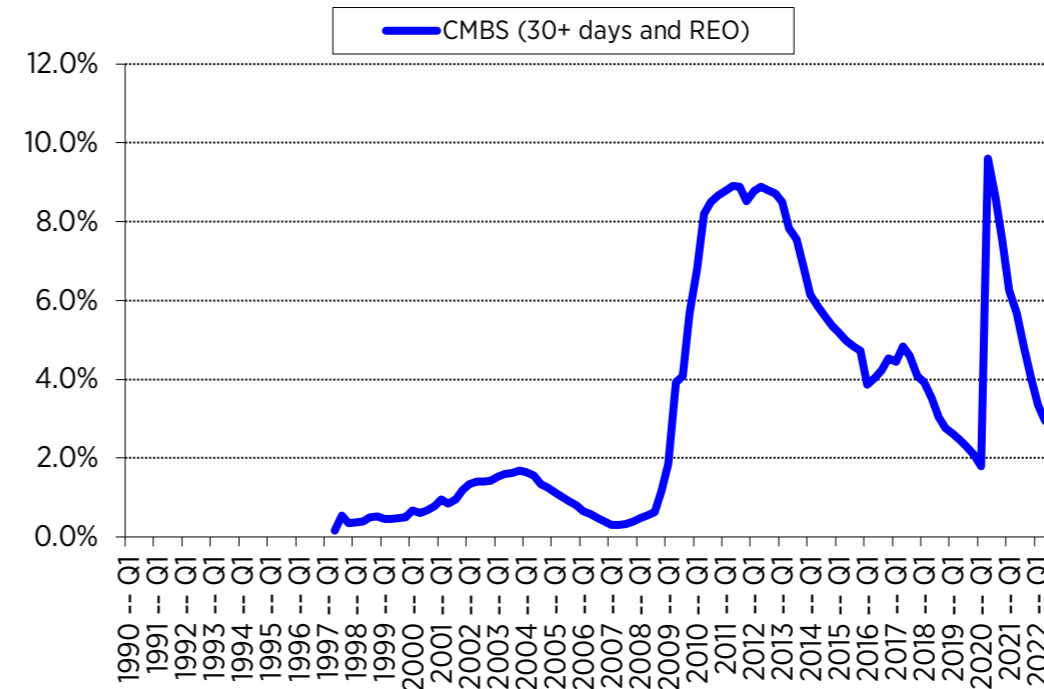
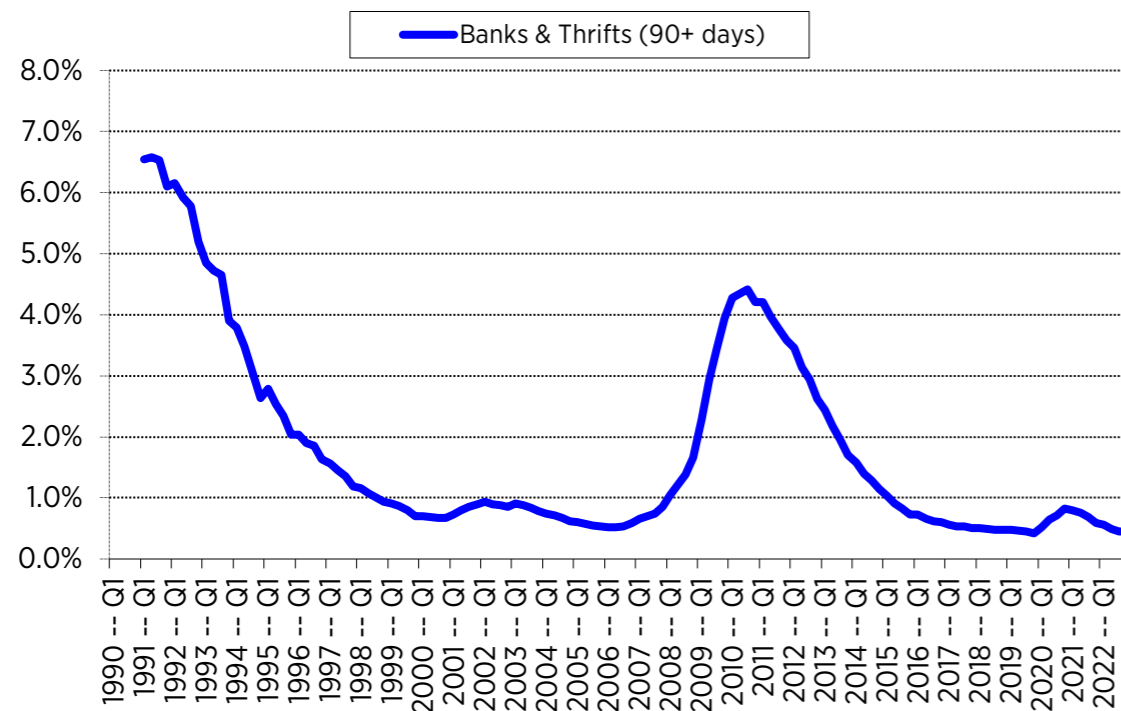
to: <https://www.mba.org/home/product/commercial-multifamily-loan-performance-survey-73258>.



CHART 1. COMMERCIAL/MULTIFAMILY MORTGAGE DELINQUENCY RATES AMONG MAJOR INVESTOR GROUPS

Selected delinquency rates at the end of the period

NOTE: Delinquency rates shown are NOT comparable between investor groups. These rates show how performance of loans for each investor groups has varied over time, but cannot be used to compare one investor group to another.



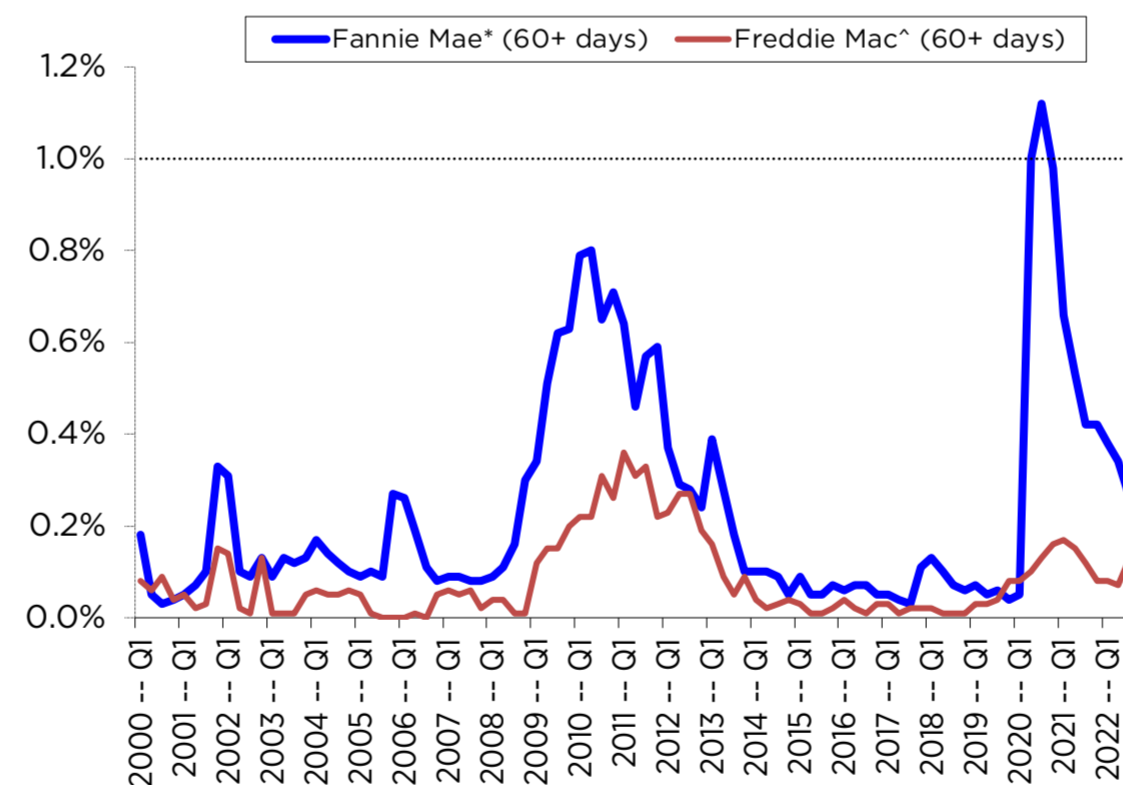
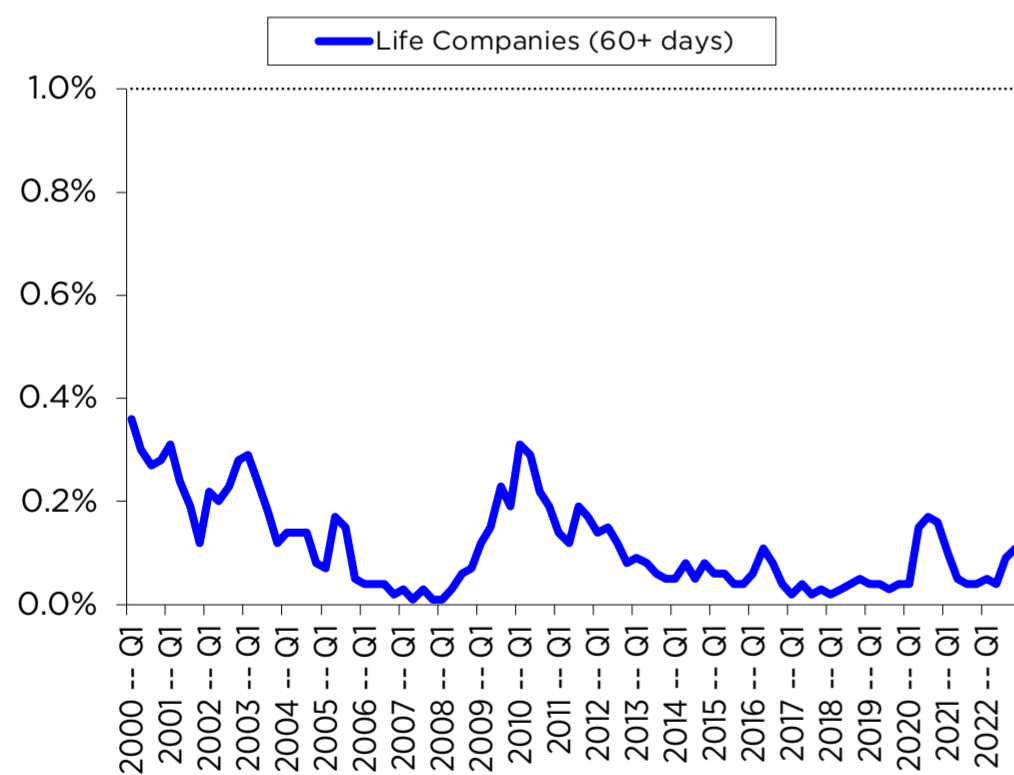
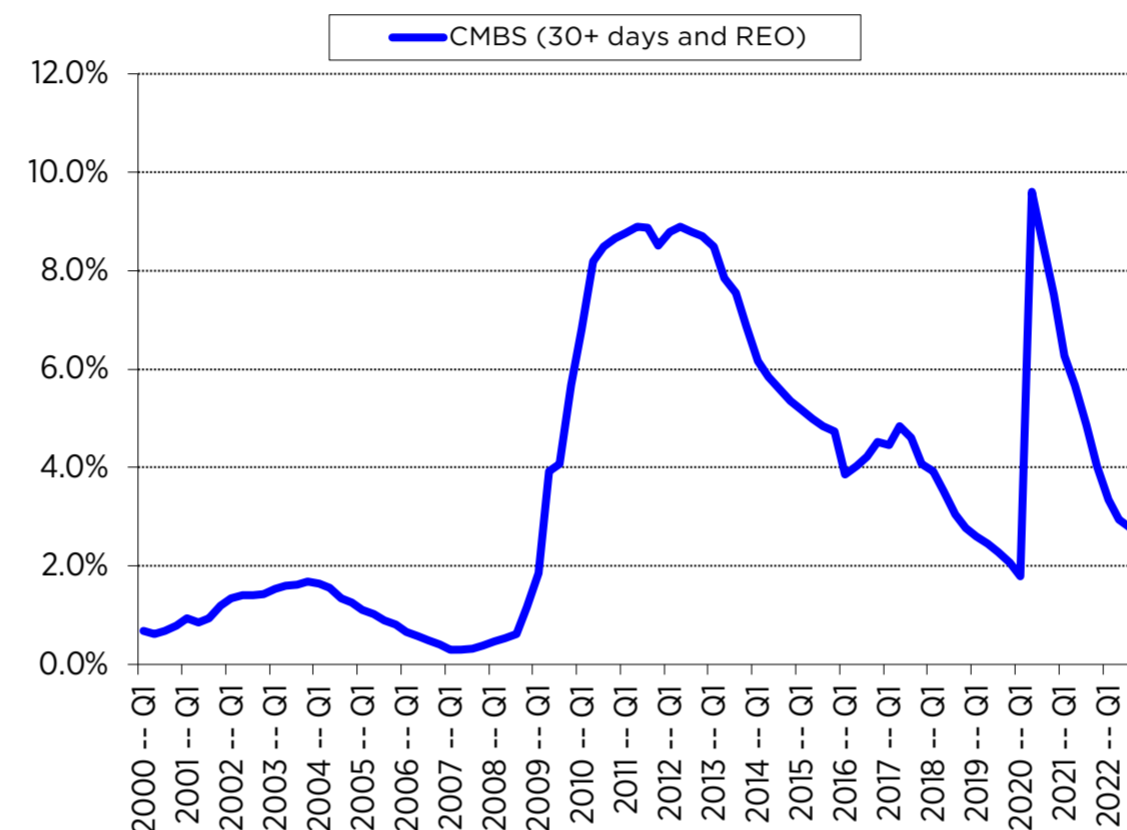
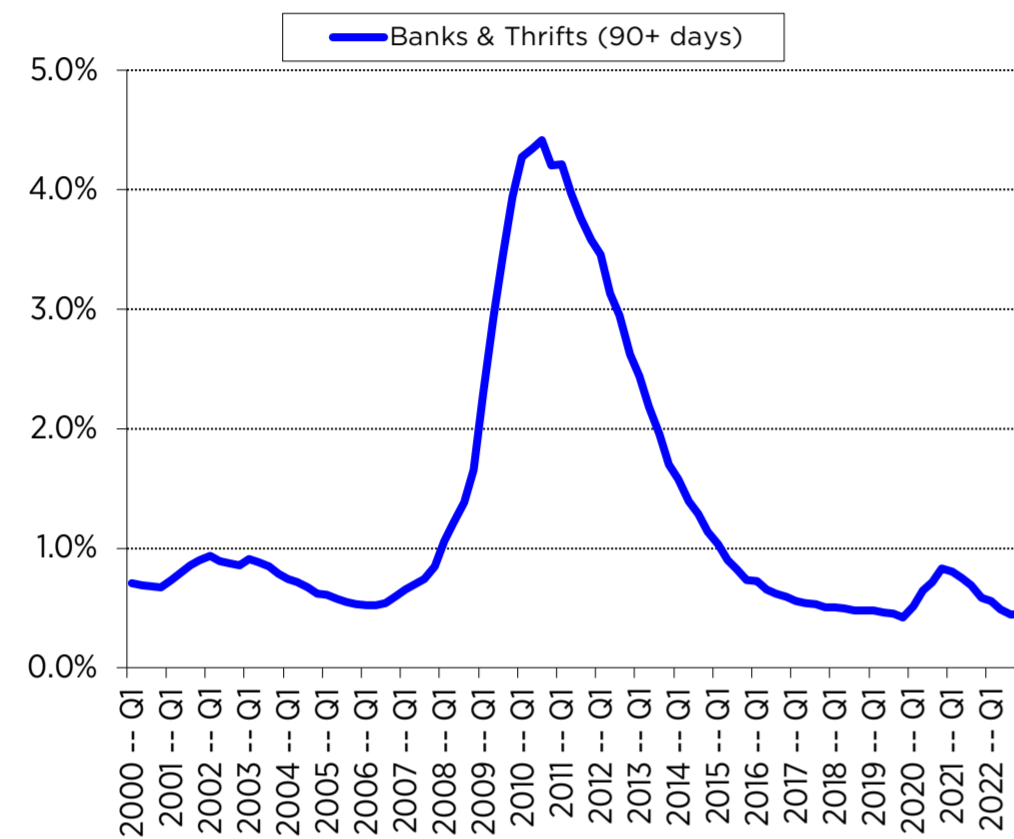
Sources: Trepp LLC, American Council of Life Insurers, Fannie Mae, Freddie Mac, OFHEO and Federal Deposit Insurance Corporation



CHART 2. COMMERCIAL/MULTIFAMILY MORTGAGE DELINQUENCY RATES AMONG MAJOR INVESTOR GROUPS, 2000 - PRESENT

Selected delinquency rates at the end of the period

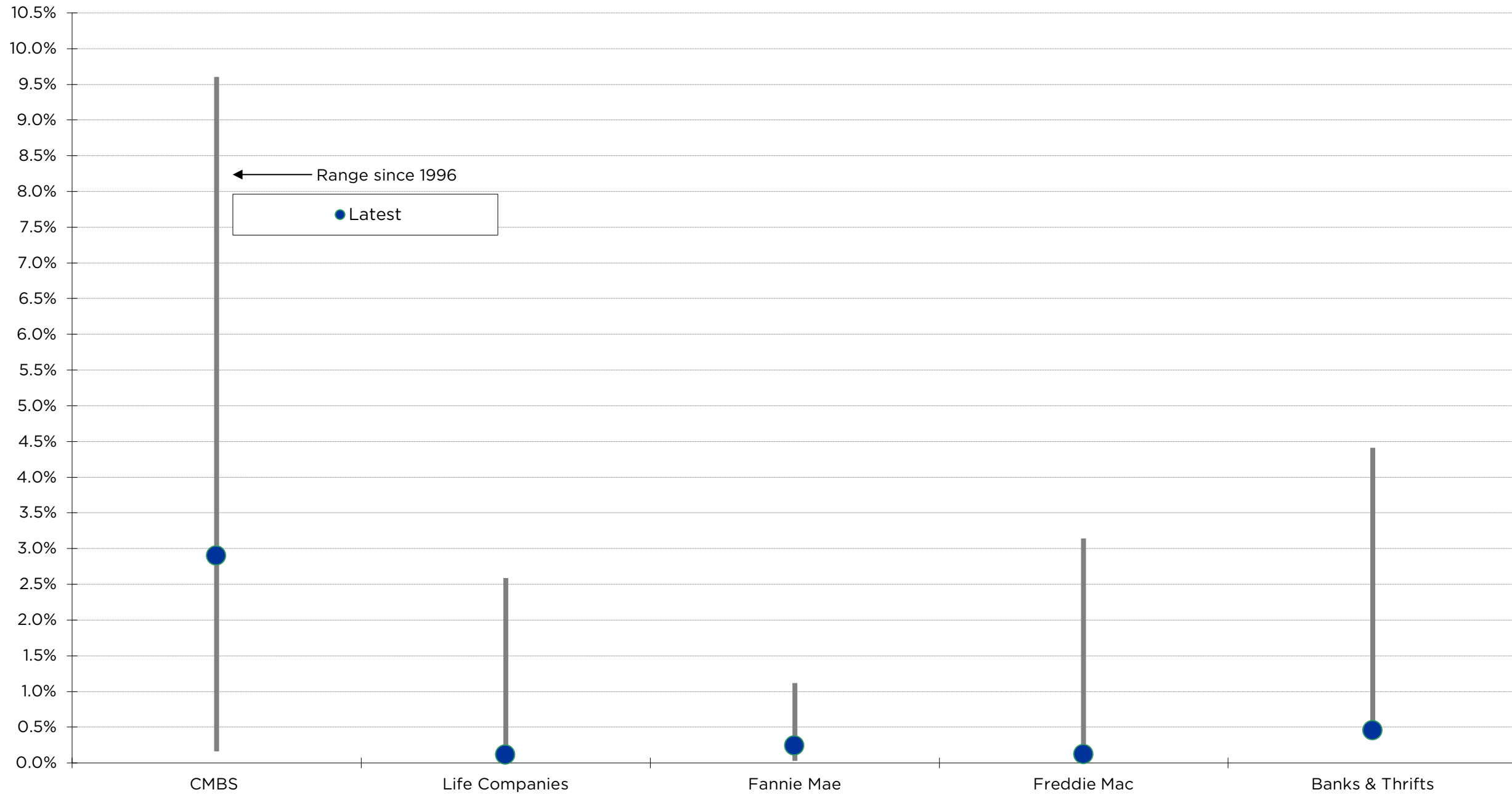
NOTE: Delinquency rates shown are NOT comparable between investor groups. These rates show how performance of loans for each investor groups has varied over time, but cannot be used to compare one investor group to another.



Sources: Trepp LLC, American Council of Life Insurers, Fannie Mae, Freddie Mac, OFHEO and Federal Deposit Insurance Corporation

CHART 3. Latest Delinquency Rates and Range Since 1996

NOTE: Delinquency rates shown are NOT comparable between investor groups. These rates show how performance of loans for each investor groups has varied over time, but cannot be used to compare one investor group to another.



Sources: Trepp LLC, American Council of Life Insurers, Fannie Mae, Freddie Mac, OFHEO and Federal Fannie Mae, Freddie Mac, OFHEO and Federal Deposit Insurance Corporation

COMMERCIAL/MULTIFAMILY MORTGAGE DELINQUENCY RATES AMONG MAJOR INVESTOR GROUPS



Selected delinquency rates at the end of the period

NOTE: Delinquency rates shown are NOT comparable between investor groups. These rates show how performance of loans for each investor groups has varied over time, but cannot be used to compare one investor group to another.

	CMBS (30+ days and REO)	Life Companies (60+ days)	Fannie Mae (60+ days)	Freddie Mac (60+days)	Banks & Thrifts (90+ days)
Year-end					
2003 -- Q4	1.68%	0.12%	0.13%	0.05%	0.78%
2004 -- Q4	1.25%	0.08%	0.10%	0.06%	0.62%
2005 -- Q4	0.80%	0.05%	0.27%	0.00%	0.53%
2006 -- Q4	0.39%	0.02%	0.08%	0.05%	0.59%
2007 -- Q4	0.39%	0.01%	0.08%	0.02%	0.85%
2008 -- Q4	1.17%	0.07%	0.30%	0.01%	1.66%
2009 -- Q4	5.68%	0.19%	0.63%	0.20%	3.94%
2010 -- Q4	8.67%	0.19%	0.71%	0.26%	4.21%
2011 -- Q4	8.51%	0.17%	0.59%	0.22%	3.58%
2012 -- Q4	8.71%	0.08%	0.24%	0.19%	2.62%
2013 -- Q4	6.86%	0.05%	0.10%	0.09%	1.70%
2014 -- Q4	5.36%	0.08%	0.05%	0.04%	1.14%
2015 -- Q4	4.73%	0.04%	0.07%	0.02%	0.73%
2016 -- Q4	4.53%	0.04%	0.05%	0.03%	0.60%
2017 -- Q4	4.08%	0.03%	0.11%	0.02%	0.51%
2018 -- Q4	2.77%	0.05%	0.06%	0.01%	0.48%
2019 -- Q4	2.07%	0.04%	0.04%	0.08%	0.42%
2020 -- Q4	7.50%	0.16%	0.98%	0.16%	0.83%
2021 -- Q4	4.02%	0.04%	0.42%	0.08%	0.59%
Quarter-end					
2019 -- Q1	2.61%	0.04%	0.07%	0.03%	0.48%
2019 -- Q2	2.46%	0.04%	0.05%	0.03%	0.46%
2019 -- Q3	2.29%	0.03%	0.06%	0.04%	0.45%
2019 -- Q4	2.07%	0.04%	0.04%	0.08%	0.42%
2020 -- Q1	1.79%	0.04%	0.05%	0.08%	0.51%
2020 -- Q2	9.60%	0.15%	1.00%	0.10%	0.64%
2020 -- Q3	8.60%	0.17%	1.12%	0.13%	0.72%
2020 -- Q4	7.50%	0.16%	0.98%	0.16%	0.83%
2021 -- Q1	6.26%	0.10%	0.66%	0.17%	0.80%
2021 -- Q2	5.68%	0.05%	0.53%	0.15%	0.75%
2021 -- Q3	4.86%	0.04%	0.42%	0.12%	0.69%
2021 -- Q4	4.02%	0.04%	0.42%	0.08%	0.59%
2022 -- Q1	3.36%	0.05%	0.38%	0.08%	0.56%
2022 -- Q2	2.95%	0.04%	0.34%	0.07%	0.49%
2022 -- Q3	2.77%	0.09%	0.26%	0.13%	0.44%
2022 -- Q4	2.90%	0.11%	0.24%	0.12%	0.45%

Sources: Trepp LLC, American Council of Life Insurers, Fannie Mae, Freddie Mac, OFHEO and Federal Deposit Insurance Corporation.

Note: Differences between the delinquency measures are detailed in Appendix A.

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**APPENDIX A
SOURCES & MEASURES OF DELINQUENCIES**

Commercial Mortgage-backed Securities (CMBS)

Source: Trepp LLC, Wells Fargo Securities, LLC and Intex Solutions, Inc. The delinquency rate for CMBS loans covers loans 30+ days delinquent, including those in foreclosure, and real estate owned (REO). The CMBS rate is the only one to include REO in either the numerator or the denominator. This series includes all private-label (non-Ginnie Mae, Fannie Mae or Freddie Mac issued) deals that are currently outstanding, including both fixed- and floating-rate deals. In reports released prior to Q3 2011, this series included only deals issued prior to 2009. Beginning with the Q3 2011 release all deals are included regardless of issue date.

Life Companies

Source: American Council of Life Insurers
The delinquency rate for life insurance company loans covers loans 60+ days delinquent, including those in foreclosure, and does not include real estate owned (REO) in either the numerator or the denominator.

Fannie Mae

Source: Fannie Mae Monthly Volume Summary and Office of Federal Housing Enterprise Oversight Annual Reports to Congress the delinquency rate for multifamily loans either held in portfolio or securitized and guaranteed by the company covers loans 60+ days delinquent, including those in foreclosure, and does not include real estate owned (REO) in either the numerator or the denominator. The company was unable to provide December delinquency figures for the years 2000 to 2004, so the fourth quarter numbers presented for those years are November, rather December, figures. In January 2011, Fannie Mae revised its 2010 monthly multifamily delinquency rates for all periods presented to exclude multifamily borrowers who have entered into a forbearance agreement and are abiding by the terms of the agreement, but had been previously included in the multifamily delinquency rates due to an error.

Freddie Mac

Source: Freddie Mac Monthly Volume Summary and Office of Federal Housing Enterprise Oversight Annual Reports to Congress

The delinquency rate for multifamily loans either held in portfolio or securitized and guaranteed by the company covers loans 60+ days delinquent, including those in foreclosure, and does not include real estate owned (REO) in either the numerator or the denominator. Freddie Mac notes that their delinquency rate “[e]xcludes mortgage loans whose original contractual terms have been modified under an agreement with the borrower as long as the borrower complies with the modified contractual terms.” As an example, after Hurricane Katrina, Freddie Mac modified a number of loans affected by the storms. In May 2010, Freddie Mac returned to reporting multifamily delinquencies as those loans 60+ days delinquent.

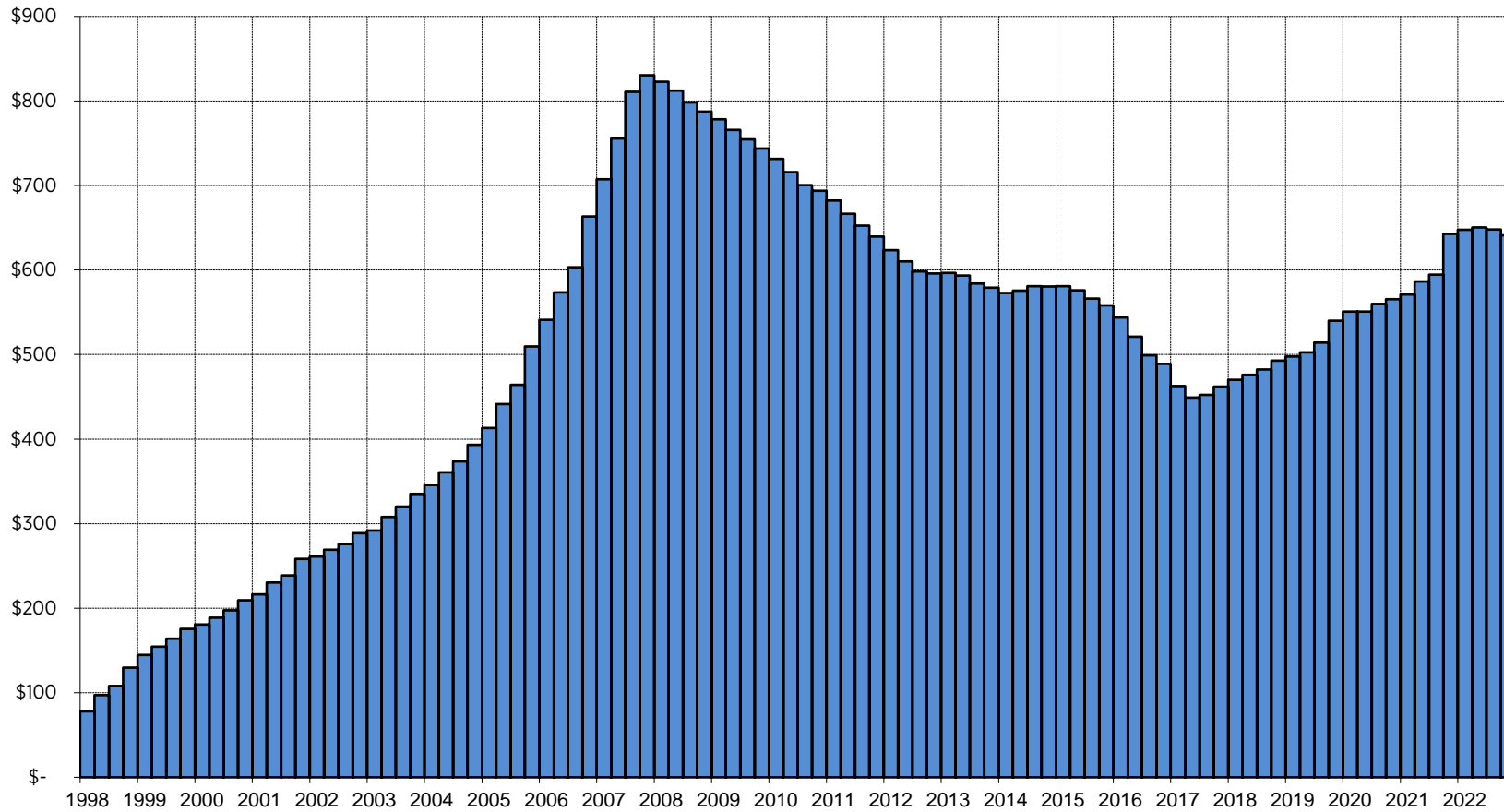
FDIC-insured Banks & Thrifts

Source: Federal Deposit Insurance Corporation
The delinquency rate for FDIC banks and thrifts covers loans 90+ days delinquent, including those in foreclosure and in non-accrual status, and does not include real estate owned (REO) in either the numerator or the denominator. The universe of loans covered by this series also includes a large number of “owner-occupied” commercial loans – loans supported by the income of the resident business rather than by rent and lease payments. In a 2007 analysis by MBA of the ten banks with the largest commercial mortgage portfolios, approximately half, in dollar volume, of their commercial (non-multifamily) loan portfolio was comprised of these “owner-occupied” properties.

Data are available for life companies, FDIC-insured banks and thrifts, Fannie Mae and Freddie Mac since 1990 and CMBS since 1997.

COMMERCIAL MORTGAGE-BACKED SECURITIES (CMBS) OUTSTANDING

Billions of Dollars



Source: Trepp LLC, Wells Fargo Securities, LLC, and Intex Solutions, Inc.

COMMERCIAL MORTGAGE-BACKED SECURITIES (CMBS) OUTSTANDING

Billions of Dollars

Year	Q1	Q2	Q3	Q4	Q4 Year-Over-Year Change		Q3-to-Q4 Change		
					Total	Percent change	Total	Percent change	
<i>U.S. CMBS OUTSTANDING</i>									
2000	\$ 180.59	\$ 188.90	\$ 197.64	\$ 209.43	\$ 33.89	19%	\$ 11.79	6.0%	
2001	\$ 216.32	\$ 230.24	\$ 238.90	\$ 258.20	\$ 48.77	23%	\$ 19.30	8.1%	
2002	\$ 261.16	\$ 269.10	\$ 275.95	\$ 288.57	\$ 30.37	12%	\$ 12.62	4.6%	
2003	\$ 292.00	\$ 308.09	\$ 320.32	\$ 335.14	\$ 46.57	16%	\$ 14.82	4.6%	
2004	\$ 345.86	\$ 360.86	\$ 373.65	\$ 393.29	\$ 58.15	17%	\$ 19.64	5.3%	
2005	\$ 413.05	\$ 441.38	\$ 464.05	\$ 509.67	\$ 116.38	30%	\$ 45.62	9.8%	
2006	\$ 541.16	\$ 573.55	\$ 603.33	\$ 663.31	\$ 153.64	30%	\$ 59.98	9.9%	
2007	\$ 707.40	\$ 755.46	\$ 811.02	\$ 830.28	\$ 166.96	25%	\$ 19.26	2.4%	
2008	\$ 822.76	\$ 812.17	\$ 798.21	\$ 787.42	\$ (42.86)	-5%	\$ (10.80)	-1.4%	
2009	\$ 778.19	\$ 765.76	\$ 754.70	\$ 743.90	\$ (43.51)	-6%	\$ (10.80)	-1.4%	
2010	\$ 731.41	\$ 715.77	\$ 700.28	\$ 693.69	\$ (50.21)	-7%	\$ (6.59)	-0.9%	
2011	\$ 682.40	\$ 666.38	\$ 652.68	\$ 639.75	\$ (53.94)	-8%	\$ (12.93)	-2.0%	
2012	\$ 623.55	\$ 610.07	\$ 598.29	\$ 595.83	\$ (43.93)	-7%	\$ (2.46)	-0.4%	
2013	\$ 596.60	\$ 593.46	\$ 584.17	\$ 579.23	\$ (16.59)	-3%	\$ (4.94)	-0.8%	
2014	\$ 572.84	\$ 575.66	\$ 580.79	\$ 580.41	\$ 1.18	0%	\$ (0.38)	-0.1%	
2015	\$ 580.83	\$ 576.00	\$ 566.10	\$ 558.00	\$ (22.41)	-4%	\$ (8.09)	-1.4%	
2016	\$ 543.70	\$ 521.15	\$ 499.25	\$ 489.06	\$ (68.94)	-12%	\$ (10.19)	-2.0%	
2017	\$ 462.68	\$ 449.07	\$ 452.25	\$ 461.98	\$ (27.08)	-6%	\$ 9.74	2.2%	
2018	\$ 469.99	\$ 475.98	\$ 482.49	\$ 492.90	\$ 30.92	7%	\$ 10.41	2.2%	
2019	\$ 497.64	\$ 502.75	\$ 514.22	\$ 539.96	\$ 47.05	10%	\$ 25.73	5.0%	
2020	\$ 550.82	\$ 550.88	\$ 559.78	\$ 565.39	\$ 25.43	5%	\$ 5.60	1.0%	
2021	\$ 570.96	\$ 586.59	\$ 594.62	\$ 642.63	\$ 77.24	14%	\$ 48.01	8.1%	
2022	\$ 647.60	\$ 650.38	\$ 647.88	\$ 641.16	\$ (1.46)	0%	\$ (6.71)	-1.0%	

Source: Trepp LLC, Wells Fargo Securities, LLC, and Intex Solutions, Inc.

COMMERCIAL MORTGAGE-BACKED SECURITIES (CMBS) MARKET COMPOSITION

Composition of CMBS Outstanding, as of September 30, 2022

Total CMBS Outstanding \$ 641.2 billion

By Property Types:

Office	26.8%
Multifamily	10.6%
Retail	19.4%
Industrial	7.0%
Hotel	15.3%
Self-Storage	3.3%
Healthcare	0.1%
Other	17.5%

By Amortization:

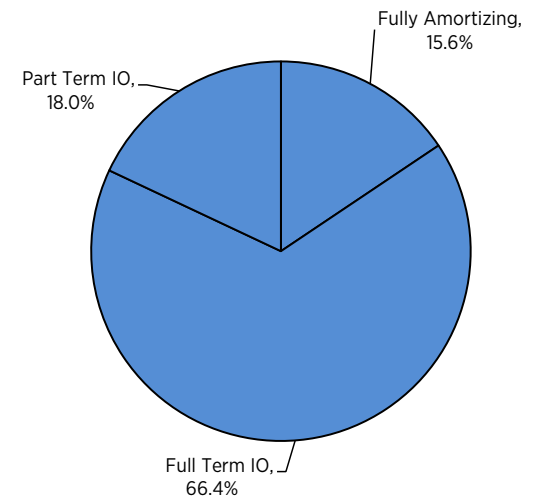
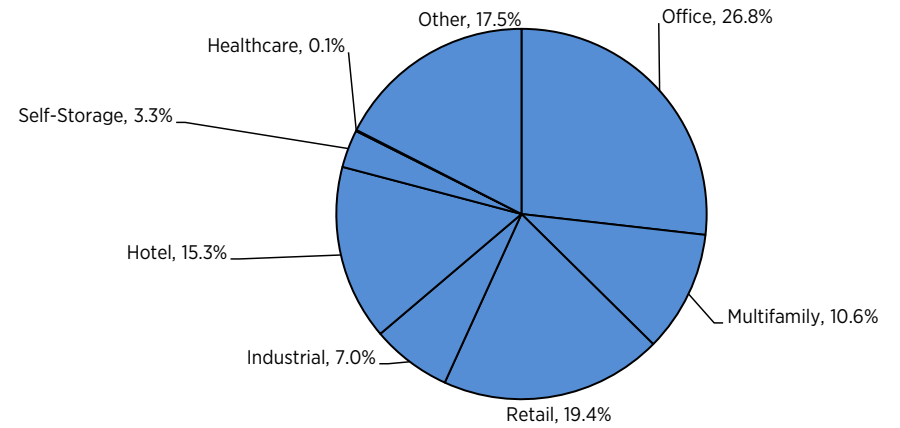
Fully Amortizing	15.6%
All Interest-Only (IO)	84.4%
Full Term IO	66.4%
Part Term IO	18.0%

By Percent Defeased 5.3%

By Delinquency:

Current	98.4%
30-day delinquent	0.20%
60-day delinquent	0.00%
90+day delinquent	0.50%
Foreclosure/REO	0.90%

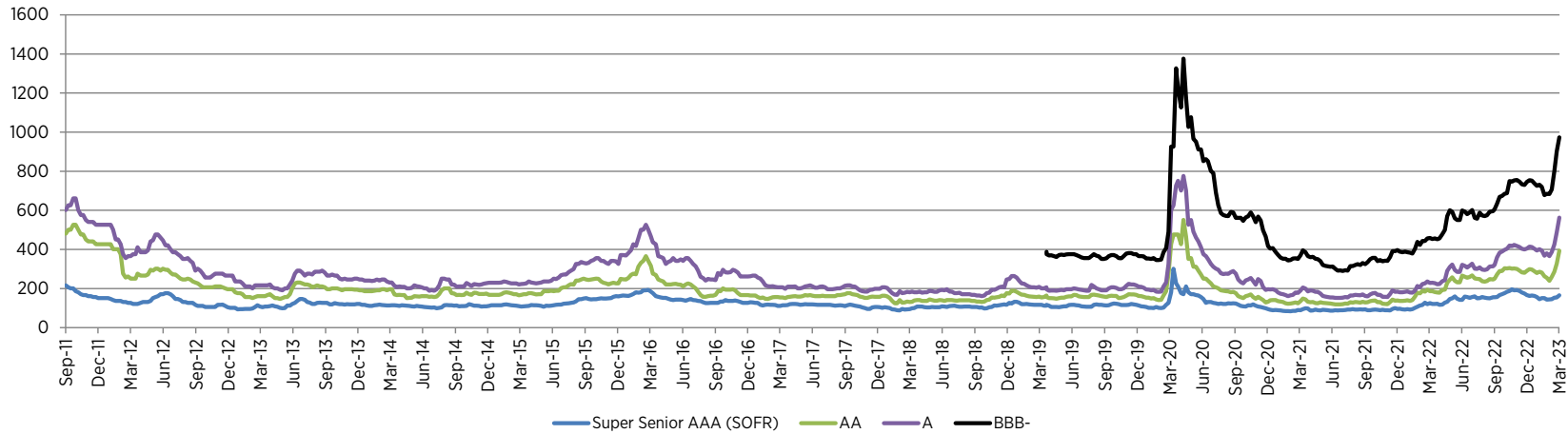
Source: Trepp LLC



CMBS SPREADS
COMMERCIAL MORTGAGE BACKED SECURITIES (CMBS)
NEW ISSUE SPREADS TO SOFR RATES

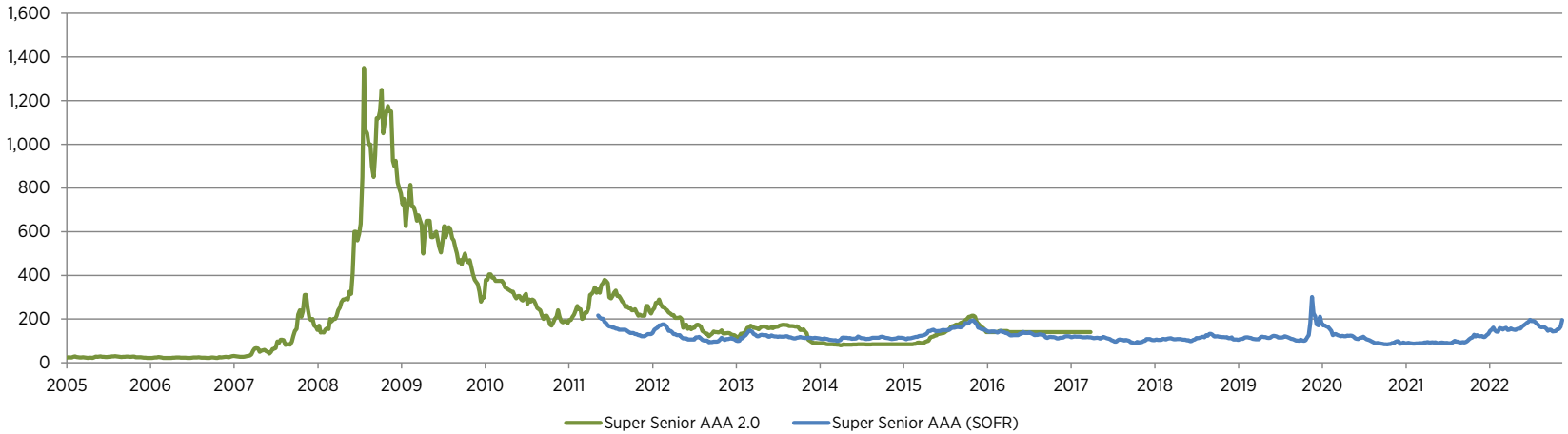
NOTE: In Q1 2022 MBA began using spreads to SOFR. As a result, the data presented here may not be comparable to that in previous Quarterly Data Books.

(in Basis Points)



AAA CMBS SPREADS

(in Basis Points)



Source: JP Morgan Securities

CMBS AND OTHER SPREADS

**Commercial Mortgage Backed Securities (CMBS) and selected other CRE mortgage bonds
Spreads to SOFR Rates**

NOTE: In Q1 2022 MBA began using spreads to SOFR. As a result, the data presented here may not be comparable to that in previous data books.

(in Basis Points)

	New Issue CMBS					10yr Freddie K A1
	Super Senior AAA	AA	A	BBB-	10/9.5 DUS	
End of Q4 2020	90	141	196	406	57	47
End of Q1 2021	99	149	206	396	48	30
End of Q2 2021	88	119	152	300	43	33
End of Q3 2021	89	130	160	335	51	30
End of Q4 2021	92	136	181	386	57	43
End of Q1 2022	121	186	229	453	88	65
End of Q2 2022	157	261	316	594	90	78
End of Q3 2022	171	289	384	669	120	93
End of Q4 2022	162	297	412	752	102	97
30-Dec-22	162	297	412	752	102	97
6-Jan-23	157	288	403	738	99	94
13-Jan-23	146	279	394	726	94	85
20-Jan-23	151	286	401	731	96	85
27-Jan-23	151	282	395	720	95	85
3-Feb-23	143	263	368	678	93	85
10-Feb-23	144	255	380	685	91	85
17-Feb-23	145	240	366	683	89	84
24-Feb-23	153	259	387	707	90	85
3-Mar-23	154	286	426	801	90	85
10-Mar-23	165	327	487	902	95	88
17-Mar-23	195	393	563	973	120	106

Source: JP Morgan Securities

5. Recent Commercial/Multifamily Research Releases from MBA

The following reports can be found at www.mba.org/crefresearch. If you have trouble locating these or other MBA reports, email crefresearch@mba.org

3/22/2023

MBA Releases 2022 Rankings of Commercial/Multifamily Mortgage Firms' Origination Volumes

According to a set of commercial/multifamily real estate finance league tables prepared by the Mortgage Bankers Association (MBA), the following firms were the top commercial/multifamily mortgage originators in 2022:

3/7/2023

Commercial and Multifamily Mortgage Delinquency Rates Remain Low in Fourth Quarter 2022

Commercial and multifamily mortgage delinquencies remained low in the fourth quarter of 2022, according to the Mortgage Bankers Association's (MBA) latest Commercial/Multifamily Delinquency Report.

2/13/2023

MBA Releases 2022 Year-End Commercial/Multifamily Servicer Rankings

The Mortgage Bankers Association (MBA) today released its year-end ranking of commercial and multifamily mortgage servicers' volumes as of December 31, 2022. At the top of the list of firms is PNC Real Estate/Midland Loan Services, with \$732 billion in master and primary servicing, followed by Wells Fargo Bank, N.A., (\$722 billion), KeyBank National Association (\$451 billion), Berkadia Commercial Mortgage LLC (\$393 billion), and CBRE Loan Services (\$380 billion).

2/13/2023

Commercial/Multifamily Borrowing Down 54% in the Fourth Quarter of 2022

Commercial and multifamily mortgage loan originations were 54 percent lower in the fourth quarter of 2022 compared to a year ago and decreased 23 percent from the third quarter of 2021. This is according to the Mortgage Bankers Association's (MBA) Quarterly Survey of Commercial/Multifamily Mortgage Bankers Originations, which was released today at the 2023 Commercial/Multifamily Finance Convention and Expo.

*2/13/2023***Commercial and Multifamily Mortgage Maturity Volumes Increase 33 Percent in 2023**

\$331.2 billion of the \$2.8 trillion (12 percent) of outstanding commercial and multifamily mortgages held by non-bank lenders and investors will mature in 2023, which is a 33 percent increase from the \$249 billion that matured in 2022. This is according to the Mortgage Bankers Association's (MBA) 2022 Commercial Real Estate/Multifamily Survey of Loan Maturity Volumes, released today at the 2023 Commercial/Multifamily Finance Convention and Expo.

*2/13/2023***Total Commercial and Multifamily Borrowing and Lending Expected to Fall to \$684 Billion in 2023**

Total commercial and multifamily mortgage borrowing and lending is expected to fall to \$684 billion this year, which is a 15 percent decline from an expected 2022 total of \$804 billion. This is according to an updated baseline forecast released here today by the Mortgage Bankers Association (MBA) at the 2023 Commercial/Multifamily Finance Convention and Expo.

*1/17/2023***Commercial and Multifamily Mortgage Delinquency Rates Increased Slightly Through the Fourth Quarter of 2022**

Delinquency rates for mortgages backed by commercial and multifamily properties increased slightly through the fourth quarter of 2022, according to the Mortgage Bankers Association's (MBA) latest CREF Loan Performance Survey.

*1/5/2023***Total Commercial and Multifamily Borrowing and Lending Expected to Fall to \$700 Billion in 2023**

Total commercial and multifamily mortgage borrowing and lending is expected to fall to \$700 billion this year, which is a 5 percent decline from an expected 2022 total of \$740 billion. This is according to an updated baseline forecast released today by the Mortgage Bankers Association (MBA).

*1/5/2023***MBA CREF Outlook Survey: Unsettled Markets Dissipating in 2023**

Commercial and multifamily mortgage originators are experiencing an unsettled market for borrowing and lending but anticipate those conditions will slowly stabilize over the course of 2023. That is according to the Mortgage Bankers Association's (MBA) 2023 Commercial Real Estate Finance (CREF) Outlook Survey, which polled the leaders of the top commercial and multifamily mortgage finance firms for their outlook for the year ahead.

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*12/13/2022***Commercial and Multifamily Mortgage Debt Outstanding Increased by \$70 Billion in Third-Quarter 2022**

The level of commercial/multifamily mortgage debt outstanding increased by \$70.0 billion (1.6 percent) in the third quarter of 2022, according to the Mortgage Bankers Association's (MBA) latest Commercial/Multifamily Mortgage Debt Outstanding quarterly report.

*12/6/2022***Commercial and Multifamily Mortgage Delinquency Rates Remain Low in Third Quarter 2022**

Commercial and multifamily mortgage delinquencies remained low in the third quarter of 2022, according to the Mortgage Bankers Association's (MBA) latest Commercial/Multifamily Delinquency Report.

*11/8/2022***Commercial/Multifamily Borrowing Declines 13 Percent in Third-Quarter 2022**

Commercial and multifamily mortgage loan originations decreased 13 percent in the third quarter of 2022 compared to the same period last year, according to the Mortgage Bankers Association's (MBA) Quarterly Survey of Commercial/Multifamily Mortgage Bankers Originations.

*10/17/2022***Commercial and Multifamily Mortgage Delinquency Rates Declined Through the Third Quarter of 2022**

Delinquency rates for mortgages backed by commercial and multifamily properties declined through the third quarter of 2022, according to the Mortgage Bankers Association's (MBA) latest CREF Loan Performance Survey.

*10/3/2022***Commercial/Multifamily Lending Expected to Fall in 2022 Due to Ongoing Economic Uncertainty**

Total commercial and multifamily mortgage borrowing and lending is expected to fall to \$766 billion this year, down 14 percent from 2021 totals (\$891 billion). This is according to an updated baseline forecast released today by the Mortgage Bankers Association (MBA).

*9/20/2022***Commercial/Multifamily Mortgage Debt Outstanding Increased by \$99.5 Billion in Second-Quarter 2022**

The level of commercial/multifamily mortgage debt outstanding increased by \$99.5 billion (2.3 percent) in the second quarter of 2022, according to the Mortgage Bankers Association's (MBA) latest Commercial/Multifamily Mortgage Debt Outstanding quarterly report.

*9/13/2022***Commercial and Multifamily Mortgage Delinquency Rates Remain Low in Second-Quarter 2022**

Commercial and multifamily mortgage delinquencies declined in the second quarter of 2022, according to the Mortgage Bankers Association's (MBA) latest Commercial/Multifamily Delinquency Report.

*8/18/2022***Commercial/Multifamily Borrowing Up 19 Percent Year-Over-Year in the Second Quarter of 2022**

Commercial and multifamily mortgage loan originations increased 19 percent in the second quarter of 2022 compared to the same period last year, according to the Mortgage Bankers Association's (MBA) Quarterly Survey of Commercial/Multifamily Mortgage Bankers Originations.

*8/2/2022***Multifamily Lending Hit Record High of \$487 Billion in 2021**

In 2021, 2,215 different multifamily lenders provided a total of \$487.3 billion in new mortgages for apartment buildings with five or more units, according to the Mortgage Bankers Association's (MBA) annual report of the multifamily lending market.

*7/19/2022***Higher Rates, Economic Uncertainty to Slow Commercial/Multifamily Lending in the Second Half of 2022**

Total commercial and multifamily mortgage borrowing and lending is expected to fall to \$733 billion this year, down 18 percent from 2021 totals (\$891 billion). This is according to an updated baseline forecast released today by the Mortgage Bankers Association (MBA).

*6/16/2022***Commercial/Multifamily Mortgage Debt Outstanding Rises to New Record in First-Quarter 2022**

The level of commercial/multifamily mortgage debt outstanding increased by \$74.2 billion (1.8 percent) in the first quarter of 2022, according to the Mortgage Bankers Association's (MBA) latest Commercial/Multifamily Mortgage Debt Outstanding quarterly report.

*5/31/2022***Commercial and Multifamily Mortgage Delinquency Rates Remain Low in First-Quarter 2022**

Commercial and multifamily mortgage delinquencies declined in the first quarter of 2022, according to the Mortgage Bankers Association's (MBA) latest Commercial/Multifamily Delinquency Report.

*5/12/2022***Commercial/Multifamily Borrowing Jumped 72 Percent in the First Quarter of 2022**

Commercial and multifamily mortgage loan originations increased 72 percent in the first quarter of 2022 compared to the same period last year, according to the Mortgage Bankers Association's (MBA) Quarterly Survey of Commercial/Multifamily Mortgage Bankers Originations. In line with seasonality trends, originations during the first three months of 2022 year were 39 percent lower than the fourth quarter of 2021.

*4/18/2022***Commercial/Multifamily Lending to Hold Steady in 2022 Amidst Higher Rates and Economic Uncertainty**

Total commercial and multifamily mortgage borrowing and lending is expected to hold steady at a projected \$895 billion of total lending in 2022, roughly in line with 2021 totals (\$891 billion). This is according to an updated forecast released today by the Mortgage Bankers Association (MBA).

*4/14/2022***Commercial and Multifamily Mortgage Bankers Originated \$683.2 Billion in 2021; Total Lending Tally Reaches New Record of \$890.6 Billion**

Commercial and multifamily mortgage bankers closed \$683.2 billion of loans in 2021, according to the Mortgage Bankers Association's (MBA) 2021 Commercial Real Estate/Multifamily Finance Annual Origination Volume Summation. The \$683.2 billion in commercial and multifamily mortgages closed last year was 55 percent higher than the \$441.5 billion reported in 2020.

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*3/23/2022***Commercial/Multifamily Mortgage Debt Outstanding Jumps to Record Quarterly High in Fourth-Quarter 2021**

The level of commercial/multifamily mortgage debt outstanding during the final three months of 2021 was \$287 billion (7.4 percent) higher than at the end of 2020, according to the Mortgage Bankers Association's (MBA) latest Commercial/Multifamily Mortgage Debt Outstanding quarterly report.

*3/22/2022***MBA Releases 2021 Rankings of Commercial/Multifamily Mortgage Firms' Origination Volumes**

MBA's Commercial Real Estate/Multifamily Finance Firms - Annual Origination Volumes report is the only one of its kind to present a comprehensive set of listings of 149 different commercial/multifamily mortgage originators, their 2021 volumes, and the different roles they play. The report presents origination volumes in more than 140 categories, including by role, by investor group, by property type, by financing structure type, and by the location of the originating office.

*3/21/2022***Commercial and Multifamily Mortgage Delinquency Rates Remain Low in Fourth-Quarter 2021**

Commercial and multifamily mortgage delinquencies declined in the fourth quarter of 2021, according to the Mortgage Bankers Association's (MBA) latest Commercial/Multifamily Delinquency Report.

*2/14/2022***MBA Forecast: Commercial/Multifamily Lending to Hit Record \$1 Trillion in 2022**

Total commercial and multifamily mortgage borrowing and lending is expected to break \$1 trillion for the first time in 2022, a 13 percent increase from 2021's estimated volume of \$900 billion, according to a new forecast released today by the Mortgage Bankers Association (MBA) at its 2022 Commercial/Multifamily Finance Convention and Expo.

*2/14/2022***Commercial and Multifamily Mortgage Maturity Volumes to Increase 12 Percent in 2022**

\$248.8 billion of the \$2.6 trillion (10 percent) of outstanding commercial and multifamily mortgages held by non-bank lenders and investors will mature in 2022, which is a 12 percent increase from the \$222.5 billion that matured in 2021. This is according to the Mortgage Bankers Association's Commercial Real Estate/Multifamily Survey of Loan Maturity Volumes, released today at the 2022 Commercial/Multifamily Finance Convention and Expo.

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*2/14/2022***Commercial/Multifamily Borrowing Jumped 79 Percent to New Record in the Fourth Quarter of 2021**

Commercial and multifamily mortgage loan originations were 79 percent higher in the fourth quarter of 2021 compared to a year ago, and increased 44 percent from the third quarter of 2021. This is according to the Mortgage Bankers Association's (MBA) Quarterly Survey of Commercial/Multifamily Mortgage Bankers Originations, which was released today at the 2022 Commercial/Multifamily Finance Convention and Expo.

*2/13/2022***MBA Releases 2021 Year-End Commercial/Multifamily Servicer Rankings**

The Mortgage Bankers Association (MBA) today at the 2022 Commercial/Multifamily Finance Convention and Expo released its year-end ranking of commercial and multifamily mortgage servicers' volumes as of December 31, 2021.

*1/12/2022***Commercial and Multifamily Mortgage Delinquencies Declined in the Fourth Quarter of 2021**

Delinquency rates for mortgages backed by commercial and multifamily properties declined during the final three months of 2021, according to the Mortgage Bankers Association's (MBA) latest CREF Loan Performance Survey.

*1/11/2022***MBA CREF Outlook Survey: Originators Are Bullish on 2022 Outlook**

Commercial and multifamily mortgage originators anticipate 2022 will be another strong year of borrowing and lending, according to the Mortgage Bankers Association's (MBA) 2022 Commercial Real Estate Finance (CREF) Outlook Survey.

*12/16/2021***Every Major Investor Group Increased Holdings of Commercial/Multifamily Mortgage Debt in the Third Quarter of 2021**

The level of commercial/multifamily mortgage debt outstanding increased by \$64.8 billion (1.6 percent) in the third quarter of 2021, according to the Mortgage Bankers Association's (MBA) latest Commercial/Multifamily Mortgage Debt Outstanding quarterly report.

*12/7/2021***Commercial and Multifamily Mortgage Delinquency Rates Decreased in the Third Quarter of 2021**

Commercial and multifamily mortgage delinquencies declined in the third quarter of 2021, according to the Mortgage Bankers Association's (MBA) latest Commercial/Multifamily Delinquency Report.

*11/4/2021***Commercial/Multifamily Borrowing Jumped 119 Percent in the Third Quarter of 2021**

Commercial and multifamily mortgage loan originations were 119 percent higher in the third quarter of 2021 compared to a year ago and increased 19 percent from the second quarter of 2021, according to the Mortgage Bankers Association's (MBA) Quarterly Survey of Commercial/Multifamily Mortgage Bankers Originations.

*10/6/2021***Commercial and Multifamily Mortgage Delinquencies Declined in September**

Delinquency rates for mortgages backed by commercial and multifamily properties declined in September, according to the Mortgage Bankers Association's (MBA) latest monthly CREF Loan Performance Survey. The survey was developed to better understand the ways the COVID-19 pandemic is impacting commercial mortgage loan performance.

*9/28/2021***Commercial/Multifamily Mortgage Debt Increased 1.5 Percent in the Second Quarter of 2021**

The level of commercial/multifamily mortgage debt outstanding increased by \$60.7 billion (1.5 percent) in the second quarter of 2021, according to the Mortgage Bankers Association's (MBA) latest Commercial/Multifamily Mortgage Debt Outstanding quarterly report.

*9/14/2021***Commercial and Multifamily Mortgage Delinquencies Continue Downward Trend**

Delinquency rates of mortgages backed by commercial and multifamily properties have broadly improved in recent months, according to two reports released jointly today by the Mortgage Bankers Association (MBA).

*8/12/2021***Commercial/Multifamily Borrowing Bounces Back in the Second Quarter of 2021**

Commercial and multifamily mortgage loan originations were 106 percent higher in the second quarter of 2021 compared to a year ago and increased 66 percent from the first quarter of 2021, according to the Mortgage Bankers Association's (MBA) Quarterly Survey of Commercial/Multifamily Mortgage Bankers Originations.

*8/10/2021***MBA Forecast: Commercial/Multifamily Lending on Track to Increase 31 Percent to \$578 Billion in 2021**

Commercial and multifamily mortgage bankers are expected to close \$578 billion of loans backed by income-producing properties in 2021, a 31 percent increase from 2020's volume of \$442 billion, according to a new forecast released today by the Mortgage Bankers Association (MBA).

*8/5/2021***Commercial and Multifamily Mortgage Delinquencies Declined in July**

Delinquency rates for mortgages backed by commercial and multifamily properties declined in July, according to the Mortgage Bankers Association's (MBA) latest monthly CREF Loan Performance Survey. The survey was developed to better understand the ways the COVID-19 pandemic is impacting commercial mortgage loan performance.

*8/5/2021***Multifamily Lending Hit \$359.7 Billion in 2020**

In 2020, 2,140 different multifamily lenders provided a total of \$359.7 billion in new mortgages for apartment buildings with five or more units, according to the Mortgage Bankers Association's (MBA) annual report of the multifamily lending market.

*7/7/2021***Commercial and Multifamily Mortgage Delinquencies Hold Steady in June**

Delinquency rates for mortgages backed by commercial and multifamily properties held steady in June, according to the Mortgage Bankers Association's (MBA) latest monthly CREF Loan Performance Survey. The survey was developed to better understand the ways the COVID-19 pandemic is impacting commercial mortgage loan performance.

6/15/2021

Commercial/Multifamily Mortgage Debt Increased 1.1 Percent in the First Quarter of 2021

The level of commercial/multifamily mortgage debt outstanding rose by \$44.6 billion (1.1 percent) in the first quarter of 2021, according to the Mortgage Bankers Association's (MBA) latest Commercial/Multifamily Mortgage Debt Outstanding quarterly report. Total commercial/multifamily debt outstanding rose to \$3.93 trillion at the end of the first quarter. Multifamily mortgage debt alone increased \$28.8 billion (1.7 percent) to \$1.7 trillion from the fourth quarter of 2020.

6/3/2021

Commercial and Multifamily Mortgage Delinquencies Decline to Lowest Level Since the Onset of the Pandemic

Delinquency rates for mortgages backed by commercial and multifamily properties continue to decline, according to two reports released today by the Mortgage Bankers Association (MBA).

5/11/2021

Commercial and Multifamily Borrowing Declines 14 Percent in the First Quarter of 2021

Commercial and multifamily mortgage loan originations decreased 14 percent in the first quarter of 2021 compared to the same period last year, according to the Mortgage Bankers Association's (MBA) Quarterly Survey of Commercial/Multifamily Mortgage Bankers Originations. In line with seasonality trends, originations during the first three months of the year were 37 percent lower than the fourth quarter of 2020.

5/3/2021

Commercial and Multifamily Mortgage Delinquencies Declined in April

Delinquency rates for mortgages backed by commercial and multifamily properties decreased again in April, reaching the lowest level since the onset of the COVID-19 pandemic, according to the Mortgage Bankers Association's (MBA) latest monthly CREF Loan Performance Survey. The survey was developed to better understand the ways the COVID-19 pandemic is impacting commercial mortgage loan performance.

4/15/2021

Commercial and Multifamily Mortgage Bankers Originated \$441.5 Billion in 2020

Commercial and multifamily mortgage bankers closed \$441.5 billion of loans in 2020, according to the Mortgage Bankers Association's (MBA) 2020 Commercial Real Estate/Multifamily Finance Annual Origination Volume Summation. The \$441.5 billion in commercial and multifamily mortgages closed last year was 26 percent lower than the record \$601 billion reported in 2019.

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*4/1/2021***Commercial and Multifamily Mortgage Delinquencies Decreased in March**

Delinquency rates for mortgages backed by commercial and multifamily properties decreased again in March, reaching the lowest level since the onset of the COVID-19 pandemic, according to the Mortgage Bankers Association's (MBA) latest monthly CREF Loan Performance Survey. The survey was developed to better understand the ways the COVID-19 pandemic is impacting commercial mortgage loan performance.

*3/17/2021***MBA Releases 2020 Rankings of Commercial/Multifamily Mortgage Firms' Origination Volumes**

MBA's Commercial Real Estate/Multifamily Finance Firms - Annual Origination Volumes report is the only one of its kind to present a comprehensive set of listings of 141 different commercial/multifamily mortgage originators, their 2020 volumes, and the different roles they play. The report presents origination volumes in more than 140 categories, including by role, by investor group, by property type, by financing structure type, and by the location of the originating office.

*3/16/2021***Commercial/Multifamily Mortgage Debt Increased 5.8 Percent in the Fourth Quarter of 2020**

The level of commercial/multifamily mortgage debt outstanding at the end of 2020 was \$212 billion (5.8 percent) higher than at the end of 2019, according to the Mortgage Bankers Association's (MBA) latest Commercial/Multifamily Mortgage Debt Outstanding quarterly report.

*3/4/2021***Commercial and Multifamily Mortgage Delinquency Rates Continue to Vary by Property Types and Capital Sources**

According to two reports released today by the Mortgage Bankers Association (MBA), delinquency rates for mortgages backed by commercial and multifamily properties decreased in February, as the COVID-19 pandemic's impact on commercial and multifamily mortgage performance continues to vary by the different types of commercial real estate.

*2/10/2021***MBA Releases 2020 Year-End Commercial/Multifamily Servicer Rankings**

The Mortgage Bankers Association (MBA) today released its year-end ranking of commercial and multifamily mortgage servicers' volumes as of December 31, 2020.

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*2/9/2021***Commercial and Multifamily Mortgage Maturity Volumes to Increase 36 Percent in 2021**

\$222.5 billion of the \$2.3 trillion (10 percent) of outstanding commercial and multifamily mortgages held by non-bank lenders and investors will mature in 2021, a 36 percent increase from the \$163.2 billion that matured in 2020. That is according to today's annual release of the Mortgage Bankers Association's Commercial Real Estate/Multifamily Survey of Loan Maturity Volumes.

*2/9/2021***MBA Forecast: Commercial/Multifamily Lending to Increase 11 Percent to \$486 Billion in 2021**

Commercial and multifamily mortgage bankers are expected to close \$486 billion of loans backed by income-producing properties in 2021, an 11 percent increase from 2020's estimated volume of \$440 billion, according to a new forecast released today by the Mortgage Bankers Association (MBA).

*2/8/2021***Commercial/Multifamily Borrowing Falls 18 Percent in the Fourth Quarter of 2020**

Commercial and multifamily mortgage loan originations were 18 percent lower in the fourth quarter of 2020 compared to a year ago, and increased 76 percent from the third quarter of 2020, according to the Mortgage Bankers Association's (MBA) Quarterly Survey of Commercial/Multifamily Mortgage Bankers Originations.

*2/2/2021***Commercial and Multifamily Mortgage Delinquencies Decreased in January**

Delinquency rates for mortgages backed by commercial and multifamily properties decreased in January, according to the Mortgage Bankers Association's (MBA) latest monthly MBA CREF Loan Performance Survey. The survey was developed to better understand the ways the COVID-19 pandemic is impacting commercial mortgage loan performance.

*1/8/2021***Commercial and Multifamily Mortgage Delinquencies Rise in December**

Delinquency rates for mortgages backed by commercial and multifamily properties increased for the second month in a row in December, according to the Mortgage Bankers Association's (MBA) latest monthly MBA CREF Loan Performance Survey. The survey was developed to better understand the ways the pandemic is impacting commercial mortgage loan performance.



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