

QDEB Q2

COMMERCIAL / MULTIFAMILY QUARTERLY DATABOOK | Q2 2022

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COMMERCIAL/MULTIFAMILY
QUARTERLY DATABOOK
Q2 2022

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MBA COMMERCIAL REAL ESTATE/MULTIFAMILY FINANCE

QUARTERLY DATABOOK

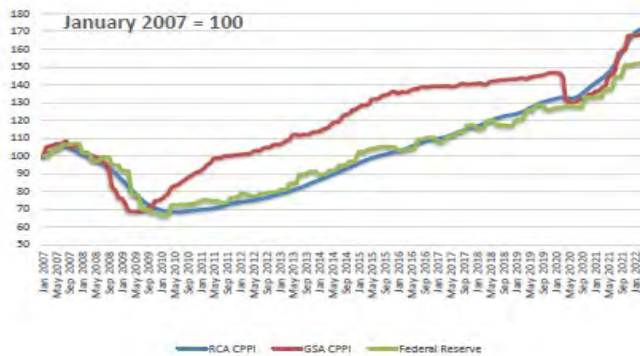
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Second Quarter 2022

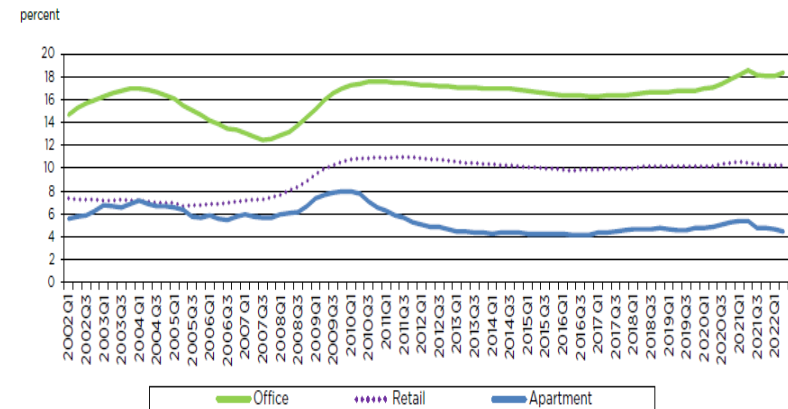
Selected Charts

Price Indices



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

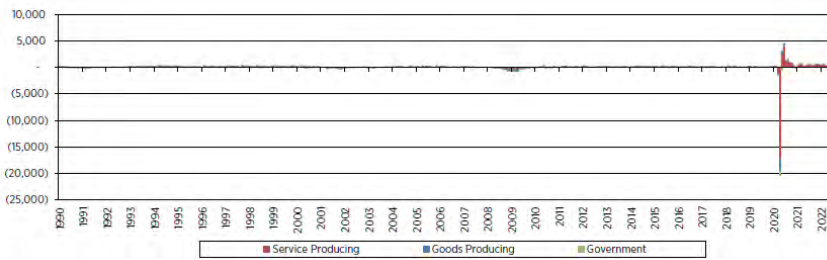
Average Vacancy Rates By Property Type



Source: REIS

Month-over-month Change in At-Place Employment

Thousands of jobs



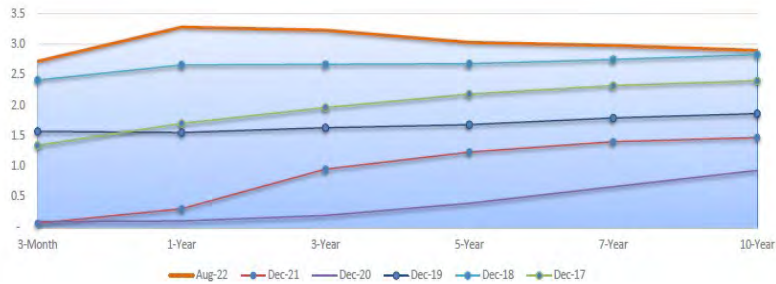
Source: Bureau of Labor Statistics

Ten-year Treasury and 10-year Swaps Percent



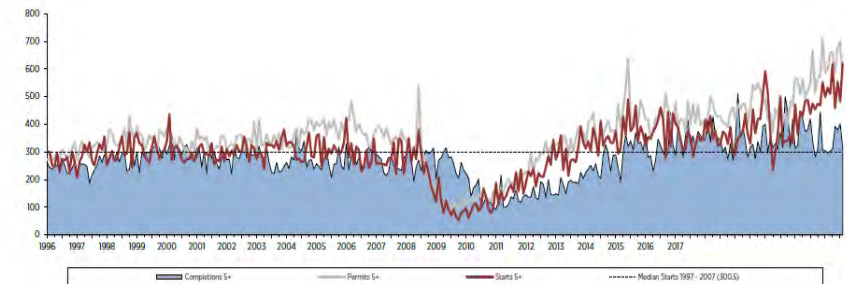
Source: Federal Reserve Board & JP Morgan Securities

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
Second Quarter 2022
September 30, 2022



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1. Outlook

Introduction

ECONOMY

Commercial and multifamily real estate sits at the confluence of three distinct markets – space, equity and debt – all three of which are going through significant transitions, as is the U.S. economy as a whole.

The second quarter was the second consecutive quarter of negative growth in real gross domestic product (GDP). The 0.6 percent decline followed a 1.6 percent drop in Q1. While two consecutive quarters of drops in GDP are often seen as a sign of recession, the Q1 decline was driven by weakness in net exports and inventories – neither of which appeared to show fundamental weakness in the economy as a whole. Expectations are that Q3 will return to positive, although slow, growth.

At the same time, the labor market has remained tight. Businesses added an average 349,000 jobs each month during the quarter, followed by 526,000 jobs in July and 315,000 in August. The unemployment rate, which sat at 3.6 percent throughout Q2 and fell to 3.5 percent in July, rose to 3.7 percent in August, but only because the 786,000 people who joined the labor force outnumbered the 442,000 additional people with jobs that month.

Retail sales have continued to benefit from consumers' past savings and growing wages – with sales excluding motor vehicles and parts dealers up 8.5 percent over the last year and more spending going to services.

CRE FUNDAMENTALS

Commercial real estate (CRE) fundamentals vary dramatically by property type. Apartment vacancy rates are – at 5.6 percent according to the Census Bureau – the tightest they have been since the mid-1980s. Industrial markets are similarly tight. Retail and office vacancies are higher than pre-pandemic levels, although

measurement, particularly of office, is made more complicated by the presence of space that may be leased but not being used. The tight apartment and industrial markets have led to significant increases in asking rents – with apartment rents up 17 percent over the last year. Because renewed apartment leases generally do not rise as much as those of empty units, those figures do not necessarily represent the change in rents paid by the typical renter, which the Bureau of Labor Statistics estimates at 6.7 percent.

Of all the property types, office continues to draw the greatest attention, although not necessarily in a good way. To help better understand some of the key drivers of coming demand for office, MBA released A Framework for Considering Office Demand in a Post-Pandemic World (<https://www.mba.org/news-and-research/newsroom/news/2022/09/09/the-office-market-has-likely-changed-forever.-look-to-the-labor-market-for-clues-on-how-big-the-shift-will-be>)

The white paper looks at the relative benefits and costs of remote and in-person work to employees and employers. It finds that in the near term, remote work can be just as, if not more, effective than office work in terms of “getting the job done,” while also providing a range of tangible short-term benefits. The findings also reveal, however, that companies and workers rely heavily on in-person interactions to develop workplace capital, helping them thrive over the long term. The pandemic has elevated the weight of the near-term benefits of remote work while reducing the pull of developing workplace capital.

The white paper presents two scenarios – a base case where hybrid work trends remain, and an alternative case where a looser labor market and “a fear of missing out” lead to a greater return to in-office work – to analyze the outlook for the office sector and potential impacts to commercial mortgage loan volume and property values.

CRE SALES & VALUES

After a record start to the year in terms of the dollar volume of commercial real estate property sales, the velocity has begun to slow markedly. Q1 and Q2 – at \$162 billion and \$169 billion for sales of the major property types – were the largest first and second quarters on record, up a combined 44 percent from 2021 volumes. That changed in July, with sales volume down 7 percent from a year earlier, and August, with volume down 41 percent.

The changing market conditions are just starting to show up in some of the data series tracking cap rates and property values. The commercial property price index from Green Street Advisors reported a 4.9 percent drop in values during Q2 while the Federal Reserve's series showed a 1.8 percent fall and Real Capital Analytics showed a 1.9 percent increase.

CRE FINANCING

Borrowing and lending backed by commercial real estate set another quarterly record from April through June, although the pace of increase slowed from the first quarter. Property owners, investors, and lenders continue to work through broader economic uncertainty that is affecting the space, equity, and debt markets. MBA is forecasting that borrowing and lending will slow during the second half of the year. That said, improvements in fundamentals and values in recent years provide significant support to properties with outstanding loans and continued financing opportunities for properties whose cash flows can support debt.

Compared to a year earlier, a rise in originations for retail, hotel, and multifamily led the overall increase in commercial/multifamily lending volumes. By property type, retail increased by 108 percent, hotels increased by 37 percent, multifamily increased 24 percent, industrial increased 3 percent, office decreased 11 percent and health care decreased by 3 percent.

Among investor types, the dollar volume of loans originated for depositories increased by 102 percent year-over-year, government sponsored enterprises (GSEs – Fannie Mae and Freddie Mac)

increased 29 percent, and investor-driven lenders increased 12 percent. Commercial Mortgage-Backed Securities (CMBS) decreased 57 percent and lending for life insurance company portfolios decreased 5 percent.

MORTGAGE DEBT OUTSTANDING

Total commercial/multifamily mortgage debt outstanding rose to \$4.38 trillion at the end of the second quarter. Multifamily mortgage debt alone increased \$35.7 billion (1.9 percent) to \$1.9 trillion from the first quarter of 2022.

The \$99.5 billion increase in commercial and multifamily mortgage debt outstanding in the second quarter was the second largest quarterly rise since the inception of MBA's data series in 2007. The increase in holdings by depositories was the largest on record. The data match the fact that the first half of 2022 saw more commercial and multifamily borrowing and lending than any previous January through June period.

Commercial banks saw the largest gains in dollar terms in their holdings of commercial/multifamily mortgage debt – an increase of \$51.9 billion (3.2 percent). REITs increased their holdings by \$22.3 billion (14.4 percent), life insurance companies increased their holdings by \$13.1 billion (2.1 percent), and agency and GSE portfolios and MBS increased their holdings by \$8.0 billion (0.9 percent). Given a variety of changes in space, equity, and debt markets since the start of the year, we expect the pace to slow considerably in coming quarters.

Delinquency rates for commercial and multifamily mortgages fell again during the second quarter of 2022. Many capital sources are seeing delinquency rates at or approaching pre-pandemic levels, which were some of the lowest delinquency rates on record. MBA survey data have shown significant differences by property type as the COVID-19 pandemic's effects have morphed. These property-type differences, particularly across changing economic conditions, will continue to be a key factor in commercial and multifamily loan performance.

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

- Banks and thrifts (90 or more days delinquent or in non-accrual): 0.49 percent, a decrease of 0.07 percentage points from the first quarter of 2022;
- Life company portfolios (60 or more days delinquent): 0.04 percent, a decrease of 0.01 percentage points from the first quarter;
- Fannie Mae (60 or more days delinquent): 0.34 percent, a decrease of 0.04 percentage points from the first quarter;
- Freddie Mac (60 or more days delinquent): 0.07 percent, a decrease of 0.01 percentage points from the first quarter; and
- CMBS (30 or more days delinquent or in REO): 2.95 percent, a decrease of 0.41 percentage points from the first quarter.

MBA Economic Forecast

September 19, 2022

	2021				2022				2023				2021	2022	2023	2024
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Percent Change, SAAR																
Real Gross Domestic Product	6.3	6.7	2.3	6.9	-1.6	-0.6	1.3	1.8	0.6	0.9	0.7	1.2	5.5	0.2	0.9	1.3
Personal Consumption Expenditures	11.4	12.0	2.0	2.5	1.8	1.5	1.6	3.1	0.6	0.8	1.0	1.2	6.9	2.0	0.9	1.9
Business Fixed Investment	12.9	9.2	1.7	2.9	10.0	0.0	2.5	3.6	-1.0	-1.0	-1.3	-0.7	6.6	3.9	-1.0	-0.9
Residential Investment	13.3	-11.7	-7.7	2.2	0.4	-16.2	-29.9	-17.0	2.0	10.6	12.6	13.6	-1.5	-16.3	9.6	7.1
Govt. Consumption & Investment	4.2	-2.0	0.9	-2.6	-2.9	-1.8	-0.7	1.7	3.3	1.4	1.4	1.3	0.1	-0.9	1.9	0.8
Net Exports (Bil. Chain 2012\$)	-1033.0	-1048.4	-1112.3	-1139.5	-1311.0	-1247.4	-1146.6	-1169.3	-1188.6	-1180.3	-1191.0	-1202.4	-1083.3	-1218.6	-1190.6	-1269.8
Inventory Investment (Bil. Chain 2012\$)	-75.1	-143.3	-56.8	164.3	160.3	71.3	51.5	54.9	56.9	40.4	23.0	14.6	-27.7	84.5	33.7	21.2
Consumer Prices (YOY)	1.9	4.8	5.3	6.7	8.0	8.6	8.2	7.3	5.5	3.4	2.7	2.3	6.7	7.3	2.3	2.0
Percent																
Unemployment Rate	6.2	5.9	5.1	4.2	3.8	3.6	3.7	3.7	3.9	4.0	4.3	4.5	5.4	3.7	4.2	4.9
Federal Funds Rate	0.125	0.125	0.125	0.125	0.375	1.625	2.375	3.875	4.125	4.125	4.125	4.125	0.125	3.875	4.125	3.125
10-Year Treasury Yield	1.3	1.6	1.3	1.5	1.9	2.9	3.0	3.1	3.0	3.0	2.9	2.9	1.5	3.1	2.9	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

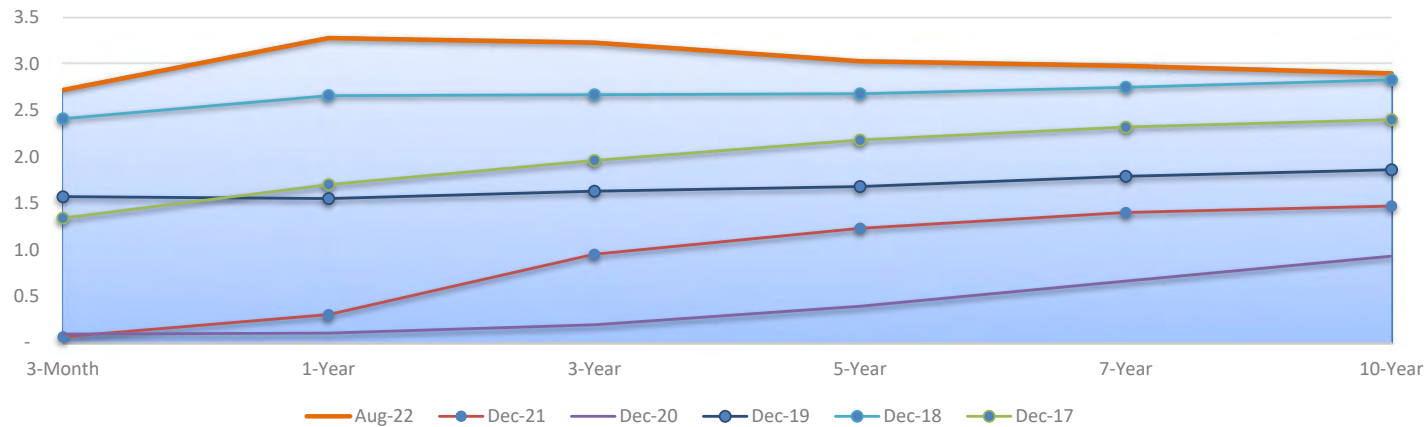
OUTSTANDING

RELEASES

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.

OUTLOOK

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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-16	0.51	0.87	1.49	1.96	2.29	2.49	2.32
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
Aug-21	0.05	0.07	0.42	0.77	1.06	1.28	1.33
Sep-21	0.04	0.08	0.47	0.86	1.16	1.37	1.49
Oct-21	0.05	0.11	0.67	1.11	1.40	1.58	1.56
Nov-21	0.05	0.18	0.82	1.20	1.45	1.56	1.53
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
Change in Rate Aug- 21 to Aug- 22	2.67	3.21	2.81	2.26	1.92	1.62	1.78

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

OUTLOOK

ENVIRONMENT

PRODUCTION

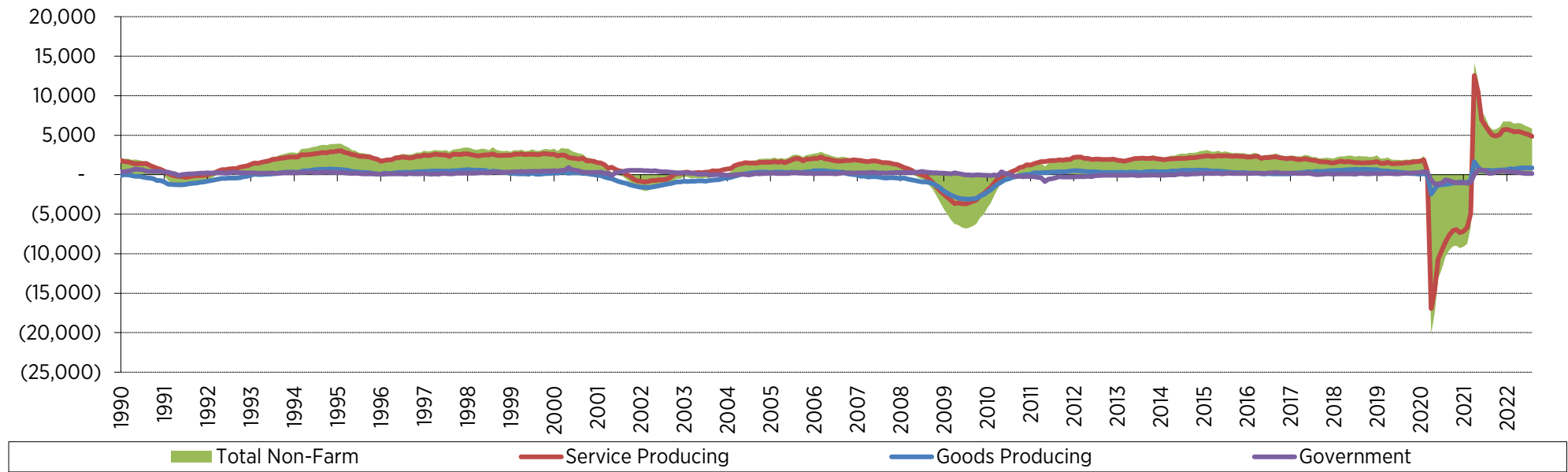
OUTSTANDING

RELEASES

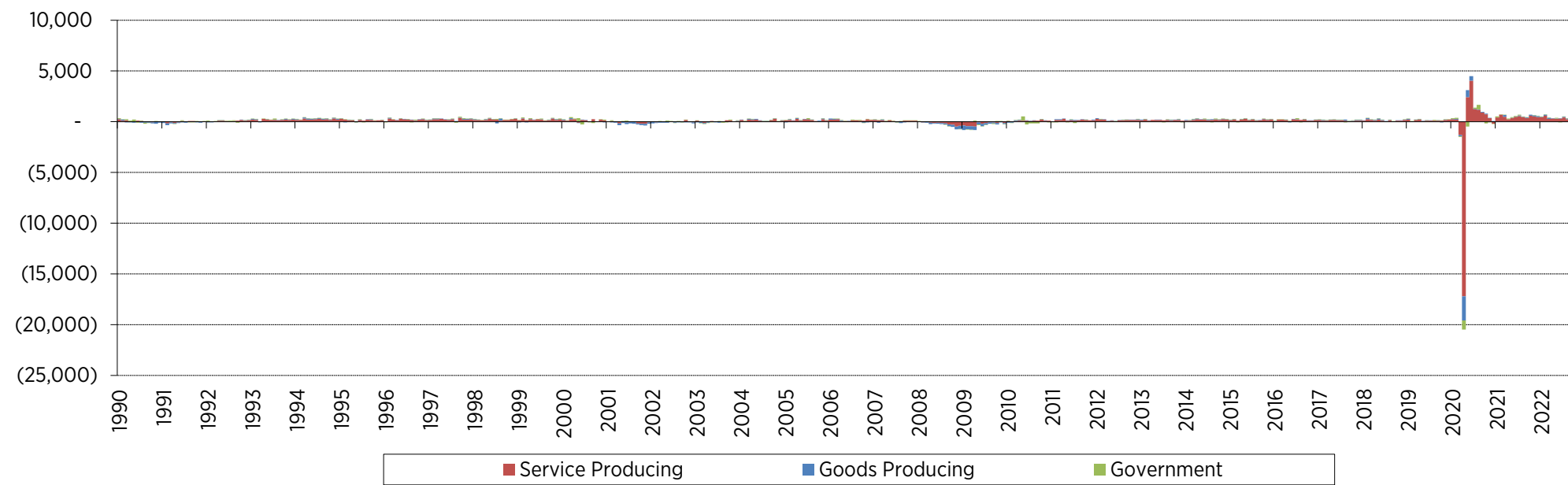
EMPLOYEES ON NONFARM PAYROLLS

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

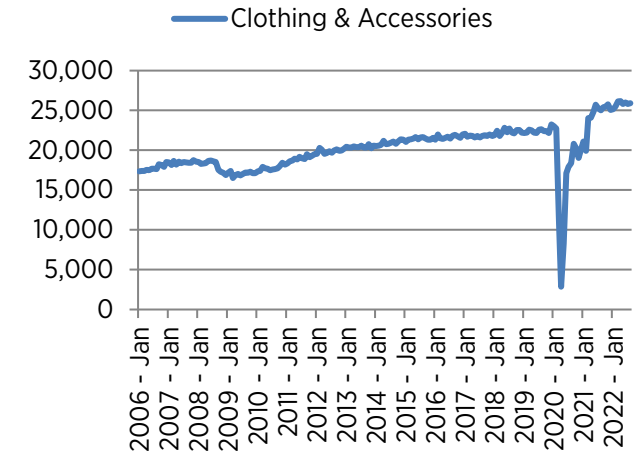
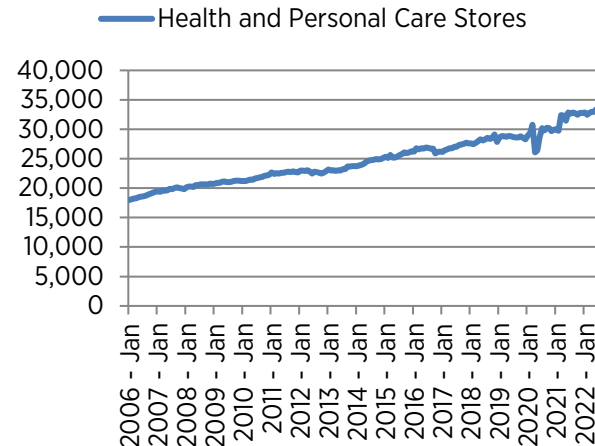
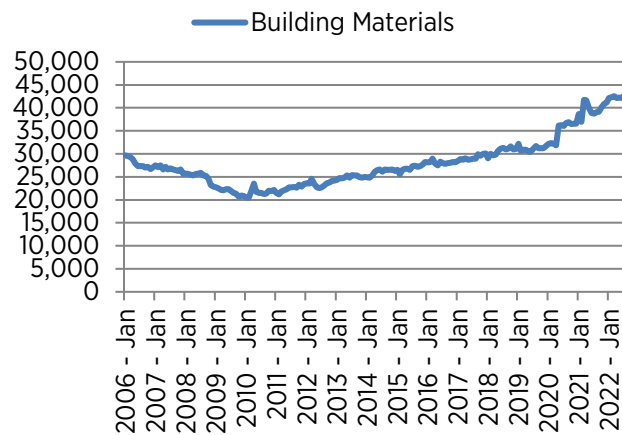
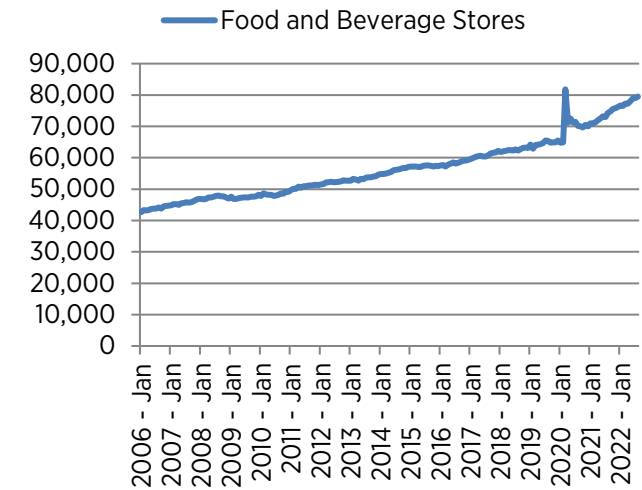
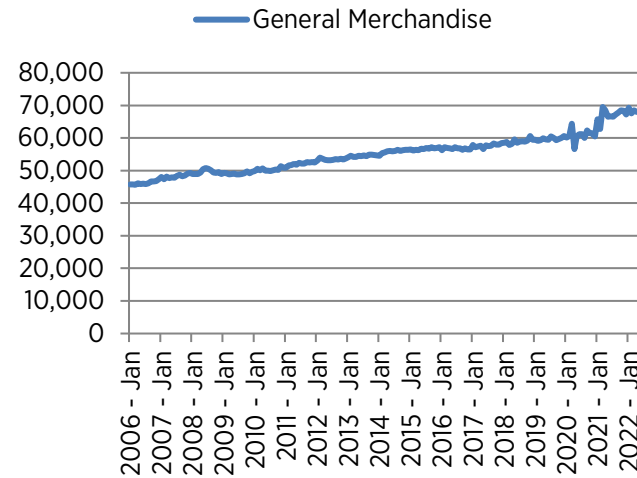
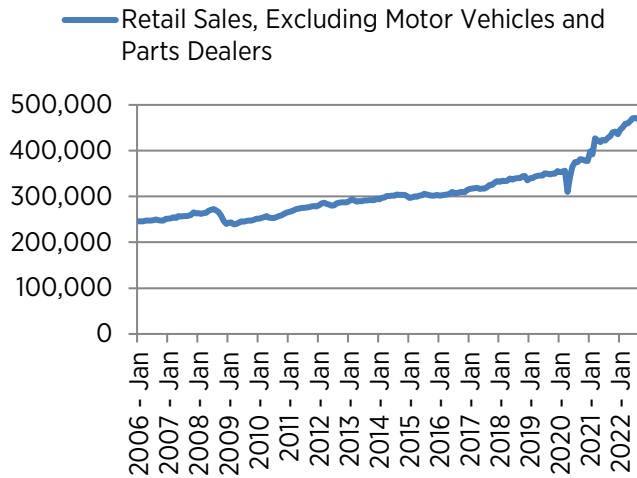
	Private	Private	Government	Total
	Service Producing	Goods Producing		Nonfarm
Dec 2017	104,829	20,316	22,384	147,529
Dec 2018	106,382	20,930	22,509	149,821
Dec 2019	108,041	21,017	22,731	151,789
Dec 2020	100,705	20,101	21,691	142,497
Dec 2021	106,408	20,691	22,141	149,240
Dec 2021	106,408	20,691	22,141	149,240
Jan 2022	106,868	20,723	22,153	149,744
Feb 2022	107,458	20,837	22,163	150,458
Mar 2022	107,758	20,922	22,176	150,856
Apr 2022	108,062	20,986	22,176	151,224
May 2022	108,332	21,047	22,231	151,610
Jun 2022	108,635	21,090	22,178	151,903
Jul 2022	109,046	21,156	22,227	152,429
Aug 2022	109,309	21,201	22,234	152,744
Percent change Aug 2021 to Aug 2022	4.7%	4.1%	0.6%	4.0%
Change				
Year-over-year				
Dec 2017	1,540	494	80	2,114
Dec 2018	1,553	614	125	2,292
Dec 2019	1,659	87	222	1,968
Dec 2020	(7,336)	(916)	(1,040)	(9,292)
Dec 2021	5,703	590	450	6,743
Month-over-month				
Sep 2021	355	54	15	424
Dec 2021	468	93	27	588
Jan 2022	460	32	12	504
Feb 2022	590	114	10	714
Mar 2022	300	85	13	398
Apr 2022	304	64	-	368
May 2022	270	61	55	386
Jun 2022	303	43	(53)	293
Jul 2022	411	66	49	526
Aug 2022	263	45	7	315

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

OUTLOOK

ENVIRONMENT

PRODUCTION

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RELEASES

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		
2017	692,085	729,255	349,976	324,373	261,614	3,858,008	Year-Over-Year 4.68%
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%
							Month-over-Month
2022 - Jan	69,233	76,603	42,170	32,815	25,160	446,334	2.37%
2022 - Feb	67,568	76,533	42,307	32,445	25,481	450,340	0.90%
2022 - Mar	68,468	77,268	42,572	32,763	26,157	459,048	1.93%
2022 - Apr	68,026	77,270	42,168	32,962	26,166	459,427	0.08%
2022 - May	68,053	78,111	42,257	32,985	25,812	465,403	1.30%
2022 - Jun	69,621	79,000	42,131	33,426	26,004	471,041	1.21%
2022 - Jul	69,349	79,083	42,684	33,571	25,788	471,501	0.10%
2022 - Aug	69,700	79,466	43,165	33,362	25,898	469,131	-0.50%
Percent change							
2021 - Aug to 2022 - Aug	3.6%	7.0%	10.5%	1.5%	3.5%	9.7%	

Source: U.S. Census Bureau

OUTLOOK

ENVIRONMENT

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2. Commercial/Multifamily Finance Environment

Extract of Commercial Real Estate Comments from the Federal Reserve Board's Beige Book
September 7, 2022

This report was prepared at the Federal Reserve Bank of Philadelphia based on information collected on or before August 29, 2022. 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

Economic activity was unchanged, on balance, since early July, with five Districts reporting slight to modest growth in activity and five others reporting slight to modest softening. Most Districts reported steady consumer spending as households continued to trade down and to shift spending away from discretionary goods and toward food and other essential items. Auto sales remained muted across most Districts, reflecting limited inventories and elevated prices. Hospitality and tourism contacts highlighted overall solid leisure travel activity with some reporting an uptick in business and group travel. Manufacturing activity grew in several Districts, although there were some reports of declining output as supply chain disruptions and labor shortages continued to hamper production. Despite some reports of strong leasing activity, residential real estate conditions weakened noticeably as home sales fell in all twelve Districts and residential construction remained constrained by input shortages. Commercial real estate activity softened, particularly demand for office space. Loan demand was mixed; while financial institutions reported generally strong demand for credit cards and commercial and industrial loans, residential loan demand was weak amid elevated mortgage interest rates. Nonfinancial services firms experienced stable to slightly higher demand. Demand for transportation services was mixed and reports on agriculture conditions across reporting Districts varied. While demand for energy products was robust, production remained constrained by supply chain bottlenecks for critical components. The outlook for future economic growth remained

generally weak, with contacts noting expectations for further softening of demand over the next six to twelve months.

FIRST DISTRICT—BOSTON

First District commercial real estate markets were mostly stable. Contacts reported a largely static retail leasing market, with little change in rents or demand for space. Rents for industrial space remained quite high, with vacancy rates at historic lows, as scarce land and labor constrained the addition of new supply. Demand for high-square-footage industrial space continued to outstrip supply, particularly in urban areas. Vacancy rates in office buildings remained elevated throughout the region, and lease rates fell or held steady, as working from home remained prevalent. Contacts said that office rents were flat but that concessions such as high renovation budgets had become standard. Higher interest rates deterred borrowing for new construction and acquisitions. Equity contributions on new loans increased, as investors sought to avoid lower-yielding options. The outlook was generally pessimistic. In the retail and industrial markets, contacts expected high borrowing and building costs to continue to deter construction activity. Several contacts expected office leasing activity to pick up by the end of the year but cautioned that such activity would result in significant tenant downsizing.

SECOND DISTRICT—NEW YORK

Commercial real estate markets have softened a bit, on balance. Office markets were steady to slightly weaker, with vacancy rates edging up in Manhattan, northern New Jersey, and upstate New York but steady elsewhere. Office rents were little changed across the District. The industrial market has also shown scattered signs of weakening, with vacancy rates steady to modestly higher but rents continuing to rise briskly. Retail rents were flat, while vacancy rates rose modestly.

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Construction activity weakened somewhat, as construction starts slipped. Still, a fair amount of space remains under construction, though this too has declined a bit, as a good deal of commercial space under development has come or is about to come to market. Industry contacts characterized the general business climate as quite negative and worsening, and contacts are somewhat pessimistic about the near-term outlook.

THIRD DISTRICT—PHILADELPHIA

On balance, construction activity and leasing activity for commercial real estate continued to hold steady. The markets for industrial/warehouse space, multifamily housing, and institutional projects remained strong. Rents for industrial/warehouse space and multifamily housing continued to rise. Contacts noted that high input prices remain a challenge for construction, but price growth has slowed. Multiple contacts reported that new land purchases and long-term projects have been delayed until firms have more clarity on interest rates and inflation.

FOURTH DISTRICT—CLEVELAND

Most nonresidential construction and real estate contacts reported that demand has remained stable despite increasing interest rates. Demand for warehousing space in particular has remained strong as firms continue to shift toward more ecommerce activity. While contacts expected demand to remain stable in the near future, a few worried that higher construction costs and rising interest rates could lead to declines in overall demand.

FIFTH DISTRICT—RICHMOND

Commercial real estate activity remained stable. Some respondents noted that office and retail market activity was starting to slow while the industrial or multifamily segments continued to experience strong leasing demand, low vacancy rates, and increasing rental rates. There remained a shortage of Class A office space, especially in suburban markets, and the amount of sublease space had been shrinking. Retail vacancy rates continued to edge down; but less desirable retail centers were still struggling with vacancies. New commercial construction projects decreased slightly due to higher construction costs, lack of availability of

some materials, and increased interest rates. Commercial real estate capital market activity softened this period.

SIXTH DISTRICT—ATLANTA

District commercial real estate (CRE) activity was mixed. Contacts reported healthy conditions in the multifamily and industrial markets, but voiced concerns that negative sentiment associated with a potential economic slowdown could impact activity. Slowing occurred in certain segments of retail CRE as some contacts reported a growing number of restaurant closings. Contacts also noted increasing concerns about possible declining CRE values as the bid-ask spread widened, pools of buyers diminished, the number of buyers seeking concessions grew, and prices declining in some of the less robust property types.

SEVENTH DISTRICT—CHICAGO

Nonresidential construction decreased slightly, as contacts continued to report project delays and elevated costs. Commercial real estate activity also fell slightly, with contacts highlighting some cooling in the strong demand for industrial space. There were concerns about the ability of owners of multifamily properties to repay floating interest rate loans that were underwritten with large forecasted rent increases. Prices and rents fell slightly, as did vacancy rates.

EIGHTH DISTRICT—ST. LOUIS

Commercial real estate activity has slowed slightly since our previous report, with large office buildings competing for few clients. Industrial real estate inventory remains extremely low, though industrial construction activity has increased. Demand for rental units has continued to increase since our previous report—especially for single-family housing. Rental rates in all four major District MSAs increased since our previous report. The general outlook of contacts remains negative, with over 80 percent of contacts in real estate and construction describing their outlook as somewhat or significantly worse than the previous quarter.

NINTH DISTRICT—MINNEAPOLIS

Commercial construction was flat since the last report. Among several dozen contacts, revenue trends were modestly higher, which some

contacts attributed to higher input costs getting passed on to customers. More than half said profits declined. Firms reported decent project backlogs but many challenges, including long product lead times and uncertain pricing that "make it hard to bid projects and not lose money," said one contact.

Commercial real estate was flat overall since the last report. Real estate sources said that the office market continued to soften, with rising vacancy rates and subleasing activity. Office space sales also remained subdued with the increase in interest rates and related financing costs. However, demand for industrial space remained high, and low vacancy rates were spurring a host of new construction projects, including an increase in speculative developments, according to a source.

TENTH DISTRICT—KANSAS CITY

Growth in non-residential real estate activity expanded at a moderate pace. While office vacancies remained elevated, demand for industrial space grew rapidly, and occupancy of retail spaces continued to expand at a moderate pace. Planned development for industrial sites expanded at a robust pace in several states. However, contacts expressed mixed views regarding future development and building activity for commercial properties. As financial conditions continued to tighten, several contacts noted that they were able to adjust terms and covenants, and to continue with planned construction. Other contacts indicated that persistently high materials costs and labor shortages are inhibiting further new development of large commercial projects.

ELEVENTH DISTRICT—DALLAS

Apartment leasing was solid and in line with pre-COVID levels, though momentum has slowed from its 2021 highs. Occupancy was flat to down and rent growth remained elevated but was declining from its earlier feverish pace. Demand for office space was mixed and construction subdued, while industrial leasing and construction remained high.

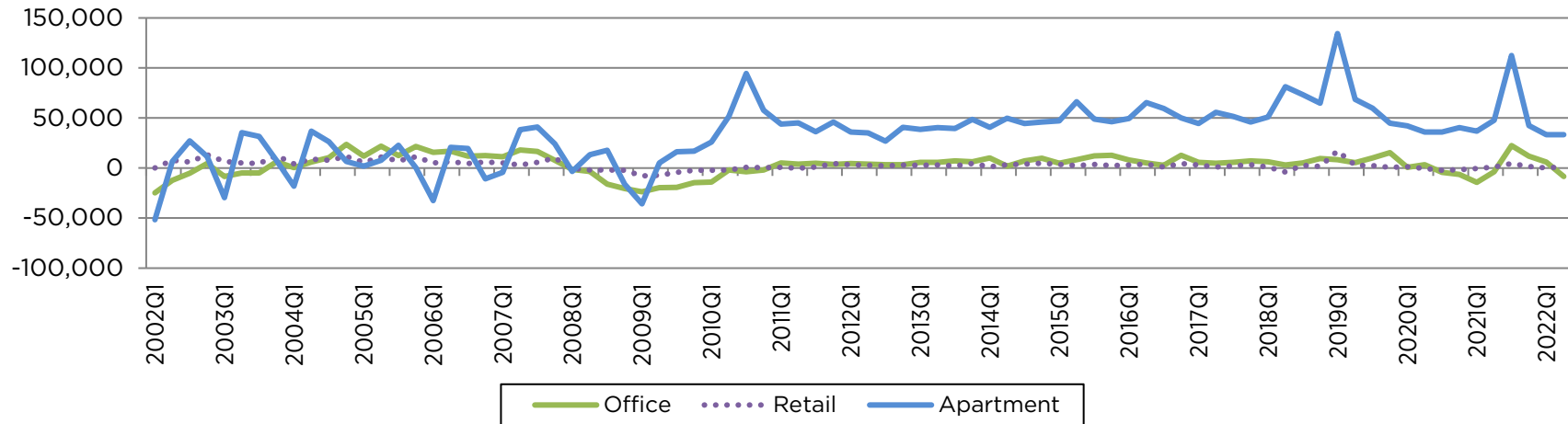
TWELFTH DISTRICT—SAN FRANCISCO

Activity in the commercial real estate market was mixed. Demand for industrial and warehouse space remained robust, while demand for office and retail space weakened in most of the District. One contact in Los

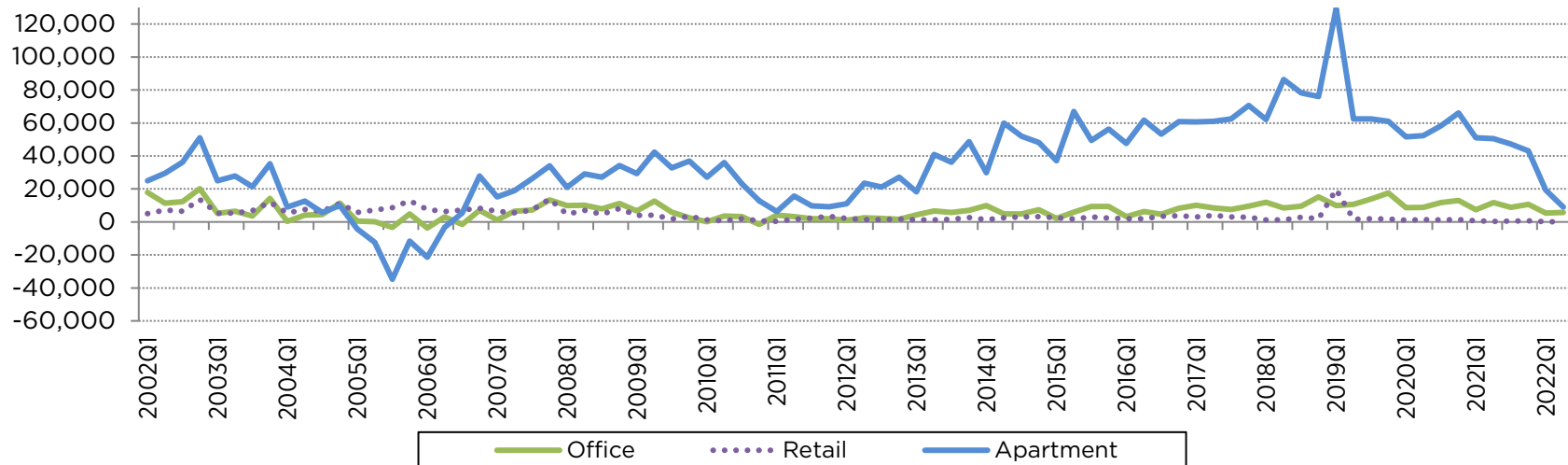
Angeles expected office vacancies to rise when leases are renegotiated as businesses continued to struggle to return workers to the office. Contacts noted that commercial real estate permits and construction slowed down in some areas due to cooling activity.

NET INVENTORY CHANGE/NET ABSORPTION COMMERCIAL/MULTIFAMILY PROPERTIES

Net Absorption (Thousands of Square Feet)



Net Inventory Change (Thousands of Square Feet)



Source: REIS

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COMMERCIAL/MULTIFAMILY PROPERTIES NET INVENTORY CHANGE LESS NET ABSORPTION

THOUSANDS OF SQUARE FEET

Year	Q1	Q2	Q3	Q4	Calendar Year	YTD Q2
APARTMENT						
2016	(1,972)	(3,540)	(6,397)	10,640	(1,269)	(5,512)
2017	15,942	5,270	10,994	24,410	56,616	21,212
2018	11,111	5,147	4,982	11,413	32,653	16,258
2019	(4,944)	(6,031)	2,485	16,218	7,728	(10,975)
2020	9,387	16,389	22,405	25,691	73,872	25,776
2021	14,188	2,802	(65,384)	616	(47,778)	16,990
2022	(14,143)	(24,460)				(38,603)
OFFICE						
2016	(4,919)	1,095	1,693	(4,657)	(6,788)	(3,824)
2017	4,396	3,575	1,961	2,207	12,139	7,971
2018	5,798	5,560	4,350	5,566	21,274	11,358
2019	1,431	5,330	3,593	2,161	12,515	6,761
2020	7,950	5,425	16,007	19,355	48,737	13,375
2021	21,884	15,503	(13,611)	(1,164)	22,612	37,387
2022	(553)	14,224				13,671
RETAIL						
2016	(1,177)	(1,943)	2,334	(811)	(1,597)	(3,120)
2017	75	2,853	854	(401)	3,381	2,928
2018	192	5,253	142	488	6,075	5,445
2019	2,510	(1,149)	(467)	1,067	1,961	1,361
2020	(343)	1,758	3,457	2,938	7,810	1,415
2021	1,084	(801)	(3,947)	(970)	(4,634)	283
2022	174	(1,250)				(1,076)

Source: REIS

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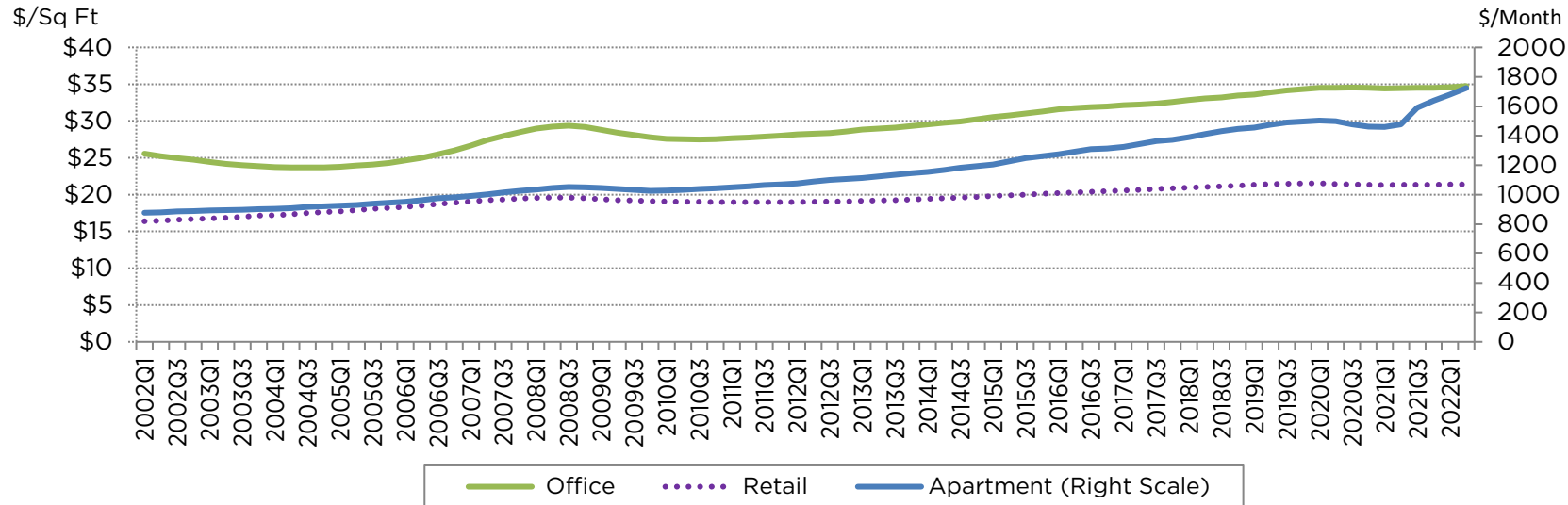
PRODUCTION

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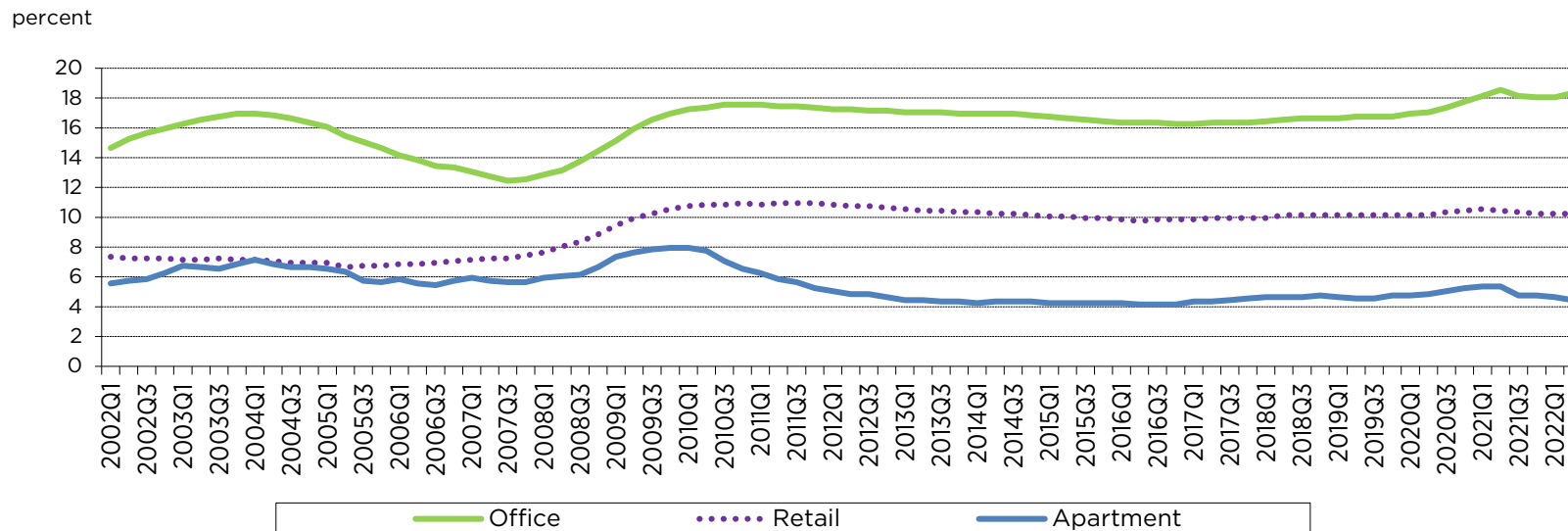
RELEASES

AVERAGE RENTS AND VACANCY RATES AT COMMERCIAL/MULTIFAMILY PROPERTIES

Average Rents



Average Vacancy Rates



Source: REIS

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AVERAGE RENTS AND VACANCY RATES AT COMMERCIAL/MULTIFAMILY PROPERTIES

Year	Average Asking Rents					Average Vacancy Rates (percent)				
	Q1	Q2	Q3	Q4	Q2 Year-over-year % change	Q1	Q2	Q3	Q4	Q2 Year-over-year change
APARTMENT	(per month)									
2016	\$ 1,274	\$ 1,291	\$ 1,308	\$ 1,313	5.3%	4.3	4.2	4.2	4.2	-0.1
2017	\$ 1,325	\$ 1,345	\$ 1,364	\$ 1,373	4.2%	4.4	4.4	4.5	4.6	0.2
2018	\$ 1,390	\$ 1,411	\$ 1,431	\$ 1,446	4.9%	4.7	4.7	4.7	4.8	0.3
2019	\$ 1,455	\$ 1,475	\$ 1,489	\$ 1,497	4.5%	4.7	4.6	4.6	4.8	-0.1
2020	\$ 1,503	\$ 1,499	\$ 1,476	\$ 1,461	1.6%	4.8	4.9	5.1	5.3	0.3
2021	\$ 1,460	\$ 1,477	\$ 1,591	\$ 1,638	-1.5%	5.4	5.4	4.8	4.8	0.5
2022	\$ 1,679	\$ 1,724			16.7%	4.7	4.5			-0.9
OFFICE	(per sq. ft)									
2016	\$ 31.57	\$ 31.76	\$ 31.89	\$ 32.00	3.2%	16.4	16.4	16.4	16.3	-0.3
2017	\$ 32.16	\$ 32.26	\$ 32.38	\$ 32.57	1.6%	16.3	16.4	16.4	16.4	0.0
2018	\$ 32.85	\$ 33.09	\$ 33.22	\$ 33.46	2.6%	16.5	16.6	16.7	16.7	0.2
2019	\$ 33.59	\$ 33.88	\$ 34.15	\$ 34.35	2.4%	16.7	16.8	16.8	16.8	0.2
2020	\$ 34.50	\$ 34.49	\$ 34.56	\$ 34.53	1.8%	17.0	17.1	17.4	17.8	0.3
2021	\$ 34.44	\$ 34.46	\$ 34.49	\$ 34.52	-0.1%	18.2	18.6	18.2	18.1	1.5
2022	\$ 34.60	\$ 34.75			0.8%	18.1	18.4			-0.2
RETAIL	(per sq. ft)									
2016	\$ 20.22	\$ 20.30	\$ 20.39	\$ 20.48	2.0%	9.9	9.8	9.9	9.9	-0.3
2017	\$ 20.56	\$ 20.66	\$ 20.76	\$ 20.88	1.8%	9.9	10.0	10.0	10.0	0.2
2018	\$ 20.97	\$ 21.03	\$ 21.13	\$ 21.22	1.8%	10.0	10.2	10.2	10.2	0.2
2019	\$ 21.34	\$ 21.42	\$ 21.48	\$ 21.50	1.9%	10.2	10.2	10.2	10.2	0.0
2020	\$ 21.54	\$ 21.44	\$ 21.40	\$ 21.34	0.1%	10.2	10.2	10.4	10.5	0.0
2021	\$ 21.31	\$ 21.33	\$ 21.36	\$ 21.36	-0.5%	10.6	10.5	10.4	10.3	0.3
2022	\$ 21.38	\$ 21.39			0.3%	10.3	10.3			-0.2

Source: REIS

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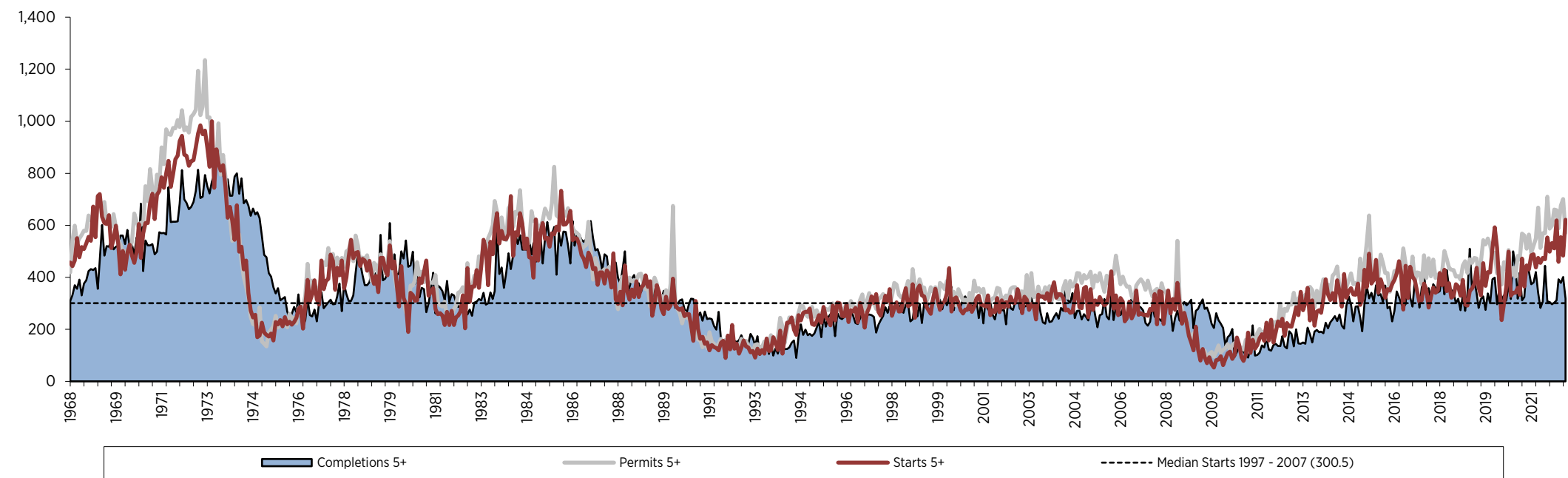
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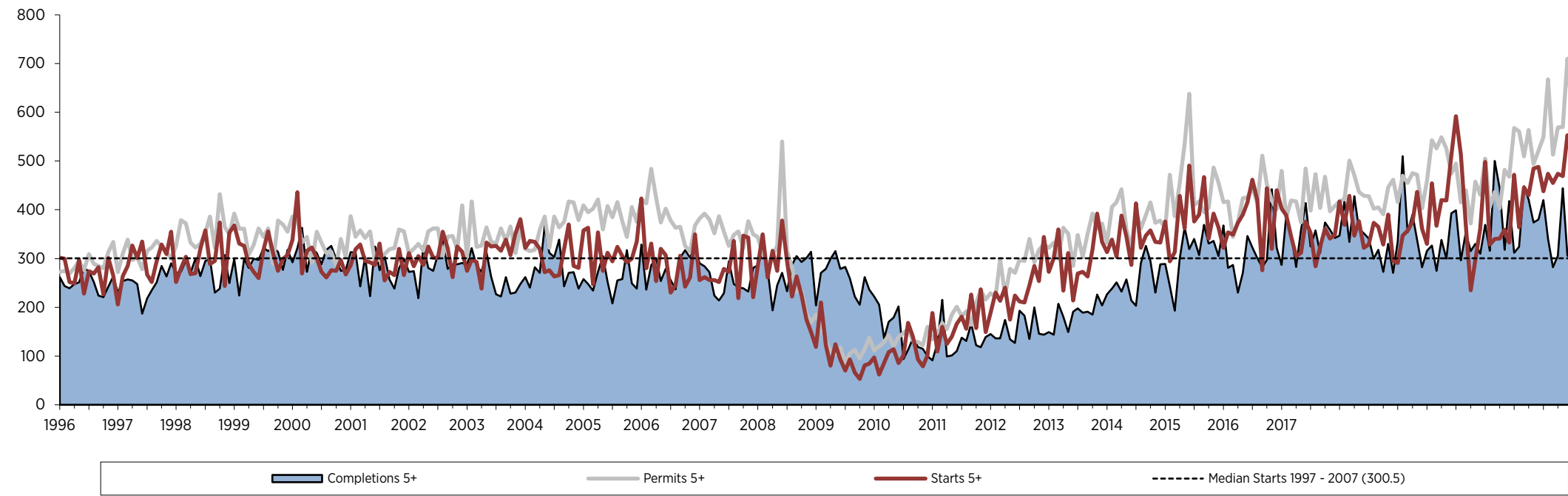
MULTIFAMILY BUILDING PERMITS, STARTS AND COMPLETIONS

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>						
2017	425	343	347	0.9%	-10.0%	11.5%
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	567	462	364	27.4%	22.6%	-0.3%
<i>Month-over-month</i>						
Aug 2021	668	474	341	21.7%	8.2%	-18.8%
Sep 2021	513	455	282	-23.2%	-4.0%	-17.3%
Oct 2021	569	474	306	10.9%	4.2%	8.5%
Nov 2021	570	469	444	0.2%	-1.1%	45.1%
Dec 2021	710	553	306	24.6%	17.9%	-31.1%
Jan 2022	587	499	305	-17.3%	-9.8%	-0.3%
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	483	401	3.7%	-12.8%	5.8%
Aug 2022	571	621	318	-18.5%	28.6%	-20.7%
Percent change Aug 2021 to Aug 2022	-14.5%	31.0%	-6.7%			

Source: U.S. Census Bureau

COMMERCIAL/MULTIFAMILY QUARTERLY DATABOOK

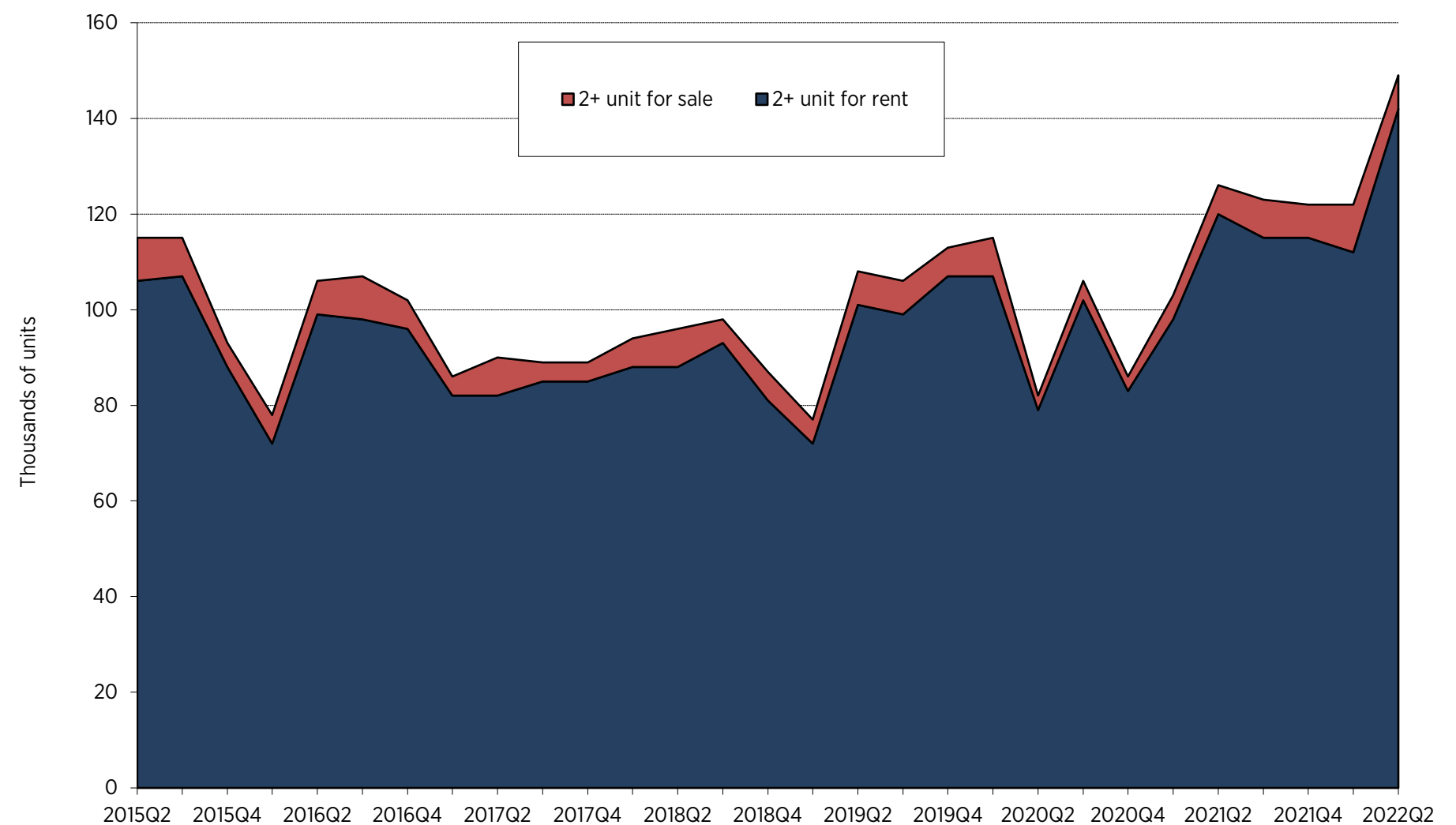
Q2 2022

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	452	304	148	142	7	96%

Source: U.S. Census Bureau



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Value of Commercial Real Estate Construction Put-In-Place

July 2022 Data

The value of selected commercial real estate (CRE)-related private construction put-in-place increased slightly in the month of July and was higher than the pace of construction in July 2021. The \$429.0 billion seasonally adjusted annual rate in July was 0.1 percent higher than the June 2022 rate, and 6.8 percent higher than the July 2021 pace. The pace of construction in July was 152 percent higher than its recession low.

Private MULTIFAMILY new construction activity decreased in July. July's seasonally adjusted annual pace of \$100.5 billion was 0.6 percent lower than June's \$101.1 billion and 1.2 percent lower than last July's rate. The pace of construction in July was 503 percent higher than its recession low.

The value of private OFFICE construction put-in-place increased in July. July's seasonally adjusted annual pace of \$73.5 billion was 1.9 percent lower than last July's rate. The pace of construction in July was 238 percent higher than its recession low.

The value of private HEALTH CARE construction put-in-place decreased 1.2 percent in July. July's seasonally adjusted annual pace of \$40.1 billion was 5.5 percent higher than last July's rate. The pace of construction in July was 47 percent higher than its recession low and one percent below its pre-recession high.

The value of private RETAIL, WHOLESALE AND SELECTED SERVICES (referred to as COMMERCIAL by the Census Bureau) construction put-in-place increased 0.7 percent in July. July's seasonally adjusted annual pace of \$104.1 billion was 13.7 percent higher than last July's rate. The pace of construction in July was 204 percent higher than its recession low.

The value of LODGING construction put-in-place increased 0.6 percent in July. July's seasonally adjusted annual pace of \$16.8 billion was 0.3 percent higher than last July's rate. The pace of construction in July was

112 percent higher than its recession low and 55 percent below its pre-recession high.

The value of MANUFACTURING construction put-in-place increased 0.6 in July. July's seasonally adjusted annual pace of \$94.0 billion was 19.2 percent higher than last July's rate. The pace of construction in July was 214 percent higher than its recession low.

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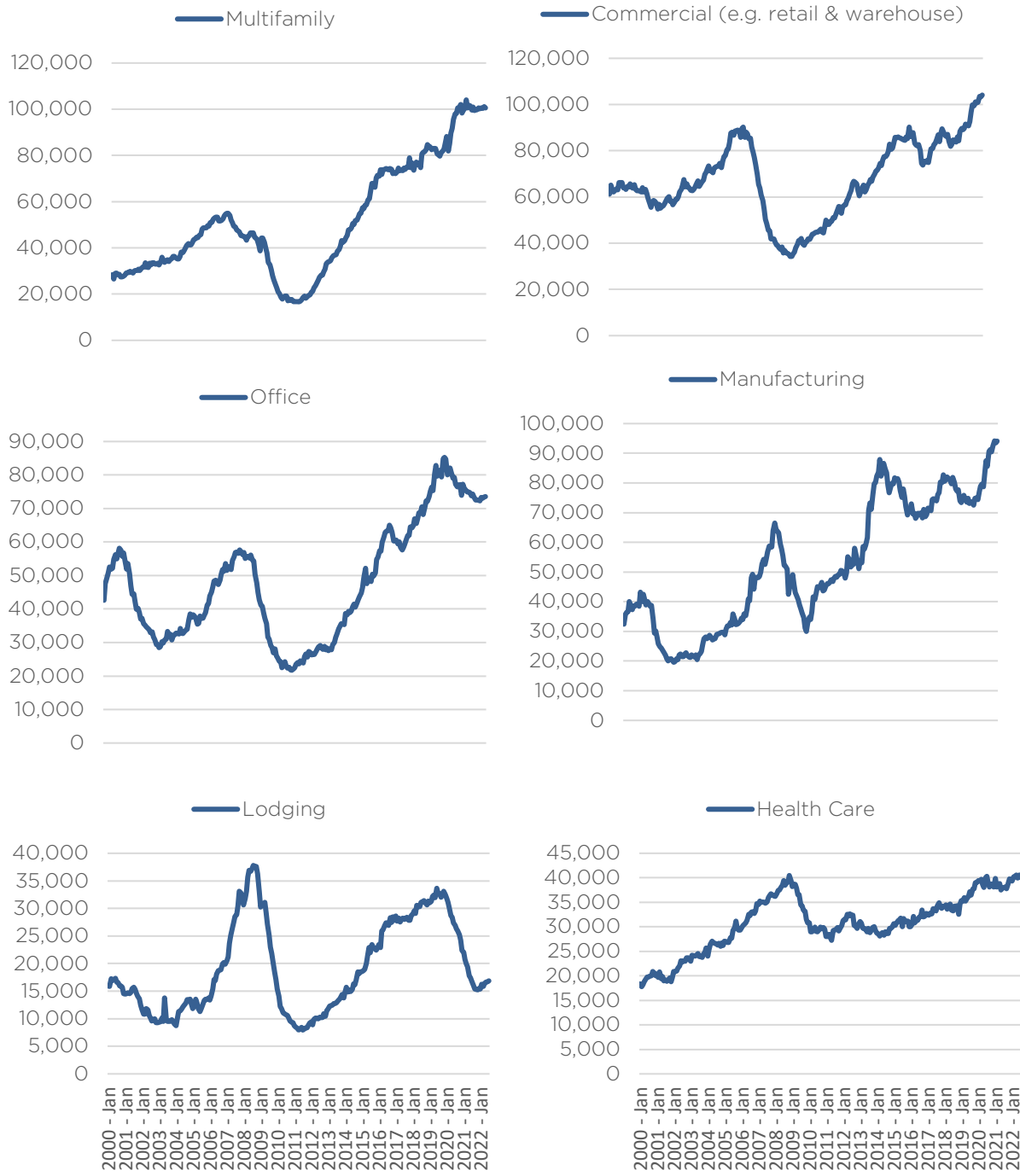
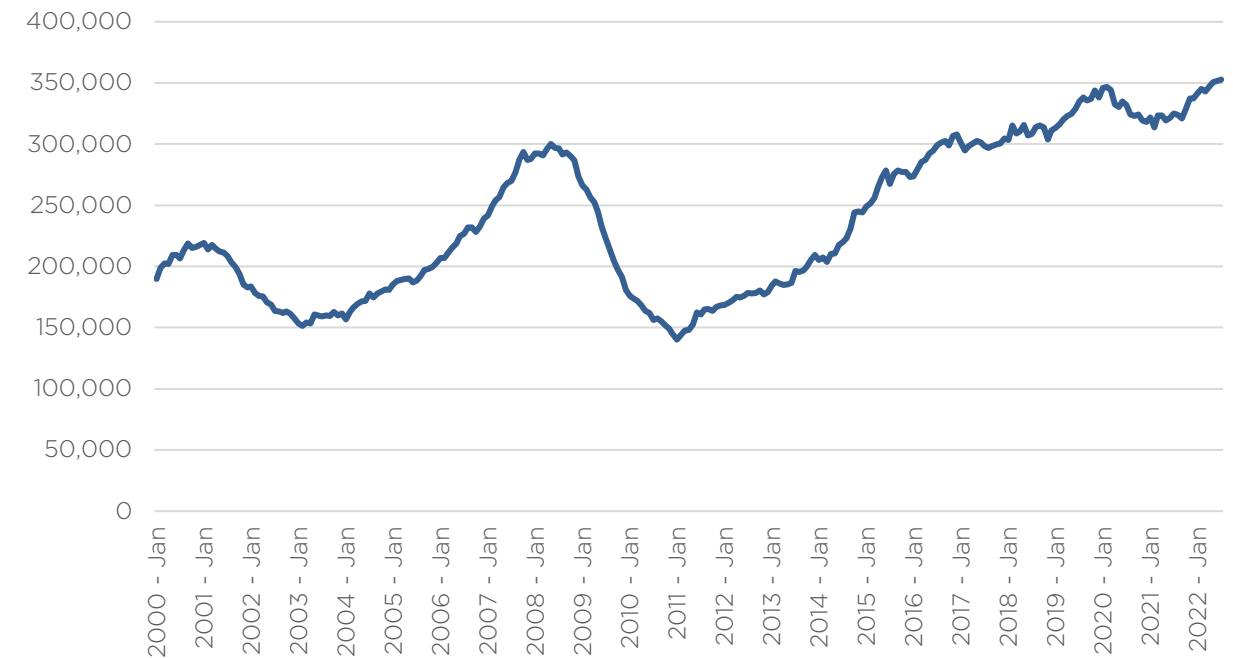
COMMERCIAL/MULTIFAMILY QUARTERLY DATABOOK

Q2 2022

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

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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						Total	% Change Month-over- Month
	Multifamily	Commercial	Office	Lodging	Health Care	Manufacturing		
2021 - Apr	100,199	89,762	76,104	19,391	38,852	74,923	399,231	0.2%
2021 - May	104,040	89,052	75,436	17,797	37,548	74,340	398,213	-0.3%
2021 - Jun	100,655	89,749	74,983	17,376	38,025	76,784	397,572	-0.2%
2021 - Jul	101,732	91,525	74,944	16,790	37,968	78,878	401,837	1.1%
2021 - Aug	101,432	91,145	74,707	15,998	38,136	79,504	400,922	-0.2%
2021 - Sep	99,700	90,805	73,851	15,401	37,761	78,683	396,201	-1.2%
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	101,072	103,378	73,386	16,734	40,560	93,481	428,611	0.2%
2022 - Jul	100,481	104,102	73,490	16,835	40,067	94,048	429,023	0.1%
Jun - Jul	-0.6%	0.7%	0.1%	0.6%	-1.2%	0.6%	0.1%	
Jul - Jul	-1.2%	13.7%	-1.9%	0.3%	5.5%	19.2%	6.8%	
Trough to current	503%	204%	238%	112%	47%	214%	152%	
Peak to current	-3%	0%	-14%	-55%	-1%	0%	0%	

Source: MBA, U.S. Census Bureau

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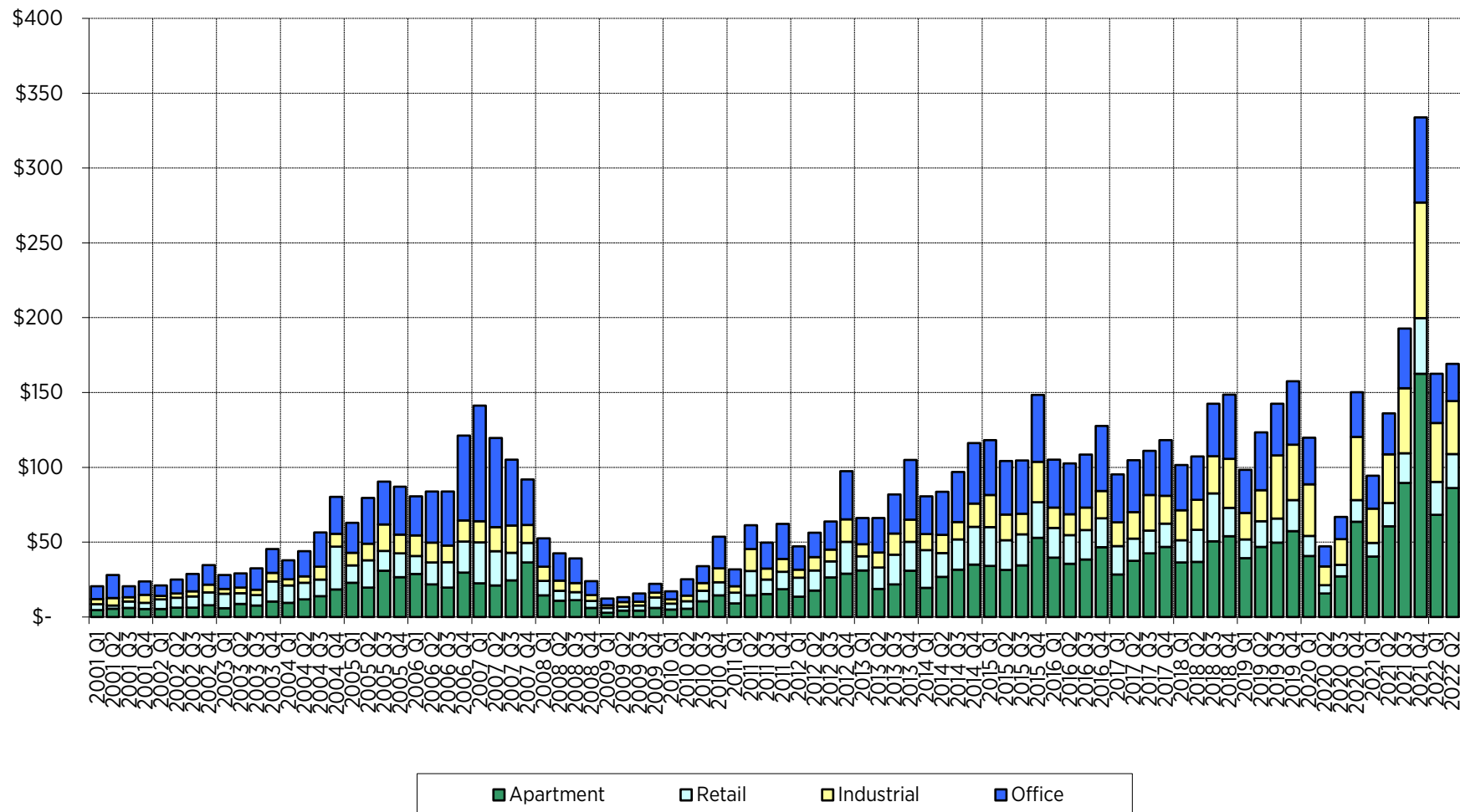
PRODUCTION

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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.

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COMMERCIAL/MULTIFAMILY **QUARTERLY DATABOOK**

Q2 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 Q2	
					Sales	Percent change	Sales	Percent change
APARTMENT								
2018	\$ 36.46	\$ 36.76	\$ 50.63	\$ 53.98	\$ 177.83	14%	\$ 73.22	158%
2019	\$ 39.40	\$ 46.88	\$ 49.73	\$ 57.40	\$ 193.42	9%	\$ 86.29	18%
2020	\$ 40.77	\$ 15.67	\$ 27.21	\$ 63.61	\$ 147.27	-24%	\$ 56.45	-35%
2021	\$ 40.37	\$ 60.58	\$ 89.59	\$ 162.53	\$ 353.07	140%	\$ 100.95	79%
2022	\$ 68.32	\$ 86.27					\$ 154.58	53%
INDUSTRIAL								
2018	\$ 19.94	\$ 19.98	\$ 24.87	\$ 32.71	\$ 97.51	28%	\$ 39.92	150%
2019	\$ 17.68	\$ 20.80	\$ 42.20	\$ 36.95	\$ 117.63	21%	\$ 38.48	-4%
2020	\$ 34.42	\$ 12.49	\$ 17.23	\$ 42.35	\$ 106.50	-9%	\$ 46.91	22%
2021	\$ 22.77	\$ 32.58	\$ 43.35	\$ 77.34	\$ 176.04	65%	\$ 55.35	18%
2022	\$ 39.28	\$ 35.35					\$ 74.63	35%
OFFICE								
2018	\$ 30.32	\$ 29.10	\$ 35.10	\$ 42.87	\$ 137.38	3%	\$ 59.41	86%
2019	\$ 28.82	\$ 38.60	\$ 34.60	\$ 42.27	\$ 144.30	5%	\$ 67.43	13%
2020	\$ 31.21	\$ 13.37	\$ 14.72	\$ 29.79	\$ 89.09	-38%	\$ 44.58	-34%
2021	\$ 22.01	\$ 27.35	\$ 39.94	\$ 56.69	\$ 145.99	64%	\$ 49.36	11%
2022	\$ 32.93	\$ 24.83					\$ 57.76	17%
RETAIL								
2018	\$ 14.85	\$ 21.48	\$ 31.89	\$ 18.94	\$ 87.17	35%	\$ 36.34	92%
2019	\$ 12.40	\$ 17.08	\$ 16.03	\$ 20.81	\$ 66.32	-24%	\$ 29.48	-19%
2020	\$ 13.48	\$ 5.65	\$ 7.63	\$ 14.44	\$ 41.20	-38%	\$ 19.13	-35%
2021	\$ 9.22	\$ 15.50	\$ 19.92	\$ 37.18	\$ 81.81	99%	\$ 24.71	29%
2022	\$ 22.04	\$ 22.63					\$ 44.67	81%
TOTAL								
2018	\$ 101.58	\$ 107.32	\$ 142.49	\$ 148.50	\$ 499.89	16%	\$ 208.90	119%
2019	\$ 98.31	\$ 123.36	\$ 142.55	\$ 157.43	\$ 521.66	4%	\$ 221.67	6%
2020	\$ 119.88	\$ 47.19	\$ 66.79	\$ 150.19	\$ 384.06	-26%	\$ 167.08	-25%
2021	\$ 94.36	\$ 136.02	\$ 192.79	\$ 333.74	\$ 756.90	97%	\$ 230.38	38%
2022	\$ 162.57	\$ 169.08					\$ 331.64	44%

Source: Real Capital Analytics.

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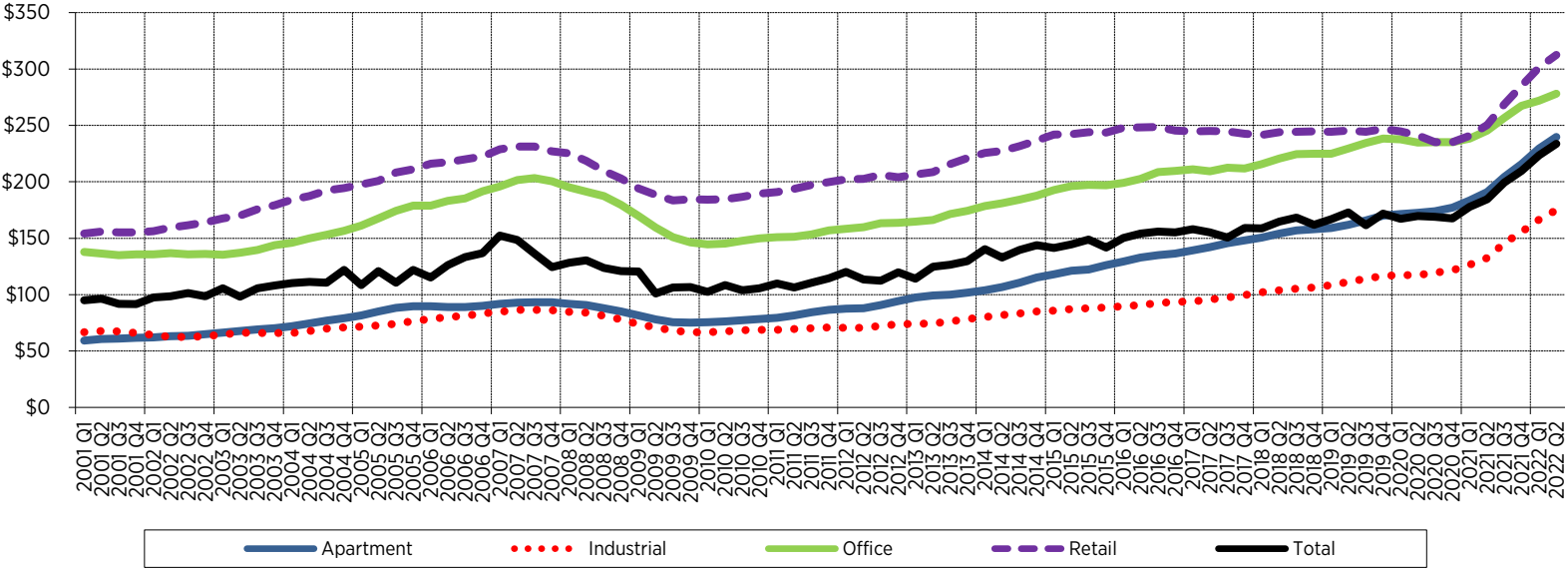
COMMERCIAL/MULTIFAMILY QUARTERLY DATABOOK

Q2 2022

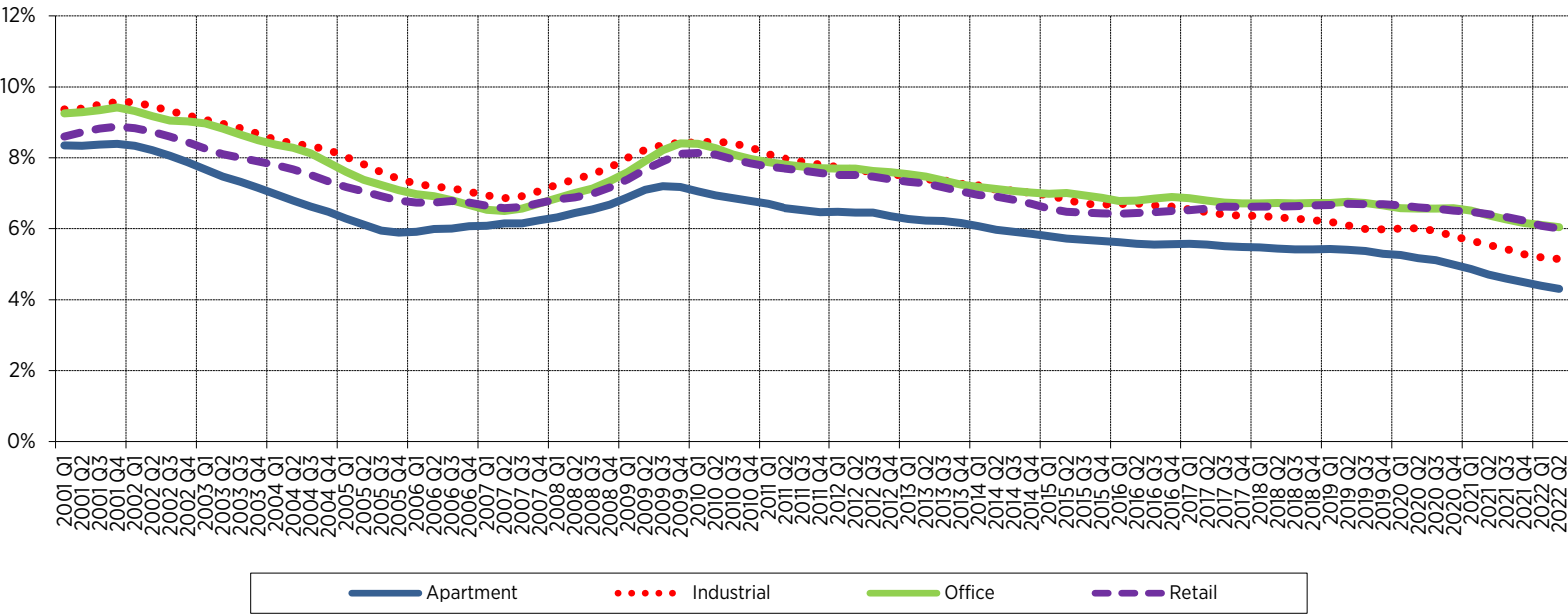
QUARTERLY SALES PRICES OF LARGER (\$2.5 MILLION+) COMMERCIAL/MULTIFAMILY PROPERTIES

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.

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.					Capitalization Rate				
	Q1	Q2	Q3	Q4	Q2 Year-over-year % change	Q1	Q2	Q3	Q4	Q2 Year-over-year % change
APARTMENT (\$1000/unit)										
2018	\$ 151	\$ 154	\$ 157	\$ 158	8%	5.5%	5.4%	5.4%	5.4%	-2%
2019	\$ 159	\$ 162	\$ 166	\$ 170	5%	5.4%	5.4%	5.4%	5.3%	-1%
2020	\$ 172	\$ 173	\$ 174	\$ 177	7%	5.3%	5.2%	5.1%	5.0%	-4%
2021	\$ 184	\$ 191	\$ 204	\$ 216	11%	4.9%	4.7%	4.6%	4.5%	-9%
2022	\$ 230	\$ 240			26%	4.4%	4.3%			-9%
INDUSTRIAL (\$/sq. ft)										
2018	\$ 102	\$ 104	\$ 105	\$ 107	9%	6.4%	6.3%	6.3%	6.2%	-2%
2019	\$ 108	\$ 111	\$ 114	\$ 117	7%	6.2%	6.1%	6.0%	6.0%	-4%
2020	\$ 117	\$ 117	\$ 120	\$ 121	5%	6.0%	6.0%	5.9%	5.8%	-1%
2021	\$ 126	\$ 133	\$ 146	\$ 156	13%	5.7%	5.5%	5.4%	5.3%	-8%
2022	\$ 167	\$ 175			32%	5.2%	5.1%			-7%
OFFICE (\$/sq. ft)										
2018	\$ 216	\$ 221	\$ 224	\$ 225	5%	6.7%	6.7%	6.7%	6.7%	-1%
2019	\$ 225	\$ 230	\$ 234	\$ 238	4%	6.7%	6.8%	6.7%	6.7%	0%
2020	\$ 238	\$ 235	\$ 235	\$ 235	2%	6.6%	6.6%	6.6%	6.6%	-3%
2021	\$ 238	\$ 246	\$ 257	\$ 267	5%	6.5%	6.4%	6.3%	6.2%	-3%
2022	\$ 272	\$ 278			13%	6.1%	6.0%			-5%
RETAIL (\$/sq. ft)										
2018	\$ 242	\$ 244	\$ 244	\$ 245	-1%	6.6%	6.6%	6.6%	6.7%	1%
2019	\$ 244	\$ 246	\$ 244	\$ 247	1%	6.7%	6.7%	6.7%	6.7%	1%
2020	\$ 245	\$ 241	\$ 235	\$ 235	-2%	6.7%	6.6%	6.6%	6.5%	-2%
2021	\$ 241	\$ 250	\$ 269	\$ 285	4%	6.5%	6.4%	6.3%	6.5%	-3%
2022	\$ 302	\$ 313			25%	6.1%	6.0%			-6%
TOTAL (\$1000/unit or \$/sq. ft)*										
2018	\$ 159	\$ 165	\$ 168	\$ 162	6%	6.2%	6.2%	6.2%	6.1%	-1%
2019	\$ 167	\$ 173	\$ 161	\$ 172	5%	6.1%	6.1%	6.0%	6.0%	-1%
2020	\$ 167	\$ 170	\$ 169	\$ 168	-2%	6.0%	6.0%	5.8%	5.7%	-3%
2021	\$ 178	\$ 185	\$ 200	\$ 210	9%	5.6%	5.4%	5.3%	5.2%	-9%
2022	\$ 223	\$ 234			27%	5.2%	5.0%			-9%

Source: Real Capital Analytics.

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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

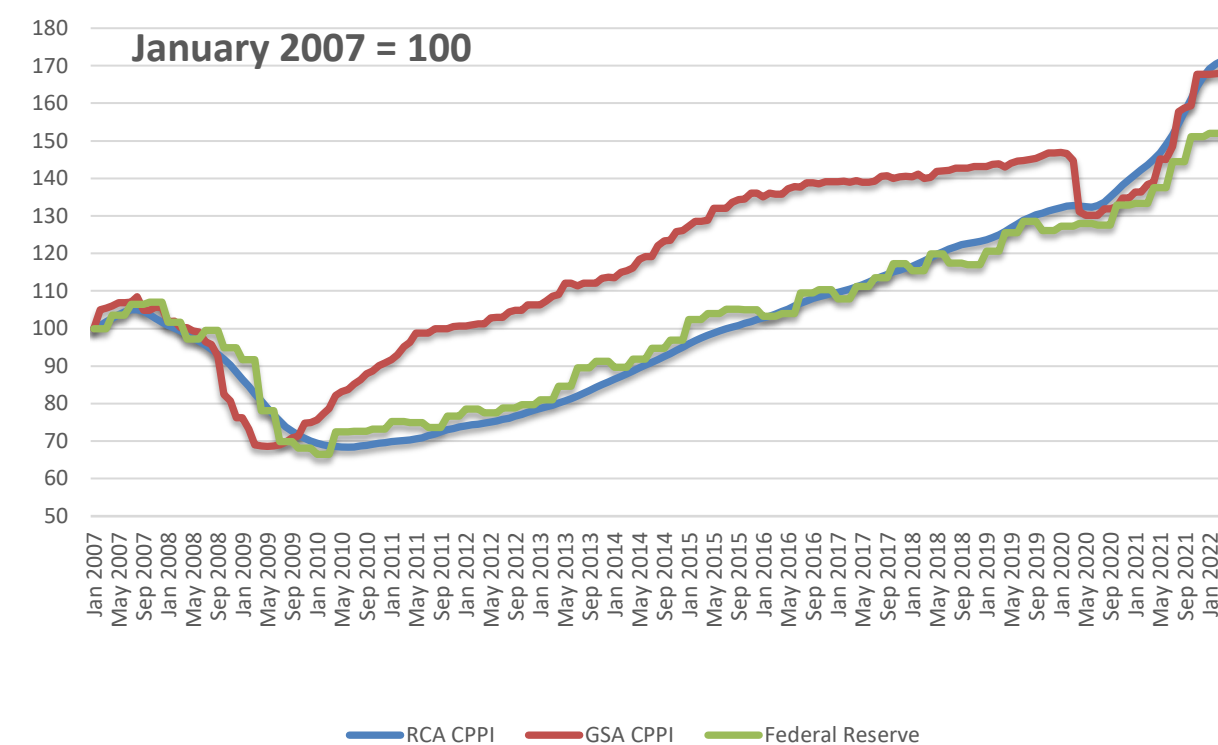
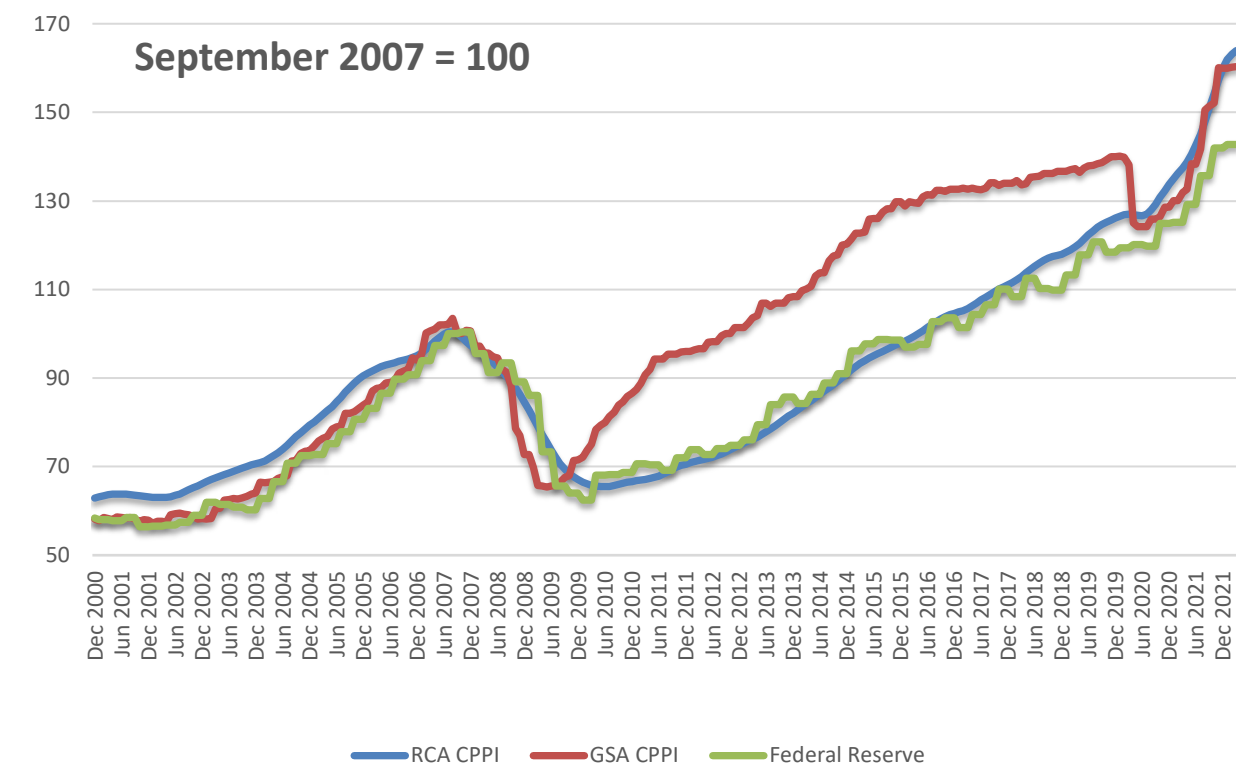
	Year-over-year Change		
	RCA CPPI	Green Street Advisors CPPI	Federal Reserve Board CRE Price Index
Year End 2012	6.1%	5.7%	3.9%
Year End 2013	9.7%	6.8%	14.4%
Year End 2014	10.9%	10.9%	6.2%
Year End 2015	7.6%	8.0%	8.4%
Year End 2016	6.8%	2.2%	5.0%
Year End 2017	6.2%	1.0%	6.3%
Year End 2018	6.2%	1.9%	-0.3%
Year End 2019	6.9%	2.5%	7.8%
Year End 2020	6.0%	-8.1%	5.5%
Year End 2021	19.7%	24.4%	13.6%

	Quarter-Over-Quarter		
	RCA CPPI	Green Street Advisors CPPI	Federal Reserve Board CRE Price Index
Q4 2018	0.8%	0.3%	-0.4%
Q1 2019	1.4%	0.5%	3.1%
Q2 2019	2.3%	0.5%	4.1%
Q3 2019	1.9%	0.5%	2.5%
Q4 2019	1.2%	1.0%	-1.9%
Q1 2020	0.7%	-1.4%	0.9%
Q2 2020	-0.3%	-10.1%	0.6%
Q3 2020	2.0%	1.3%	-0.3%
Q4 2020	3.4%	2.2%	4.2%
Q1 2021	2.8%	2.6%	0.3%
Q2 2021	3.7%	4.8%	3.2%
Q3 2021	6.0%	9.5%	5.0%
Q4 2021	5.9%	5.7%	4.6%
Q1 2022	2.5%	0.2%	0.6%
Q2 2022	1.9%	-4.9%	-1.8%

Current price relative to 2007 peak 166% 147% 140%

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

*NCREIF TBI discontinued Q1 2020



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3. Production

Quarterly Survey of Commercial/Multifamily Mortgage Bankers Originations

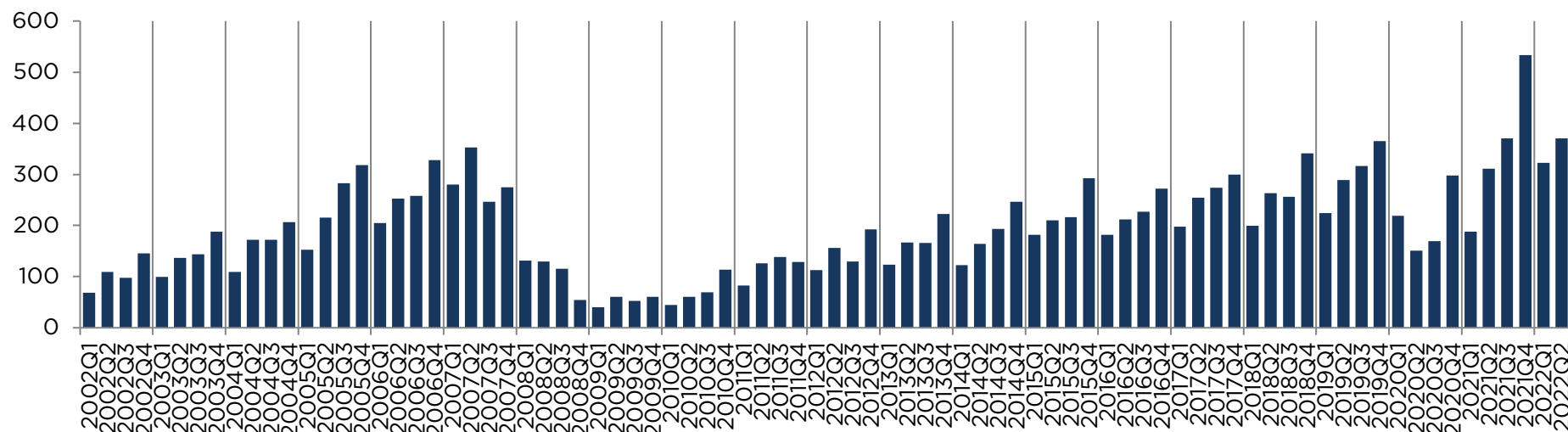
August 18, 2022

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

"Borrowing and lending backed by commercial real estate set another quarterly record from April through June, although the pace of increase slowed from the first quarter," said Jamie Woodwell, MBA's Vice President of Commercial Real Estate Research. "Property owners, investors, and lenders continue to work through broader economic

uncertainty that is affecting the space, equity, and debt markets. MBA is forecasting that borrowing and lending will slow during the second half of the year. That said, improvements in fundamentals and values in recent years provide significant support to properties with outstanding loans and continued financing opportunities for properties whose cash flows can support debt."

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



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SECOND QUARTER 2022 ORIGINATIONS INCREASED 19 PERCENT COMPARED TO SECOND QUARTER 2021

Compared to a year earlier, a rise in originations for retail, hotel, and multifamily led the overall increase in commercial/multifamily lending volumes. By property type, retail increased by 108 percent, hotels increased by 37 percent, multifamily increased 24 percent, industrial increased 3 percent, office decreased 11 percent and health care decreased by 3 percent.

Among investor types, the dollar volume of loans originated for depositories increased by 102 percent year-over-year, government Sponsored Enterprises (GSEs – Fannie Mae and Freddie Mac) increased 29 percent, and investor-driven lenders increased 12 percent. Commercial Mortgage-Backed Securities (CMBS) decreased 57 percent and lending for life insurance company portfolios decreased 5 percent.

SECOND QUARTER 2022 ORIGINATIONS UP 15 PERCENT FROM FIRST QUARTER 2022

On a quarterly basis, second quarter originations for retail properties increased 79 percent compared to the first quarter 2022. There was a 70 percent increase in originations for health care properties, an 18 percent increase for multifamily properties, a 14 percent increase for office

properties, a 2 percent decrease for hotel properties, and originations for industrial properties decreased 26 percent.

Among investor types, the dollar volume of loans for depositories increased 42 percent, investor-driven lenders increased 20 percent, originations for GSEs increased 18 percent, and life insurance company loans increased 2 percent. Commercial Mortgage-Backed Securities (CMBS) decreased 52 percent.

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,		
	(2001 Avg Qtr = 100)				Year-over-year	Q1-to-Q2	YTD-YTD
	Q1	Q2	Q3	Q4			
TOTAL							
2019	224	289	316	365	10%	29%	11%
2020	219	151	169	298	-48%	-31%	-28%
2021	188	311	370	533	106%	66%	35%
2022	323	370			19%	15%	39%
CMBS/Conduits							
2019	76	120	113	176	-15%	58%	-11%
2020	86	6	48	64	-95%	-94%	-53%
2021	64	113	107	260	1913%	76%	92%
2022	100	49			-57%	-52%	-16%
Depositories							
2019	344	466	514	589	17%	35%	12%
2020	341	210	165	351	-55%	-38%	-32%
2021	175	362	547	869	72%	107%	-2%
2022	515	733			102%	42%	132%
Life Insurance Companies							
2019	360	392	407	543	-4%	9%	1%
2020	296	200	182	363	-49%	-33%	-34%
2021	252	487	501	593	144%	94%	49%
2022	456	465			-5%	2%	25%
Fannie Mae/Freddie Mac							
2019	497	692	739	615	19%	39%	17%
2020	527	658	680	1,132	-5%	25%	0%
2021	479	439	784	797	-33%	-8%	-23%
2022	483	568			29%	18%	14%
Investor-Driven Lenders							
2019	297	330	452	540	10%	11%	19%
2020	275	86	158	302	-74%	-69%	-42%
2021	369	704	662	940	717%	91%	197%
2022	654	788			12%	20%	34%
Multifamily							
2019	389	513	585	625	15%	32%	12%
2020	446	388	403	712	-24%	-13%	-7%
2021	423	632	829	1,122	63%	49%	26%
2022	665	786			24%	18%	38%
Office							
2019	116	193	176	215	23%	66%	13%
2020	126	55	74	94	-71%	-56%	-41%
2021	83	137	150	209	149%	65%	22%
2022	108	123			-11%	14%	4%
Retail							
2019	111	128	144	185	-32%	15%	-18%
2020	70	33	24	51	-74%	-53%	-57%
2021	38	62	101	106	88%	62%	-2%
2022	72	129			108%	79%	100%
Industrial							
2019	733	537	659	1,043	16%	-27%	43%
2020	445	303	507	1,196	-44%	-32%	-41%
2021	736	1,296	1,300	2,545	327%	76%	172%
2022	1,801	1,330			3%	-26%	54%
Hotel							
2019	349	412	321	469	-28%	18%	-14%
2020	203	36	20	100	-91%	-83%	-69%
2021	36	119	190	268	234%	228%	-35%
2022	166	162			37%	-2%	112%
Health Care							
2019	46	75	120	120	151%	62%	94%
2020	54	45	59	105	-40%	-17%	-19%
2021	57	181	86	88	302%	219%	140%
2022	103	175			-3%	70%	17%

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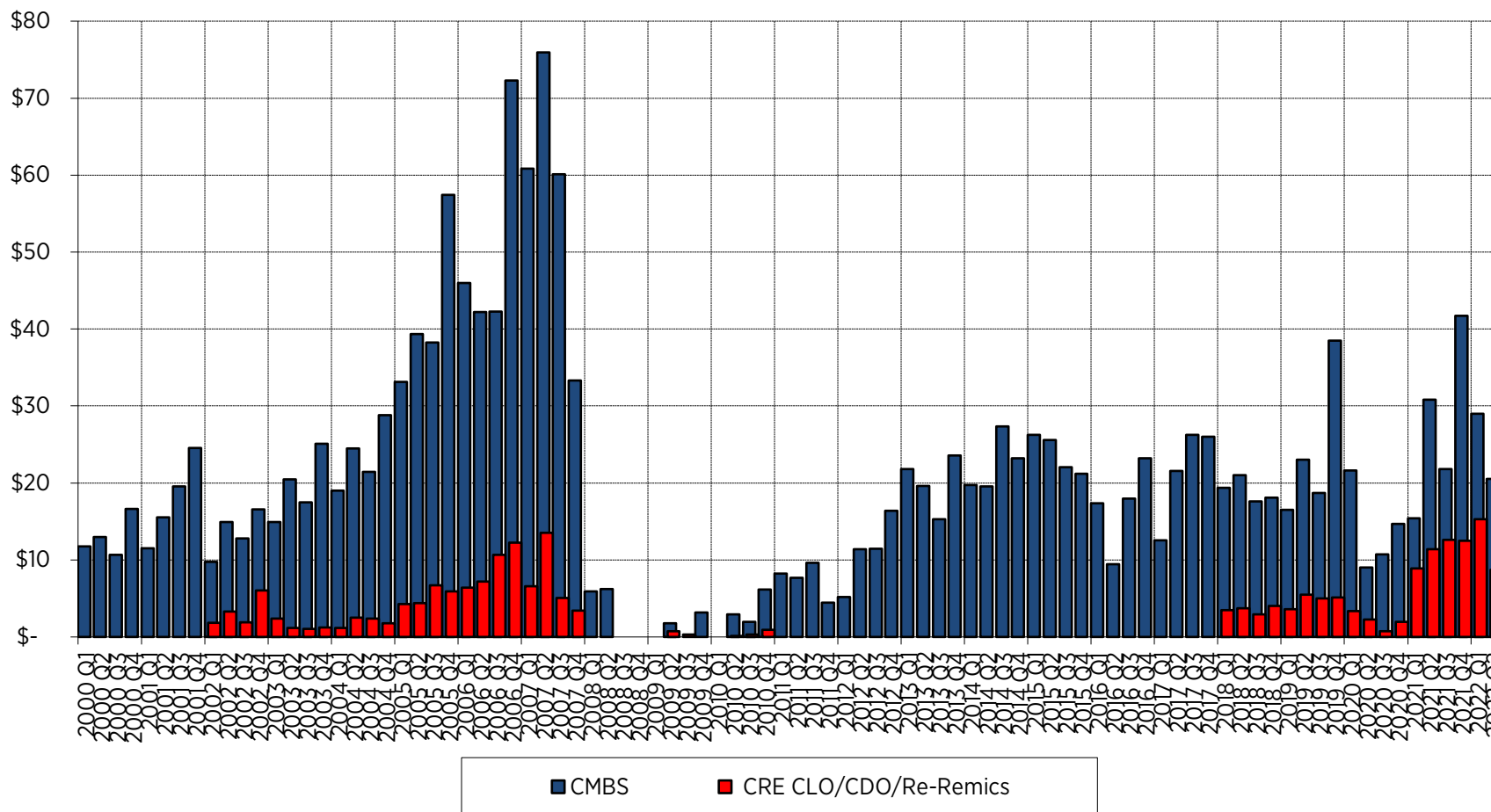
PRODUCTION

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

Billions of Dollars



Source: Commercial Real Estate Direct

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**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 Q2		
					Total	Percent change	Total	Percent change	
U.S. CMBS ISSUANCE									
2015	\$ 26.23	\$ 25.57	\$ 22.08	\$ 21.18	\$ 95.07	6%	\$ 51.80	32%	
2016	\$ 17.38	\$ 9.46	\$ 17.99	\$ 23.23	\$ 68.06	-28%	\$ 26.84	-48%	
2017	\$ 12.55	\$ 21.54	\$ 26.26	\$ 26.04	\$ 86.39	27%	\$ 34.09	27%	
2018	\$ 19.40	\$ 20.99	\$ 17.60	\$ 18.11	\$ 76.10	-12%	\$ 40.39	18%	
2019	\$ 16.54	\$ 23.00	\$ 18.72	\$ 38.48	\$ 96.74	27%	\$ 39.54	-2%	
2020	\$ 21.60	\$ 9.01	\$ 10.72	\$ 14.68	\$ 56.01	-42%	\$ 30.61	-23%	
2021	\$ 15.43	\$ 30.84	\$ 21.79	\$ 41.74	\$ 109.80	96%	\$ 46.26	51%	
2022	\$ 29.02	\$ 20.56					\$ 49.58	7%	
* CRE CLO/CDO/RE-REMICS ISSUANCE									
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	\$ 7.18	N/A	
2019	\$ 3.62	\$ 5.46	\$ 5.03	\$ 5.13	\$ 19.24	36%	\$ 9.08	27%	
2020	\$ 3.37	\$ 2.25	\$ 0.74	\$ 1.95	\$ 8.31	-57%	\$ 5.62	-38%	
2021	\$ 8.90	\$ 11.41	\$ 12.62	\$ 12.51	\$ 45.44	447%	\$ 20.31	261%	
2022	\$ 15.27	\$ 8.70					\$ 23.97	18%	

Source: Commercial Real Estate Direct

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

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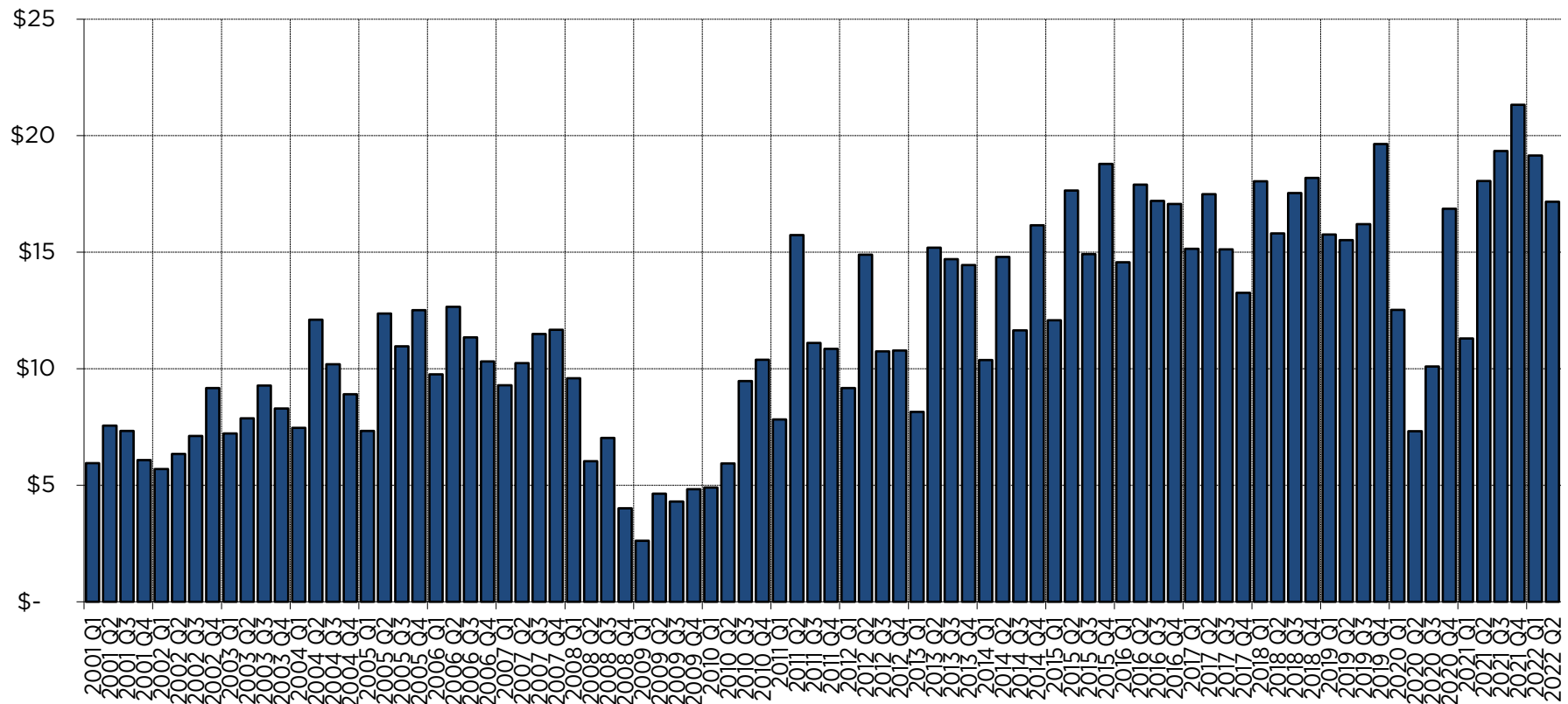
PRODUCTION

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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.

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QUARTERLY COMMERCIAL MORTGAGE COMMITMENTS BY LIFE INSURANCE COMPANIES

Billions of Dollars

Year					Annual (a)		YTD Q2	
	Q1	Q2	Q3	Q4	Total	Percent change	Total	Percent change
2001	\$ 5.95	\$ 7.56	\$ 7.33	\$ 6.08	\$ 26.92		\$ 13.50	
2002	\$ 5.69	\$ 6.34	\$ 7.12	\$ 9.17	\$ 28.32	5%	\$ 12.04	-11%
2003	\$ 7.22	\$ 7.88	\$ 9.28	\$ 8.30	\$ 32.68	15%	\$ 15.10	25%
2004	\$ 7.46	\$ 12.11	\$ 10.20	\$ 8.91	\$ 38.67	18%	\$ 19.56	30%
2005	\$ 7.33	\$ 12.37	\$ 10.96	\$ 12.51	\$ 43.17	12%	\$ 19.70	1%
2006	\$ 9.76	\$ 12.66	\$ 11.35	\$ 10.31	\$ 44.08	2%	\$ 22.42	14%
2007	\$ 9.29	\$ 10.25	\$ 11.49	\$ 11.67	\$ 42.69	-3%	\$ 19.54	-13%
2008	\$ 9.59	\$ 6.03	\$ 7.03	\$ 4.02	\$ 26.67	-38%	\$ 15.62	-20%
2009	\$ 2.62	\$ 4.63	\$ 4.30	\$ 4.83	\$ 16.39	-39%	\$ 7.26	-54%
2010	\$ 4.90	\$ 5.94	\$ 9.47	\$ 10.39	\$ 30.71	87%	\$ 10.85	49%
2011	\$ 7.83	\$ 15.73	\$ 11.10	\$ 10.85	\$ 45.52	48%	\$ 23.56	117%
2012	\$ 9.18	\$ 14.90	\$ 10.75	\$ 10.78	\$ 45.60	0%	\$ 24.07	2%
2013	\$ 8.15	\$ 15.19	\$ 14.70	\$ 14.45	\$ 52.50	15%	\$ 23.34	-3%
2014	\$ 10.38	\$ 14.80	\$ 11.64	\$ 16.16	\$ 52.98	1%	\$ 25.17	8%
2015	\$ 12.08	\$ 17.65	\$ 14.93	\$ 18.79	\$ 63.45	20%	\$ 29.73	18%
2016	\$ 14.57	\$ 17.90	\$ 17.20	\$ 17.07	\$ 66.73	5%	\$ 32.46	9%
2017	\$ 15.15	\$ 17.49	\$ 15.12	\$ 13.26	\$ 61.03	-9%	\$ 32.64	1%
2018	\$ 18.05	\$ 15.81	\$ 17.54	\$ 18.19	\$ 69.58	14%	\$ 33.86	4%
2019	\$ 15.76	\$ 15.52	\$ 16.21	\$ 19.64	\$ 67.13	-4%	\$ 31.28	-8%
2020	\$ 12.52	\$ 7.32	\$ 10.10	\$ 16.86	\$ 46.80	-30%	\$ 19.84	-37%
2021	\$ 11.30	\$ 18.06	\$ 19.34	\$ 21.33	\$ 70.03	50%	\$ 29.36	48%
2022	\$ 19.16	\$ 17.17					\$ 36.33	24%

Source: American Council of Life Insurance Companies (ACLI)

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

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4. Commercial/Multifamily Mortgage Debt Outstanding

September 20, 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.

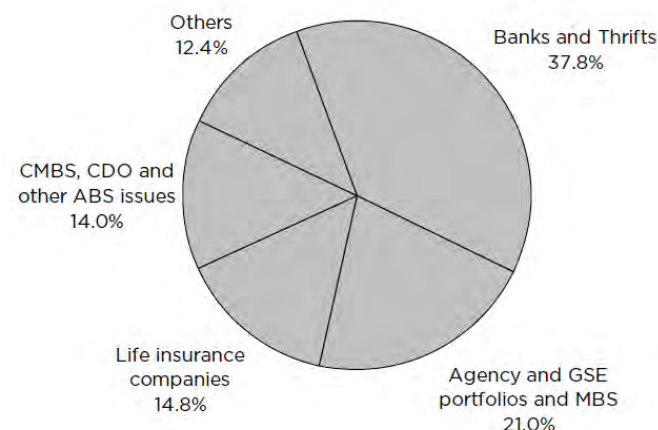
Total commercial/multifamily mortgage debt outstanding rose to \$4.38 trillion at the end of the second quarter. Multifamily mortgage debt alone increased \$35.7 billion (1.9 percent) to \$1.9 trillion from the first quarter of 2022.

"The \$99.5 billion increase in commercial and multifamily mortgage debt outstanding in the second quarter was the second largest quarterly rise since the inception of MBA's data series in 2007," said Jamie Woodwell, MBA's Vice President of Commercial Real Estate Research. "The increase in holdings by depositories was the largest on record. The data match the fact that the first half of 2022 saw more commercial and multifamily borrowing and lending than any previous January through June period."

Added Woodwell, "Given a variety of changes in space, equity, and debt markets since the start of the year, we expect the pace to slow considerably in coming quarters."

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

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



Commercial banks continue to hold the largest share (38 percent) of commercial/multifamily mortgages at \$1.7 trillion. Agency and GSE portfolios and MBS are the second-largest holders of commercial/multifamily mortgages (21 percent) at \$919 billion. Life insurance companies hold \$648 billion (15 percent), and CMBS, CDO and other ABS issues hold \$613 billion (14 percent). Many life insurance companies, banks and the GSEs purchase and hold CMBS, CDO and other ABS issues. These loans appear in the report in the "CMBS, CDO and other ABS" category.

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).

MULTIFAMILY MORTGAGE DEBT OUTSTANDING

Looking solely at multifamily mortgages in the second quarter of 2022, agency and GSE portfolios and MBS hold the largest share of total multifamily debt outstanding at \$919 billion (49 percent), followed by banks and thrifts with \$558 billion (30 percent), life insurance companies with \$187 billion (10 percent), state and local government with \$105 billion (6 percent), and CMBS, CDO and other ABS issues holding \$68 billion (4 percent).

CHANGES IN COMMERCIAL/MULTIFAMILY MORTGAGE DEBT OUTSTANDING

In the second quarter, commercial banks saw the largest gains in dollar terms in their holdings of commercial/multifamily mortgage debt – an increase of \$51.9 billion (3.2 percent). REITs increased their holdings by \$22.3 billion (14.4 percent), life insurance companies increased their holdings by \$13.1 billion (2.1 percent), and agency and GSE portfolios and MBS increased their holdings by \$8.0 billion (0.9 percent).

In percentage terms, REITs saw the largest increase – 14.4 percent – in their holdings of commercial/multifamily mortgages. Conversely, state and local government retirement funds saw their holdings decrease 3.2 percent.

CHANGES IN MULTIFAMILY MORTGAGE DEBT OUTSTANDING

The \$35.7 billion increase in multifamily mortgage debt outstanding from the first quarter of 2022 represents a quarterly gain of 1.9 percent. In dollar terms, commercial banks saw the largest gain – \$28.5 billion (5.4 percent) – in their holdings of multifamily mortgage debt. Agency and GSE portfolios and MBS increased their holdings by \$8.0 billion (0.9 percent), and life insurance companies increased by \$3.9 billion (2.1 percent).

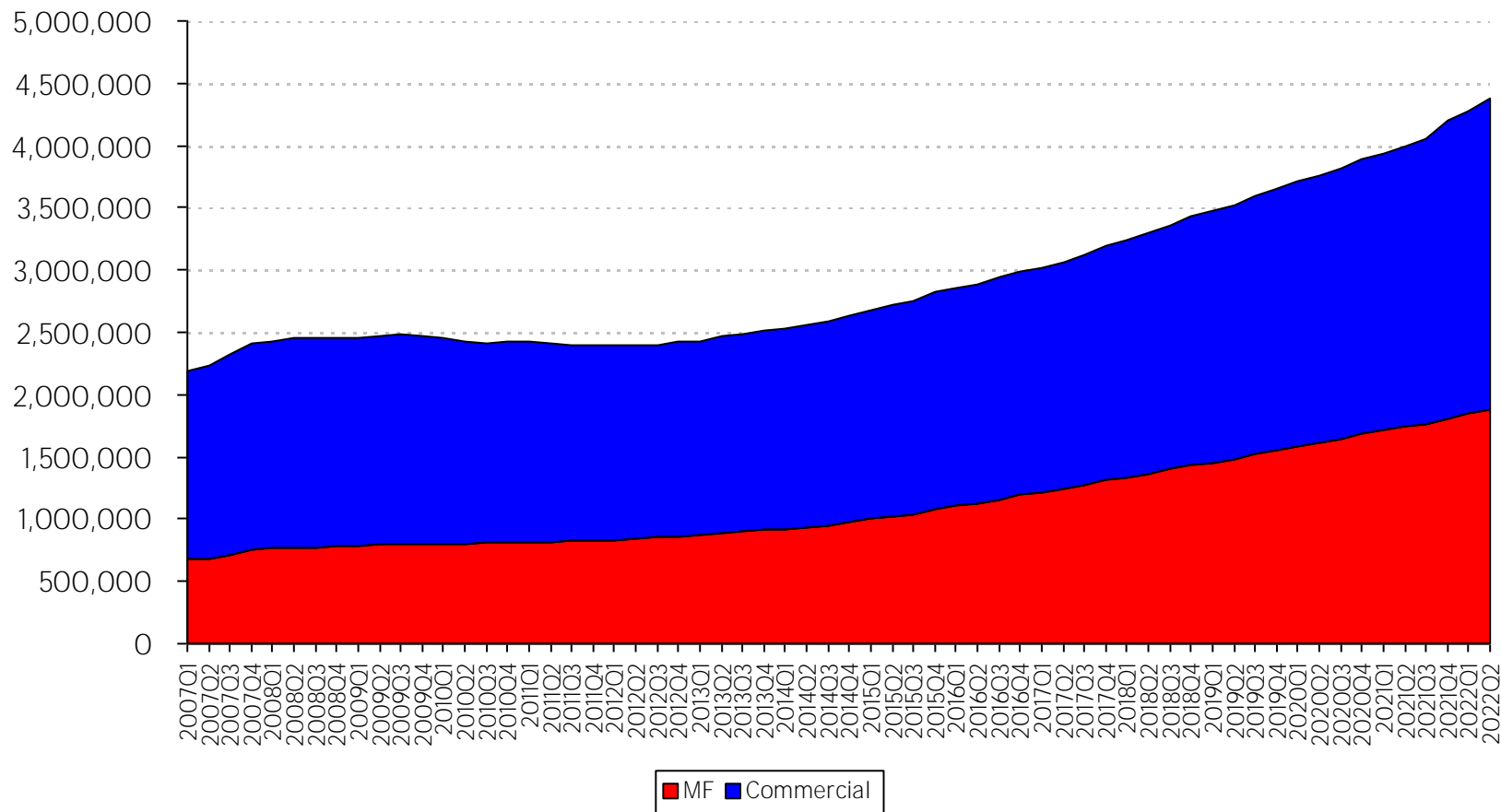
Bank and thrifts saw the largest percentage increase in their holdings of multifamily mortgage debt, up 5.4 percent. Private pension funds saw the largest decline in their holdings of multifamily mortgage debt at 25.2 percent.

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 Trepp LLC. More information on this data series is contained in Appendix A.

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, Wells Fargo Securities, LLC, Intex Solutions, Inc. and FDIC

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QUARTERLY COMMERCIAL AND MULTIFAMILY MORTGAGE DEBT OUTSTANDING

Commercial and Multifamily Mortgage Debt Outstanding, by Sector

	Mortgage Debt Outstanding				Change		Sector Share of \$ Change
	2022 Q2		2022 Q1				
	(\$millions)	% of total	(\$millions)	% of total	(\$millions)	Percent	
Bank and Thrift	1,654,861	37.8%	1,602,921	37.4%	51,940	3.2%	52.2%
Agency and GSE portfolios and MBS	918,633	21.0%	910,658	21.3%	7,975	0.9%	8.0%
Life insurance companies	648,348	14.8%	635,288	14.8%	13,060	2.1%	13.1%
CMBS, CDO and other ABS issues	613,296	14.0%	611,609	14.3%	1,687	0.3%	1.7%
REITs	177,023	4.0%	154,696	3.6%	22,327	14.4%	22.4%
State and local government	128,149	2.9%	128,495	3.0%	-346	-0.3%	-0.3%
Federal government	90,301	2.1%	89,470	2.1%	831	0.9%	0.8%
Nonfarm noncorporate business	37,577	0.9%	36,868	0.9%	709	1.9%	0.7%
Other insurance companies	30,225	0.7%	29,538	0.7%	687	2.3%	0.7%
Finance companies	29,809	0.7%	29,978	0.7%	-169	-0.6%	-0.2%
Private pension funds	24,576	0.6%	24,472	0.6%	104	0.4%	0.1%
Nonfinancial corporate business	21,925	0.5%	21,172	0.5%	753	3.6%	0.8%
State and local government retirement funds	4,145	0.1%	4,282	0.1%	-137	-3.2%	-0.1%
Household sector	1,386	0.0%	1,349	0.0%	37	2.7%	0.0%
TOTAL	4,380,254		4,280,796		99,458	2.3%	

Source: MBA, Federal Reserve Board of Governors, Trepp LLC, Wells Fargo Securities, LLC, Intex Solutions, Inc. 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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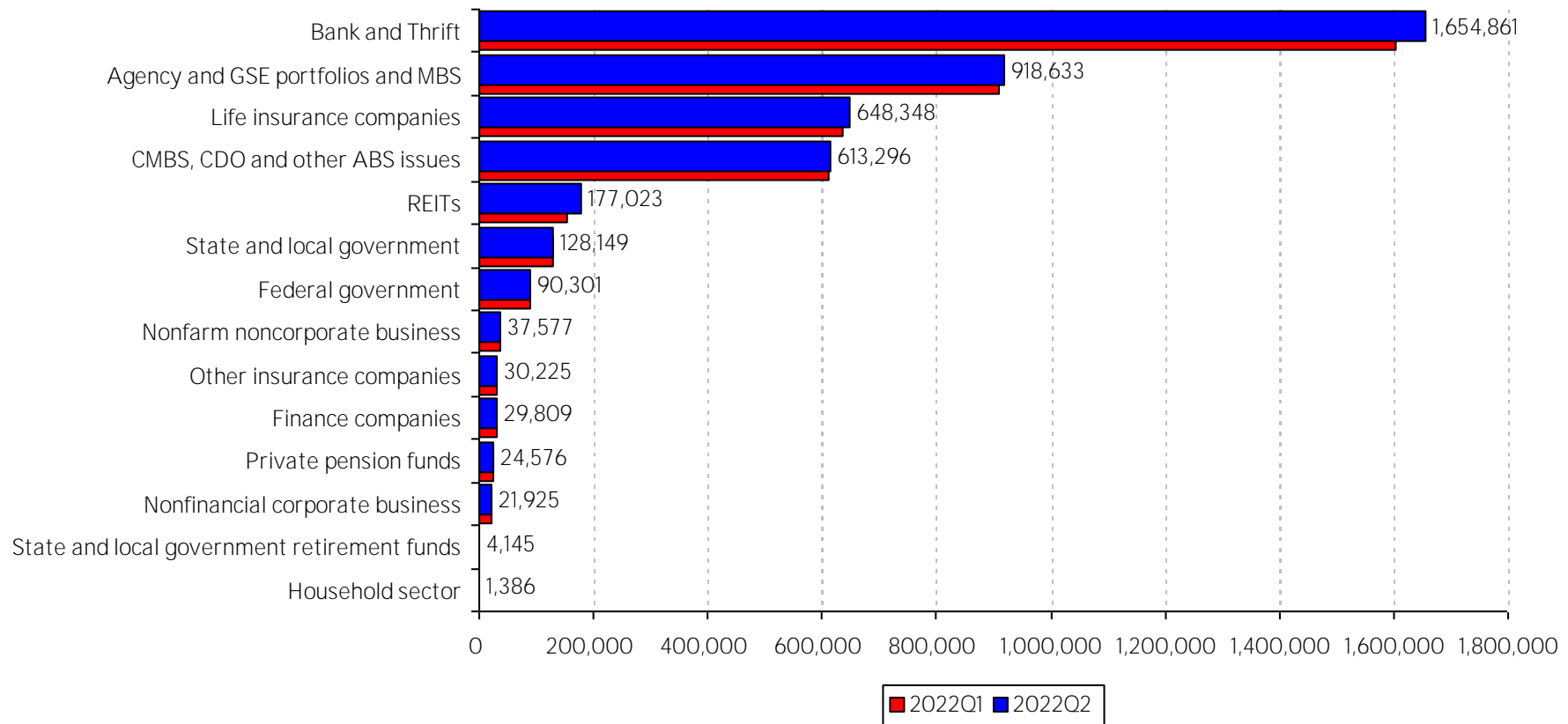
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COMMERCIAL AND MULTIFAMILY MORTGAGE DEBT OUTSTANDING

Total Commercial and Multifamily Mortgage Debt Outstanding, by Sector

(\$millions)



Source: MBA, Federal Reserve Board of Governors, Trepp LLC, Wells Fargo Securities, LLC, Intex Solutions, Inc. and FDIC

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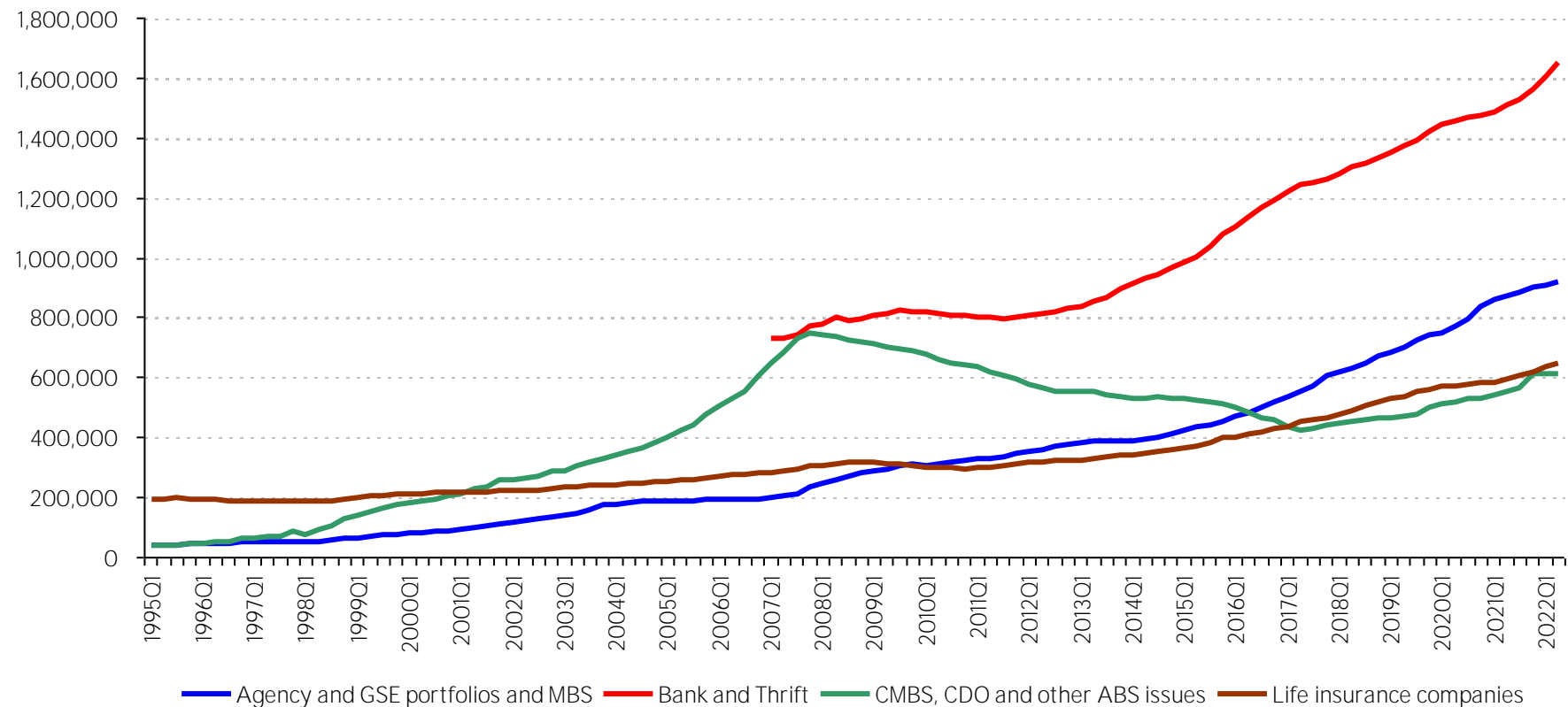
OUTSTANDING

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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, Wells Fargo Securities, LLC, Intex Solutions, Inc. and FDIC

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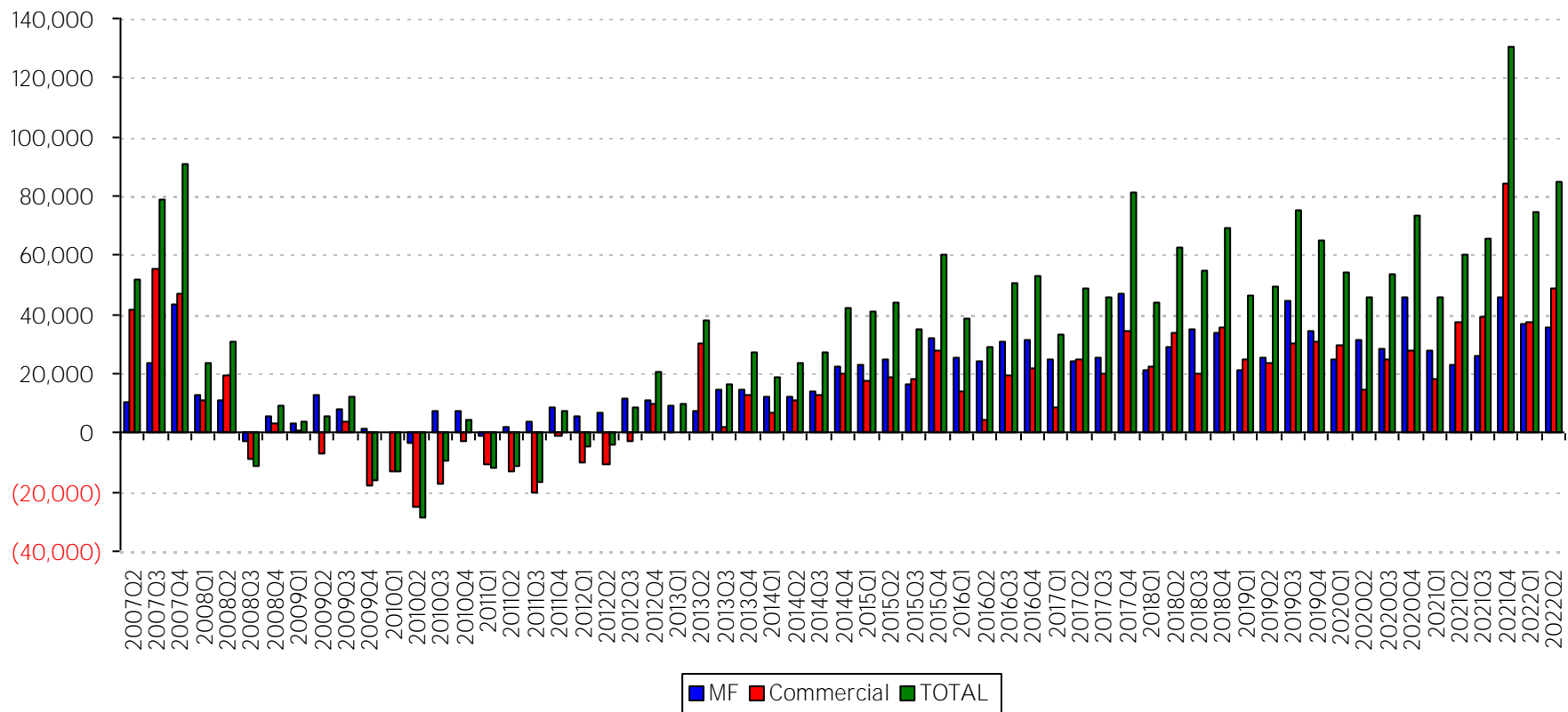
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COMMERCIAL AND MULTIFAMILY MORTGAGE FLOWS

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

(\$millions)



Source: MBA, Federal Reserve Board of Governors, Trepp LLC, Wells Fargo Securities, LLC, Intex Solutions, Inc. and FDIC

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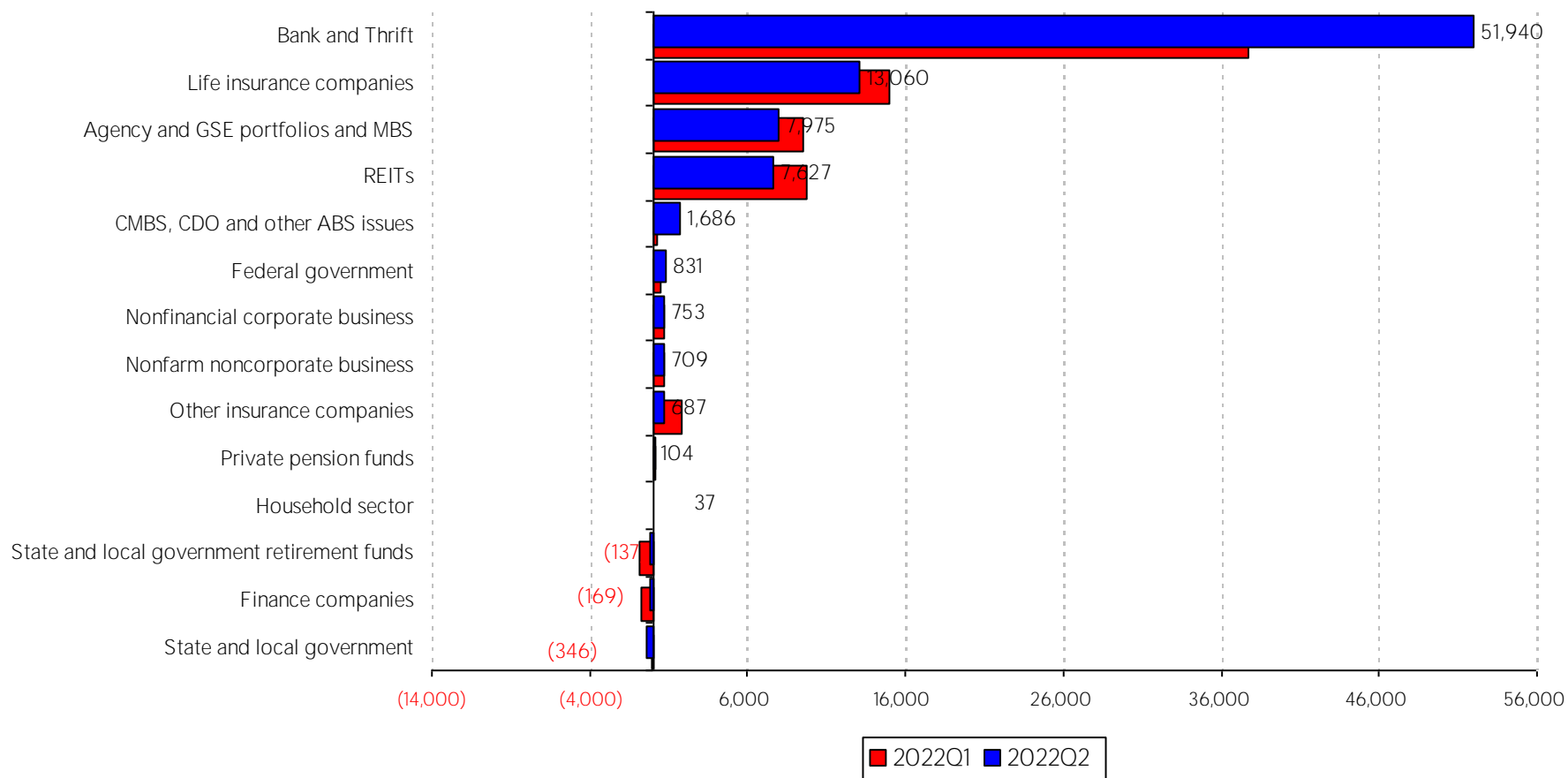
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COMMERCIAL AND MULTIFAMILY MORTGAGE FLOWS

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

(\$millions)



Source: MBA, Federal Reserve Board of Governors, Trepp LLC, Wells Fargo Securities, LLC, Intex Solutions, Inc. and FDIC

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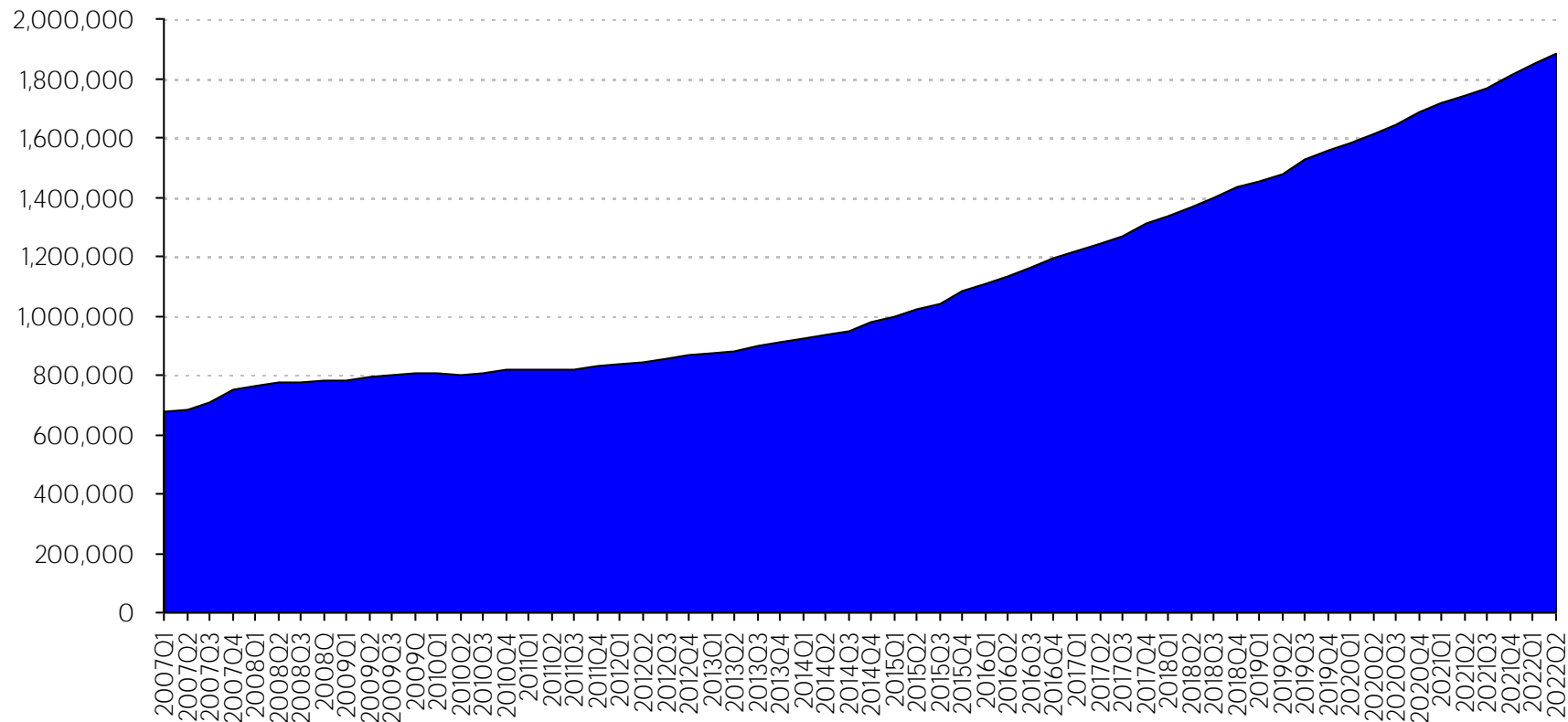
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MULTIFAMILY MORTGAGE DEBT OUTSTANDING

MULTIFAMILY MORTGAGE DEBT OUTSTANDING

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



Source: MBA, Federal Reserve Board of Governors, Trepp LLC, Wells Fargo Securities, LLC, Intex Solutions, Inc. and FDIC

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QUARTERLY MULTIFAMILY MORTGAGE DEBT OUTSTANDING

Multifamily Mortgage Debt Outstanding, by Sector

	Mortgage Debt Outstanding				Change		Sector Share of \$ Change
	2022 Q2		2022 Q1				
	(\$millions)	% of total	(\$millions)	% of total	(\$millions)	Percent	
Agency and GSE portfolios and MBS	918,633	48.8%	910,658	49.3%	7,975	0.9%	22.3%
Bank and Thrift	557,587	29.6%	529,093	28.6%	28,494	5.4%	79.8%
Life insurance companies	187,292	9.9%	183,441	9.9%	3,851	2.1%	10.8%
State and local government	104,641	5.6%	105,517	5.7%	-876	-0.8%	-2.5%
CMBS, CDO and other ABS issues	67,842	3.6%	71,569	3.9%	-3,727	-5.2%	-10.4%
Nonfarm noncorporate business	20,890	1.1%	20,496	1.1%	394	1.9%	1.1%
Federal government	10,694	0.6%	10,773	0.6%	-79	-0.7%	-0.2%
REITs	7,816	0.4%	7,989	0.4%	-173	-2.2%	-0.5%
Finance companies	5,142	0.3%	5,201	0.3%	-59	-1.1%	-0.2%
State and local government retirement funds	1,943	0.1%	2,007	0.1%	-64	-3.2%	-0.2%
Nonfinancial corporate business	822	0.0%	794	0.0%	28	3.5%	0.1%
Private pension funds	193	0.0%	258	0.0%	-65	-25.2%	-0.2%
TOTAL	1,883,495		1,847,796		35,699	1.9%	

Source: MBA, Federal Reserve Board of Governors, Trepp LLC, Wells Fargo Securities, LLC, Intex Solutions, Inc. 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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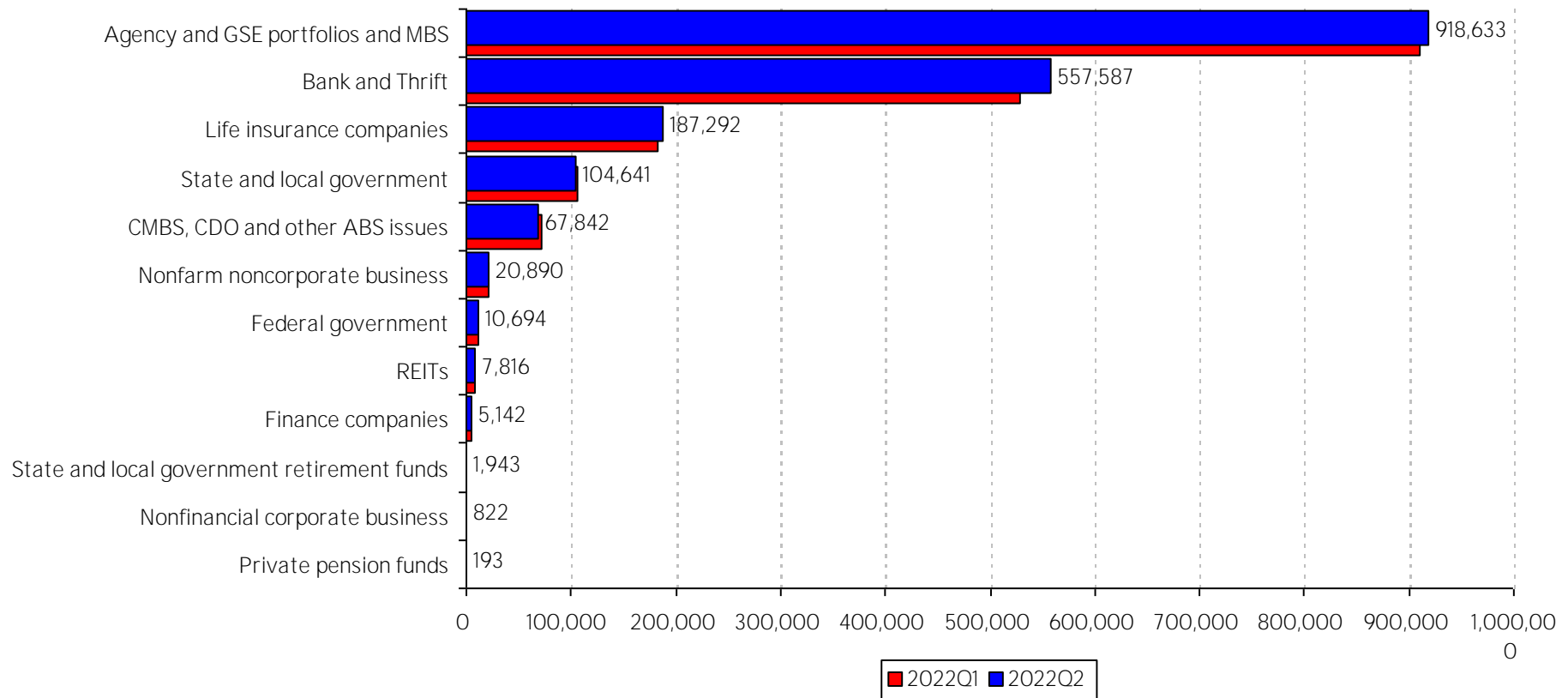
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MULTIFAMILY MORTGAGE DEBT OUTSTANDING

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

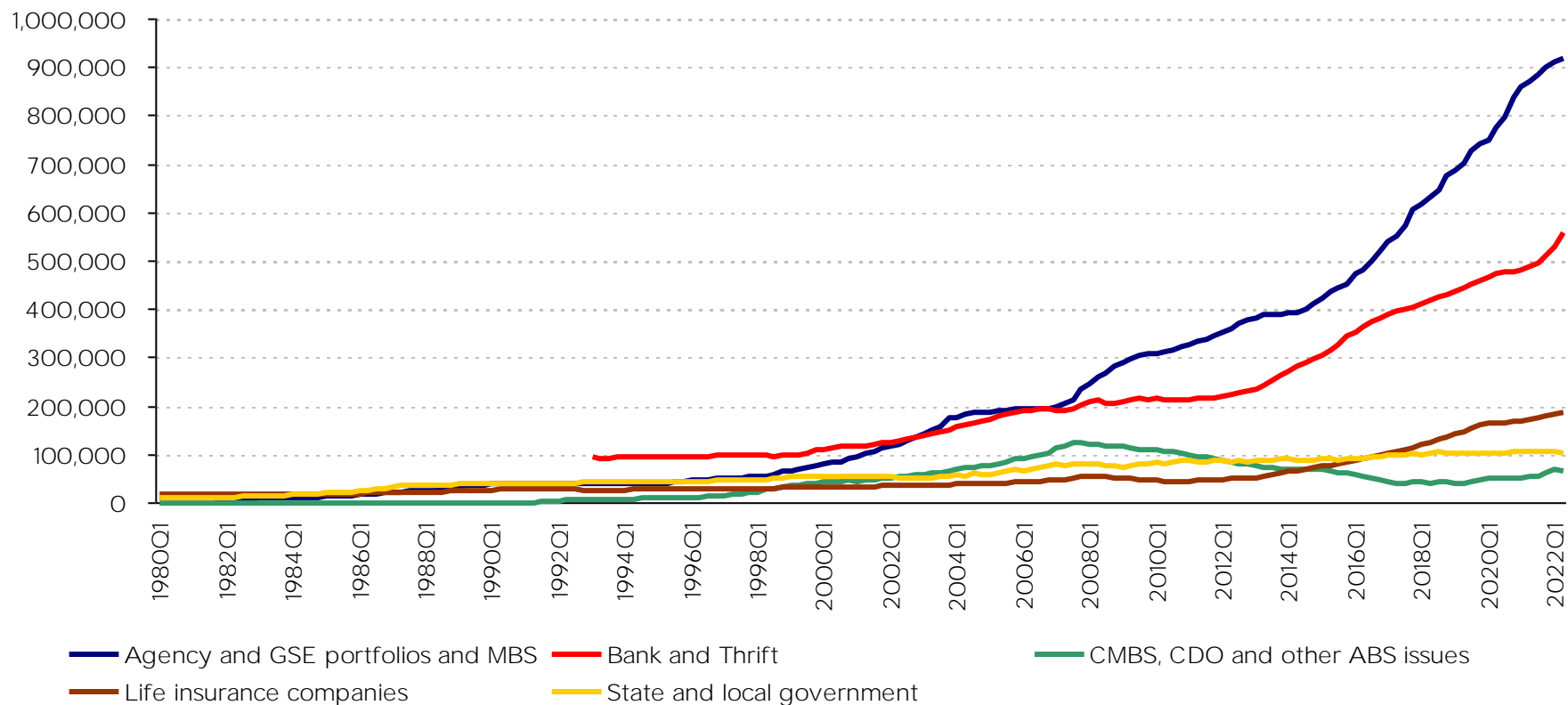


Source: MBA, Federal Reserve Board of Governors, Trepp LLC, Wells Fargo Securities, LLC, Intex Solutions, Inc. and FDIC

MULTIFAMILY MORTGAGE DEBT OUTSTANDING

Total Multifamily Mortgage Debt Outstanding, by Selected Sector by Quarter

(\$millions)



Source: MBA, Federal Reserve Board of Governors, Trepp LLC, Wells Fargo Securities, LLC, Intex Solutions, Inc. and FDIC

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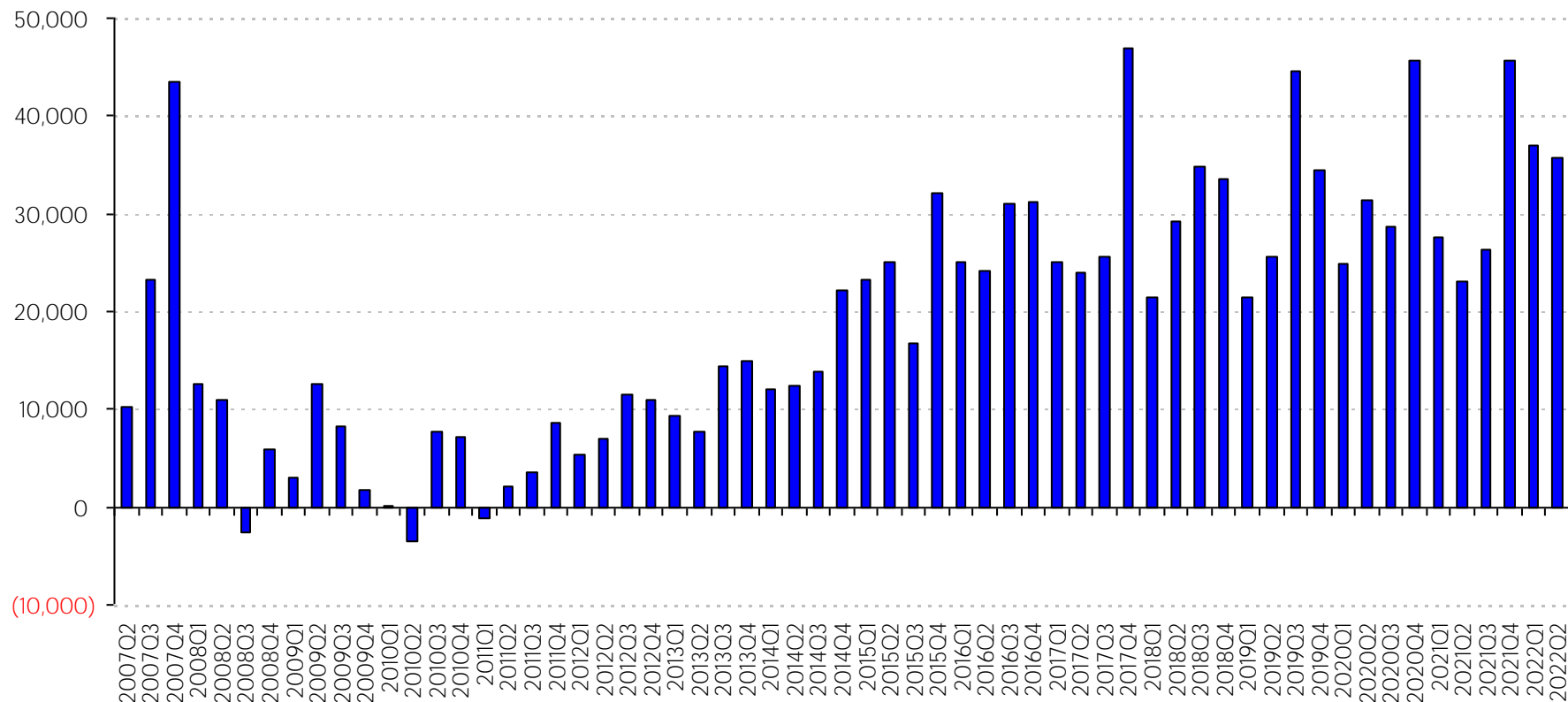
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MULTIFAMILY MORTGAGE FLOWS

Net Change in Multifamily Mortgage Debt Outstanding, by Quarter

(\$millions)



Source: MBA, Federal Reserve Board of Governors, Trepp LLC, Wells Fargo Securities, LLC, Intex Solutions, Inc. and FDIC

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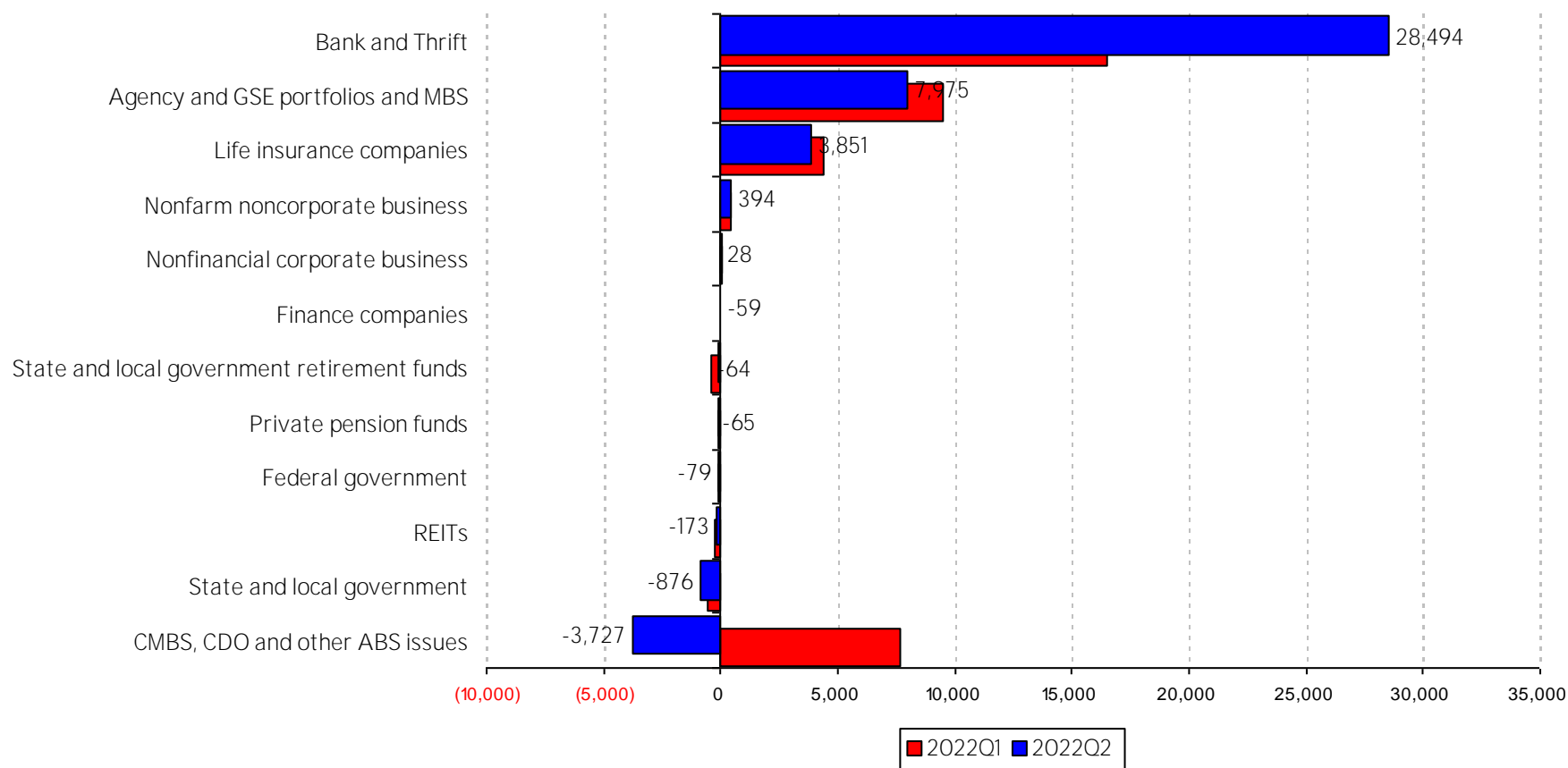
OUTSTANDING

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MULTIFAMILY MORTGAGE FLOWS

Net Change in Multifamily Mortgage Debt Outstanding, by Sector

(\$millions)



Source: MBA, Federal Reserve Board of Governors, Trepp LLC, Wells Fargo Securities, LLC, Intex Solutions, Inc. and FDIC

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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;

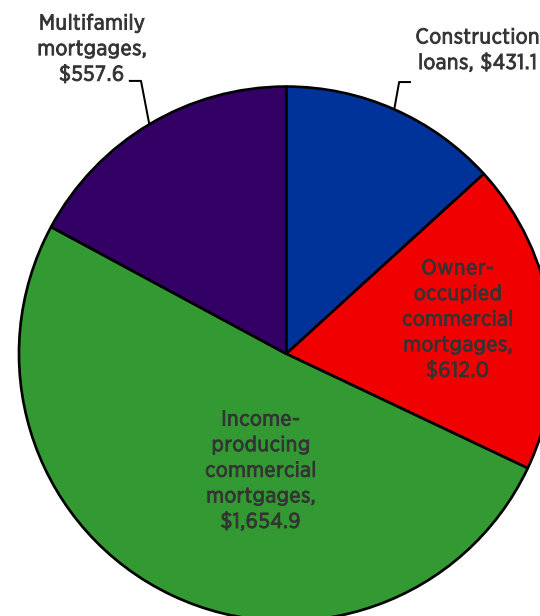
- a. loans for acquisition, development and construction and
- b. loans collateralized by owner-occupied commercial properties.

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 second quarter 2022, the Federal Reserve Board's Flow of Funds Accounts data attributed \$2.7 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 \$558 billion of multifamily mortgages and \$1.7 trillion of non-farm nonresidential mortgages, of which 64 percent or \$1.1 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 \$2.7 trillion total reported by the Federal Reserve also includes \$612 billion of loans collateralized by owner-occupied commercial properties and another \$431 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

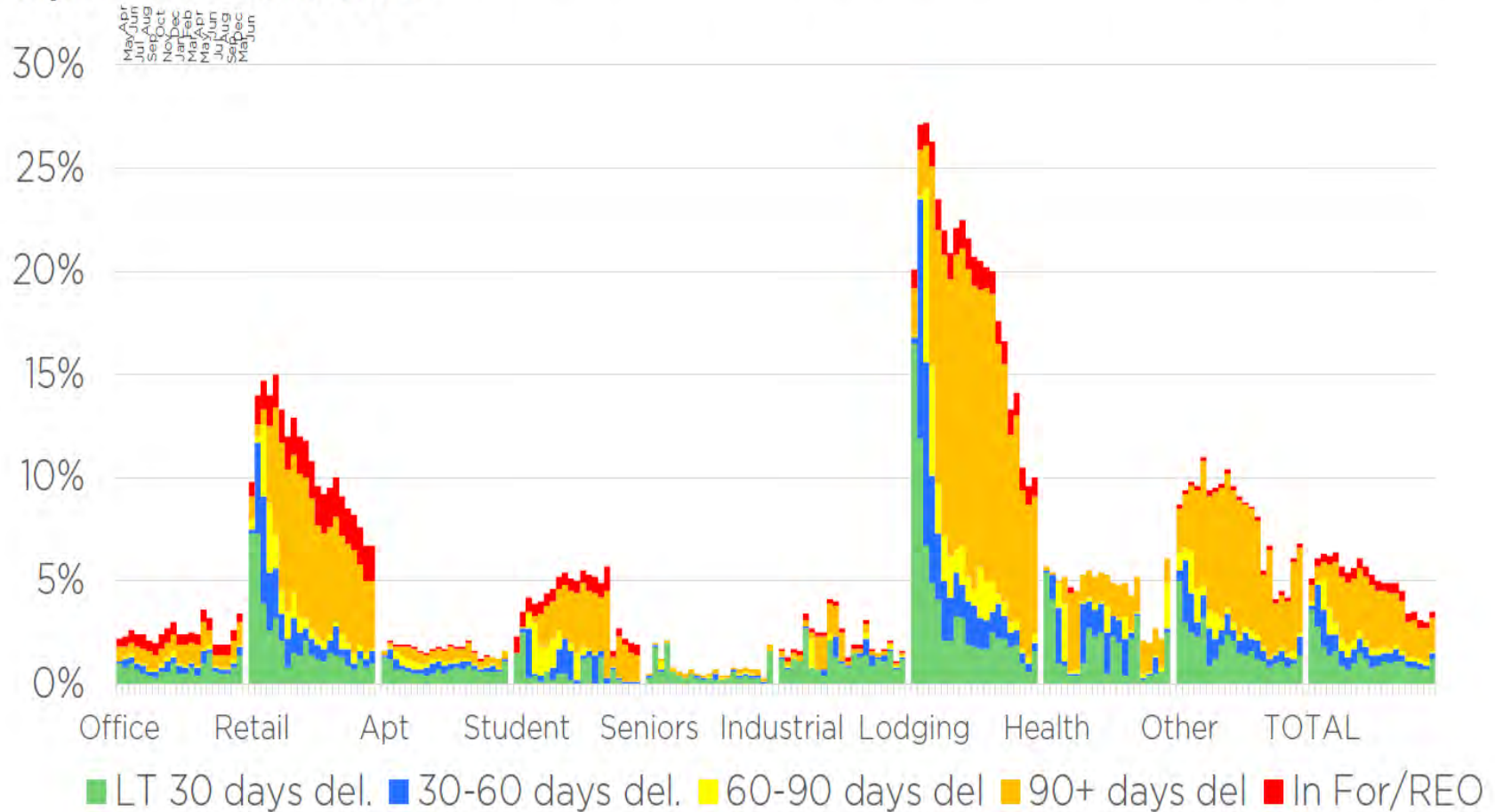
Mortgages in CMBS and held by REITs

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.

Delinquency Status, by Property Type, Share of Total Unpaid Principal Balance April 2020 – June 2022



Commercial/Multifamily Mortgage Delinquencies

Commercial and Multifamily Mortgage Delinquency Rates Remain Low in Second-Quarter 2022
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.

"Delinquency rates for commercial and multifamily mortgages fell again during the second quarter of 2022," said Jamie Woodwell, MBA's Vice President of Commercial Real Estate Research. "Many capital sources are seeing delinquency rates at or approaching pre-pandemic levels, which were some of the lowest delinquency rates on record. MBA survey data have shown significant differences by property type as the COVID-19 pandemic's effects have morphed. These property-type differences, particularly across changing economic conditions, will continue to be a key factor in commercial and multifamily loan performance."

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 just one 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 second quarter of 2022 were as follows:

- Banks and thrifts (90 or more days delinquent or in non-accrual): 0.49 percent, a decrease of 0.07 percentage points from the first quarter of 2022;
- Life company portfolios (60 or more days delinquent): 0.04 percent, a decrease of 0.01 percentage points from the first quarter;
- Fannie Mae (60 or more days delinquent): 0.34 percent, a decrease of 0.04 percentage points from the first quarter;
- Freddie Mac (60 or more days delinquent): 0.07 percent, a decrease of 0.01 percentage points from the first quarter; and
- CMBS (30 or more days delinquent or in REO): 2.95 percent, a decrease of 0.41 percentage points from the first quarter.

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.

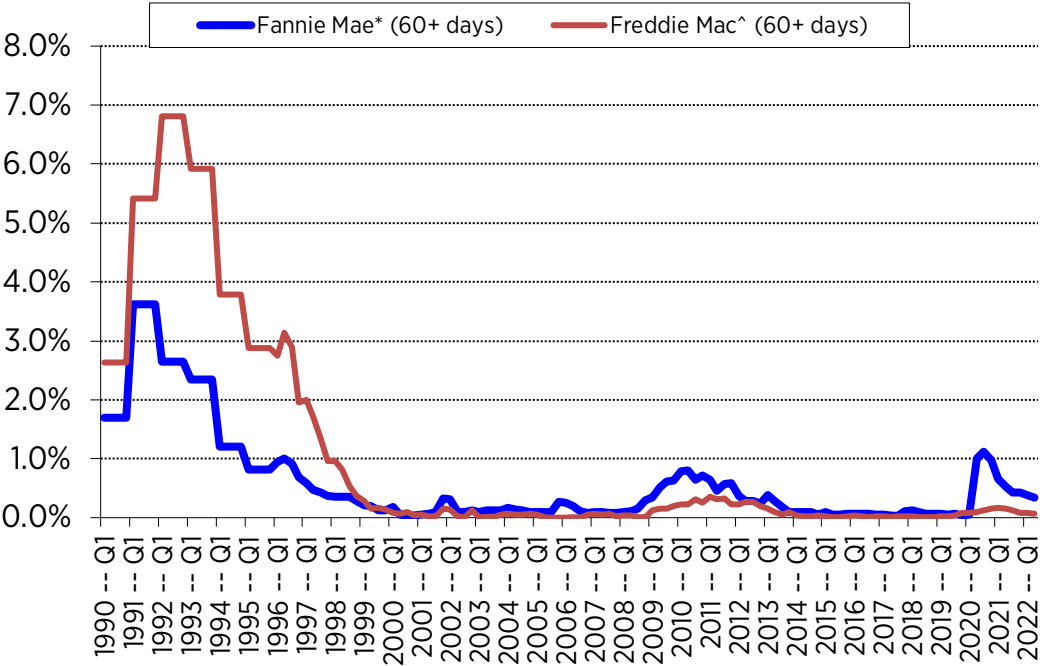
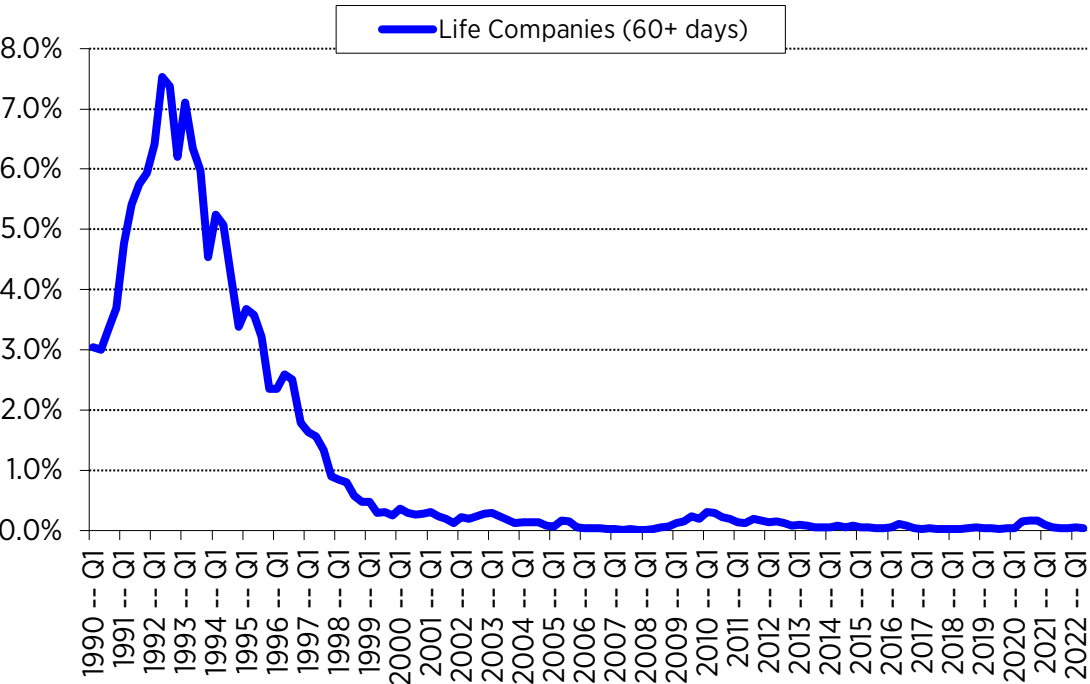
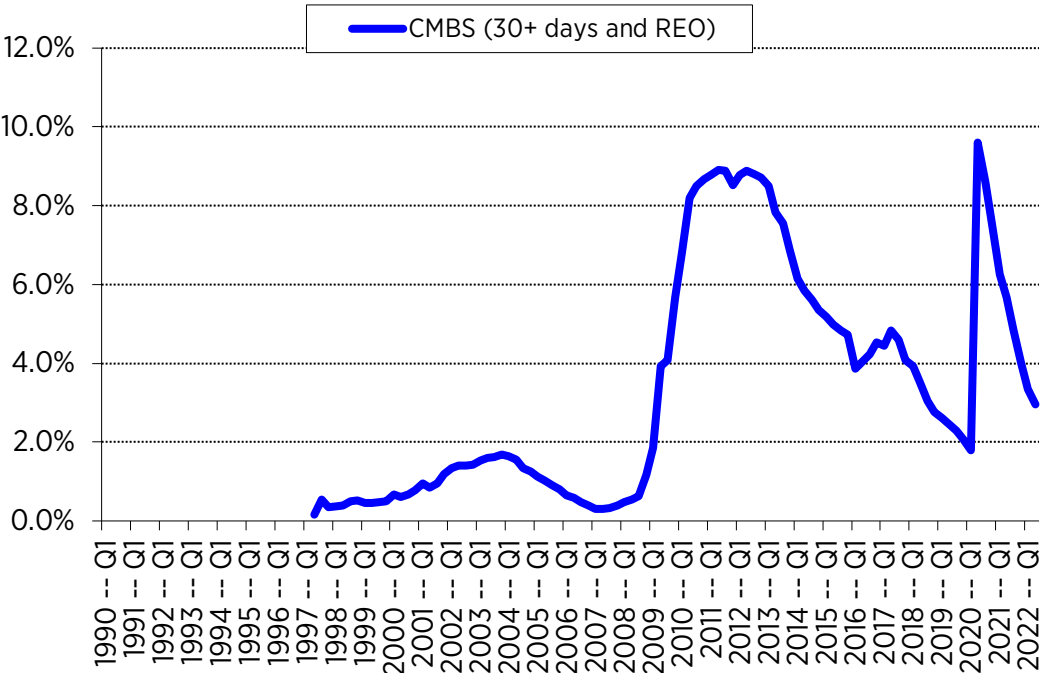
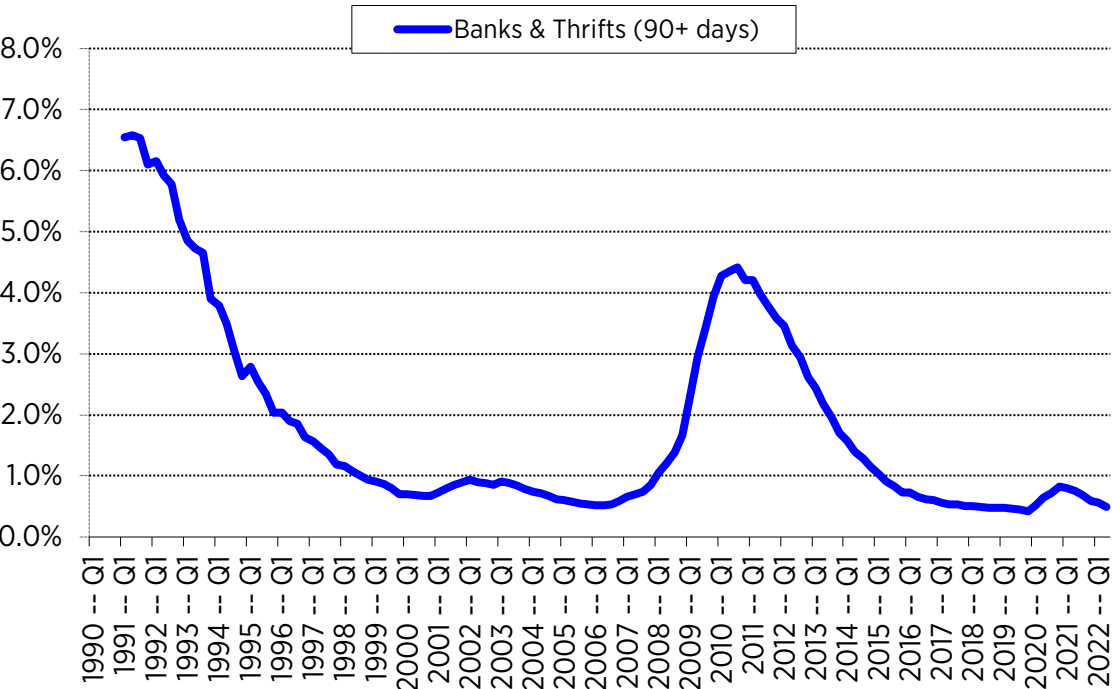
To download current report go to: <https://www.mba.org/news-and-research/research-and-economics/commercial-multifamily-research/commercial-multifamily-mortgage-delinquency-rates>.

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, Wells Fargo Securities, LLC and Intex Solutions, Inc., American Council of Life Insurers, Fannie Mae, Freddie Mac, OFHEO and Federal Deposit Insurance Corporation

COMMERCIAL/MULTIFAMILY QUARTERLY DATABOOK

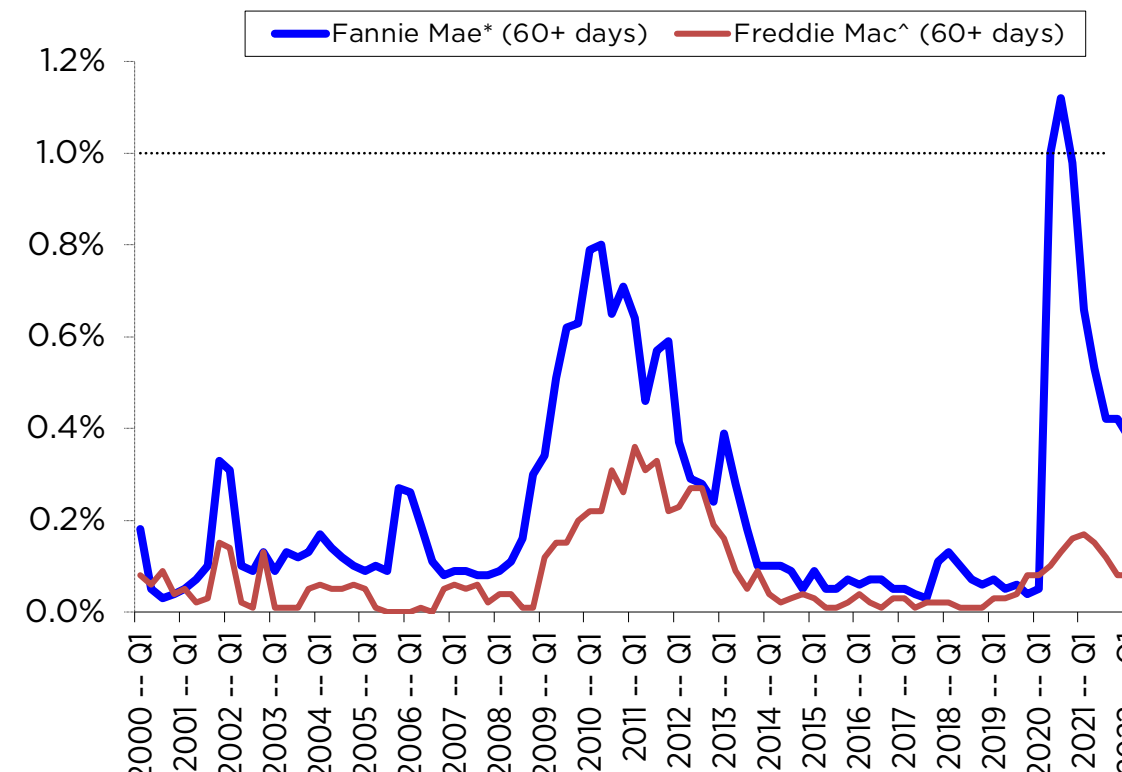
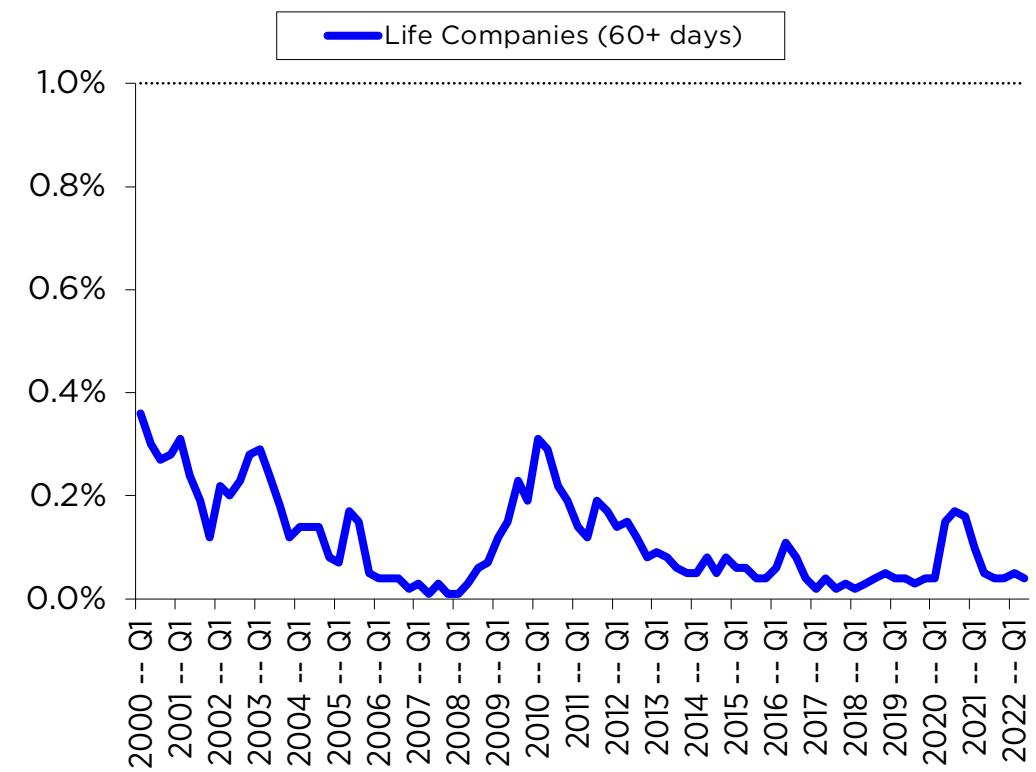
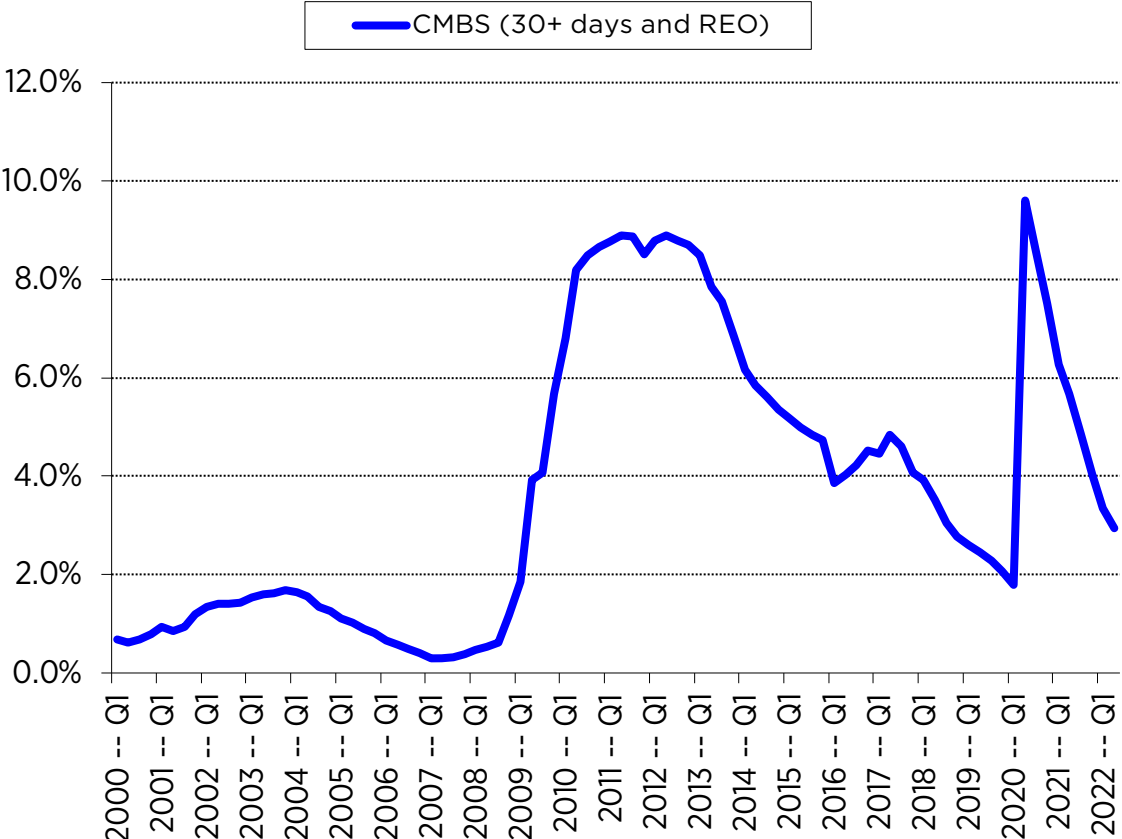
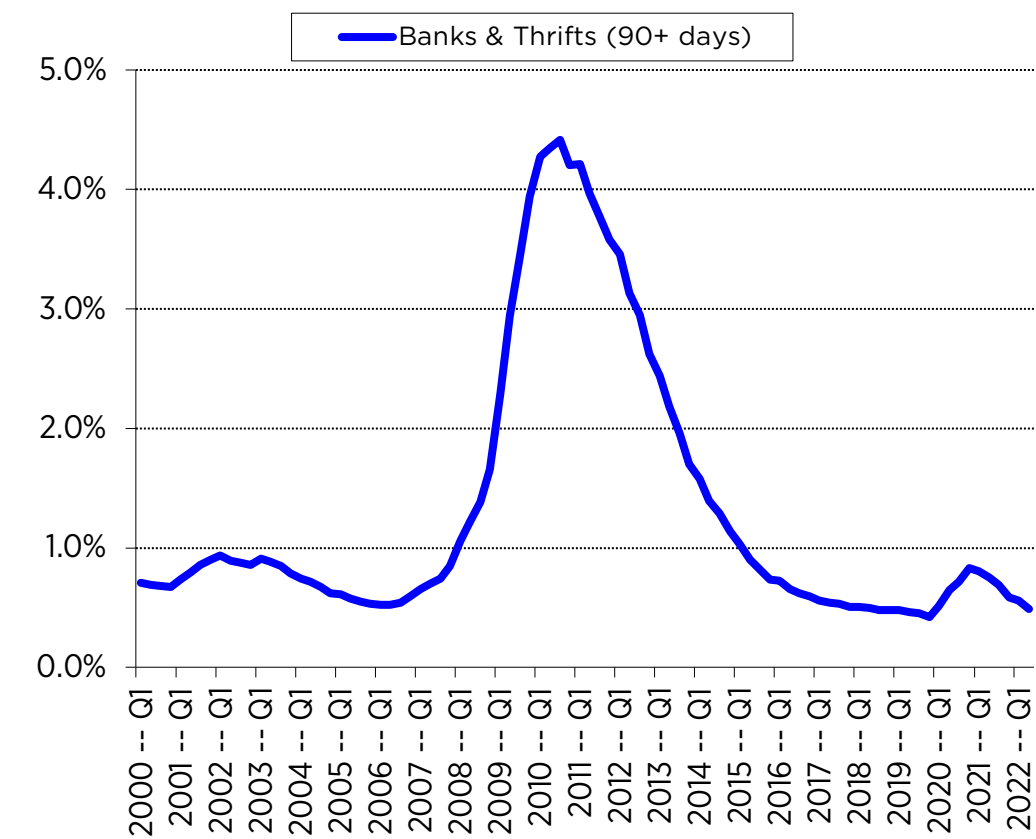
Q2 2022



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, Wells Fargo Securities, LLC and Intex Solutions, Inc., American Council of Life Insurers, Fannie Mae, Freddie Mac, OFHEO and Federal Deposit Insurance Corporation

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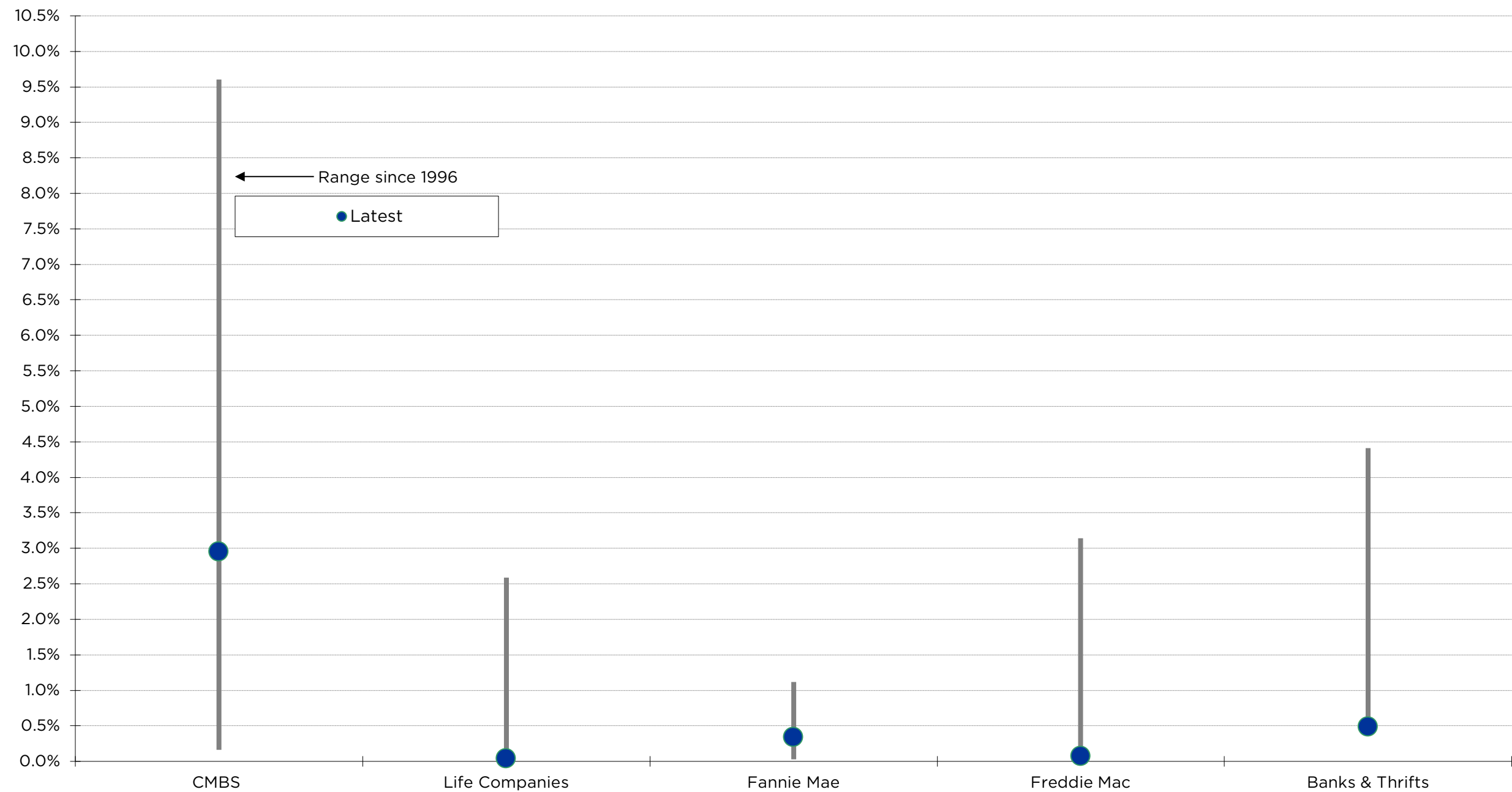
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CHART 3. Latest Delinquency Rates and Range Since 1996

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, Wells Fargo Securities, LLC and Intex Solutions, Inc., American Council of Life Fannie Mae, Freddie Mac, OFHEO and Federal Deposit Insurance Corporation

COMMERCIAL/MULTIFAMILY QUARTERLY DATABOOK

Q2 2022

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					
2018 -- Q4	2.77%	0.05%	0.06%	0.01%	0.48%
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%

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

OUTLOOK

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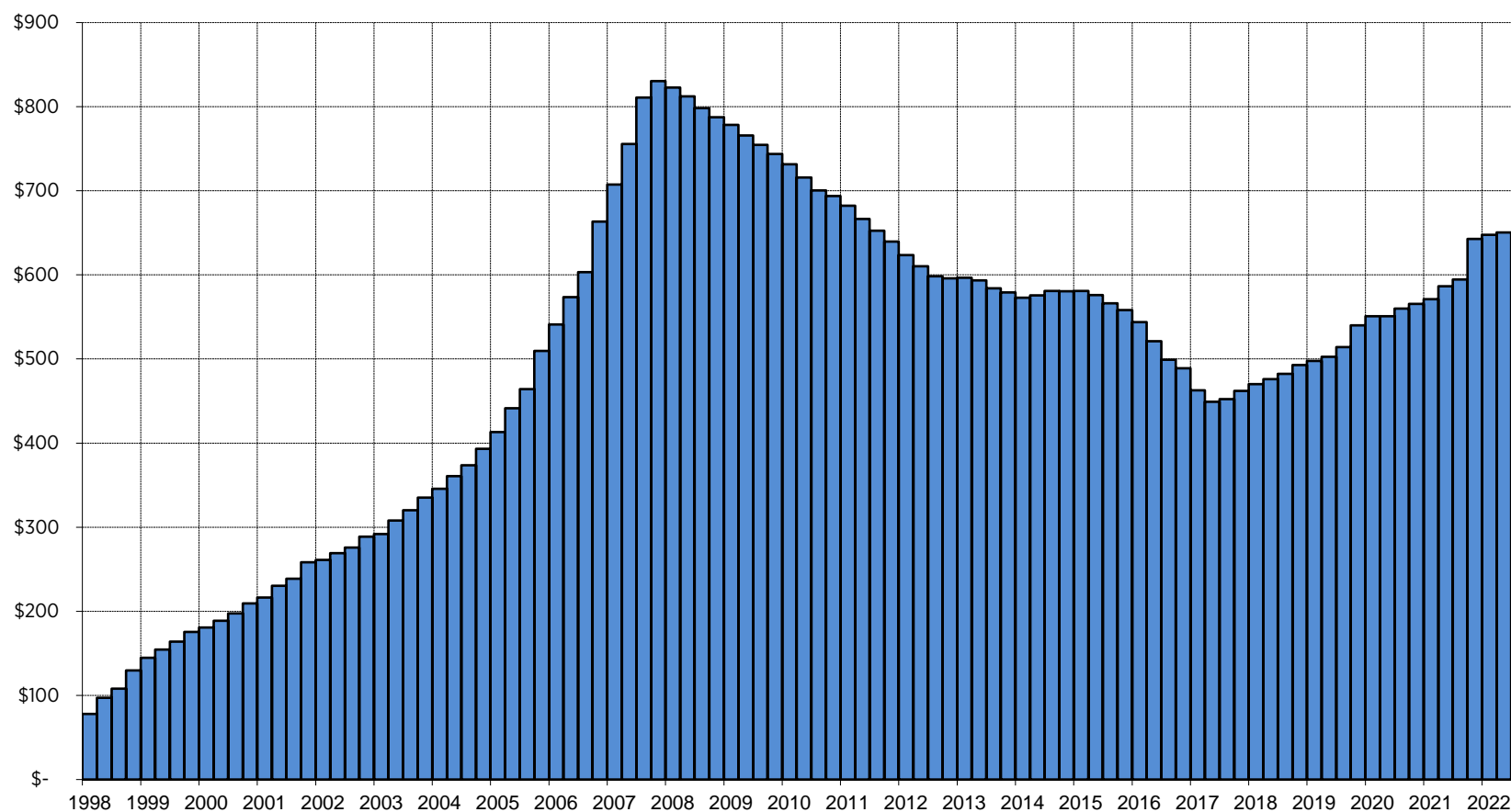
PRODUCTION

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COMMERCIAL MORTGAGE-BACKED SECURITIES (CMBS) OUTSTANDING

Billions of Dollars



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

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COMMERCIAL MORTGAGE-BACKED SECURITIES (CMBS) OUTSTANDING

Billions of Dollars

Year					Q2 Year-Over-Year Change		Q1-to-Q2 Change	
	Q1	Q2	Q3	Q4	Total	Percent change	Total	Percent change
<i>U.S. CMBS OUTSTANDING</i>								
2000	\$ 180.59	\$ 188.90	\$ 197.64	\$ 209.43	\$ 34.40	22%	\$ 8.32	4.6%
2001	\$ 216.32	\$ 230.24	\$ 238.90	\$ 258.20	\$ 41.33	22%	\$ 13.91	6.4%
2002	\$ 261.16	\$ 269.10	\$ 275.95	\$ 288.57	\$ 38.86	17%	\$ 7.94	3.0%
2003	\$ 292.00	\$ 308.09	\$ 320.32	\$ 335.14	\$ 38.99	14%	\$ 16.10	5.5%
2004	\$ 345.86	\$ 360.86	\$ 373.65	\$ 393.29	\$ 52.77	17%	\$ 15.01	4.3%
2005	\$ 413.05	\$ 441.38	\$ 464.05	\$ 509.67	\$ 80.52	22%	\$ 28.33	6.9%
2006	\$ 541.16	\$ 573.55	\$ 603.33	\$ 663.31	\$ 132.17	30%	\$ 32.39	6.0%
2007	\$ 707.40	\$ 755.46	\$ 811.02	\$ 830.28	\$ 181.91	32%	\$ 48.06	6.8%
2008	\$ 822.76	\$ 812.17	\$ 798.21	\$ 787.42	\$ 56.70	8%	\$ (10.59)	-1.3%
2009	\$ 778.19	\$ 765.76	\$ 754.70	\$ 743.90	\$ (46.41)	-6%	\$ (12.43)	-1.6%
2010	\$ 731.41	\$ 715.77	\$ 700.28	\$ 693.69	\$ (49.99)	-7%	\$ (15.65)	-2.1%
2011	\$ 682.40	\$ 666.38	\$ 652.68	\$ 639.75	\$ (49.39)	-7%	\$ (16.02)	-2.3%
2012	\$ 623.55	\$ 610.07	\$ 598.29	\$ 595.83	\$ (56.31)	-8%	\$ (13.48)	-2.2%
2013	\$ 596.60	\$ 593.46	\$ 584.17	\$ 579.23	\$ (16.61)	-3%	\$ (3.14)	-0.5%
2014	\$ 572.84	\$ 575.66	\$ 580.79	\$ 580.41	\$ (17.80)	-3%	\$ 2.83	0.5%
2015	\$ 580.83	\$ 576.00	\$ 566.10	\$ 558.00	\$ 0.33	0%	\$ (4.83)	-0.8%
2016	\$ 543.70	\$ 521.15	\$ 499.25	\$ 489.06	\$ (54.84)	-10%	\$ (22.54)	-4.1%
2017	\$ 462.68	\$ 449.07	\$ 452.25	\$ 461.98	\$ (72.08)	-14%	\$ (13.61)	-2.9%
2018	\$ 469.99	\$ 475.98	\$ 482.49	\$ 492.90	\$ 26.91	6%	\$ 5.99	1.3%
2019	\$ 497.64	\$ 502.75	\$ 514.22	\$ 539.96	\$ 26.77	6%	\$ 5.11	1.0%
2020	\$ 550.82	\$ 550.88	\$ 559.78	\$ 565.39	\$ 48.12	10%	\$ 0.06	0.0%
2021	\$ 570.96	\$ 586.59	\$ 594.62	\$ 642.63	\$ 35.71	6%	\$ 15.63	2.7%
2022	\$ 647.60	\$ 650.38			\$ 63.80	11%	\$ 2.78	0.4%

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

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COMMERCIAL MORTGAGE-BACKED SECURITIES (CMBS) MARKET COMPOSITION

Composition of CMBS Outstanding, as of June 30, 2022

Total CMBS Outstanding \$ 650.4 billion

By Property Types:

Office	27.1%
Multifamily	10.5%
Retail	20.0%
Industrial	6.7%
Hotel	15.2%
Self-Storage	3.2%
Healthcare	0.1%
Other	17.1%

By Amortization:

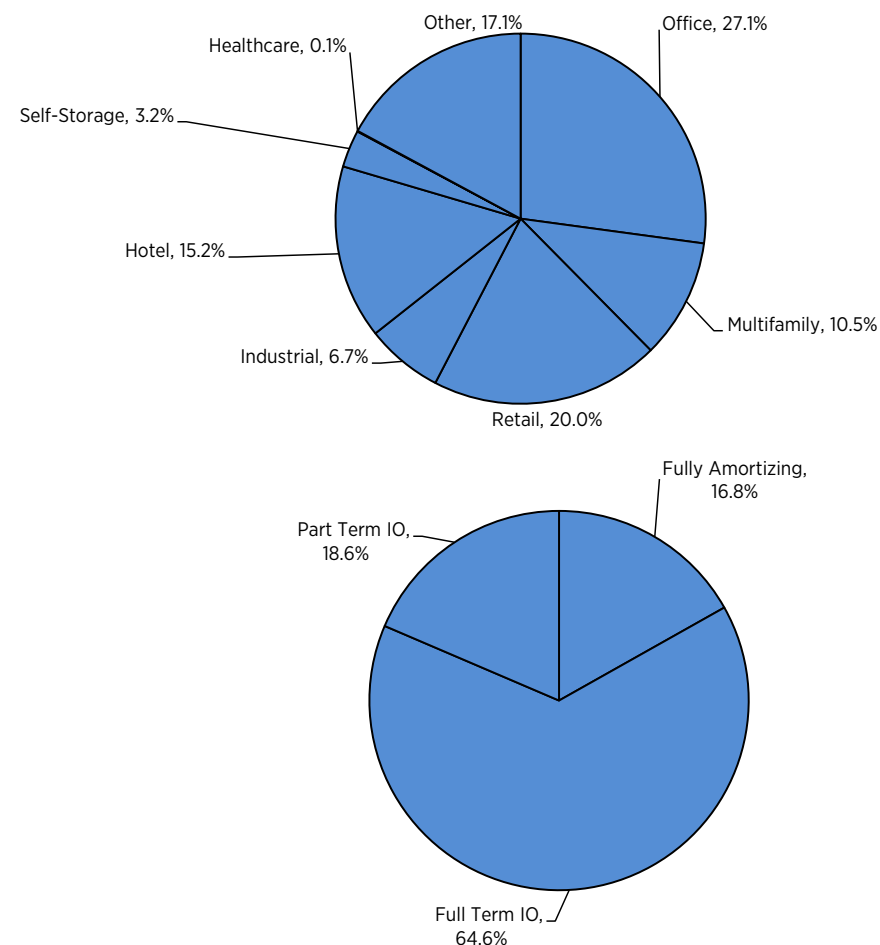
Fully Amortizing	16.8%
All Interest-Only (IO)	83.2%
Full Term IO	64.6%
Part Term IO	18.6%

By Percent Defeased 5.0%

By Delinquency:

Current	97.4%
30-day delinquent	0.17%
60-day delinquent	0.04%
90+day delinquent	0.63%
Foreclosure/REO	1.75%

Source: Trepp LLC



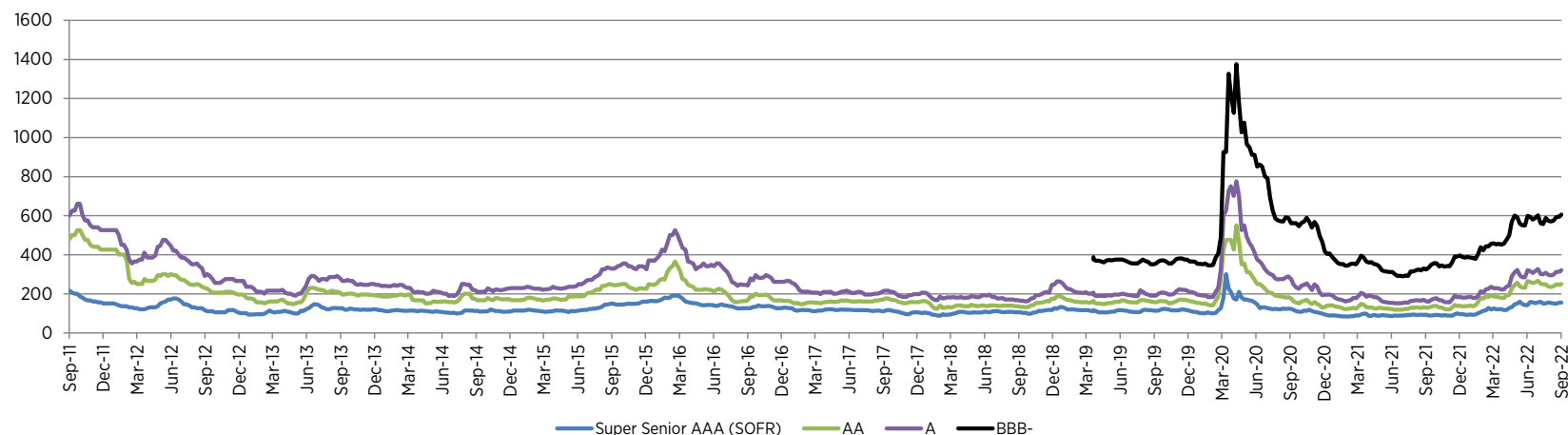
CMBS SPREADS

COMMERCIAL MORTGAGE BACKED SECURITIES (CMBS)

NEW ISSUE SPREADS TO SOFR RATES

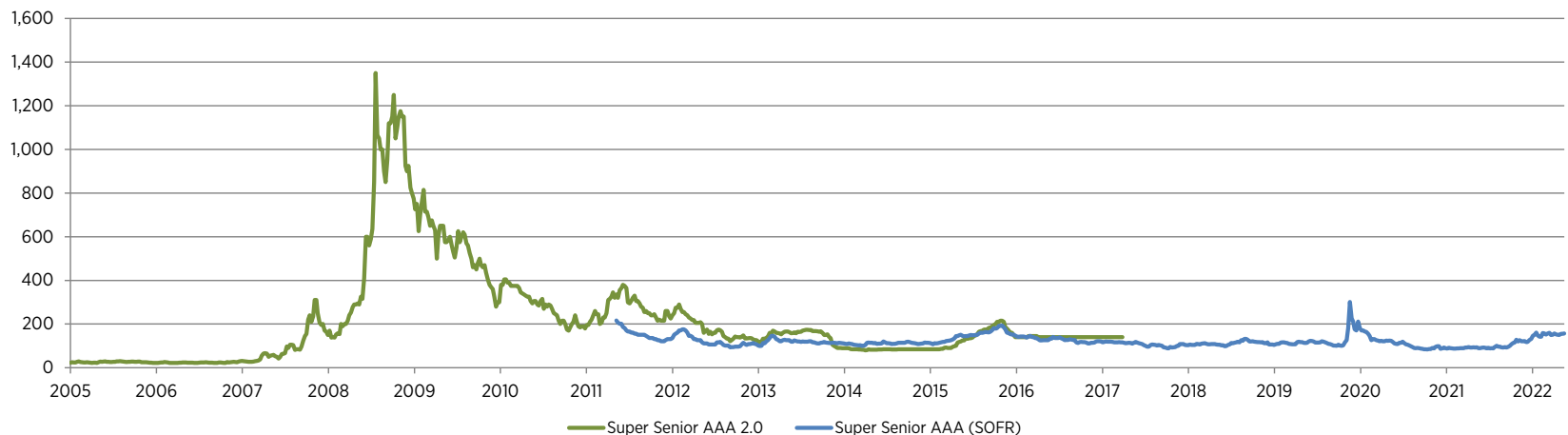
NOTE: In Q1 2022 MBA began using spreads to SOFR. As a result, the data presented here may not be comparable to that in previous Quarterly Data Books.

(in Basis Points)



AAA CMBS SPREADS

(in Basis Points)



Source: JP Morgan Securities

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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 Q1 2020	301	476	626	926	161	121
End of Q2 2020	126	251	366	861	76	71
End of Q3 2020	118	161	246	561	68	54
End of Q4 2020	89	141	196	406	56	47
End of Q1 2021	95	149	206	396	51	30
End of Q2 2021	89	119	152	300	39	33
End of Q3 2021	89	130	160	335	50	30
End of Q4 2021	93	136	181	386	57	43
End of Q1 2022	121	138	183	389	88	42
1-Jul-22	157	255	307	580	90	78
8-Jul-22	152	259	317	589	95	80
15-Jul-22	157	267	327	602	98	83
22-Jul-22	160	252	302	562	99	85
29-Jul-22	150	250	300	557	101	86
5-Aug-22	151	248	308	588	101	86
12-Aug-22	157	237	297	574	101	84
19-Aug-22	153	235	295	570	98	83
26-Aug-22	151	238	298	575	98	83
2-Sep-22	150	248	313	593	98	83
12-Sep-22	155	246	314	596	97	83
16-Sep-22	156	251	321	606	98	85

Source: JP Morgan Securities

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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

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).

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*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.

*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***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.

*2/14/2022***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.

*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.

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*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.

*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.

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*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.

*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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