CREFC Update on CRE Debt Marketplace

August 2022

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The Voice of Commercial Real Estate Finance

CMBS Delinquency Rate Sees Slight Uptick – August 2022

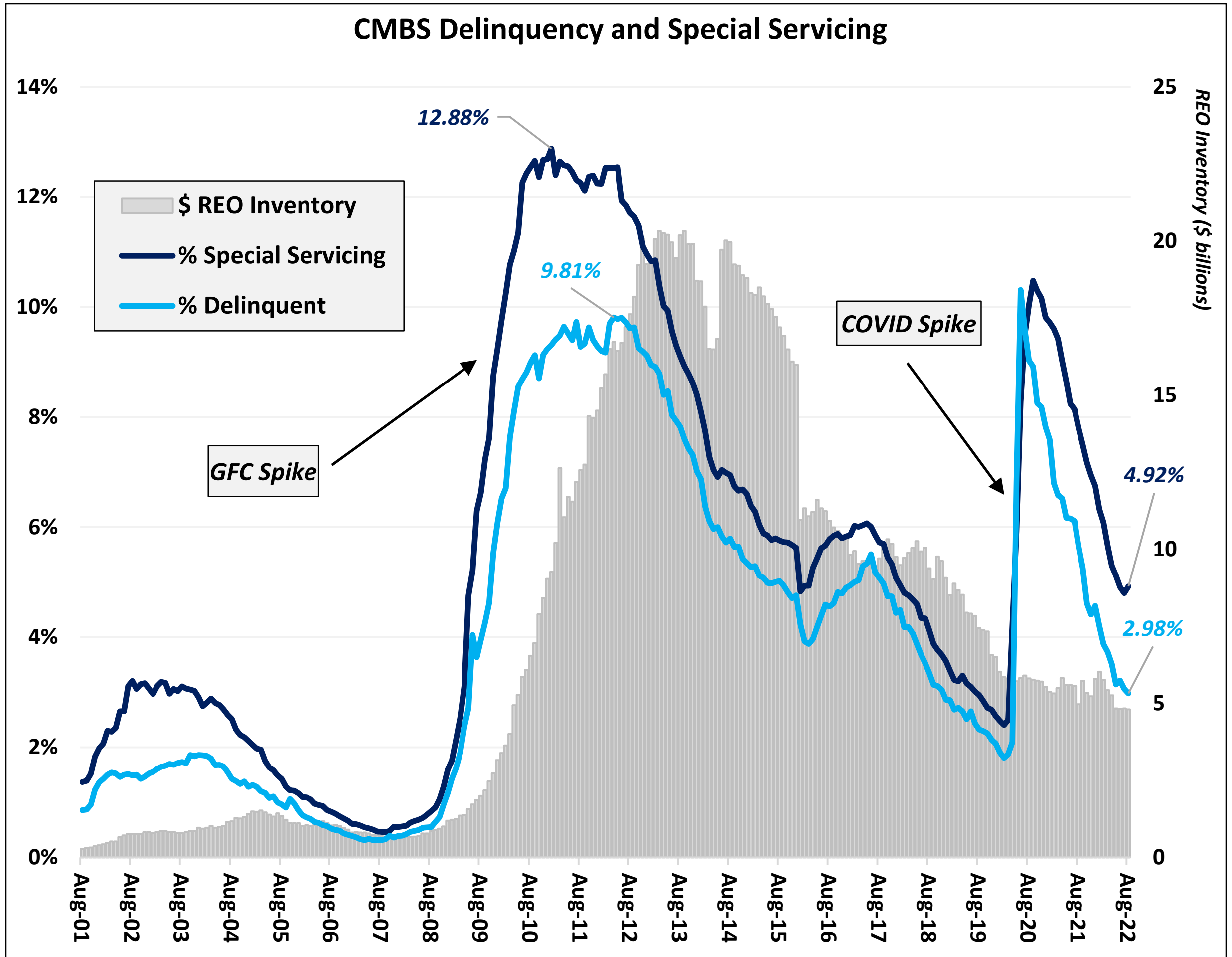
The CMBS loan performance analysis in this report reflects the sector's total outstanding balance of $633.9 billion, which is broken down as:

- ***60.7% ($384.7B) fixed-rate conduit CMBS,***
- ***39.3% ($249.2B) single-asset/single-borrower (SASB) CMBS***

DELINQUENCY RATE DROPS BELOW 3%, LOWEST POST-COVID

2.98% August 2022 CMBS Delinquency Rate

- Following a 15 basis point decline in July, the delinquency rate fell an additional 8 basis points (bps) in August to 2.98%; This is the first time the rate has been below 3% since before the pandemic
- Despite the second consecutive monthly decline, the delinquency rate over the next few months may be volatile given the challenging macro environment, as well as the new landscape for lenders in refinancing loans at higher rates and higher cap rates and thus lower asset valuations
- August's delinquency rate is 733 bps lower from its peak of 10.31% in June 2020 and is the lowest since April 2020 (2.09%) – before the impacts of the pandemic were first reflected in the data



Source: Intex, Trepp; includes both conduit and SASB

Special Servicing Rate Notches First Increase in Two Years

- **Uptick in Special Servicing Volume:** Loans in special servicing rose 12 basis points in August to 4.92%, ***the first increase following 22 consecutive monthly declines***. While the rate remains well below its high of 10.48% in September 2020, the height of the pandemic, higher benchmark rates and the real risk of an economic slowdown suggest asset valuations may be on the decline.
  - Retail and multifamily loans drove the SS increase, rising 114 and 67 bps to 11.03% and 1.90%, respectively. All other property types saw decreases.
  - ***Current tally of SS loans is ~$31 billion of specially serviced loans vs. ~$14 billion at year-end 2019, pre-pandemic***
- **De-Minimis In-Foreclosure and REO Loans to Date:** Relatively high percentage of SS loans two years into pandemic suggest in-foreclosure, REO rates should be much higher; they remain low at 1.0% and 0.8%, respectively (combined conduit and SASB universe)
  - **Forbearance Factor:** Low rates reflect forbearances in place provided by servicers; forbearance data reported in watchlists, special servicer comments
- **According to *BofA Global Research*, as of August 2022:**
  - 419 loans across 258 conduit CMBS transactions (outstanding balance of $9.4 billion, 2.5% of the outstanding conduit universe) had delinquency statuses of in-foreclosure or REO; and
  - Additional 250 loans in 186 conduit CMBS ($6.9 billion, 1.8% of outstanding conduits), mentioned foreclosure/dual tracking in servicer commentary
    - ~41% backed by retail and ~26% hotel; 2014 and 2015 vintage loans most impacted

Outlook: While too early to declare a trend, uptick in August special serving rate may reflect the challenges of refinancing loans in current rate and economic environment. We anticipate some increase in loans transferred to SS in coming months.

Current CMBS Loan Performance Still Strong

- Overall performance for conduit and SASB CMBS remains sound with delinquency rates at 4.2% and 1.1%, respectively
- Low 'in-foreclosure' loans and REO asset rates: 2.5% for conduit and 0.6% for SASB
- Total special serviced loan rates are low at 6.0% for conduit and 3.2% for SASB
- Outperformance of SASB CMBS is due primarily to the institutional-quality assets and sponsorship associated with larger loans and the heightened capital liquidity of the borrowers and thus their ability to withstand cash-flow deficits caused by the pandemic

% of Balance Outstanding	Grace Period	30+ Days Delinquent	60+ Days Delinquent	90+ Days Delinquent	In Foreclosure	REO	Non-Perf Matured Balloon	Total Delinquent	Current & Specially Serviced	Delinquent & Specially Serviced	Total Specially Serviced
Conduit CMBS	2.1%	0.1%	0.1%	0.9%	1.3%	1.2%	0.4%	**4.2%**	2.0%	4.0%	**6.0%**
SASB CMBS	0.9%	0.0%	0.0%	0.0%	0.6%	0.0%	0.5%	**1.1%**	2.1%	1.1%	**3.2%**
Total CMBS	**1.7%**	**0.1%**	**0.1%**	**0.6%**	**1.0%**	**0.8%**	**0.5%**	**3.0%**	**2.0%**	**2.9%**	**4.9%**

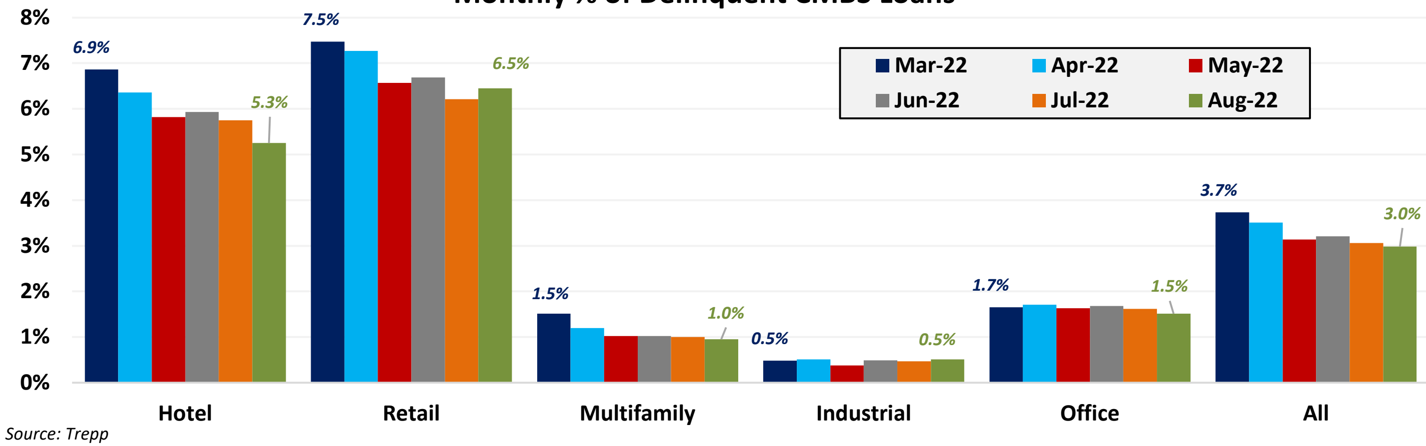
Source: Trepp; Data represent a snapshot as of the date pulled and may differ slightly across slides as Trepp updates its website on a daily basis

August 2022 Delinquency by Property Type, Hotels Lead the Way

- **Macro Delinquency Rate Decline Driven by Solid Hotel Performance.** Delinquency rate of 2.98% down 8 bps in August, driven primarily by a 50 bps decrease in hotel loans.
- **Notable New Large Loan Delinquencies:**
    - **Wilshire Courtyard – $408M (NCMS 2019-MILE).** The loan is secured by a 1mm sf office property in Los Angeles, which failed to pay off at its 7/9/22 maturity date. The borrower's request for an extension was approved. However, SOFR conversion is taking time to complete. Per the 7/1/2022 rent roll, the property was 58% occupied with a DSCR of 1.05x.
    - **Marriott Grand Cayman - $74M (GSMS 2017-GS7, CCUBS 2017-C1, UBSCM 2017-C5).** Loan secured by ~~a~~ 295-room hotel built in 1990 and renovated in 2014 and located in Grand Cayman. Loan transitioned from current to non-performing matured balloon in August. According to June 2022 financials, hotel occupancy was 31% with a DSCR of 0.86x. Borrower was current on all payments leading up to loan's maturity on 7/1/22. Borrower signed pre-negotiation agreement; discussions underway for potential extension.

DLQ by Property Type	Aug-22	Jul-22	Jun-22	Apr-22	Dec-21	Jun-21	Dec-20	Jun-20	Dec-19
Hotel	5.25%	5.75%	5.93%	6.36%	8.79%	14.26%	19.80%	24.30%	1.42%
Retail	6.45%	6.21%	6.69%	7.27%	8.27%	10.71%	12.95%	18.04%	4.24%
Multifamily	0.95%	1.00%	1.02%	1.20%	1.76%	2.02%	2.77%	3.28%	1.78%
Industrial	0.51%	0.47%	0.49%	0.51%	0.53%	0.65%	1.14%	1.56%	1.36%
Office	1.51%	1.62%	1.68%	1.71%	2.55%	2.10%	2.19%	2.65%	1.85%
All	**2.98%**	**3.06%**	**3.21%**	**3.51%**	**4.57%**	**6.16%**	**7.82%**	**10.31%**	**2.17%**

Monthly % of Delinquent CMBS Loans



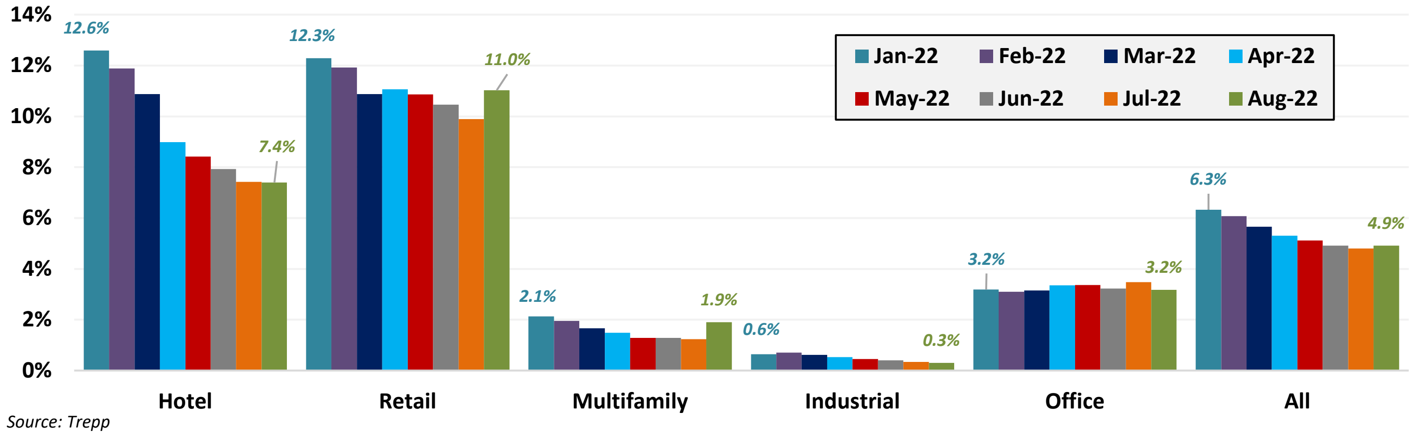
Source: Trepp

August 2022 Special Servicing by Property Type

- **Special Servicing Rate Increases – First Increase in Two Years.** SS loans totaled 4.92% in August, up from 4.80% in July.
- **Retail Loans Drive Increase.** Retail SS loans rose 114 bps to 11.03%, followed by multifamily up 67 bps to 1.90%. All other property types saw month-over-month declines.
- **Loans totaling $2.45B Transferred to SS; Largest Transfers:**
  - **MFP Portfolio - $481M (JPMCC 2019-MFP).** Loan is secured by a 43-property multifamily loan in the Midwest and Southeast. Per T12 March 2022 financials, DSCR was 0.91x and occupancy 76%. Transfer to SS was result of maturity default on 7/9/22; notice of default sent out. Borrower signed pre-negotiation agreement and lender will dual track discussions with the borrower along with enforcement of its rights and remedies under the loan docs.
  - **Santa Monica Place - $300M (WFCM 2017-SMP).** Loan is secured by a 523,000 sf regional mall in Santa Monica, CA. Occupancy has fallen to 59% due to tenant losses, including Bloomingdale's (101,000 sf) and ArcLight (48,000 sf). Transfer to SS due to imminent monetary default. Borrower submitted proposal (includes a capital investment in exchange for a maturity extension) to provide time to lease up and stabilize the property.

SS by Property Type	Aug-22	Jul-22	Jun-22	Apr-22	Dec-21	Jun-21	Dec-20	Jun-20	Dec-19
Hotel	7.40%	7.42%	7.93%	8.98%	13.72%	18.68%	24.07%	20.46%	1.94%
Retail	11.03%	9.89%	10.46%	11.06%	12.73%	14.43%	17.20%	14.22%	4.99%
Multifamily	1.90%	1.23%	1.29%	1.49%	2.11%	2.69%	2.91%	1.85%	2.22%
Industrial	0.30%	0.34%	0.40%	0.53%	0.60%	0.77%	1.22%	1.40%	1.74%
Office	3.18%	3.48%	3.23%	3.35%	3.23%	3.01%	2.71%	2.66%	2.46%
All	**4.92%**	**4.80%**	**4.91%**	**5.30%**	**6.75%**	**8.24%**	**9.81%**	**8.28%**	**2.71%**

Monthly % of CMBS Loans in Special Servicing



Source: Trepp

August Remit Realized Losses

- **12 loans across 14 CMBS transactions were liquidated with realized losses totaling $187.9 million in the August remit period**
- Severities ranged from 1% to greater than 100%, based on outstanding balances at disposition
- Largest workout by outstanding debt was the $87.6 million State House Square loan, secured by an 837,225 sf office property in Hartford, CT. Loan with special servicer since March 2019; Resolved with 54.3% loss severity.
- Five of the 12 loans incurring losses were hotel properties, including the Value Place Williston, a 248-key extended-stay hotel in ND. Property had been REO since 2017 with outstanding balance of $17.2 million; Liquidated with 100% loss severity.

No.	Deal Name	Loan Name	Balance before Liquidation ($M)	Property Type	City	State	Losses ($M)	Severity (%)
1	GSMS 2007-GG10	State House Square	87.6	Office	Hartford	CT	47.6	54.3%
2	MSC 2007-IQ4	Heritage Park	27.0	Retail	Solano	CA	12.8	47.4%
3	BACM 2015-UBS7, MSC 2015-UBS8, CSAIL 2015-C3	WPC Department Store Portfolio	55.3	Retail	Various	VR	61.7	111.6%
4	DBUBS 2011-LC1A	Westgate I Corporate Center	35.3	Office	Basking Ridge	NJ	27.1	76.8%
5	MSBAM 2014-C18	Value Place Williston	17.2	Hotel	Williston	ND	17.2	100.0%
6	JPMCC 2010-C1	Aquia Office Building	11.8	Office	Stafford	VA	11.4	96.8%
7	JPMCC 2012-CBX	Miami Gardens	11.2	Multifamily	Houston	TX	0.1	1.0%
8	JPMCC 2017-JP5	TownePlace Suites Dallas Las Colinas	10.9	Hotel	Irving	TX	2.7	24.8%
9	UBSCM 2018-C14	Holiday Inn Express & Suites Detroit Novi	9.5	Hotel	Novi	MI	3.2	34.1%
10	JPMBB 2014-C22	Holiday Inn Cape Cod	8.9	Hotel	Falmouth	MA	2.6	28.9%
11	KCM 2019-S2	South Campus - 140 & 160 High Street	4.7	Office	Springfield	MA	0.9	19.3%
12	WFCM 2013-LC12	Holiday Inn Express - Vernal	4.1	Hotel	Vernal	UT	0.6	13.7%
	Total		**283.4**				**187.9**	**66.3%**

CRE Lending Landscape and Debt Outstanding

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CRE Debt Outstanding Continues to Grow: $5.4 Trillion

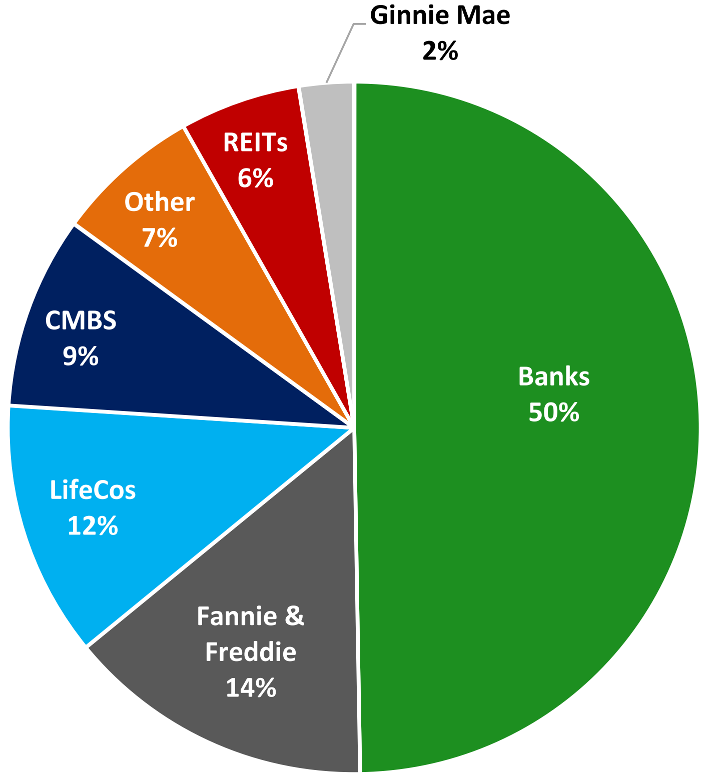
- *Banks outpace all lenders in CRE debt outstanding; GSEs take that honor on the multifamily debt outstanding front*

CRE Debt Outstanding: 2Q 2022 ($ billions)		
Holder Type	Total CRE Debt	% of CRE Debt Outstanding
Banks	2,698	50%
Fannie & Freddie	779	14%
LifeCos	648	12%
CMBS	488	9%
Other	368	7%
REITs	305	6%
Ginnie Mae	140	3%
Total	5,426	100%

Holder Type	Multifamily Debt Only	% of Multifamily Debt Outstanding	Non-Multifamily CRE Debt	% of Non-Multifamily CRE Debt Outstanding
Banks	627	32%	2,071	60%
Fannie & Freddie	779	40%	0	0%
LifeCos	187	10%	461	13%
CMBS	68	3%	420	12%
Other	144	7%	224	6%
REITs	16	1%	289	8%
Ginnie Mae	140	7%	0	0%
Total	1,961	100%	3,465	100%

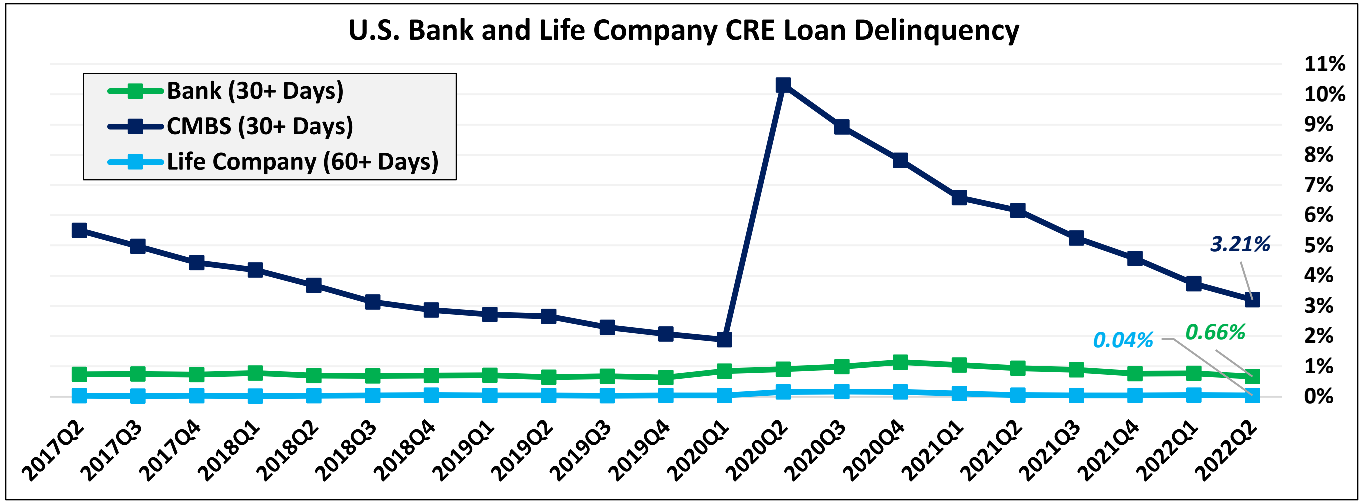
Source: Federal Reserve

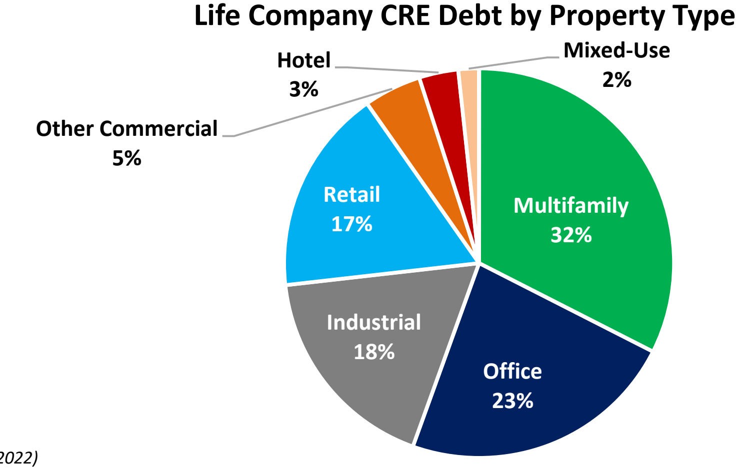
Total CRE Debt Outstanding ($5.4T)



Bank and Life Company Loan Performance Benign

- **Bank, Life Company CRE Delinquencies Remain Low**
  - 60+-day delinquency rate for life company loans remained near-zero at 0.04% in 2Q22 (ACLI)
  - 30+-day delinquency rate for bank loans declined 11 bps to 0.66% in 2Q22 (FDIC)
  - CMBS delinquencies still remain higher. Delinquencies narrowed to within 104 bps of bank delinquencies in early 2020, before the pandemic
- **Troubled Debt Restructuring (TDR) Guidance**
  - In response to the pandemic, federal/state regulators provided financial institutions flexibility to temporarily modify loans without being negatively impacted by risk-based capital and other requirements
  - CREFC advocated for TDR relief extension/ clarification, aiding lenders in their efforts to continue to work with borrowers impacted by the pandemic
  - On 3/31/22, FASB issued an update (ASU 2022-02) that eliminated TDR recognition and measurement for any entity that has adopted CECL for estimating allowances for credit losses, effective for fiscal years beginning after 12/15/22. For entities that have not yet adopted CECL, the effective dates will align with the CECL adoption date.

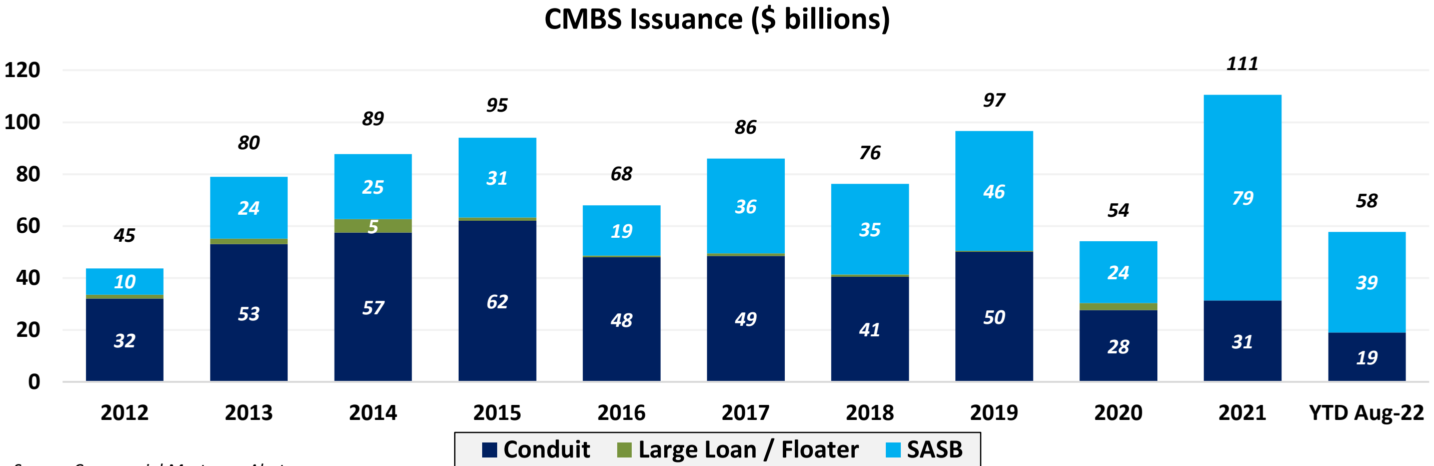




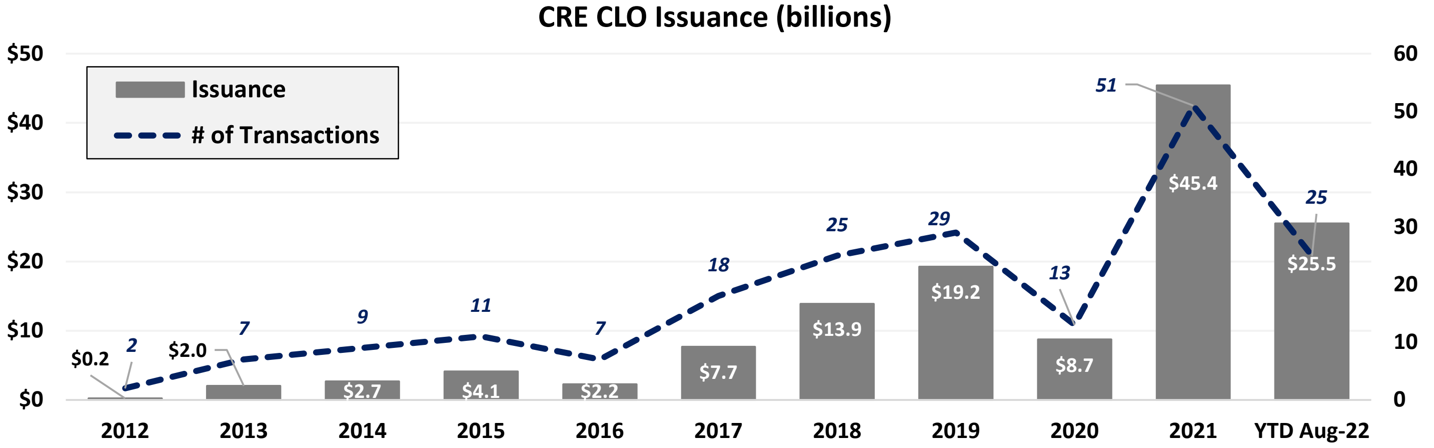
Source: ACLI (as of 2Q 2022)

Private-Label CRE Securitized Debt Overview

- **Conduit CMBS** are fixed-rate bonds secured by multiple fixed-rate loans to multiple borrowers across all core asset types. Each loan is secured by single stabilized asset or portfolio of stabilized assets.
- **Single-Asset/Single-Borrower (SASB) CMBS** is secured by a large loan to an institutional borrower secured by either a single stabilized asset or portfolio of assets
  - ***Combined CMBS issuance through August 2022 totaled $58 billion***
- **CRE CLOs** are collateralized by first mortgages of multifamily and commercial properties in transition
  - Of the outstanding CRE CLO universe, over 65% consists of loans secured by multifamily, many of which are older, naturally occurring affordable housing (NOAH) properties that accommodate lower-income tenants
  - CRE CLO issuance rose from <$1 billion in 2012 to a record $45.5 billion in 2021 via 51 CRE CLO transactions
    - ***YTD August 2022 CRE CLO issuance hit ~$26 billion***



Source: Commercial Mortgage Alert

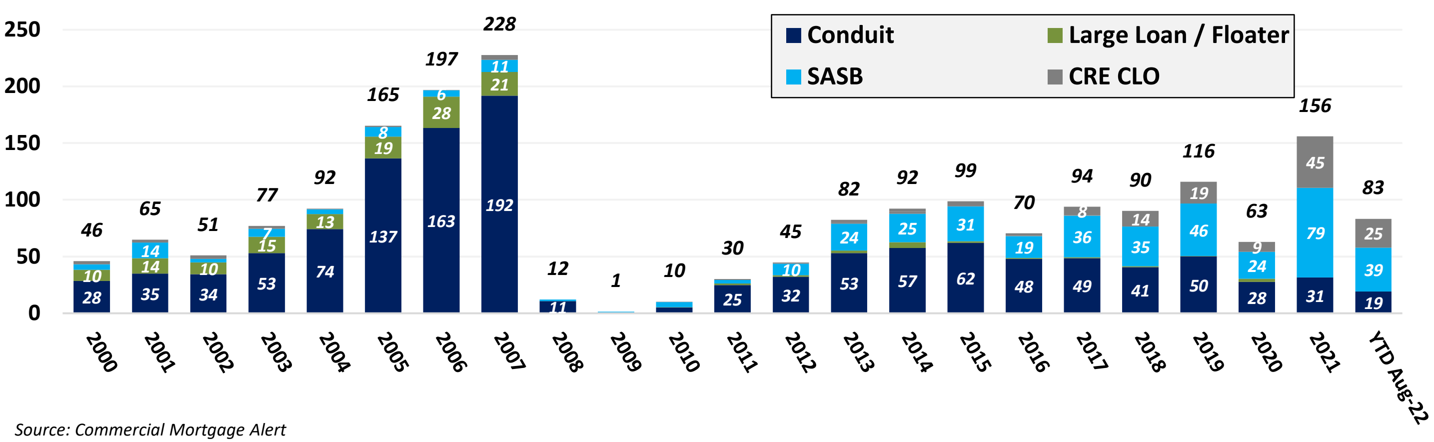


Source: Commercial Mortgage Alert, BofA

CMBS and CRE CLO Issuance Slows, Foggy Asset Valuations

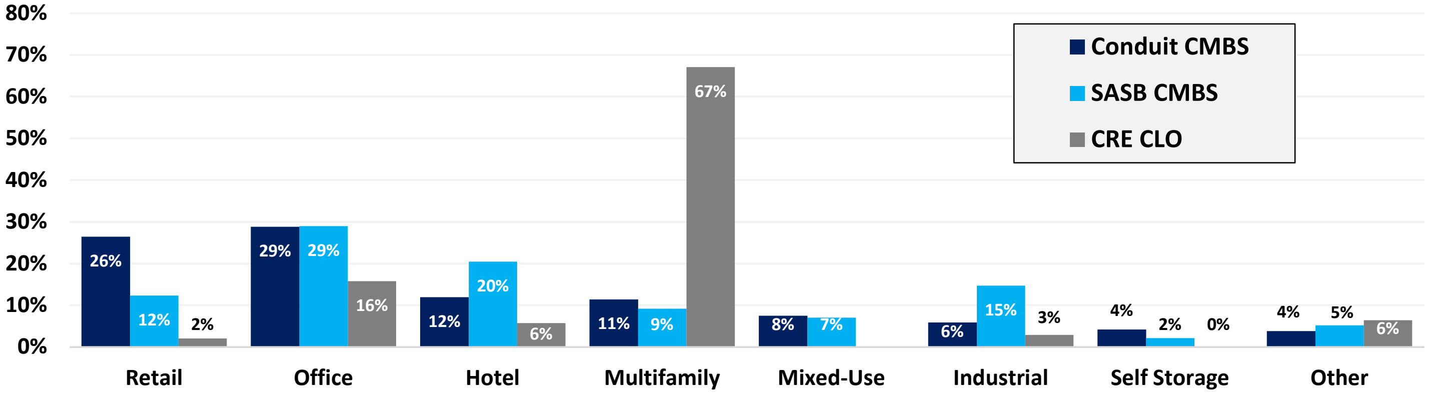
- **Private-label CRE securitized debt issuance reached a post-financial crisis high of $156 billion in 2021**
  - 2021 marked a sharp rebound from $63 billion in 2020, which reflected pandemic stress
  - SASB and CRE CLO issuances reached record levels in 2021
- **Issuance in recent months has slowed significantly compared to the same period in 2021 as a result of continued macro uncertainty and the challenges of originating loans at higher coupons and realized or anticipated lower valuations**
  - As of August 31, CMBS and CRE CLO issuance stood at $83 billion, lower than the same period in 2021 ($85 billion); ***At the end of Q1 2022, total issuance was 70% ahead of the same period in 2021***
- **Conduit CMBS and CRE CLOs tend to be collateralized by property types most relevant to workers affected by COVID-19** (restaurants, malls, community shopping centers, hotels, multifamily, affordable housing) and by assets located in secondary and tertiary markets and non-luxury properties

Private-Label CRE Securitized Debt Issuance ($ billions)



Source: Commercial Mortgage Alert

Private-Label CRE Securitized Debt by Property Type



Source: Trepp, BofA Global Research (as of June 2022)

Non-Multifamily Lending Led by Banks; Multifamily by GSEs

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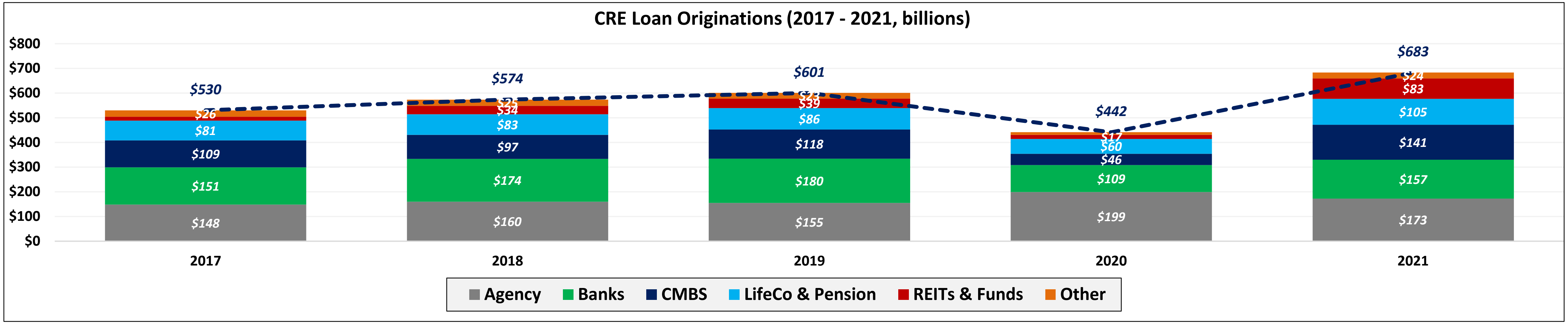

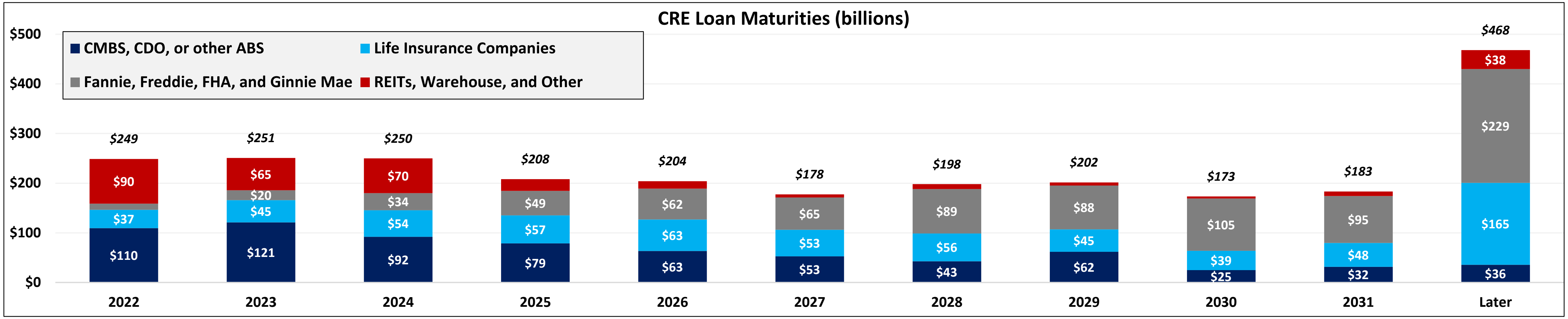

Source: Real Capital Analytics and Mortgage Bankers Association; As of December 31, 2021

ABOUT CREFC

CRE Finance Council
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The CRE Finance Council (CREFC) is the trade association for the over $5 trillion commercial real estate finance industry. More than 300 companies and almost 18,000 individuals are members of CREFC. Member firms include balance sheet and securitized lenders, loan and bond investors, private equity firms, servicers and rating agencies, among others.

Our industry plays a critical role in the financing of office buildings, industrial and warehouse properties, multifamily housing, retail facilities, hotels, and other types of commercial real estate that help form the backbone of the American economy.

CREFC promotes liquidity, transparency, and efficiency in the commercial real estate finance markets. It does this by acting as a legislative and regulatory advocate for the industry, playing a vital role in setting market standards and best practices, and providing education for market participants.

CREFC also hosts globally recognized events that bring together market participants from leading companies and organizations. Complementing these major conferences are regular After-Work Seminars and regional conferences held throughout the year.

For questions regarding this update, please contact:

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