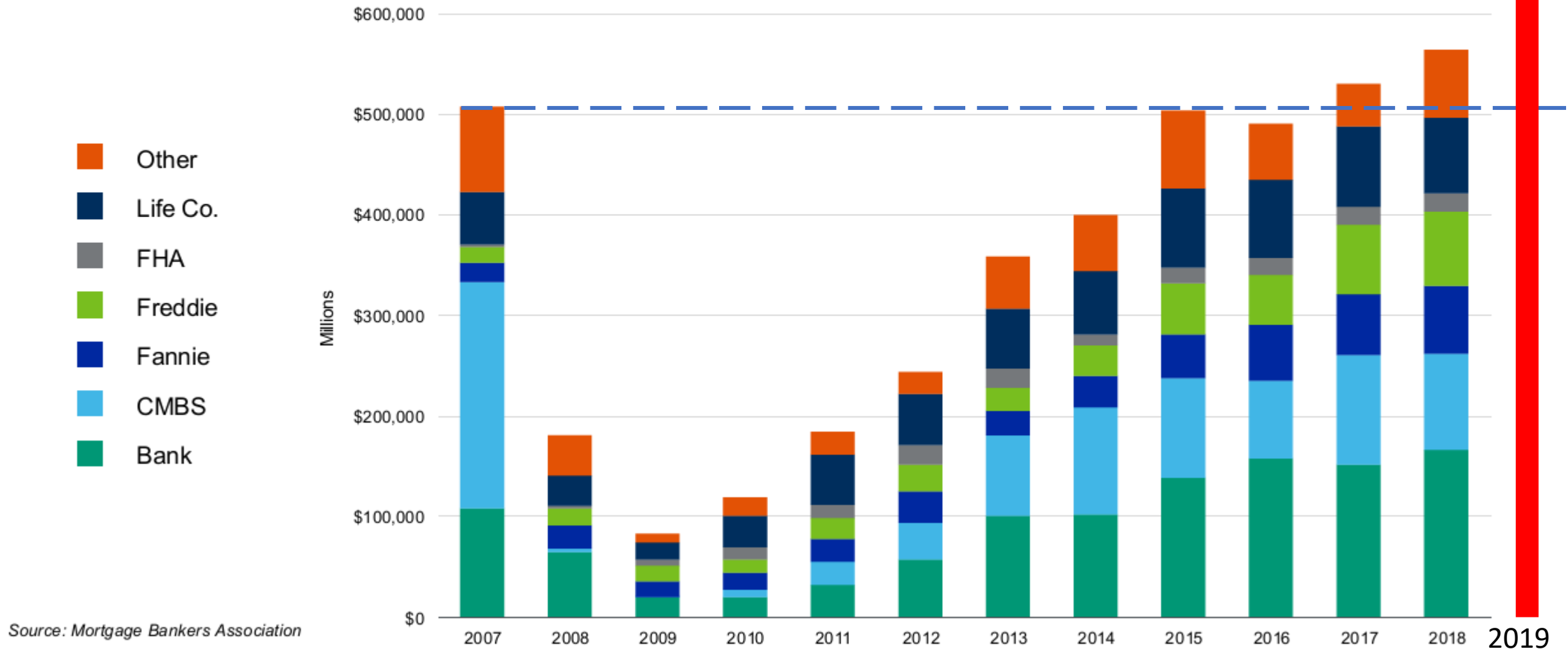


CRE Debt Issuance

Multifamily + CRE issuance volume, by year



Source: Mortgage Bankers Association

OUTSTANDING: \$3.5T

Outstanding CRE and MF debt grew by \$248B from 2018 to 2019.

Third Quarter 2019 Commercial/Multifamily DataBook

Highlights from the DataBook include:

Delinquency rates are at or near record lows for nearly every capital source, with the rate for commercial mortgages held by banks at its lowest since the inception of the series 25 years ago.

Jamie Woodwell

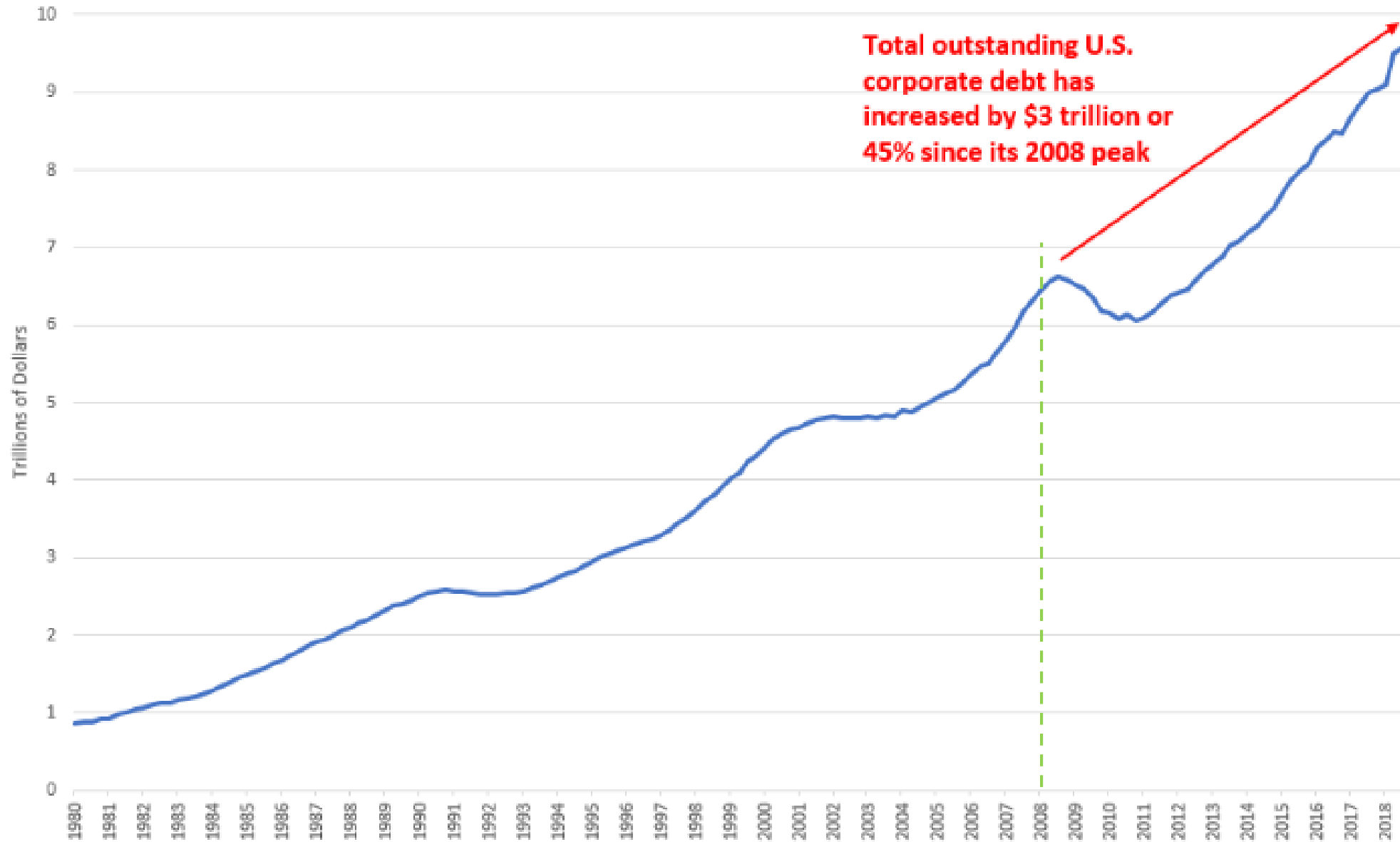
Vice President, Commercial Real Estate Research

Mortgage Bankers Association

IMN Presentation – 02/24/2020

Total Outstanding U.S. Corporate Debt

REAL INVESTMENT ADVICE



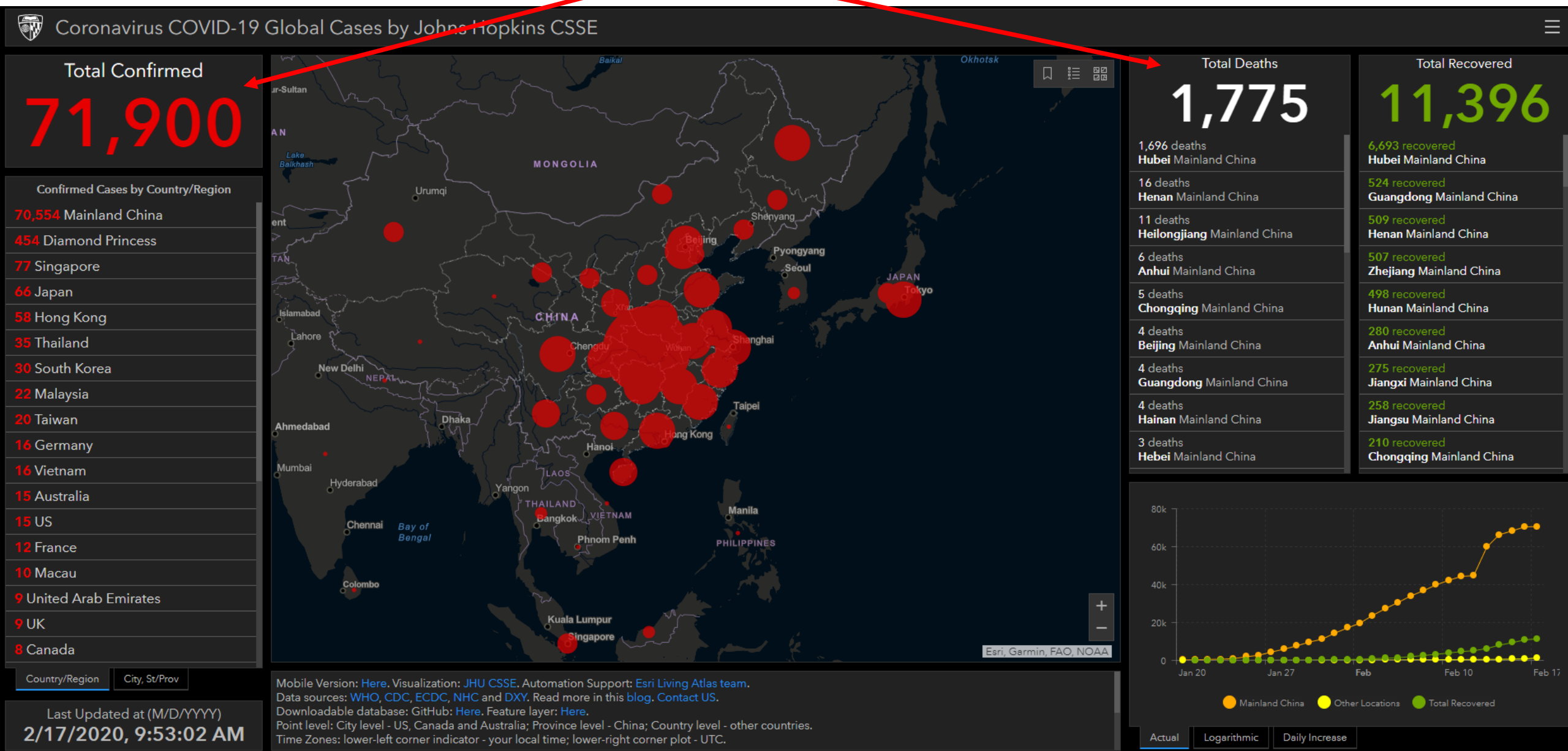
Source: St. Louis Fed

IMN Presentation
– 02/24/2020

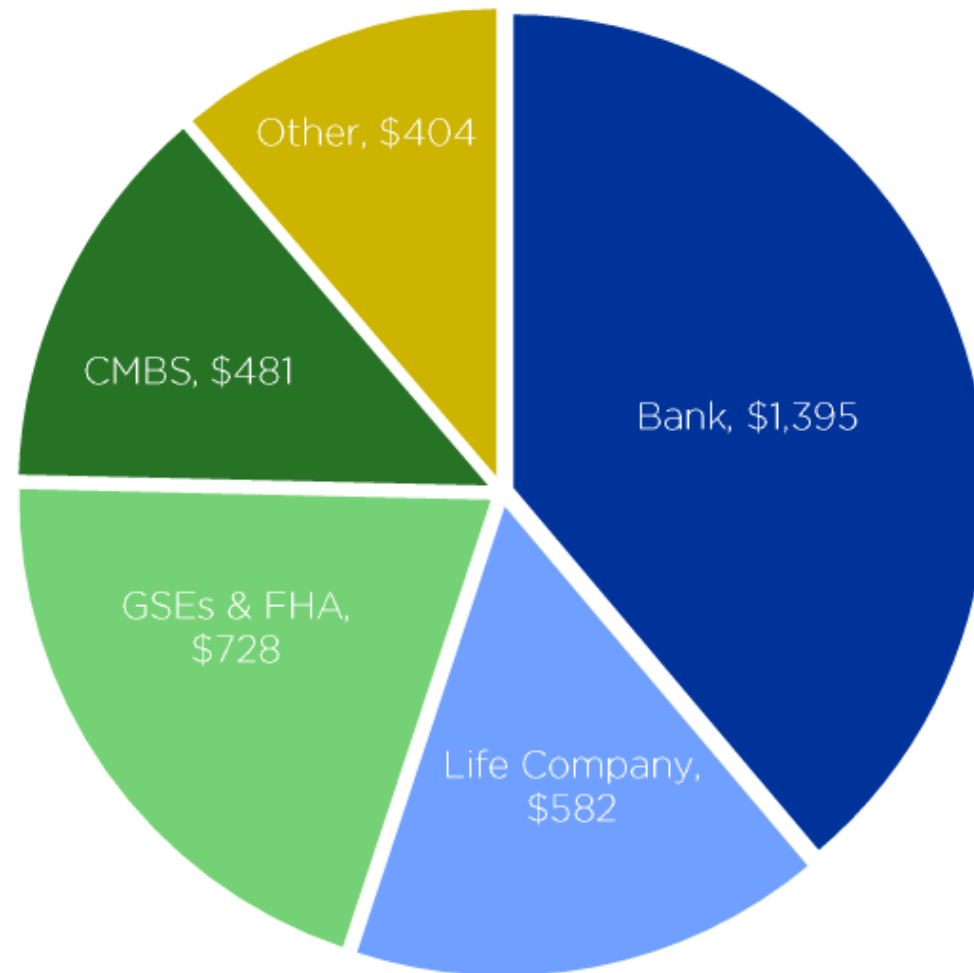
December 4, 2019

The objective now is to extend the recovery into its second decade. There are two main challenges. **Geopolitics** continue to threaten to topple the macro apple cart, most notably in the case of U.S.-China relations. With more tariffs looming and minimal progress on the big issues, plenty can go wrong and pull down global growth. The second challenge involves the **tools (or lack thereof) to stem any deterioration in the outlook**. With monetary policy rates too low to combat a typical U.S. recession and the ECB losing traction, fiscal policy will need to carry a bigger load. Whether governments are willing to use fiscal policy aggressively given the tension between high debt levels and low borrowing rates remains to be seen, particularly in advanced Europe. Alas, the initial budget proposals do not give us much comfort.

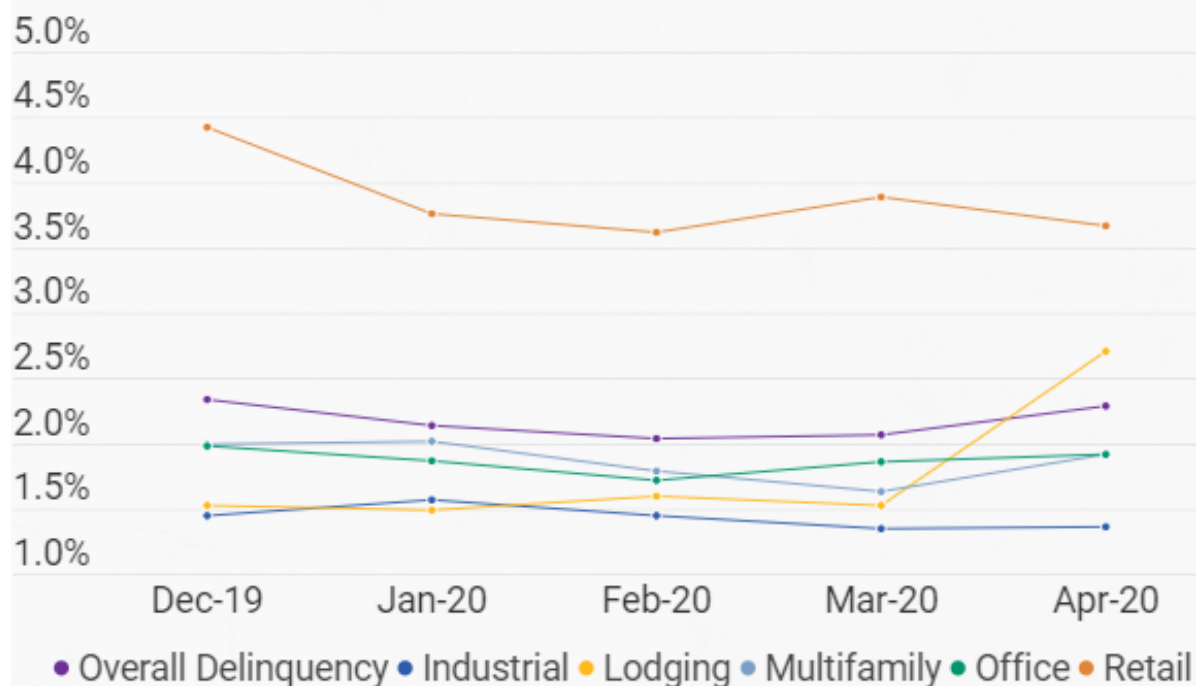
02/17



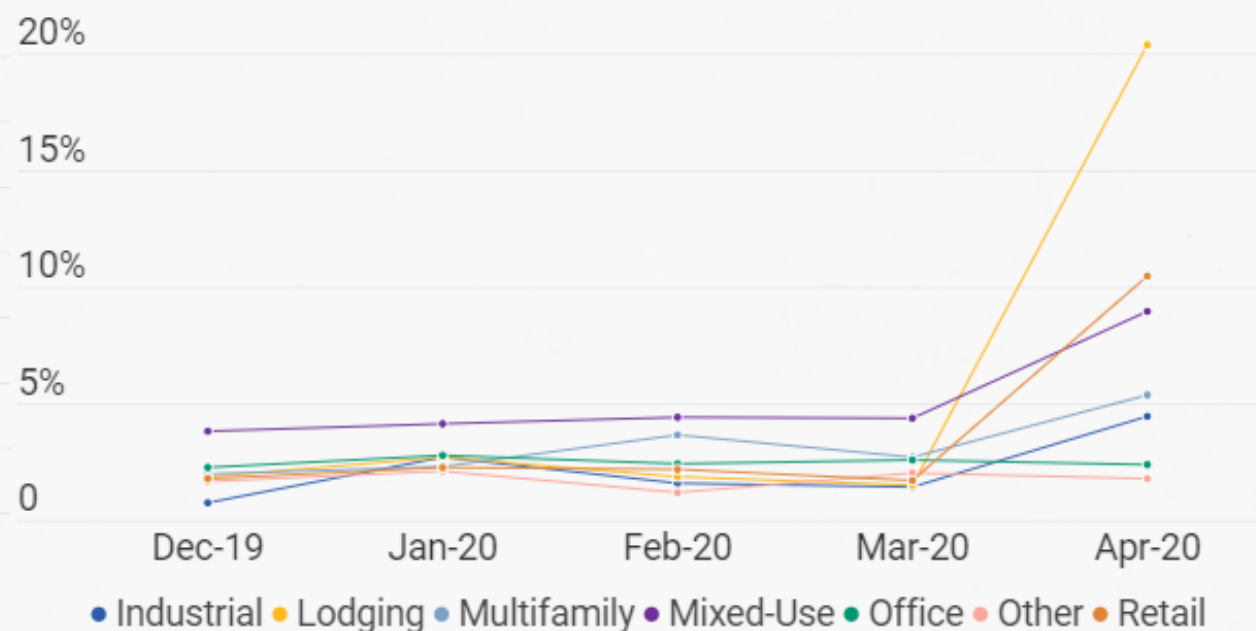
CRE Mortgage Debt Outstanding (\$billions)



CMBS Delinquency Rate (30+ Days)

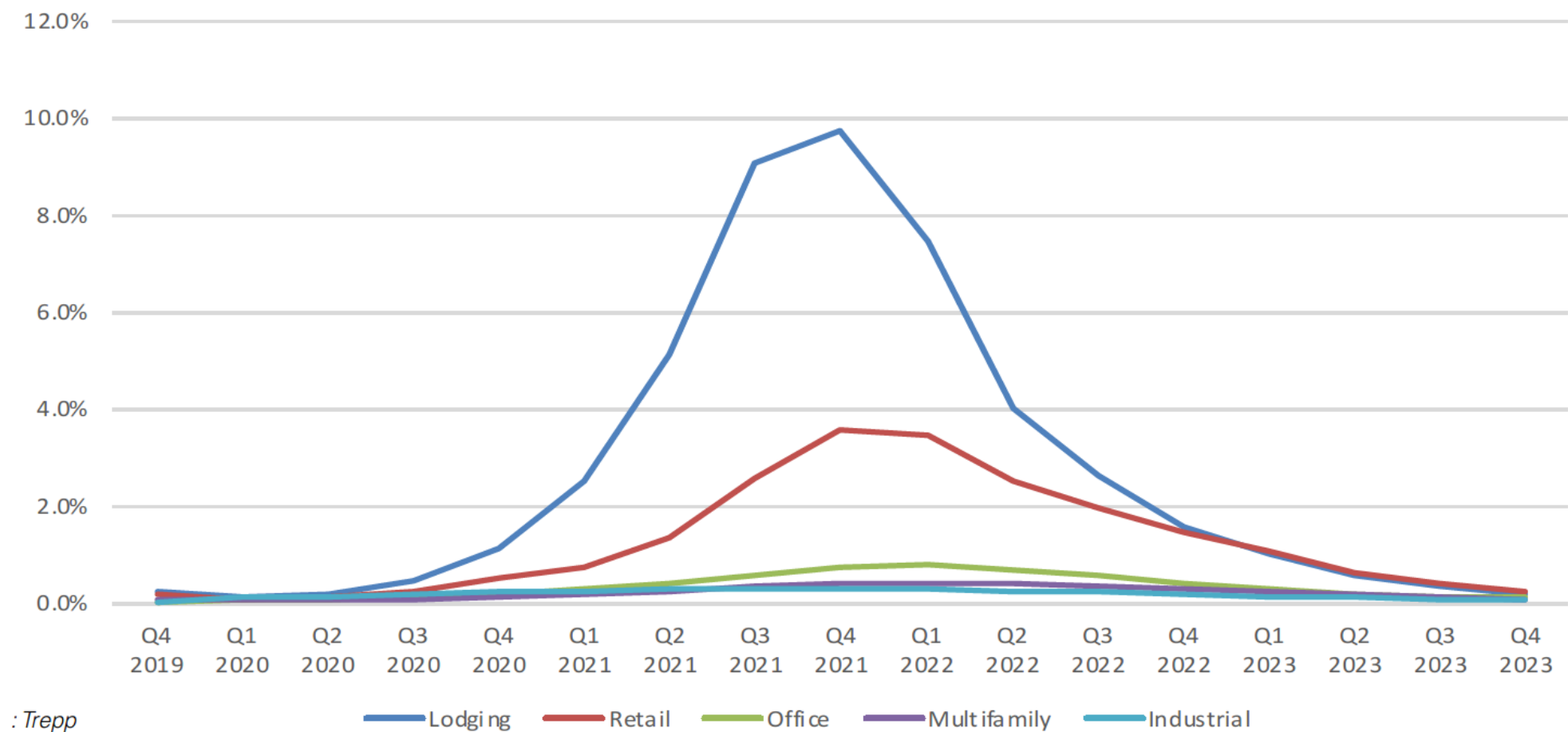


Monthly % of CMBS Loans in Grace or Beyond Grace Period (<30 Days Late Payment)



COVID-19 Impacts on Commercial Real Estate: Rising Defaults and Losses in the Loan Sector

The cumulative default rate across commercial mortgages overall will rise to 8%, up significantly from the current 0.4% default rate.



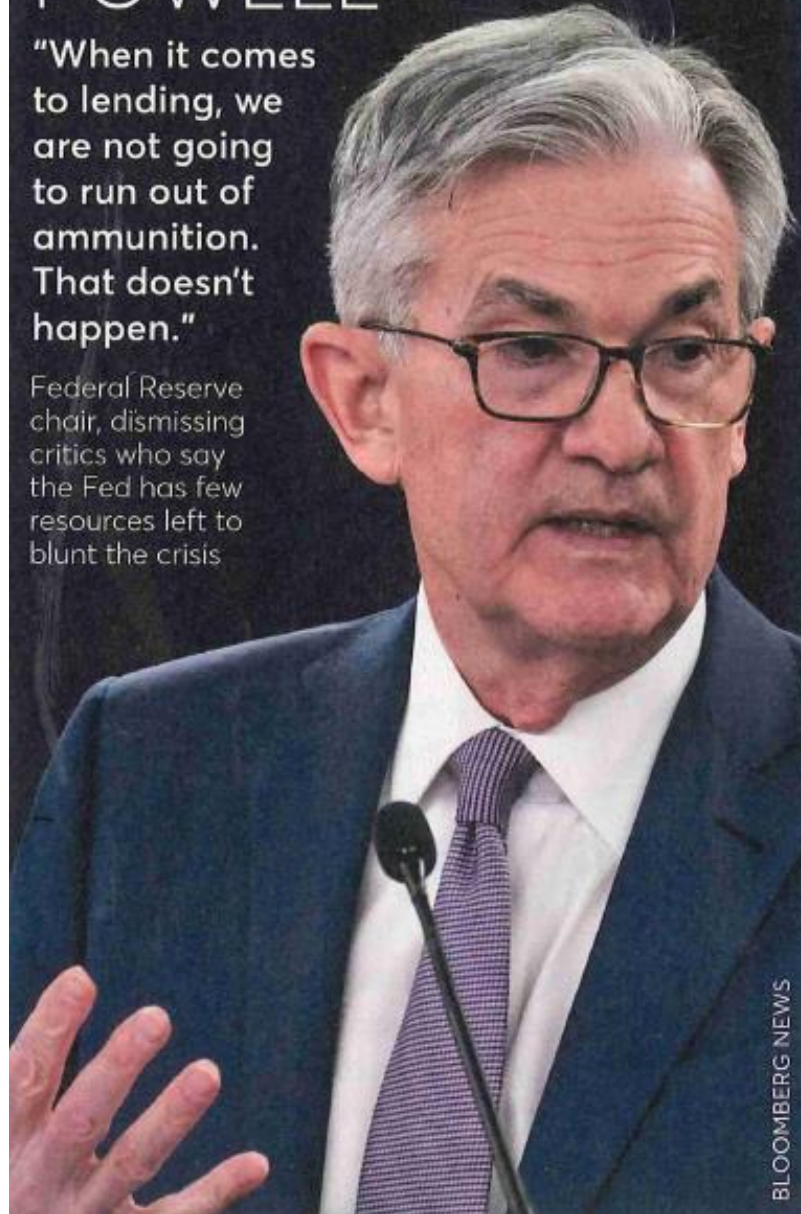
The loan data used for the analysis is from Trepp’s T-ALLR dataset. The loans are commercial mortgages originated and held on the balance sheet by a variety of banks, ranging in size from community banks that are regionally focused to large institutions with a national footprint. This is a large set of data: 12,501 loans with an aggregate outstanding balance of \$77.5 billion. This is also a diverse set of loans, spanning a broad range of property types, origination year vintages and loan sizes. BANK RESEARCH REPORT – March 2020



JEROME POWELL

**"When it comes
to lending, we
are not going
to run out of
ammunition.
That doesn't
happen."**

Federal Reserve
chair, dismissing
critics who say
the Fed has few
resources left to
blunt the crisis



BLOOMBERG NEWS

Thursday, March 26, 2020

Problem Assets Likely to Expand

Problem assets are likely to expand at banks, but how and at what levels? 2008 offers a reasonable comparison.

	Q1 2010	Q1 2006	Q4 2019
Loans and leases, 30-89 days past due	141,492	56,334	67,991
Noncurrent loans and leases	405,395	48,593	95,498
Restructured loans and leases	64,612	3,306	48,263
Other real estate owned	46,265	5,117	5,710
Total Problem Assets	657,764	113,350	217,462
Increase from pre-crisis to peak levels			580.29%
Current levels to crisis peak			302.47%

An increase in workout assets from 3x – 10x is a reasonable assumption. While the banking industry is in solid financial shape, the current situation already exceeds some of the severely adverse scenario in this year's stress tests (10% unemployment, GDP falls 8.5%, 0% rates, declines of 28 & 33% of home prices and CRE).

While it is likely banks will need to raise capital (\$200BB according to MN Fed Kashkari), banks will do this relatively painlessly and can make decisions on credit without worrying about survival. Very few banks have workout departments prepared for the influx and will need to **1) add workout resources** and/or **2) sell problem loans**.

Congress Provides Relief from GAAP

According to Section 4013 of the CARES Act, a financial institution may:

"suspend the requirements under United States generally accepted accounting principles for loan modifications related to the coronavirus disease 2019 (COVID-19) pandemic that would otherwise be categories as a troubled debt restructuring; and suspend any determination of a loan modified as a result of the effects of the coronavirus disease 2019 (COVID-19) pandemic as being a troubled debt restructuring, including impairment for accounting purposes."

- Extraordinary action by Congress allowing banks to provide a "free forbearance" to borrowers without any downgrades or impairments, providing that the loans were not impaired pre-COVID
- Expires on December 31, 2020, or 60 days after the national emergency ends

Banks are issuing short-term forbearances & deferrals with near automatic approval. Typically, the workout departments are not even involved. This gives borrowers some time to get back on their feet, but it also sets up a big increase in problem assets in the latter part of 2020 and 2021.

Deferred Loan at Large & Mid Cap Banks

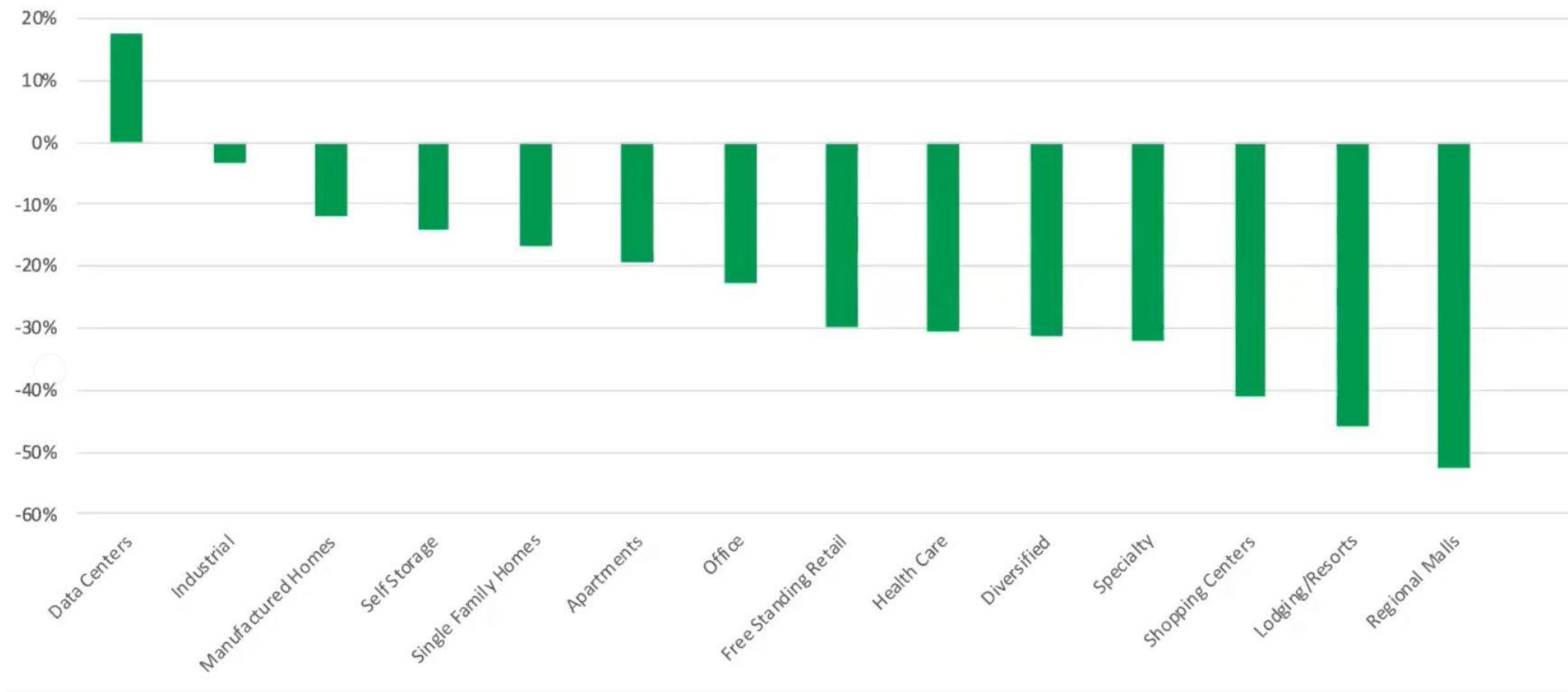
Updating Forbearance Details With New Disclosures

Co. Name	Market Cap. (\$M)	1Q Disclosure: Deferred Loans	Deferred Loans %	Co. Name	Market Cap. (\$M)	1Q Disclosure: Deferred Loans	Deferred Loans %	Co. Name	Market Cap. (\$M)	1Q Disclosure: Deferred Loans	Deferred Loans %
Simmons First National Corp.	\$1,878	3,200,000	22.3%	New York Community Bancorp	\$4,575	4,800,000	11.3%	Sterling Bancorp	\$2,185	1,100,000	5.1%
South State Corporation	\$1,790	2,400,000	20.9%	First Horizon National Corp.	\$2,498	3,786,000	11.3%	Comerica Inc.	\$4,467	2,700,000	5.1%
Sandy Spring Bancorp Inc.	\$760	1,400,000	20.8%	BankUnited Inc.	\$1,766	2,600,000	11.2%	Bank of America Corporation	\$192,422	42,031,400	4.0%
Seacoast Banking Corp. of FL	\$960	1,000,000	18.8%	First Bancorp	\$683	506,000	11.1%	PNC Financial Services Group	\$42,710	9,300,000	3.5%
International Bancshares Corp.	\$1,759	1,270,763	18.4%	Atlantic Union Bkshs Corp.	\$1,738	1,400,000	11.0%	Hilltop Holdings Inc.	\$1,489	253,100	3.4%
M&T Bank Corp.	\$13,477	16,655,000	17.8%	CVB Financial Corp.	\$2,613	768,000	10.3%	TriCo Bancshares	\$862	149,916	3.4%
Pacific Premier Bancorp	\$1,097	1,532,102	17.5%	First Financial Bancorp.	\$1,351	950,000	10.2%	Citizens Financial Group Inc.	\$8,788	4,110,000	3.2%
CenterState Bank Corp.	\$1,974	2,100,000	17.5%	Washington Trust Bancorp Inc.	\$569	406,000	9.9%	Associated Banc-Corp	\$2,002	733,000	3.0%
Home BancShares Inc.	\$2,163	1,941,590	17.4%	Old National Bancorp	\$2,193	1,228,404	9.9%	Zions Bancorp. NA	\$4,827	1,497,810	3.0%
Ameris Bancorp	\$1,565	2,200,000	16.8%	Heritage Financial Corp.	\$677	376,600	9.8%	First Repub Bank	\$17,148	2,723,905	2.9%
Investors Bancorp Inc	\$2,046	3,540,000	16.6%	1st Source Corp.	\$813	494,000	9.6%	Commerce Bancshares Inc.	\$6,195	399,000	2.6%
Pinnacle Financial Partners	\$2,680	3,300,000	16.2%	BancFirst Corp.	\$1,166	566,214	9.5%	Western Alliance Bancorp	\$3,065	570,000	2.5%
Independent Bank Corp.	\$2,301	1,421,908	15.9%	Park National Corp.	\$1,201	616,000	9.5%	First Merchants Corp.	\$1,435	200,000	2.3%
United Community Banks Inc.	\$1,427	1,400,000	15.7%	Banner Corp.	\$1,185	837,000	9.0%	TCF Financial Corp.	\$3,615	825,000	2.3%
Columbia Banking System Inc.	\$1,800	1,290,000	14.4%	ServisFirst Bancshares Inc.	\$1,710	574,700	7.6%	Hope Bancorp, Inc.	\$1,048	251,668	2.0%
Hancock Whitney Corp.	\$1,649	3,100,000	14.4%	Enterprise Financial Services	\$714	392,100	7.2%	Bank OZK	\$2,551	356,000	2.0%
OceanFirst Financial Corp.	\$778	1,086,000	13.7%	Glacier Bancorp Inc.	\$3,037	716,000	7.1%	East West Bancorp Inc.	\$4,295	567,000	1.6%
City Holding Co.	\$1,044	490,300	13.7%	People's United Financial Inc.	\$5,271	3,008,131	6.8%	Fifth Third Bancorp	\$12,178	1,500,000	1.3%
Signature Bank	\$5,042	5,600,000	13.7%	Opus Bank	\$600	393,900	6.6%	Capital One Financial Corp.	\$25,636	3,000,000	1.1%
First Busey Corp.	\$901	918,000	13.6%	Regions Financial Corp.	\$9,369	5,400,000	6.1%	Wells Fargo & Co.	\$110,275	10,900,000	1.1%
Renasant Corp.	\$1,326	1,285,000	13.2%	Truist Financial Corp.	\$47,808	19,000,000	6.0%	Washington Federal Inc.	\$1,889	56,000	0.5%
First Interstate BancSystem	\$1,903	1,092,000	12.2%	F.N.B. Corp.	\$2,323	1,397,340	5.9%	Prosperity Bancshares Inc.	\$4,837	67,000	0.4%
Synovus Financial Corp.	\$2,666	4,600,000	12.0%	Triumph Bancorp Inc.	\$563	233,000	5.4%	BancorpSouth Bank	\$2,058	28,000	0.2%
Lakeland Financial Corp.	\$950	467,100	11.4%	U.S. Bancorp	\$51,204	17,107,412	5.4%	Citigroup Inc.	\$89,726	1,000,000	0.1%
Webster Financial Corp.	\$2,147	2,376,000	11.4%	Eagle Bancorp Inc	\$1,023	398,000	5.1%				

Source: Janney Research (FIG Group), Company Fillings

2020 YTD Performance by Property Type

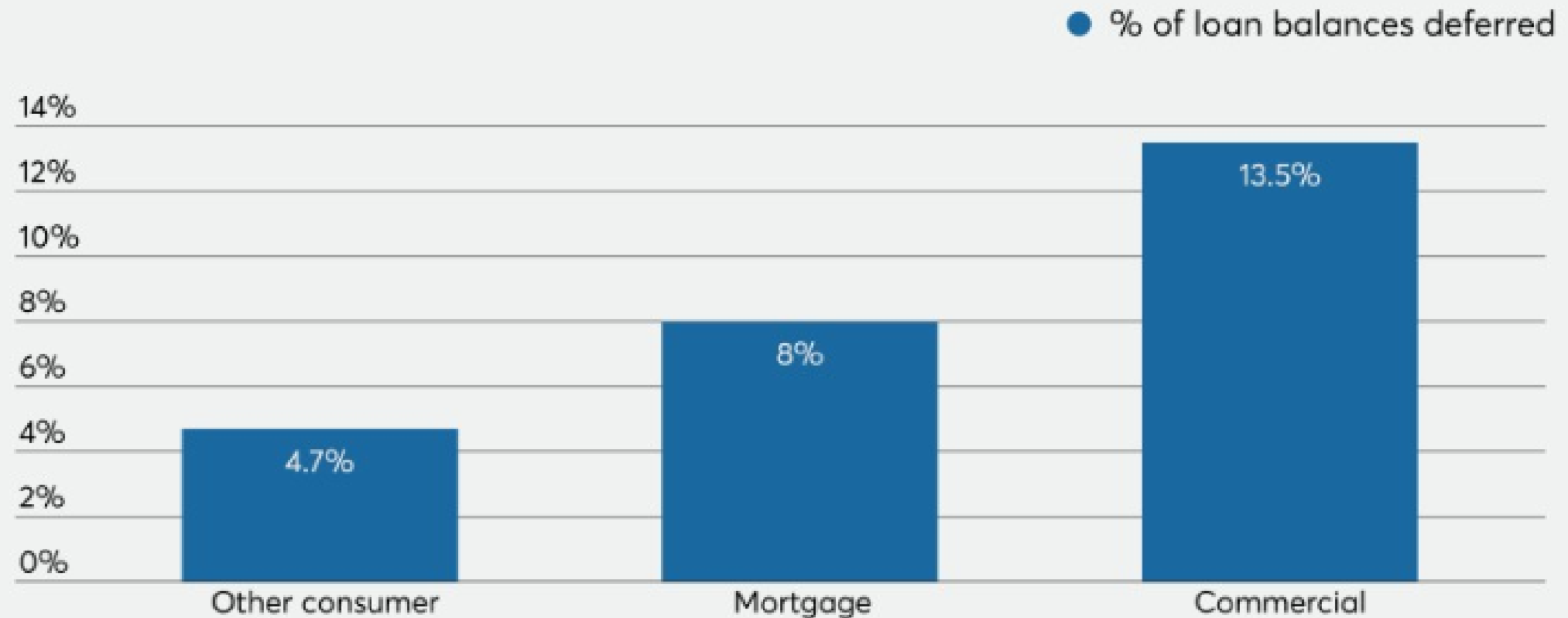
(As of April 30, 2020)



March 31, 2020

Payments on hold

A large percentage of loans at banks are in deferment



Source: KBW (analysis of 180 disclosures by publicly traded banks)

Keefe, Bruyette & Woods' analysis of roughly 180 publicly traded banks with total loans of \$5.5 trillion.

Summary of Paycheck Protection Program Rounds 1 and 2

Approved Loans	Approved Dollars (SBA Guaranteed)	Avg Loan Size
4,347,860	\$ 534,843,253,290	123,013