HOUSING FINANCE POLICY CENTER



A MONTHLY CHARTBOOK

August 2020



ABOUT THE CHARTBOOK

The Housing Finance Policy Center's (HFPC) mission is to produce analyses and ideas that promote sound public policy, efficient markets, and access to economic opportunity in the area of housing finance. At A Glance, a monthly chartbook and data source for policymakers, academics, journalists, and others interested in the government's role in mortgage markets, is at the heart of this mission.

We welcome feedback from our readers on how we can make *At A Glance* a more useful publication. Please email any comments or questions to <u>ataglance@urban.org</u>.

To receive regular updates from the Housing Finance Policy Center, please visit <u>here</u> to sign up for our bi-weekly newsletter.

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INTRODUCTION

Ginnie Mae Eliminates Servicer Loophole that Hurts Investors

Institutionalized forbearance has helped many homeowners who cannot pay their mortgages remain in their homes, including 9.5 percent of those with a Ginnie Mae mortgage. But it's also caused an enormous spike in the rate that Ginnie Mae servicers are removing loans from securitized pools. In many instances, servicers are removing non-performing loans from pools and quickly delivering the same loans to new pools once the borrower has begun making payments again, bringing unexpected profits to the servicer. In response to this legal but unintended profit-making opportunity, Ginnie Mae <u>instituted a new "temporary" restriction</u>, effective July 1st, 2020, that limits the ability of servicers to re-pool forborne loans that have been purchased out of the existing pool. While this action by Ginnie Mae makes sense, it reduces the flexibility servicers have to work with troubled borrowers.

Since January 2019, mortgagor payoff has been the main reason for removing loans as refinance activity has soared amid record low mortgage rates. In June 2020, a new category of removals - Repurchase of Delinquent Loans - more than quadrupled, accounting for about one-third of total removals. However, these repurchases fell in July and its share of all removals shrank.

Once the borrower begins paying again or "reperforming" on the loan, the servicer could just return the loan to a different Ginnie Mae pool, selling it at the higher price and collecting the premium. Forborne loans are far more likely to re-perform than loans that go delinquent under other circumstances. Some servicers were pulling loans out of pools as soon as they could, including loans that they had reason to believe would re-perform quickly, so they could take advantage of this unintended profit.

Ginnie's change in policy, effective July 1, 2020, forever prohibits re-pooling forborne loans in the most desirable Ginnie II securities. As of July 1, 2020, once seven months of on-time payments have been made on the removed loan, the loan can be delivered into a new custom pool that will have much worse liquidity, and likely sell at a lower price than the Ginnie II securities. This new policy makes sense as a way of curbing a loophole that hurt investors. At the same time, flexibility to work with troubled homeowners is somewhat curtailed if the new policy reduces the willingness of servicers to repurchase these delinquent loans.

As we deal with an unprecedented crisis, we need to keep a close eye on the data to make sure we understand the intended and unintended results of policies and all of the trade-offs involved.

Distribution of Removed Loans from Ginnie Pools

Distribution of Removed Louis from Office 1 0015							
	<u>Total</u>	Mortgagor Payoff	Repurchase of delinguent loan	Foreclosure with claim payment	Loss mitigation	Substitution	<u>Other</u>
January 2019	84,957	76%	18%	1%	5%	0%	0%
January 2020	185,509	86%	11%	1%	3%	0%	0%
February 2020	183,926	87%	10%	1%	2%	0%	0%
March 2020	210,680	92%	6%	1%	2%	0%	0%
April 2020	225,709	92%	6%	0%	2%	0%	0%
May 2020	246,989	86%	12%	0%	2%	0%	0%
June 2020	389,616	64%	34%	0%	2%	0%	0%
July 2020	351,977	75%	22%	0%	2%	0%	0%

Note: A substitution occurs when a defective loan is removed from the pool and replaced with an eligible loan, or when the issuer is correcting for an over-collateralization by means of loan substitution. All loan substitutions must have the prior approval of Ginnie Mae. **Source**: Urban Institute calculations from Ginnie Mae data.

The increase in the repurchase of delinquent loans through June was a direct result of increases in mortgage forbearances which began in March, 2020. Mortgage forbearance puts servicers in a bind since they are required to pay a loan's principal and interest (P&I) to investors as long as the loan remains in a security, even if the borrower is in forbearance. To avoid making these P&I payments, servicers can buy the mortgage out of the securitized pool ("Repurchase of Delinquent Loan".) When a servicer purchases a loan out of the pool, they must fund the loan, but this is often less costly than continuing to make the P&I payments.

Ginnie Mae policies allow a servicer to purchase a 90 day or more delinquent mortgage out of a securitized pool at par (i.e. 100), even if the mortgage pool was selling above par (i.e. at 105) as many mortgage-backed securities have been.

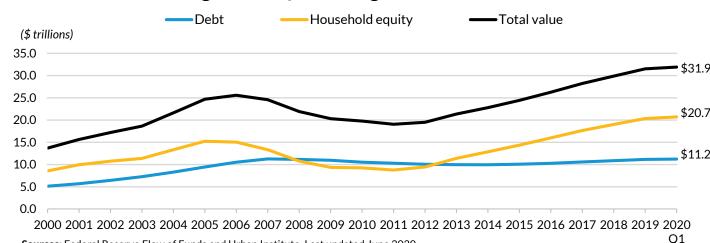
INSIDE THIS ISSUE

- With private capital pulling back significantly because of the COVID-19 recession, the federal government is once again playing the dominant role in the mortgage market. Over 85 percent of originations in Q2 2020 were federally-backed (Page 8).
- Originator profitability continued to remain highly elevated, at \$5.13 per \$100 loan in July as originators remain capacity constrained amidst the strong refinance wave (Page 19).
- Monthly delinquency data has begun to show the impact of the COVID-19 pandemic; serious delinquency rates spiked significantly to 4.26 percent in the second quarter of 2020 compared to 1.67 percent in Q1 (Page 24).

MARKET SIZE OVERVIEW

The Federal Reserve's Flow of Fund Report has indicated a gradually increasing total value of the housing market, driven primarily by growing home equity since 2012. The Q1 2020 numbers show that while mortgage debt outstanding was steady this quarter at \$11.2 trillion, total home equity grew slightly from \$20.3 trillion in Q4 2019 to \$20.7 trillion in the first quarter of 2020, bringing the total value of the housing market to \$31.9 trillion, 24.8 percent higher than the pre-crisis peak in 2006. Agency MBS account for 62.1 percent of the total mortgage debt outstanding, private-label securities make up 4.0 percent, and unsecuritized first liens make up 30.0 percent. Home equity loans comprise the remaining 4.4 percent of the total.

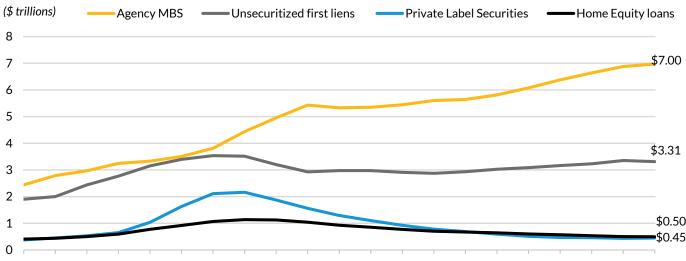
Value of the US Single Family Housing Market



Sources: Federal Reserve Flow of Funds and Urban Institute. Last updated June 2020.

Note: Single family includes 1-4 family mortgages. The home equity number is grossed up from Fed totals to include the value of households and the non-financial business sector.

Composition of the US Single Family Mortgage Market



2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

Sources: Federal Reserve Flow of Funds, eMBS and Urban Institute. Last updated June 2020.

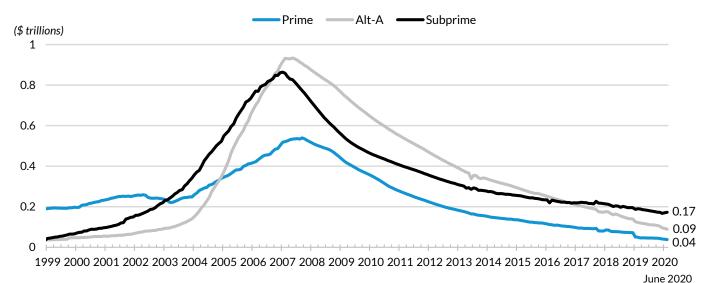
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Note: Unsecuritized first liens includes loans held by commercial banks, GSEs, savings institutions, credit unions and other financial companies

MARKET SIZE OVERVIEW

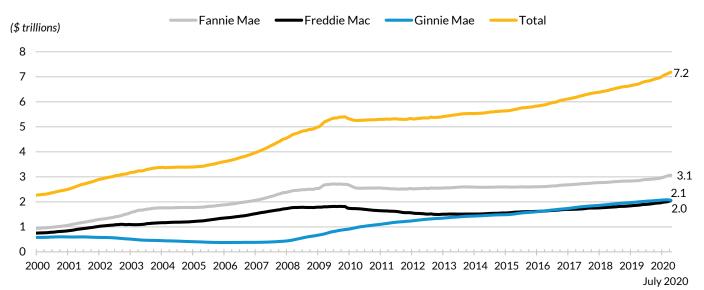
As of June 2020, our sample of first lien mortgage debt in the private-label securitization market totaled \$299 billion and was split among prime (12.7 percent), Alt-A (29.6 percent), and subprime (57.7 percent) loans. In July 2020, outstanding securities in the agency market totaled \$7.2 trillion, 42.7 percent of which was Fannie Mae, 28.5 percent Freddie Mac, and 28.8 percent Ginnie Mae. Ginnie Mae has had more outstanding securities than Freddie Mac since June 2016.

Private-Label Securities by Product Type



Sources: CoreLogic, Black Knight and Urban Institute.

Agency Mortgage-Backed Securities

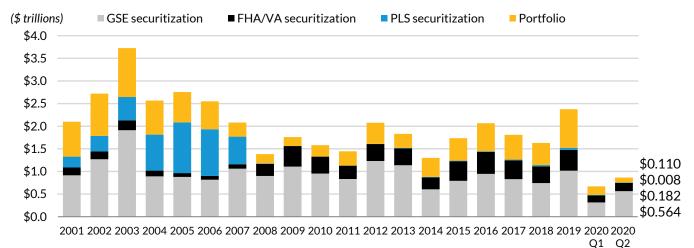


Sources: eMBS and Urban Institute.

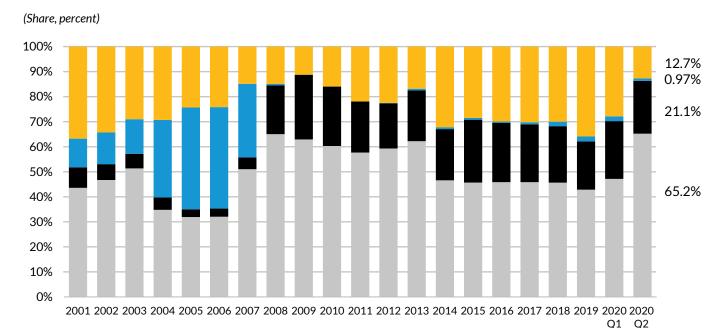
ORIGINATION VOLUME AND COMPOSITION

First Lien Origination Volume

In the second quarter of 2020, first lien originations totaled \$865 billion, up 53.1 percent from the Q2 2019 volume of \$565 billion. The share of portfolio originations was 12.7 percent in Q2 2020, a significant decline from the 38.6 percent share in the same period of 2019. The Q2 2020 GSE share stood at 65.2 percent, up from 42.1 percent in Q2 2019. The FHA/VA share grew to 21.1 percent, compared to 17.7 percent last year. Private-label securitization currently tallies 1.0 percent, down from 1.6 percent one year ago, and a fraction of its share in the pre-bubble years. With private capital pulling back significantly because of the economic downturn, the federal government is once again playing the dominant role in the mortgage market.



Sources: Inside Mortgage Finance and Urban Institute. Last updated August 2020.

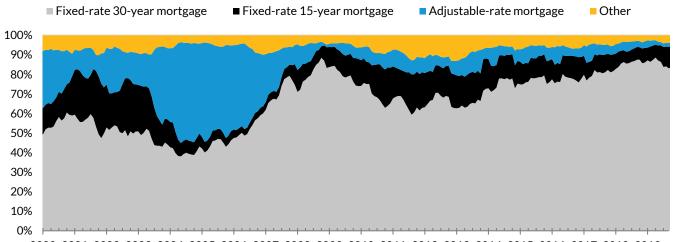


Sources: Inside Mortgage Finance and Urban Institute. Last updated August 2020.

PRODUCT COMPOSITION AND REFINANCE SHARE

The 30-year fixed-rate mortgage continues to remain the bedrock of the US housing finance system, accounting for 74.4 percent of new originations in June 2020. However, this share has decreased over the last three months from 81.1 percent in March. The share of 15-year fixed-rate mortgages, predominantly a refinance product, grew to a 16.4 percent of new originations in June 2020 as refinances continue to boom due to record low interest rates. The ARM share accounted for 1.8 percent. Since late 2018, while there has been some month-to-month variation, the refinance share (bottom chart) has generally grown for both the GSEs and Ginnie Mae as interest rates have dropped. With rates at historic lows the refi share is very high; the GSEs are in the 71 to 75 percent range, Ginnie Mae at 49.2 percent.

Product Composition

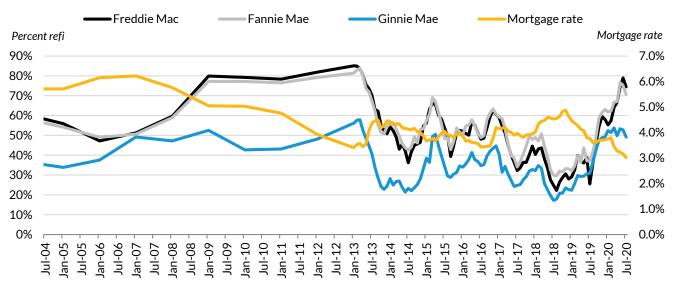


2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

Sources: Black Knight, eMBS, HMDA, SIFMA and Urban Institute. **Note**: Includes purchase and refinance originations.

June 2020

Percent Refi at Issuance



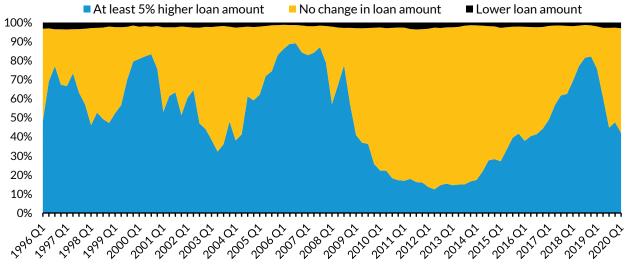
Sources: eMBS and Urban Institute.

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CASH-OUT REFINANCES

When mortgage rates are low, the share of cash-out refinances tends to be relatively smaller, as refinancing allows borrowers to save money by taking advantage of lower rates. But when rates are high, the cash-out refinance share is higher since the rate reduction incentive is gone and the only reason to refinance is to take out equity. The cash-out share of all refinances fell from 48 percent at the end of 2019 to 42 percent in the first quarter of 2020. While the cash-out refinance share for conventional mortgages may seem high at 42 percent, equity take-out volumes are substantially lower than during the bubble years. The cash-out refi share of FHA and VA lending has fallen in the first six months of 2020, likely due to the increased rate refinance activity from borrowers taking advantage of historically low rates.

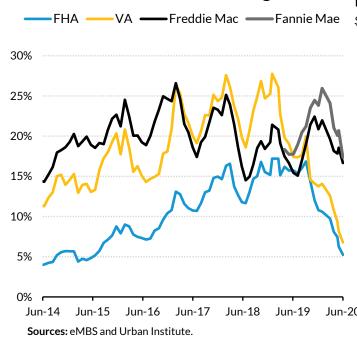
Loan Amount after Refinancing



Sources: Freddie Mac and Urban Institute.

Note: Estimates include conventional mortgages only.

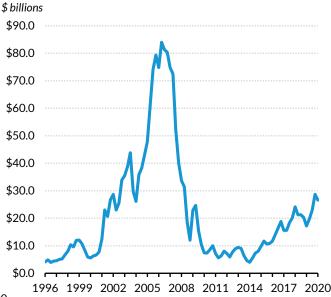
Cash-out Refi Share of All Originations



Note: Data as of June 2020.

Jun-20

Equity Take-Out from Conventional Mortgage Refinance Activity



Sources: Freddie Mac and Urban Institute.

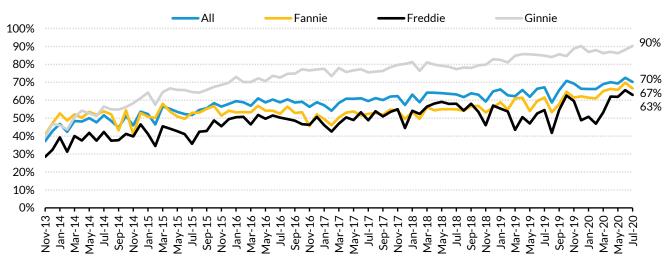
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Note: These quarterly estimates include conventional mortgages only.

AGENCY NONBANK ORIGINATION SHARE

The nonbank share for agency originations has been rising steadily since 2013, standing at 70 percent in July 2020. The Ginnie Mae nonbank share has been consistently higher than the GSEs, rising in July 2020 to 90 percent. Fannie and Freddie's nonbank shares both fell slightly in July, to 67 and 63 percent, respectively (note that these numbers can be volatile on a month-to-month basis.) Ginnie Mae and Freddie Mac both have higher nonbank origination shares for refi activity than for purchase activity; Fannie Mae has a higher share for purchase activity.

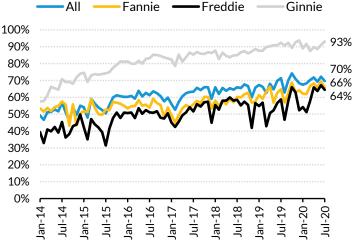
Nonbank Origination Share: All Loans



Sources: eMBS and Urban Institute.

Nonbank Origination Share: Purchase Loans

Nonbank Origination Share: Refi Loans



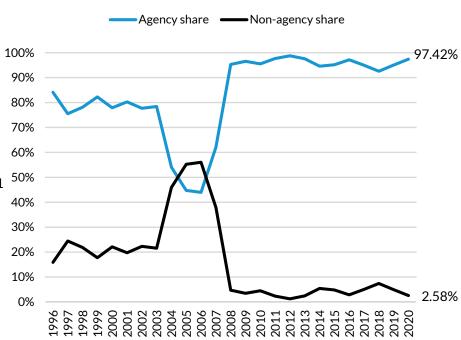
Sources: eMBS and Urban Institute.

Sources: eMBS and Urban Institute.

SECURITIZATION VOLUME AND COMPOSITION

Agency/Non-Agency Share of Residential MBS Issuance

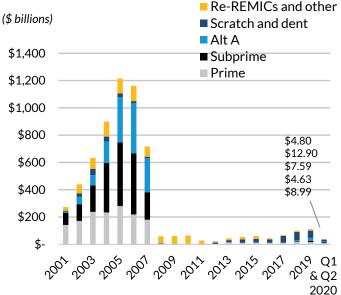
The non-agency share of mortgage securitizations has increased gradually over the post-crisis years, from 1.83 percent in 2012 to 5.0 percent in 2019. Through July of 2020, the non-agency share was 2.58 percent: the sharp drop from 2019 reflects the fact that the nonagency market production has been low due to dislocations caused by COVID-19. Non-agency securitization volume totaled \$38.91 billion in the first half of 2020, a decrease relative to 1H 2019's \$49.82 billion total. Alt-A and scratch and dent securitizations have both grown since the same period last year. Non-agency securitizations continue to be tiny compared to pre-housing market crisis levels.



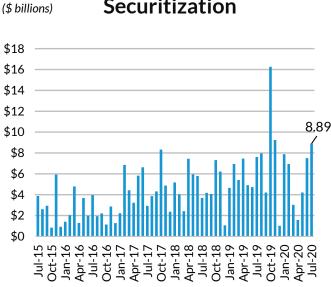
Sources: Inside Mortgage Finance and Urban Institute.

Note: Based on data from July 2020. Monthly non-agency volume is subject to revision.

Non-Agency MBS Issuance



Monthly Non-Agency Securitization

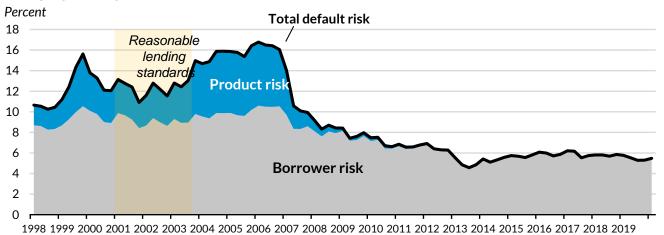


Sources: Inside Mortgage Finance and Urban Institute.

CREDIT BOX HOUSING CREDIT AVAILABILITY INDEX

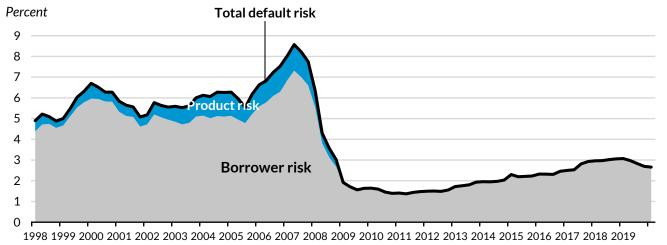
The Urban Institute's Housing Credit Availability Index (HCAI) assesses lenders' tolerance for both borrower risk and product risk, calculating the share of owner-occupied purchase loans that are likely to go 90+ days delinquent over the life of the loan. The HCAI Index stood at 5.5 percent in Q1 2020, up slightly from the end of 2019. The small increase was primarily driven by the increase in the government channel's market share; this may have been overstated as some of the portfolio and private label (PP) loans were stranded in the pipeline at quarter end due to COVID-19. This would exaggerate the shift to the FHA and GSE markets, and inflate credit availability, as the risk in the PP and GSE channels are similar and the risk in the government channel is higher. More information about the HCAI is available here.

All Channels



GSE Channel

The GSE market has expanded the credit box proportionately more than the government channel in recent years, although the GSE box is still much narrower. From Q2 2011 to Q1 2020, the total risk taken by the GSE channel has nearly doubled, from 1.4 percent to 2.6 percent. However, over the past year, credit availability has trended down and we anticipate this trend will become more acute in the second quarter of 2020 in response to the COVID-19 crisis.



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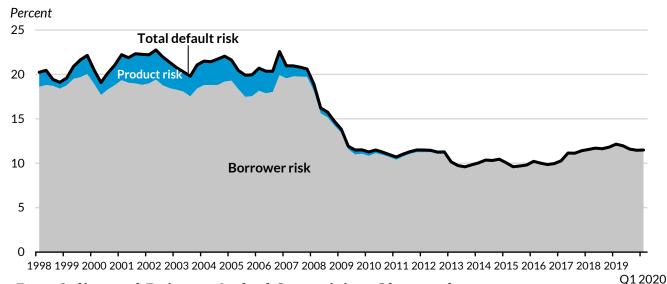
Sources: eMBS, CoreLogic, HMDA, IMF, and Urban Institute.

Note: Default is defined as 90 days or more delinquent at any point. Last updated July 2020.

HOUSING CREDIT AVAILABILITY INDEX

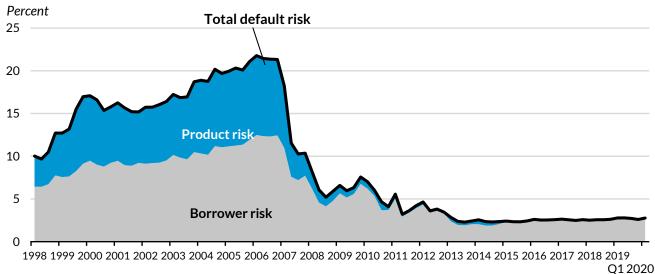
Government Channel

The total default risk the government channel is willing to take bottomed out at 9.6 percent in Q3 2013. It has gradually increased since then, up to 11.49 percent in Q1 2020, from 11.46 percent at the end of 2019.



Portfolio and Private Label Securities Channels

The portfolio and private-label securities (PP) channel took on more product risk than the government and GSE channels during the bubble. After the 2008 housing crisis, PP channel's product and borrower risks dropped sharply. The numbers have stabilized since 2013, with product risk fluctuating below 0.6 percent and borrower risk in the 2.0-3.0 percent range. Total risk in the PP channel was 2.77 percent in Q1 2020, consisting of 2.76 percent borrower risk and 0.01 percent product risk. Note that there was a sizeable contraction in the market share for this channel over the course of the quarter, reflecting both a shift to the agency market since the beginning of the year as well as the fact that some PP loans were stranded in the pipeline when COVID-19 hit and did not close in March of 2020. Total risk in the portfolio and private-label securities channel stood at 2.77 percent in Q1 2020.



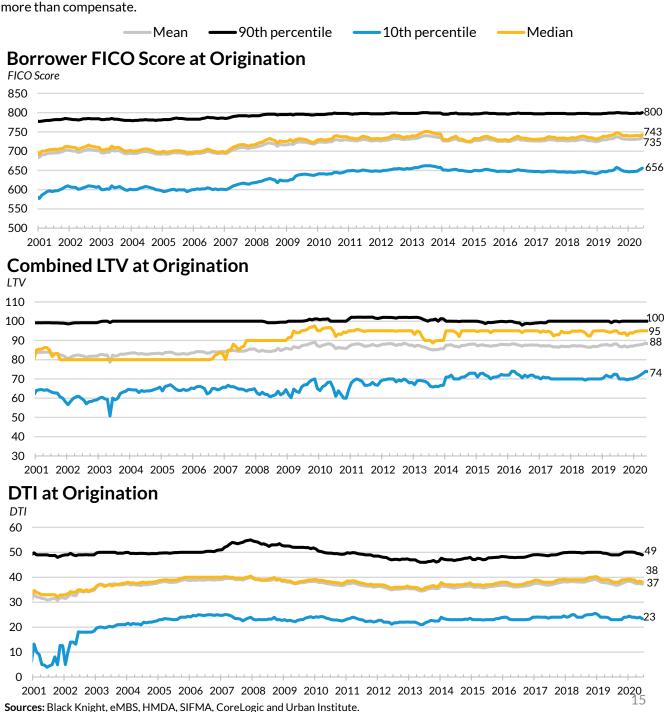
Sources: eMBS, CoreLogic, HMDA, IMF, and Urban Institute.

Note: Default is defined as 90 days or more delinquent at any point. Last updated July 2020.

Data as of June 2020.

CREDIT AVAILABILITY FOR PURCHASE LOANS

Access to credit remains tight, especially for lower FICO borrowers. The median FICO for current purchase loans is about 43 points higher than the pre-housing crisis level of around 700. The 10th percentile, which represents the lower bound of creditworthiness to qualify for a mortgage, was 656 in June 2020, which is high compared to low-600s pre-bubble. The median LTV at origination of 95 percent also remains high, reflecting the rise of FHA and VA lending. Although current median DTI of 38 percent exceeds the pre-bubble level of 36 percent, higher FICO scores more than compensate.

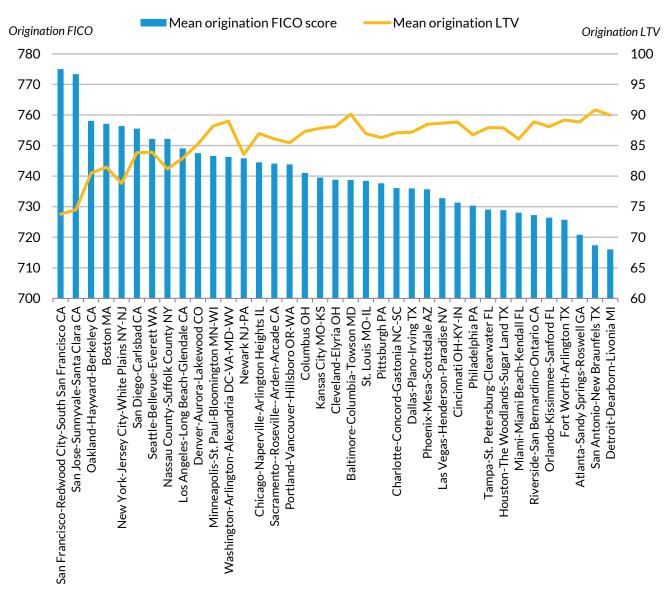


Note: Includes owner-occupied purchase loans only. DTI data prior to April 2018 is from CoreLogic; after that date, it is from Black Knight.

CREDIT AVAILABILITY BY MSA FOR PURCHASE LOANS

Credit has been tight for all borrowers with less-than-stellar credit scores—especially in MSAs with high housing prices. For example, the mean origination FICO for borrowers in San Francisco-Redwood City-South San Francisco, CA is approximately 775. Across all MSAs, lower average FICO scores tend to be correlated with high average LTVs, as these MSAs rely heavily on FHA/VA financing.

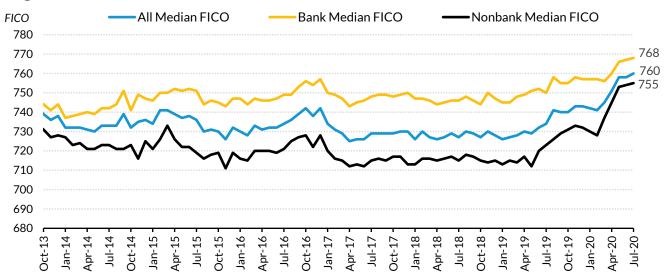
Origination FICO and LTV



AGENCY NONBANK CREDIT BOX

Nonbank originators have played a key role in expanding access to credit. In the GSE space, FICO scores for banks and nonbanks have nearly converged; the differential is much larger in the Ginnie Mae space. FICO scores for banks and nonbanks in both GSE and Ginnie Mae segments increased over the course of 2019 and the first seven months of 2020, due to increased refi activity; this activity is skewed toward higher FICO scores. This has been particularly pronounced the last five months: March, April, May, June, and July of 2020. Comparing Ginnie Mae FICO scores today versus five years ago (late 2014), FICO scores have risen significantly for both banks and nonbanks, but more for banks. This partly reflects the sharp cut-back in FHA lending by banks post-2008. As pointed out on page 11, banks now comprise only about 10 percent of Ginnie Mae originations.

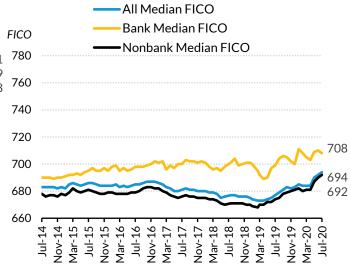
Agency FICO: Bank vs. Nonbank



Sources: eMBS and Urban Institute.

GSE FICO: Bank vs. Nonbank

Ginnie Mae FICO: Bank vs. Nonbank

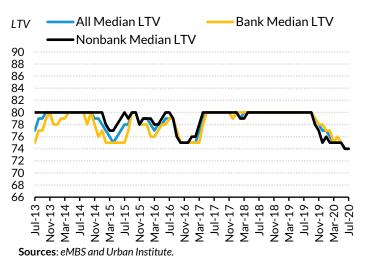


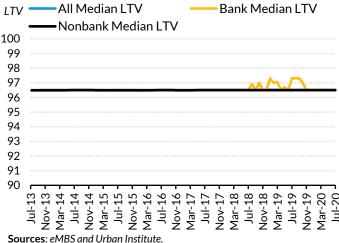
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AGENCY NONBANK CREDIT BOX

The median LTVs for nonbank and bank originations are comparable, while the median DTI for nonbank loans is higher than for bank loans, more so in the Ginnie Mae space. From early 2017 to early 2019, there was a sustained increase in DTIs, which has reversed beginning in the spring of 2019. This is true for both Ginnie Mae and the GSEs, for banks and nonbanks. As interest rates in 2017 and 2018 increased, DTIs rose, because borrower payments were driven up relative to incomes. As rates fell during most of 2019 and thus far in 2020, DTIs fell as borrower payments declined relative to incomes.

Ginnie Mae LTV: Bank vs. Nonbank GSE LTV: Bank vs. Nonbank

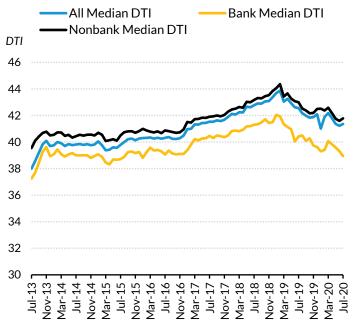




GSE DTI: Bank vs. Nonbank

All Median DTI Bank Median DTI Nonbank Median DTI DTI 44 42 40 38 36 34 32 30

Ginnie Mae DTI: Bank vs. Nonbank



Sources: eMBS and Urban Institute.

Sources: eMBS and Urban Institute.

STATE OF THE MARKET MORTGAGE ORIGINATION **PROJECTIONS**

Fannie Mae, Freddie Mac and the MBA estimate 2020 origination volume to be between \$2.82 and \$3.41 trillion, higher than the \$2.17 to \$2.33 trillion in 2019. The increase in the 2020 origination volume is due to expectations of very strong refinance activity. All three groups expect the refinance share to be 13-18 percentage points higher than in 2019, based on continued low rates in the wake of COVID-19.

Total Originations and Refinance Shares

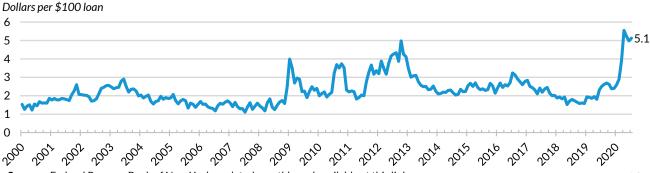
	Or	riginations (\$ billior	ns)	Refi Share (percent)			
Period	Total, FNMA estimate	Total, FHLMC estimate	Total, MBA estimate	FNMA estimate	FHLMC estimate	MBA estimate	
2019 Q1	359	350	325	34	35	30	
2019 Q2	581	555	501	35	36	29	
2019 Q3	752	695	651	50	47	42	
2019 Q4	770	725	696	57	58	55	
2020 Q1	787	670	563	64	60	54	
2020 Q2	1144	770	928	72	66	63	
2020 Q3	862	754	740	52	64	49	
2020 Q4	615	723	585	48	66	46	
2016	2052	2125	1891	49	47	49	
2017	1826	1810	1760	36	37	35	
2018	1766	1700	1677	30	32	28	
2019	2305	2325	2173	44	46	41	
2020	3407	2916	2816	61	64	54	
2021	2478	2524	2115	45	51	34	

Sources: Fannie Mae, Freddie Mac, Mortgage Bankers Association and Urban Institute.

Note: Shaded boxes indicate forecasted figures. All figures are estimates for total single-family market. Regarding interest rates, the yearly averages for 2016, 2017, 2018 and 2019 were 3.8, 4.0, 4.6, and 3.9 percent. For 2020, the respective projections for Fannie, Freddie, and MBA are 3.1, 3.4, and 3.3 percent.

Originator Profitability and Unmeasured Costs

In July 2020, Originator Profitability and Unmeasured Costs (OPUC) stood at \$5.13 per \$100 loan, up substantially from \$2.59 in January 2020, but down from April's \$5.55, the highest level on record. Increased profitability reflects lender capacity constraints amidst strong refi demand. Additionally, the Fed's massive purchases of agency MBS in March and April pushed down secondary yields, thus widening the spread to primary rates. We would expect OPUC to remain elevated for some time, declining as the backlog of refinance activity is processed, volumes ebb and originators begin to compete more aggressively on price. OPUC , formulated and calculated by the Federal Reserve Bank of New York, is a good relative measure of originator profitability. OPUC uses the sales price of a mortgage in the secondary market (less par) and adds two sources of profitability; retained servicing (both base and excess servicing, net of g-fees), and points paid by the borrower. OPUC is generally high when interest rates are low, as originators are capacity constrained due to refinance demand and have no incentive to reduce rates. Conversely, when interest rates are higher and refi activity low, competition forces originators to lower rates, driving profitability down.



Sources: Federal Reserve Bank of New York, updated monthly and available at this link: http://www.ny.frb.org/research/epr/2013/1113fust.html and Urban Institute. Last updated July 2020.

STATE OF THE MARKET **HOUSING SUPPLY**

Months of supply in July 2020 was 3.9, below the 4.2 months in July 2019. Strong demand for housing in recent years, fueled by low mortgage rates, and coupled with low home construction has kept the months supply limited. Fannie Mae, Freddie Mac, the MBA, and the NAHB forecast 2020 housing starts to be 1.20 to 1.28 million units; these 2020 forecasts from Fannie Mae, the MBA, and the NAHB are below 2019 levels. Fannie Mae, Freddie Mac, and the MBA predict total home sales of 4.80 to 5.83 million units in 2020, also below 2019 levels.

Months of Supply



Source: National Association of Realtors and Urban Institute. Data as of July 2020.

Housing Starts and Home Sales

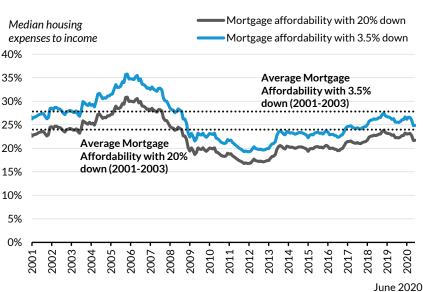
		Housing Star	ts, thousands	Home Sales. thousands				
Year	Total, FNMA estimate	Total, FHLMC estimate	Total, MBA estimate	Total, NAHB estimate	Total, FNMA estimate	Total, FHLMC estimate	Total, MBA estimate	Total, NAHB estimate*
2016	1174	1170	1177	1177	6011	6010	6001	5385
2017	1203	1200	1208	1208	6123	6120	6158	5522
2018	1250	1250	1250	1250	5957	5960	5956	5357
2019	1290	1250	1295	1295	6023	6000	6016	5439
2020	1239	1280	1185	1195	5606	4800	5825	5087
2021	1286	N/A	1276	1244	5794	5600	6252	5473

Sources: Mortgage Bankers Association, Fannie Mae, Freddie Mac, National Association of Home Builders and Urban Institute. Note: Shaded boxes indicate forecasted figures; column labels indicate source of estimate. Freddie Mac numbers are now updated quarterly instead of monthly. *NAHB home sales estimate is for single-family structures only, it excludes condos and co-ops. Other figures include all single-family sales.

STATE OF THE MARKET **HOUSING AFFORDABILITY**

National Mortgage Affordability Over Time

Home prices remain affordable by historic standards, despite price increases over the last 8 years, as interest rates are now near generational lows. As of June 2020, with a 20 percent down payment, the share of median income needed for the monthly mortgage payment stood at 21.7 percent; with 3.5 down, it is 24.8 percent. Since February 2019, the median housing expenses to income ratio has been slightly lower than the 2001-2003 average. As shown in the bottom picture, mortgage affordability varies widely by MSA.

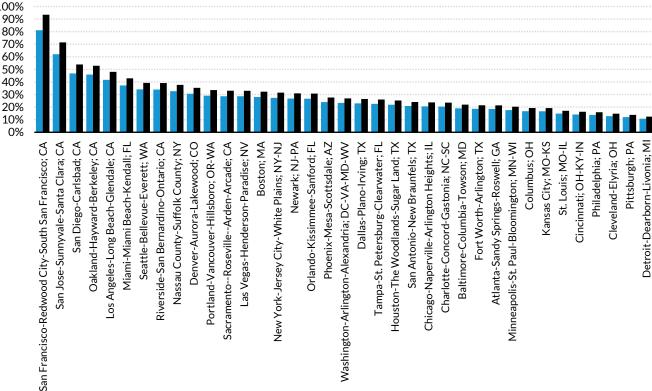


Mortgage affordability with 20% down ■ Mortgage affordability with 3.5% down

Mortgage Affordability by MSA



100%



Sources: National Association of Realtors, US Census Bureau, Current Population Survey, American Community Survey, Moody's Analytics, Freddie Mac Primary Mortgage Market Survey, and the Urban Institute.

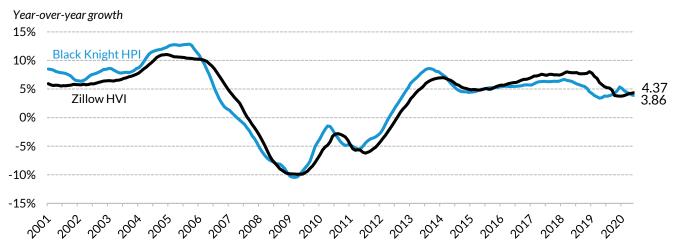
Note: Mortgage affordability is the share of median family income devoted to the monthly principal, interest, taxes, and insurance payment required to buy the median home at the Freddie Mac prevailing rate 2018 for a 30-year fixed-rate mortgage and property tax and insurance at 1.75 percent of the housing value. Data for the bottom chart as of Q2 2019.

STATE OF THE MARKET

HOME PRICE INDICES

National Year-Over-Year HPI Growth

According to Black Knight's repeat sales index, year-over-year home price appreciation declined to 3.86 percent in June 2020. Year-over-year home price appreciation measured by Zillow's hedonic index was 4.37 percent in June 2020, up slightly from May. Although housing affordability remains constrained, especially at the lower end of the market, recent declines in rates serve as a partial offset.



Sources: Black Knight, Zillow, and Urban Institute. Note: Data as of June 2020.

Changes in Black Knight HPI for Top MSAs

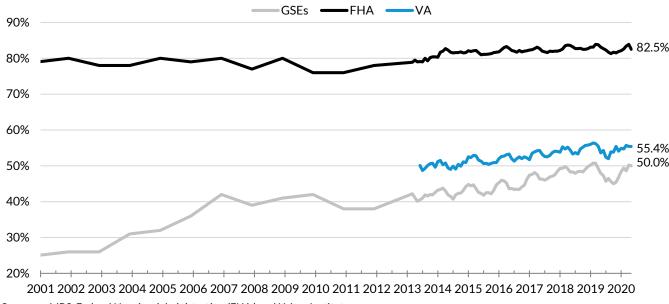
After rising 59.8 percent from the trough, national house prices are now 19.4 percent higher than pre-crisis peak levels. At the MSA level, twelve of the top 15 MSAs have exceeded their pre-crisis peak HPI: New York, NY; Los Angeles, CA; Atlanta, GA; Washington, DC; Houston, TX; Phoenix, AZ; Dallas, TX; Minneapolis, MN; Seattle, WA; Denver, CO; San Diego, CA; and Anaheim, CA. Three MSAs particularly hard hit by the boom and bust—Chicago, IL; Riverside, CA; and Baltimore, MD—are 8.1, 4.8, and 5.4 percent, respectively, below peak values.

MSA	2000 to peak	Peak to trough	Trough to current	% above peak
United States	75.1	-25.3	59.8	19.4
New York-Jersey City-White Plains, NY-NJ	127.8	-22.5	49.5	15.9
Los Angeles-Long Beach-Glendale, CA	179.5	-38.1	95.1	20.7
Chicago-Naperville-Arlington Heights, IL	67.2	-38.4	49.2	-8.1
Atlanta-Sandy Springs-Roswell, GA	32.4	-35.1	86.1	20.8
Washington-Arlington-Alexandria, DC-VA-MD-WV	149.1	-28.3	42.5	2.1
Houston-The Woodlands-Sugar Land, TX	29.3	-6.6	52.2	42.1
Phoenix-Mesa-Scottsdale, AZ	113.2	-51.1	107.1	1.3
Riverside-San Bernardino-Ontario, CA	174.9	-51.6	96.8	-4.8
Dallas-Plano-Irving, TX	26.3	-7.3	72.7	60.2
Minneapolis-St. Paul-Bloomington, MN-WI	69.3	-30.6	67.4	16.2
Seattle-Bellevue-Everett, WA	90.3	-33.2	115.3	43.9
Denver-Aurora-Lakewood, CO	34.1	-12.2	98.8	74.5
Baltimore-Columbia-Towson, MD	123.3	-24.4	25.1	-5.4
San Diego-Carlsbad, CA	148.3	-37.5	86.0	16.2
Anaheim-Santa Ana-Irvine, CA	163.2	-35.2	70.5	10.4

FIRST-TIME HOMEBUYERS

First-Time Homebuyer Share

In June 2020, the FTHB share for FHA, which has always been more focused on first time homebuyers, declined slightly to 82.5 percent. The FTHB share of VA lending remained flat in June at 55.4 percent. The GSE FTHB share in June was down from May to 50.0 percent. The bottom table shows that based on mortgages originated in June 2020, the average FTHB was more likely than an average repeat buyer to take out a smaller loan, have a lower credit score, and higher LTV, thus paying a higher interest rate.



Sources: eMBS, Federal Housing Administration (FHA) and Urban Institute. **Note**: All series measure the first-time homebuyer share of purchase loans for principal residences.

June 2020

Comparison of First-Time and Repeat Homebuyers, GSE and FHA Originations

_	GSEs		FH/	4	GSEs and FHA	
Characteristics	First-time	Repeat	First-time	Repeat	First-time	Repeat
Loan Amount (\$)	266,298	295,145	227,404	247,120	251,736	288,286
Credit Score	745	758	677	681	720	747
LTV (%)	89	81	96	95	91	83
DTI (%)	34	36	43	44	37	37
Loan Rate (%)	3.41	3.34	3.44	3.38	3.42	3.35

Sources: eMBS and Urban Institute.

Note: Based on owner-occupied purchase mortgages originated in June 2020.

STATE OF THE MARKET

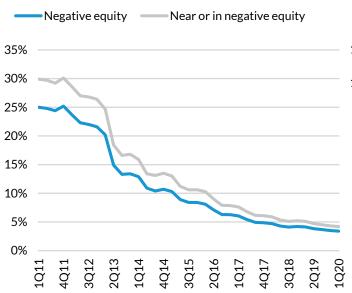
DELINQUENCIES AND LOSS MITIGATION ACTIVITY

Loans in and near negative equity continued to decline in 1Q 2020; 3.4 percent now have negative equity, an additional 0.8 percent have less then 5 percent equity. Due to the effects of COVID-19, loans that are 90 days or more delinquent or in foreclosure spiked significantly in Q2 2020, to 4.26 percent. This number includes loans where borrowers have missed their payments, including loans in COVID-19 forbearance. New loan modifications and liquidations (bottom) have continued to decline. Since Q3, 2007, total loan modifications (HAMP and proprietary) are roughly equal to total liquidations. Hope Now reports show 8,644,182 borrowers received a modification from Q3 2007 to Q3 2019, compared with 8,871,863 liquidations in the same period.

Negative Equity Share

Sources: CoreLogic and Urban Institute.

Q3-Q4

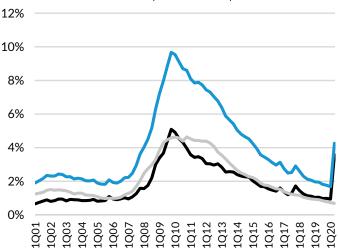


Loans in Serious Delinquency/Foreclosure

Percent of loans 90 days or more delinquent

Percent of loans in foreclosure

Percent of loans 90 days or more delinquent or in foreclosure



Sources: Mortgage Bankers Association and Urban Institute. *Last updated May* 2020.

2019

01-03

Loan Modifications and Liquidations Number of Joans (thousands)

Note: Loans with negative equity refer to loans above 100 percent

LTV. Loans near negative equity refer to loans above 95 percent LTV.

1,600 1,400 1,200 1,000 800 600 400 200

2010 2011 2012 2013 2014 2015 2016 2017

Sources: Hope Now and Urban Institute.
Note: Liquidations include both foreclosure sales and short sales. Last updated

■ Hamp Permanent Mods

■ Total liquidations

March 2020.

Proprietary mods completed

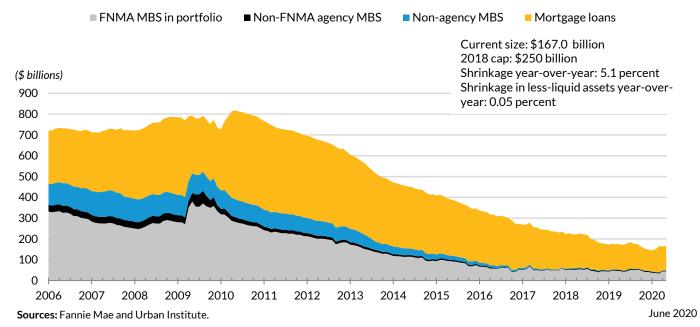
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GSES UNDER CONSERVATORSHIP

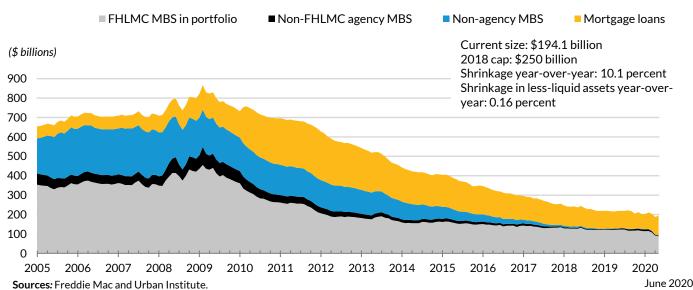
GSE PORTFOLIO WIND-DOWN

Even though the Fannie Mae and Freddie Mac portfolios are well below the \$250 billion size they were required to reach by year-end 2018, the portfolios have continued to shrink. From June 2019 to June 2020, the Fannie portfolio contracted by 5.1 percent, and the Freddie portfolio contracted by 10.1 percent. Within the portfolio, Freddie Mac and Fannie Mae held their less liquid assets (mortgage loans, non-agency MBS), constant from the year prior.

Fannie Mae Mortgage-Related Investment Portfolio Composition



Freddie Mac Mortgage-Related Investment Portfolio Composition

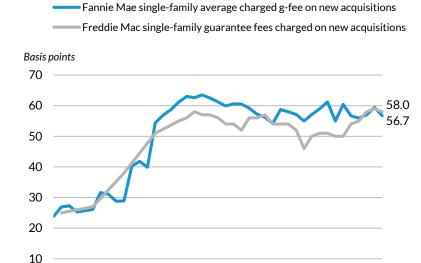


GSES UNDER CONSERVATORSHIP

EFFECTIVE GUARANTEE FEES

Guarantee Fees Charged on New Acquisitions

Fannie Mae's average g-fees charged on new acquisitions fell from 59.4 bps in Q1 2020 to 56.7 bps in Q2 2020. Freddie's also fell slightly from 59.0 bps to 58.0 bps. The gap between the two g-fees was 3.2 bps in Q2 2020. Today's g-fees are markedly higher than g-fee levels in 2011 and 2012, and have contributed to the GSEs' earnings; the bottom table shows Fannie Mae LLPAs, which are expressed as upfront charges.



Sources: Fannie Mae, Freddie Mae and Urban Institute. *Last updated August 2020.*

Fannie Mae Upfront Loan-Level Price Adjustments (LLPAs)

				LTV (%)					
Credit Score	≤60	60.01 - 70	70.01 - 75	75.01 - 80	80.01 - 85	85.01 - 90	90.01 - 95	95.01 - 97	>97
> 740	0.00	0.25	0.25	0.50	0.25	0.25	0.25	0.75	0.75
720 - 739	0.00	0.25	0.50	0.75	0.50	0.50	0.50	1.00	1.00
700 - 719	0.00	0.50	1.00	1.25	1.00	1.00	1.00	1.50	1.50
680 - 699	0.00	0.50	1.25	1.75	1.50	1.25	1.25	1.50	1.50
660 - 679	0.00	1.00	2.25	2.75	2.75	2.25	2.25	2.25	2.25
640 - 659	0.50	1.25	2.75	3.00	3.25	2.75	2.75	2.75	2.75
620 - 639	0.50	1.50	3.00	3.00	3.25	3.25	3.25	3.50	3.50
< 620	0.50	1.50	3.00	3.00	3.25	3.25	3.25	3.75	3.75
Product Feature (Cumulative)									
Investment Property	2.125	2.125	2.125	3.375	4.125	4.125	4.125	4.125	4.125

Sources: Fannie Mae and Urban Institute. *Last updated March of 2019.*

GSES UNDER CONSERVATORSHIP GSE RISK-SHARING TRANSACTIONS

Fannie Mae and Freddie Mac have been laying off back-end credit risk through CAS and STACR deals and through reinsurance transactions. They have also done front-end transactions with originators and reinsurers, and experimented with deep mortgage insurance coverage with private mortgage insurers. FHFA's 2020 scorecard requires the GSEs to transfer a significant amount of credit risk to private markets. This is a departure from the 2019 scorecard, which required risk transfer specifically on 90% of new acquisitions. Fannie Mae's CAS issuances since inception total \$1.65 trillion; Freddie's STACR totals \$1.59 trillion. Since the COVID-19 induced spread widening in March 2020, Freddie Mac has issued three deals, while Fannie has issued none.

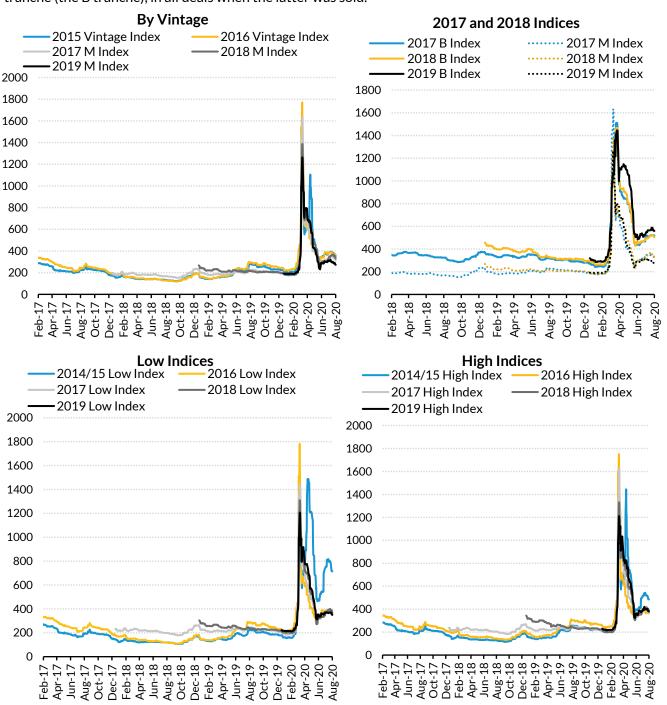
Fannie Mae – Connecticut Avenue Securities (CAS)							
Date	Transaction	Reference Pool Size (\$ m)	Amount Issued (\$m)	% of Reference Pool Covered			
2013	CAS 2013 deals	\$26,756	\$675	2.5			
2014	CAS 2014 deals	\$227, 234	\$5,849	2.6			
2015	CAS 2015 deals	\$187,126	\$5,463	2.9			
2016	CAS 2016 deals	\$236,459	\$7,392	3.1			
2017	CAS 2017 deals	\$264,697	\$8,707	3.3			
2018	CAS 2018 deals	\$205,900	\$7,314	3.6			
January 2019	CAS 2019 - R01	\$28,000	\$960	3.4			
February 2019	CAS 2019 - R02	\$27,000	\$1,000	3.7			
April 2019	CAS 2019 - R03	\$21,000	\$857	4.1			
June 2019	CAS 2019 - R04	\$25,000	\$1,000	4.0			
July 2019	CAS 2019 - R05	\$24,000	\$993	4.1			
October 2019	CAS 2019 - R06	\$33,000	\$1,300	3.9			
October 2019	CAS 2019 - R07	\$26,600	\$998	3.8			
November 2019	CAS 2019 - HRP1	\$106,800	\$963	0.9			
January 2020	CAS 2020 - R01	\$29,000	\$1,030	3.6			
February 2020	CAS 2020 - R02	\$29,000	\$1,134	3.9			
March 2020	CAS 2020 - SBT1	\$152,000	\$966	0.6			
Total		\$1,649,572	\$46,601	2.8			

Freddie Mac -	Structured Agency Cred	it Risk (STACR)		
Date	Transaction	Reference Pool Size (\$ m)	Amount Issued (\$m)	% of Reference Pool Covered
2013	STACR 2013 deals	\$57,912	\$1,130	2.0
2014	STACR 2014 deals	\$147,120	\$4,916	3.3
2015	STACR 2015 deals	\$209,521	\$6,658	3.2
2016	STACR 2016 deals	\$183,421	\$5,541	2.8
2017	STACR 2017 deals	\$248,821	\$5,663	2.3
2018	STACR 2018 deals	\$216,581	\$6,055	2.8
January 2019	STACR Series 2019 - DNA1	\$24,600	\$714	2.9
February 2019	STACR Series 2019 - HQA1	\$20,760	\$640	3.1
March 2019	STACR Series 2019 - DNA2	\$20,500	\$608	3.0
May 2019	STACR Series 2019 - HQA2	\$19,500	\$615	3.2
May 2019	STACR Series 2019 - FTR1	\$44,590	\$140	0.3
June 2019	STACR Series 2019 - HRP1	\$5,782	\$281	4.9
July 2019	STACR Series 2019 - DNA3	\$25,533	\$756	3.0
August 2019	STACR Series 2019 - FTR2	\$11,511	\$284	2.5
September 2019	STACR Series 2019 - HQA3	\$19,609	\$626	3.2
October 2019	STACR Series 2019 - DNA4	\$20,550	\$589	2.9
November 2019	STACR Series 2019 - HQA4	\$13,399	\$432	3.2
December 2019	STACR Series 2019 - FTR3	\$22,508	\$151	0.7
December 2019	STACR Series 2019 - FTR4	\$22,263	\$111	0.5
January 2020	STACR Series 2020 - DNA1	\$29,641	\$794	2.7
February 2020	STACR Series 2020 - HQA1	\$24,268	\$738	3.0
February 2020	STACR Series 2020 - DNA2	\$43,596	\$1,169	2.7
March 2020	STACR Series 2020 - HQA2	\$35,066	\$1,006	2.9
July 2020	STACR Series 2020 - DNA3	\$48,328	\$1,106	2.3
July 2020	STACR Series 2020 - HQA3	\$31,278	\$835	2.7
August 2020	STACR Series 2020-DNA4	\$41,932	\$1,088	2.6
Total		\$1,588,590	\$42,646	2.7

GSES UNDER CONSERVATORSHIP

GSE RISK-SHARING INDICES

The figures below show the spreads on the 2015, 2016, 2017, 2018, and 2019 indices, as priced by dealers. Note the substantial spread widening in March 2020. This reflected investor expectations of higher defaults and potential credit losses owing to COVID-19, as well as some forced selling. Spreads have tightened considerably since then, but remain well above pre-COVID levels. The 2015 and 2016 indices consist of the bottom mezzanine tranche in each deal, weighted by the original issuance amount; the equity tranches were not sold in these years. The 2017, 2018, and 2019 indices contain both the bottom mezzanine tranche as well as the equity tranche (the B tranche), in all deals when the latter was sold.

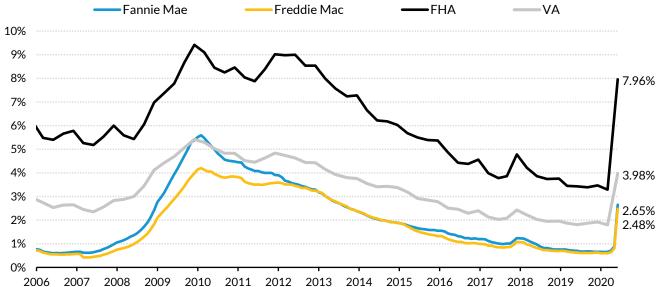


Sources: Vista Data Services and Urban Institute. **Note**: Data as of August 14, 2020.

SERIOUS DELINQUENCY RATES

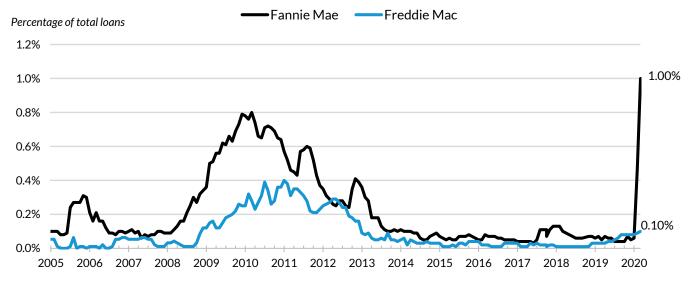
Serious delinquency rates for single-family GSE loans grew significantly in June of 2020, and we expect them to continue to grow as more borrowers affected by COVID-19 become 90 days DQ. In the single-family market, GSE, FHA, and VA delinquencies all spiked above their 2006-2007 levels. Fannie multifamily delinquencies spiked to 1.00 percent in June, due to complications from COVID-19. Freddie multifamily delinquencies also grew but much more slightly.

Serious Delinquency Rates-Single-Family Loans



Sources: Fannie Mae, Freddie Mac, MBA Delinquency Survey and Urban Institute. Note: Serious delinquency is defined as 90 days or more past due or in the foreclosure process. Not seasonally adjusted. FHA and VA delinquencies are reported on a quarterly basis, last updated June 2020. GSE delinquencies are reported monthly, last updated June 2020.

Serious Delinquency Rates-Multifamily GSE Loans



Sources: Fannie Mae, Freddie Mac and Urban Institute.

June 2020

AGENCY ISSUANCE AGENCY GROSS AND NET ISSUANCE

Agency gross issuance was \$1.66 trillion through the first seven months of 2020, more than double the volume through July 2019. The sharp increase is due to the refinance wave, which did not begin in earnest until Q2 2019, and accelerated significantly in 2020. Net issuance (new securities issued less the decline in outstanding securities due to principal pay-downs or prepayments) totaled \$301.9 billion in the first seven months of 2020, up 116.2 percent from the same period in 2019.

Agency Gross Issuance

Agency Net Issuance

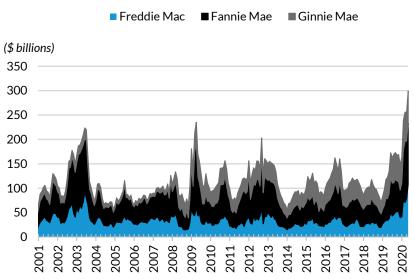
Issuance Year	GSEs	Ginnie Mae	Total	Issuance Year	GSEs	Ginnie Mae	Total
2001	\$885.1	\$171.5	\$1,056.6	2001	\$368.40	-\$9.90	\$358.50
2002	\$1,238.9	\$169.0	\$1,407.9	2002	\$357.20	-\$51.20	\$306.10
2003	\$1,874.9	\$213.1	\$2,088.0	2003	\$334.90	-\$77.60	\$257.30
2004	\$872.6	\$119.2	\$991.9	2004	\$82.50	-\$40.10	\$42.40
2005	\$894.0	\$81.4	\$975.3	2005	\$174.20	-\$42.20	\$132.00
2006	\$853.0	\$76.7	\$929.7	2006	\$313.60	\$0.20	\$313.80
2007	\$1,066.2	\$94.9	\$1,161.1	2007	\$514.90	\$30.90	\$545.70
2008	\$911.4	\$267.6	\$1,179.0	2008	\$314.80	\$196.40	\$511.30
2009	\$1,280.0	\$451.3	\$1,731.3	2009	\$250.60	\$257.40	\$508.00
2010	\$1,003.5	\$390.7	\$1,394.3	2010	-\$303.20	\$198.30	-\$105.00
2011	\$879.3	\$315.3	\$1,194.7	2011	-\$128.40	\$149.60	\$21.20
2012	\$1,288.8	\$405.0	\$1,693.8	2012	-\$42.40	\$119.10	\$76.80
2013	\$1,176.6	\$393.6	\$1,570.1	2013	\$69.10	\$87.90	\$157.00
2014	\$650.9	\$296.3	\$947.2	2014	\$30.5	\$61.6	\$92.1
2015	\$845.7	\$436.3	\$1,282.0	2015	\$75.1	\$97.3	\$172.5
2016	\$991.6	\$508.2	\$1,499.8	2016	\$127.4	\$125.8	\$253.1
2017	\$877.3	\$455.6	\$1,332.9	2017	\$168.5	\$131.3	\$299.7
2018	\$795.0	\$400.6	\$1,195.3	2018	\$149.4	\$112.0	\$261.5
2019	\$1,042.6	\$508.6	\$1,551.2	2019	\$197.8	\$95.7	\$293.5
2020 YTD	\$1,122.8	\$407.3	\$1,655.1	2020 YTD	\$275.9	\$26.1	\$301.9
2020 YTD % Change YOY	140.7%	69.7%	134.3%	2020 YTD % Change YOY	234.0%	-54.3%	116.2%
2020 Ann.	\$1,924.8	\$698.3	\$2,837.3	2020 Ann.	\$472.9	\$44.7	\$517.6

AGENCY ISSUANCE

AGENCY GROSS ISSUANCE & FED PURCHASES

Monthly Gross Issuance

While FHA, VA and GSE lending have dominated the mortgage market since the 2008 housing crisis, there has been a change in the mix. The Ginnie Mae share of new issuances has risen from a precrisis level of 10-12 percent to 34.8 percent in February 2020, reflecting gains in both purchase and refinance shares. Since then, the Ginnie share had declined, reaching 22.2 percent in July 2020; the drop reflects the more robust ramp up in GSE refinances relative to Ginnie Mae refinances.

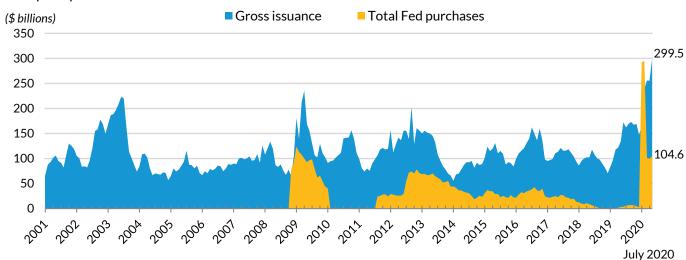


Sources: eMBS, Federal Reserve Bank of New York, and Urban Institute.

July 2020

Fed Absorption of Agency Gross Issuance

On March 23, 2020, in response to the market dislocations caused by the coronavirus pandemic, the Fed announced they would purchase Treasuries and agency MBS in an amount necessary to support smooth functioning markets. In March the Fed bought \$292.2 billion in agency MBS, and April clocked in at \$295.1 billion, the largest two months of mortgage purchases ever; and well over 100 percent of gross issuance for each of those two months. After the market stabilized, the Fed slowed its purchases to around \$100 -\$104 billion per month in May, June and July. Fed purchases in July were \$104.6 billion, 35 percent of monthly issuance, still sizeable from a historical perspective. Prior to the COVID-19 intervention, the Fed was winding down its MBS portfolio from its 2014 prior peak.



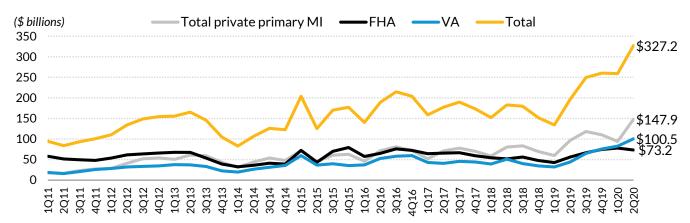
Sources: eMBS, Federal Reserve Bank of New York and Urban Institute.

AGENCY ISSUANCE

MORTGAGE INSURANCE ACTIVITY

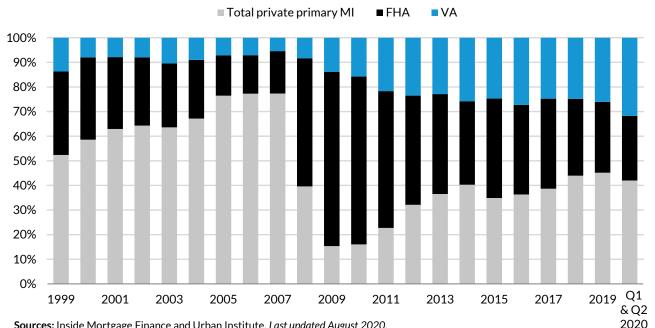
MI Activity

Mortgage insurance activity via the FHA, VA and private insurers increased from \$197 billion in Q2 2019 to \$327 billion in Q2 2020, a 57.4 percent increase. In the second quarter of 2020, private mortgage insurance written increased by \$51.3 billion, FHA increased by \$17.2 billion and VA increased by \$56.4 billion relative to Q2 2019. During this period, the VA share increased from 22.4 to 30.7 percent while the FHA share fell from 28.5 to 22.4 percent. The private mortgage insurers share also fell, from 49.1 to 45.2 percent compared to the same period a year ago.



Sources: Inside Mortgage Finance and Urban Institute. Last updated August 2020.

MI Market Share



Sources: Inside Mortgage Finance and Urban Institute. Last updated August 2020.

AGENCY ISSUANCE

MORTGAGE INSURANCE ACTIVITY

FHA premiums rose significantly in the years following the housing crash, with annual premiums rising from 50 to 135 basis points between 2008 to 2013 as FHA worked to shore up its finances. In January 2015, President Obama announced a 50 bps cut in annual insurance premiums, making FHA mortgages more attractive than GSE mortgages for the overwhelming majority of borrowers putting down less than 5%. The April 2016 reduction in PMI rates for borrowers with higher FICO scores and April 2018 reduction for lower FICO borrowers has partially offset that. As shown in the bottom table, a borrower putting 3.5 percent down with a FICO of less than 720 will find FHA financing to be more financially attractive, borrowers with FICOs of 720 and above will find GSE execution with PMI to be more attractive.

FHA MI Premiums for Typical Purchase Loan

Case number date	Upfront mortgage insurance premium (UFMIP) paid	Annual mortgage insurance premium (MIP)
1/1/2001 - 7/13/2008	150	50
7/14/2008 - 4/5/2010*	175	55
4/5/2010 - 10/3/2010	225	55
10/4/2010 - 4/17/2011	100	90
4/18/2011 - 4/8/2012	100	115
4/9/2012 - 6/10/2012	175	125
6/11/2012 - 3/31/2013 ^a	175	125
4/1/2013 - 1/25/2015 ^b	175	135
Beginning 1/26/2015 ^c	175	85

Sources: Ginnie Mae and Urban Institute.

Note: A typical purchase loan has an LTV over 95 and a loan term longer than 15 years. Mortgage insurance premiums are listed in basis points.

Initial Monthly Payment Comparison: FHA vs. PMI

Assumptions							
Property Value	\$250,000						
Loan Amount	\$241,250						
LTV	96.5						
Base Rate							
Conforming	3.02						
FHA	3.24						

FICO	620 - 639	640 - 659	660 - 679	680 - 699	700 - 719	720 - 739	740 - 759	760+
FHA MI Premiums								
FHA UFMIP	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
FHA MIP	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PMI								
GSE LLPA*	3.50	2.75	2.25	1.50	1.50	1.00	0.75	0.75
PMI Annual MIP	1.86	1.65	1.54	1.21	0.99	0.87	0.70	0.58
Monthly Payment								
FHA	\$1,238	\$1,238	\$1,238	\$1,238	\$1,238	\$1,238	\$1,238	\$1,238
PMI	\$1,487	\$1,424	\$1,389	\$1,302	\$1,258	\$1,221	\$1,180	\$1,156
PMI Advantage	-\$249	-\$187	-\$151	-\$65	-\$20	\$17	\$58	\$82

Sources: Genworth Mortgage Insurance, Ginnie Mae, and Urban Institute. FHA rate from MBA Weekly Applications Survey. Conforming rate from Freddie Mac Primary Mortgage Market Survey.

Note: Rates as of July 2020.

Mortgage insurance premiums listed in percentage points. Grey shade indicates FHA monthly payment is more favorable, while blue indicates PMI is more favorable. The PMI monthly payment calculation does not include special programs like Fannie Mae's 33 HomeReady and Freddie Mac's Home Possible (HP), both offer more favorable rates for low- to moderate-income borrowers.

^{*} For a short period in 2008 the FHA used a risk based FICO/LTV matrix for MI.

^a Applies to purchase loans less than or equal to \$625,500. Those over that amount have an annual premium of 150 bps.

Applies to purchase loans less than or equal to \$625,500. Those over that amount have an annual premium of 155 bps.

 $^{^{\}varsigma}$ Applies to purchase loans less than or equal to \$625,500. Those over that amount have an annual premium of 105 bps.

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Authors: Ellen Seidman, Laurie Goodman, Jun Zhu

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Authors: Aaron Shroyer, Sarah Strochak

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CRA Credit through Community Development and

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Authors: Laurie Goodman, Ellen Seidman, Jun Zhu

Date: July 9, 2020

The OCC's New CRA Regulations Put Banks Ahead of **Communities**

Authors: Laurie Goodman, Ellen Seidman, Jun Zhu

Date: July 2, 2020

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