Global Markets Analysis Report

A MONTHLY PUBLICATION OF GINNIE MAE'S
OFFICE OF CAPITAL MARKETS

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Ginnie Mae
Our Guaranty Matters

PREPARED FOR GINNIE MAE
BY STATE STREET GLOBAL ADVISORS
URBAN INSTITUTE, HOUSING FINANCE POLICY CENTER

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HIGHLIGHTS

What is behind the decline in agency FICO scores?

The top chart on page 27 shows that FICO scores for originations in recent months have dropped considerably. The mean FICO score for agency originations dropped from 742 in Dec 2016 to 726 in June 2017, a 16 point decline. The GSE average FICO has declined from 760 to 751, while Ginnie FICOs have registered a declined from 687 to 680 over the same six month period. The bottom two charts on the same page clearly show that this decline was driven mainly by refinances. Refi FICOs on GSE and Ginnie loans dropped by 15 points 13 points respectively, while purchase FICOs registered very little to no reduction.

But the drop in refi FICOs doesn't tell the whole story. In recent months, the percentage of agency MBS issued by Ginnie Mae – whose borrowers have lower credit scores than GSE borrowers – has increased, also helping push overall FICOs lower. Between Dec 2016 and June 2017, Ginnie Mae's issuance market share increased from 29 percent to 36 percent, mainly because the drop in refinance volumes has affected Ginnie Mae less than the GSEs, whose business is more refi dependent.

Per Urban Institute analysis, 79 percent of the total 16 point drop in FICOs between Dec 2016 and June 2017 can be attributed to the drop in refinance FICO scores alone. The remaining 21 percent can be attributed to Ginnie Mae's issuance market share gain vs. GSEs. This analysis is instructive because it shows that the drop in FICOs is driven by a real relaxation of refinance credit scores, and to a lesser extent, by to a shift in market share towards Ginnie Mae. It does not reflect the fact that it is easier for a first time homebuyer or a repeat homebuyer to obtain a purchase mortgage.

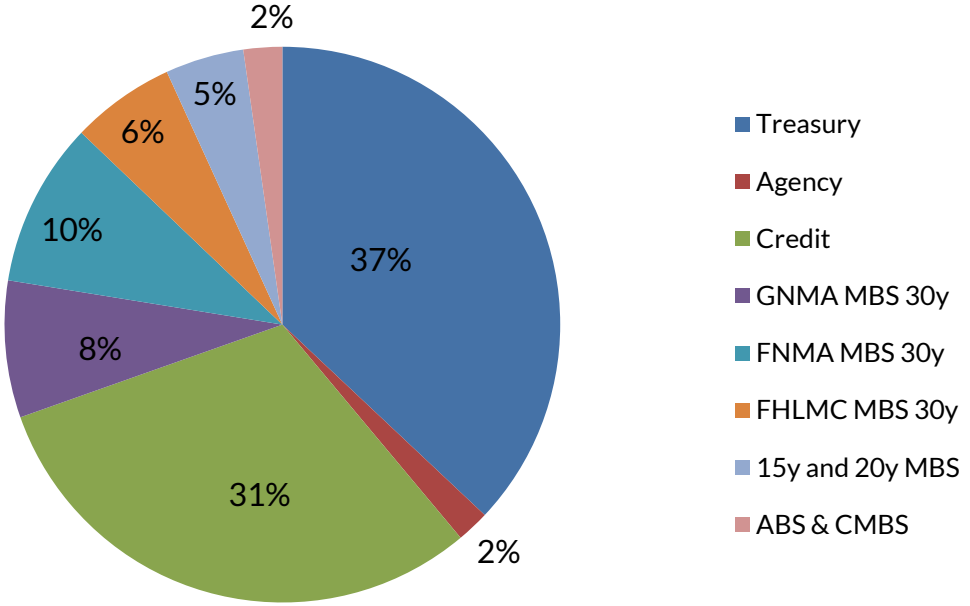
***Highlights this month*:**

- GSE gross issuance in the first half of 2017 is only up 4.4% YOY, while Ginnie Mae is down 0.8% (Pages 17 and 19)
- The first-time homebuyer share reached historical high levels for all agencies (Pages 21 and 22)
- Prepayment speeds slowed down slightly for all agencies in July 2017, due to a small uptick in rates (Pages 35-37)
- FICO scores continued to drop while DTIs continued to rise for Ginnie Mae refinance loans in June 2017 (pages 27 and 29)

Relative Attractiveness of US Fixed Income and Ginnie Mae MBS

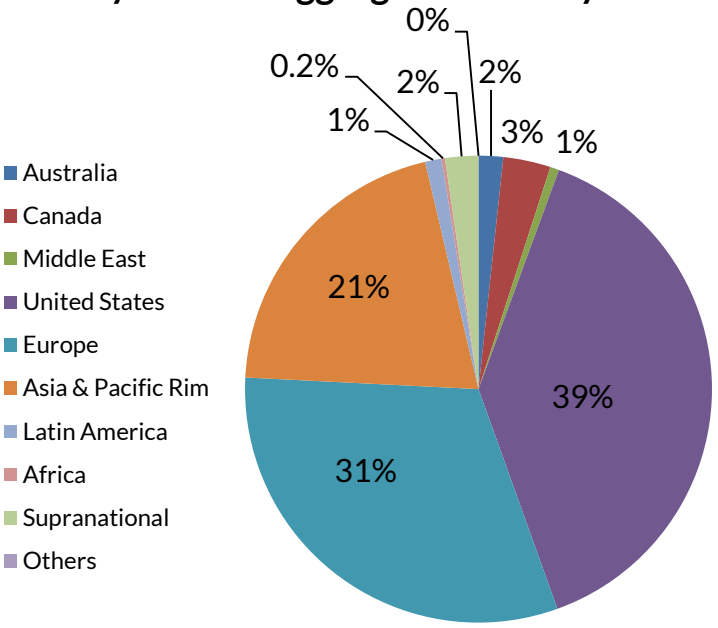
US MBS comprise 28 percent of the Barclays US Aggregate Index-- marginally less than either the US Treasury share (37%) or the US Credit share (31%). Fannie Mae 30-year MBS comprises the largest percent of US MBS (10%), while Ginnie Mae 30-year MBS and Freddie Mac 30-year MBS comprise 8 percent and 6 percent of the market, respectively. Mortgages with terms of 15- and 20- year comprise the balance (5%) of the US MBS share. US securities are the largest single contributor to the Barclays Global Aggregate, accounting for 39 percent of the global total. US MBS comprises 12 percent of the global aggregate.

Barclays US Aggregate Index



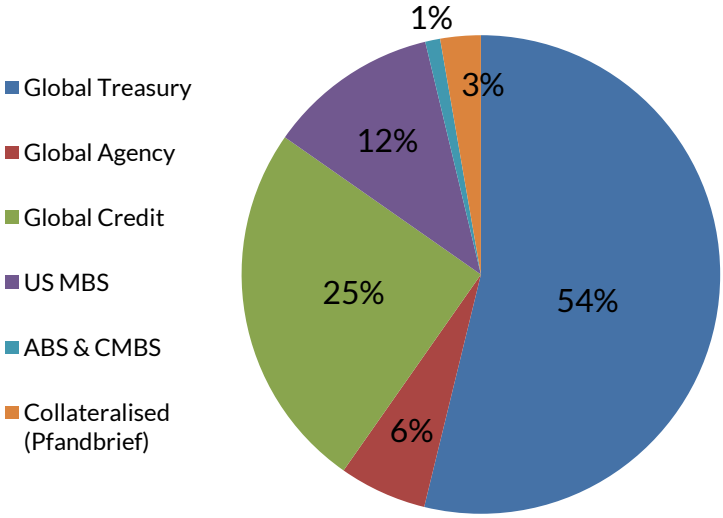
Sources: *Bloomberg and State Street Global Advisors.* ***Note:*** *Data as of June 2017*

Barclays Global Aggregate Index by Country



Sources: *Bloomberg and State Street Global Advisors.*
Note: *Data as of June 2017*

Barclays Global Aggregate Index by Sector

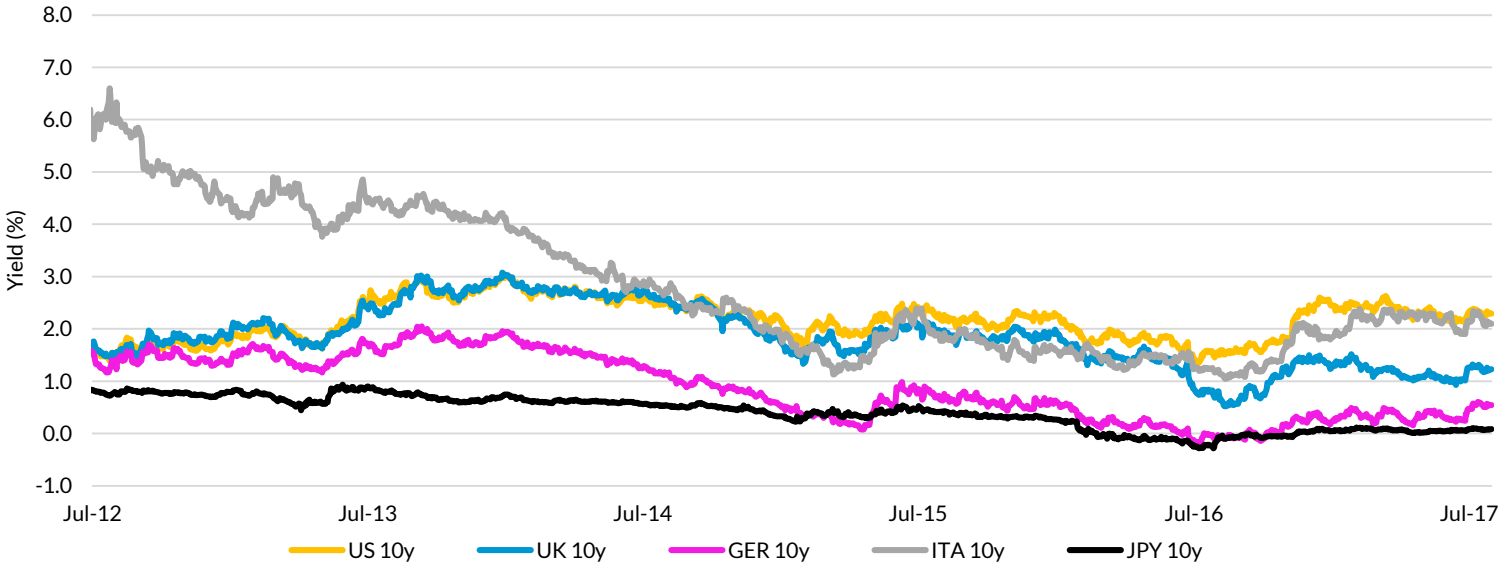


Sources: *Bloomberg and State Street Global Advisors*
Note: *Data as of June 2017*

Relative Attractiveness of US Fixed Income and Ginnie Mae MBS

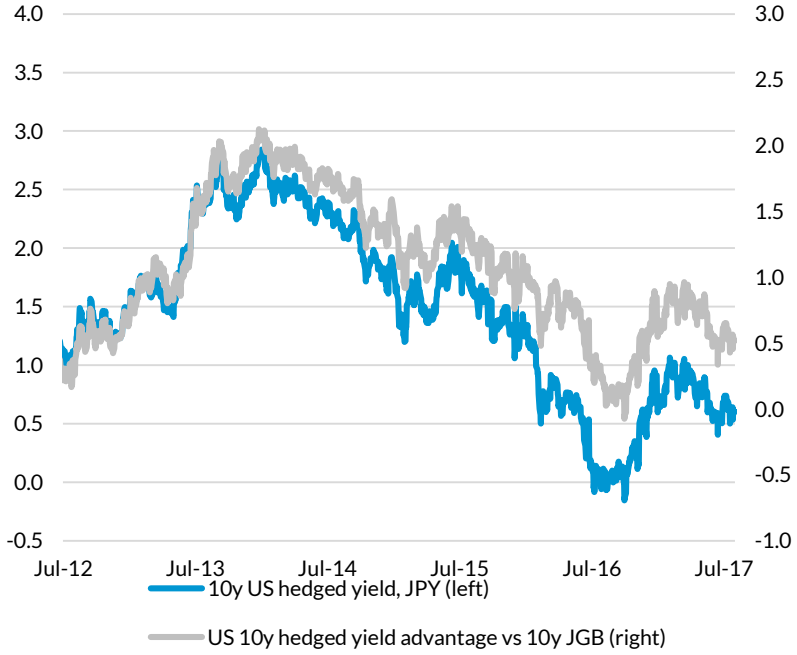
Over the past few years, US Treasury interest rates, as measured by the 10-year note have consistently been the highest in the developed world. After a dip to the level of Italy's 10-year bond yield in April and May, the US 10-year Treasury note edged up to 2.3 percent in June, and stayed at 2.3 percent in July. Interest rates for Italy, Japan, Germany, and the UK stayed relatively consistent from last month, and are currently at 2.1, 0.08, 0.5, and 1.2 percent respectively. If the Treasury notes are hedged into foreign currencies, the US yield advantage stood at 52 basis points (bps) versus the JGB, and -21 bps versus the 10-year Bund in July 2017 . This month showed a decrease of 7 bps versus the JGB and a decrease of 10 bps versus the Bund.

Global 10-year Treasury Yields



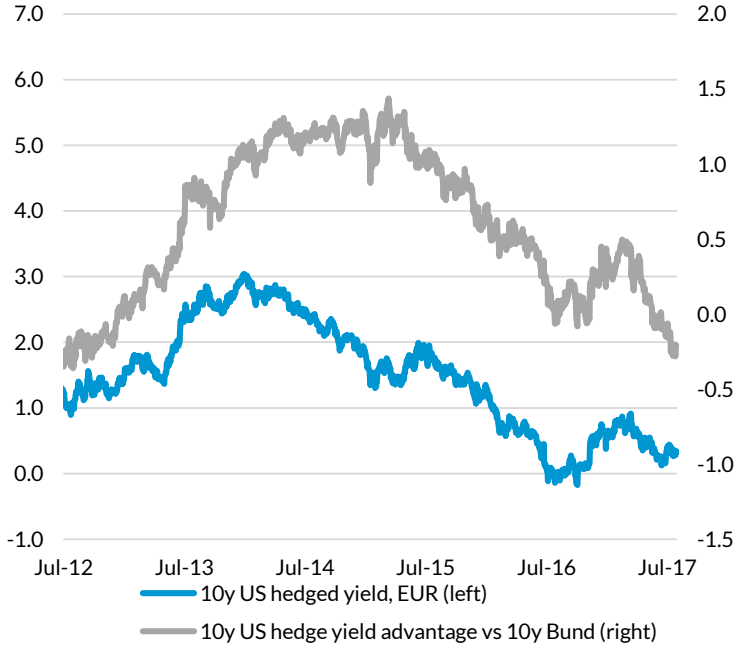
Sources: *Bloomberg and State Street Global Advisors.* ***Note:*** *Data as of July 2017*

10yr US Treasury hedged yield, JPY



Sources: *Bloomberg and State Street Global Advisors.*
Note: *Data as of July 2017*

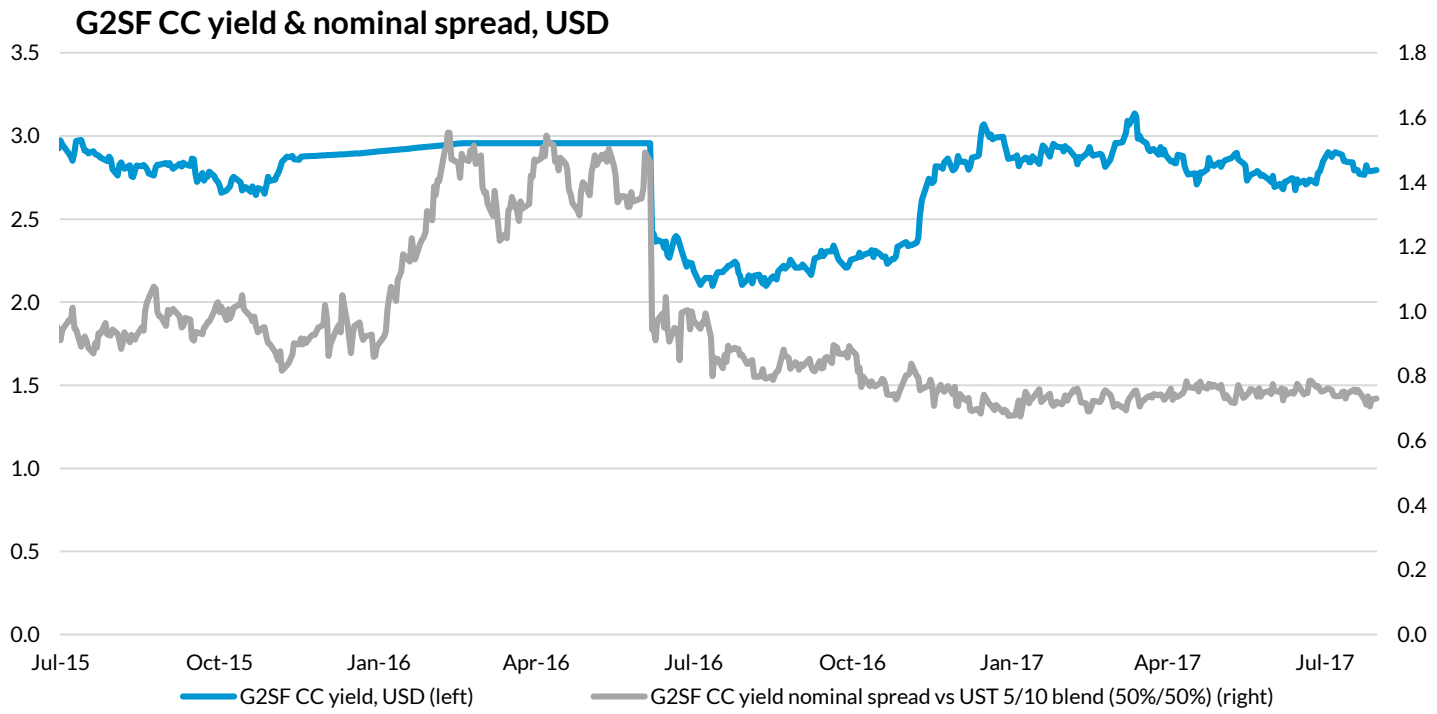
10yr US Treasury hedged yield, EUR



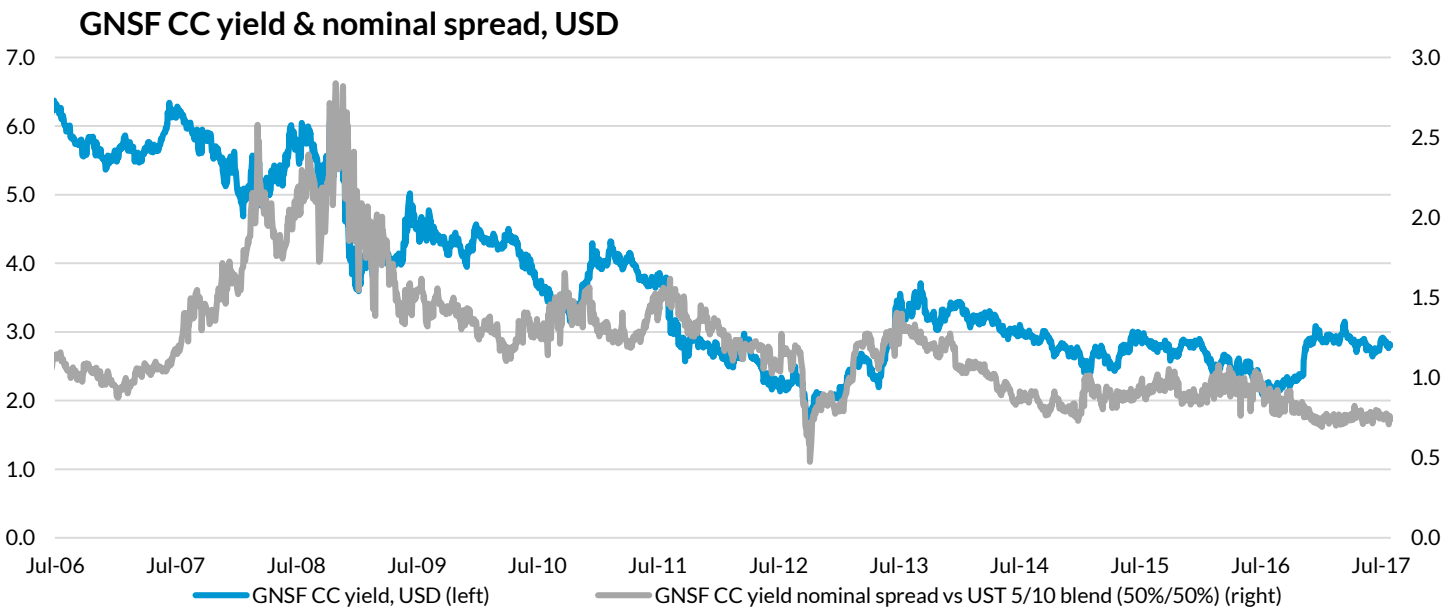
Sources: *Bloomberg and State Street Global Advisors*
Note: *Data as of July 2017*

Relative Attractiveness of US Fixed Income and Ginnie Mae MBS

Ginnie securities outyield their Treasury counterparts (as measured by the average of the 5- and 10-year Treasury yields) – 73 and 74 basis points on G2SF and GNSF, respectively.



Sources: *Bloomberg and State Street Global Advisors.* ***Note:*** *Data as of July 2017*

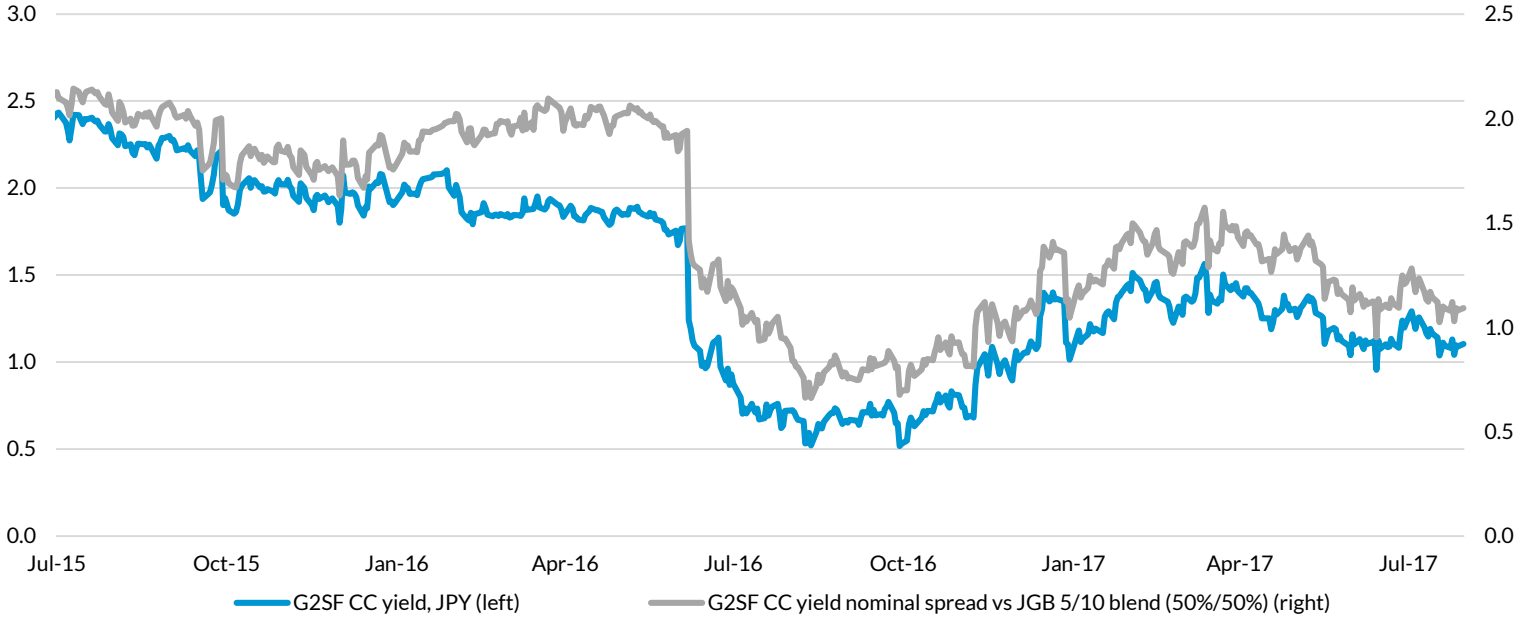


Sources: *Bloomberg and State Street Global Advisors.* ***Note:*** *Data as of July 2017*

Relative Attractiveness of US Fixed Income and Ginnie Mae MBS

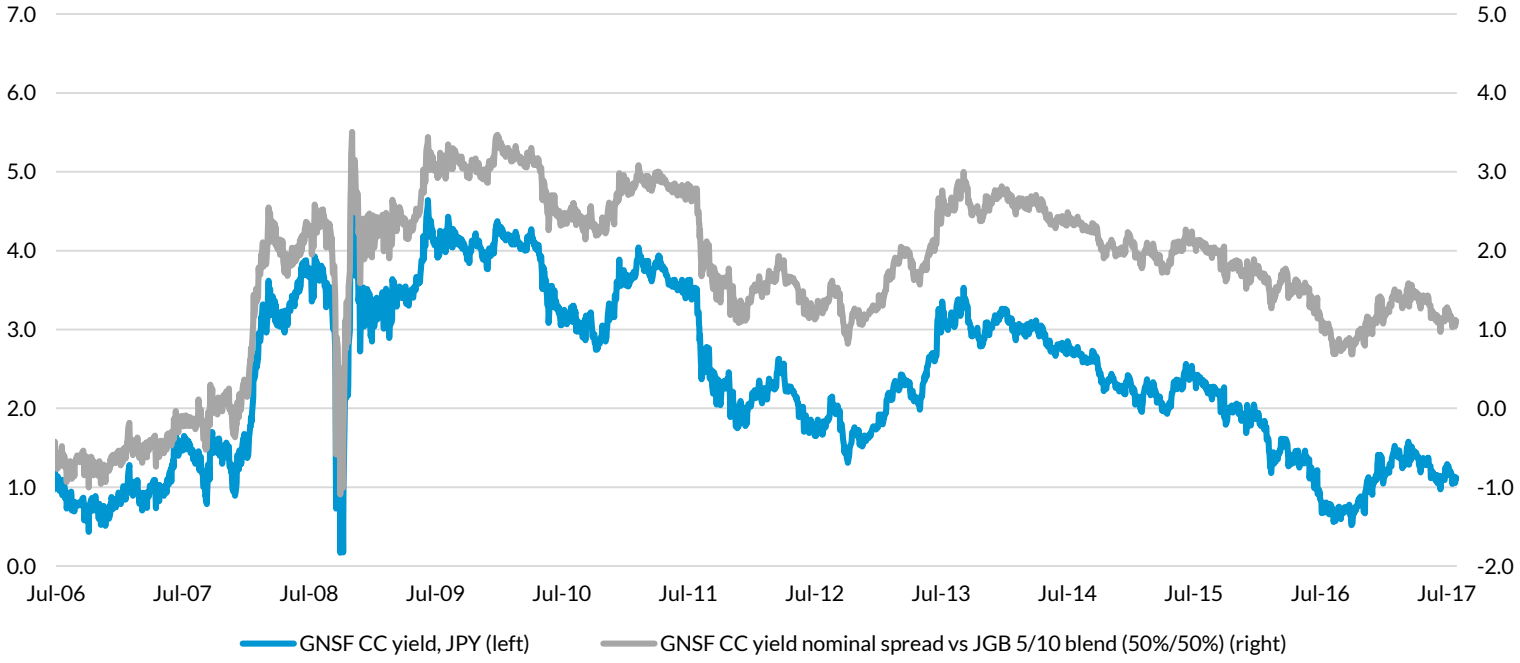
If Ginnie Mae securities are hedged into foreign currencies, they look attractive on a yield basis; handily outyielding the sovereign debt of other countries. This figure shows that G2SF and GNSF hedged into Japanese yen yield more than the JGB 5/10 blend by 109 and 110 basis points, respectively.

G2SF CC yield & nominal spread, JPY



Sources: *Bloomberg and State Street Global Advisors.* ***Note:*** *Data as of July 2017*

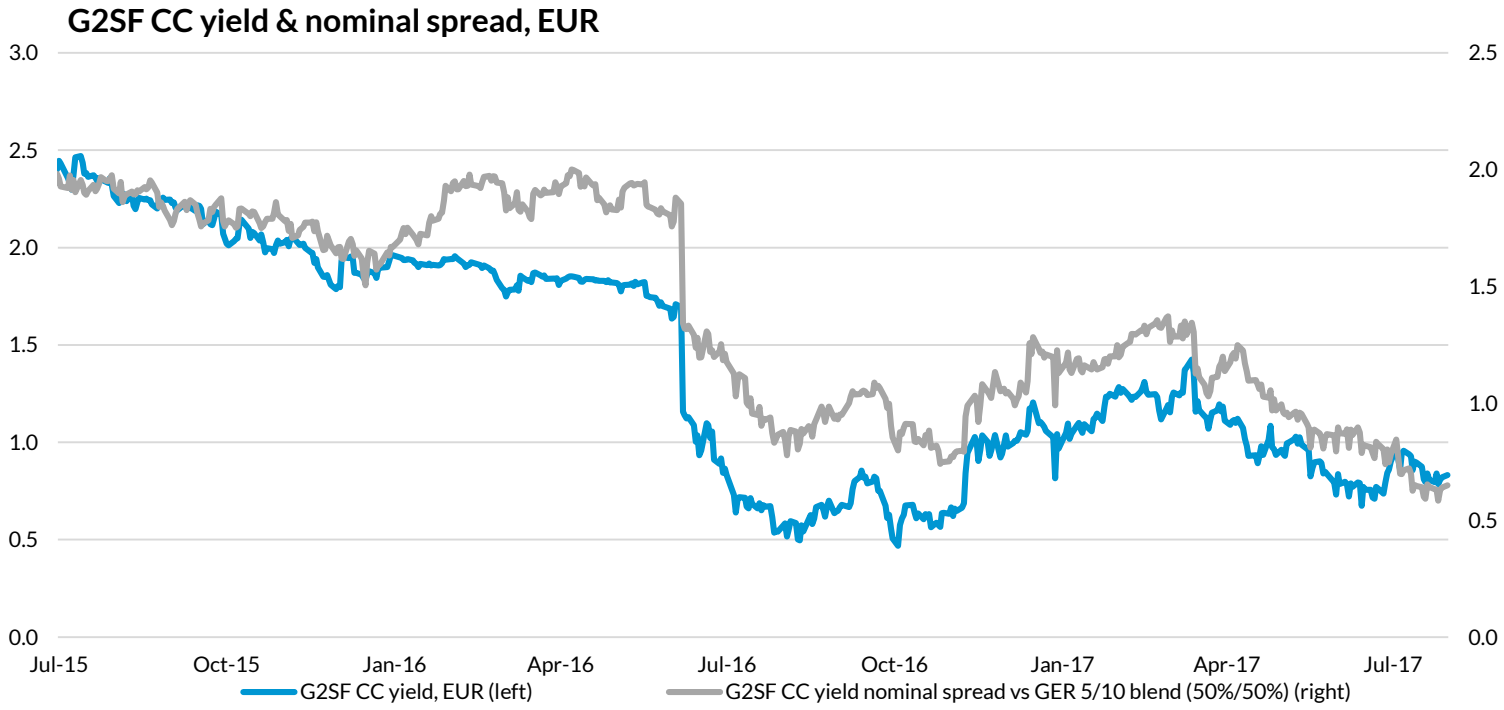
GNSF CC yield & nominal spread, JPY



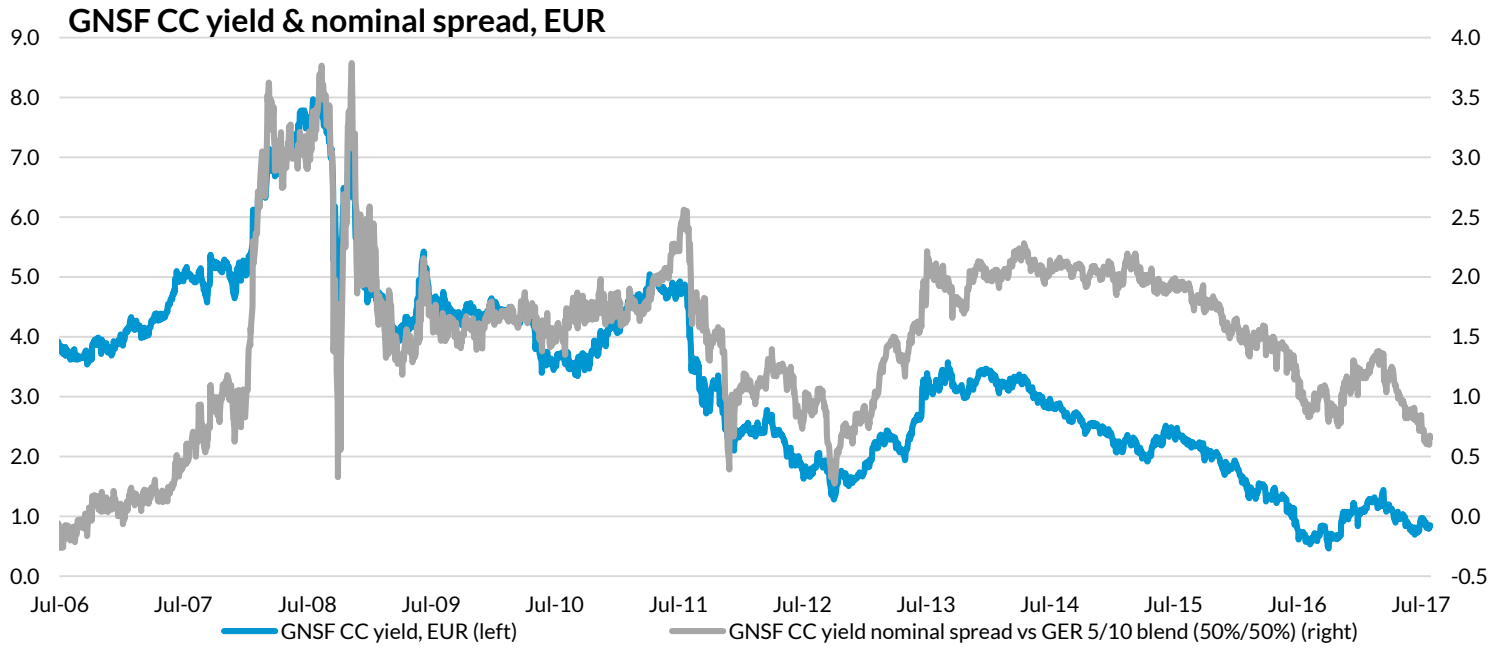
Sources: *Bloomberg and State Street Global Advisors.* ***Note:*** *Data as of July 2017*

Relative Attractiveness of US Fixed Income and Ginnie Mae MBS

If Ginnie Mae securities are hedged into foreign currencies, they look attractive on a yield basis versus sovereign alternatives. This figure shows that G2SF and GNSF hedged with euros yield more than the average of the German 5/10 Bund blend by 65 and 66 basis points, respectively.



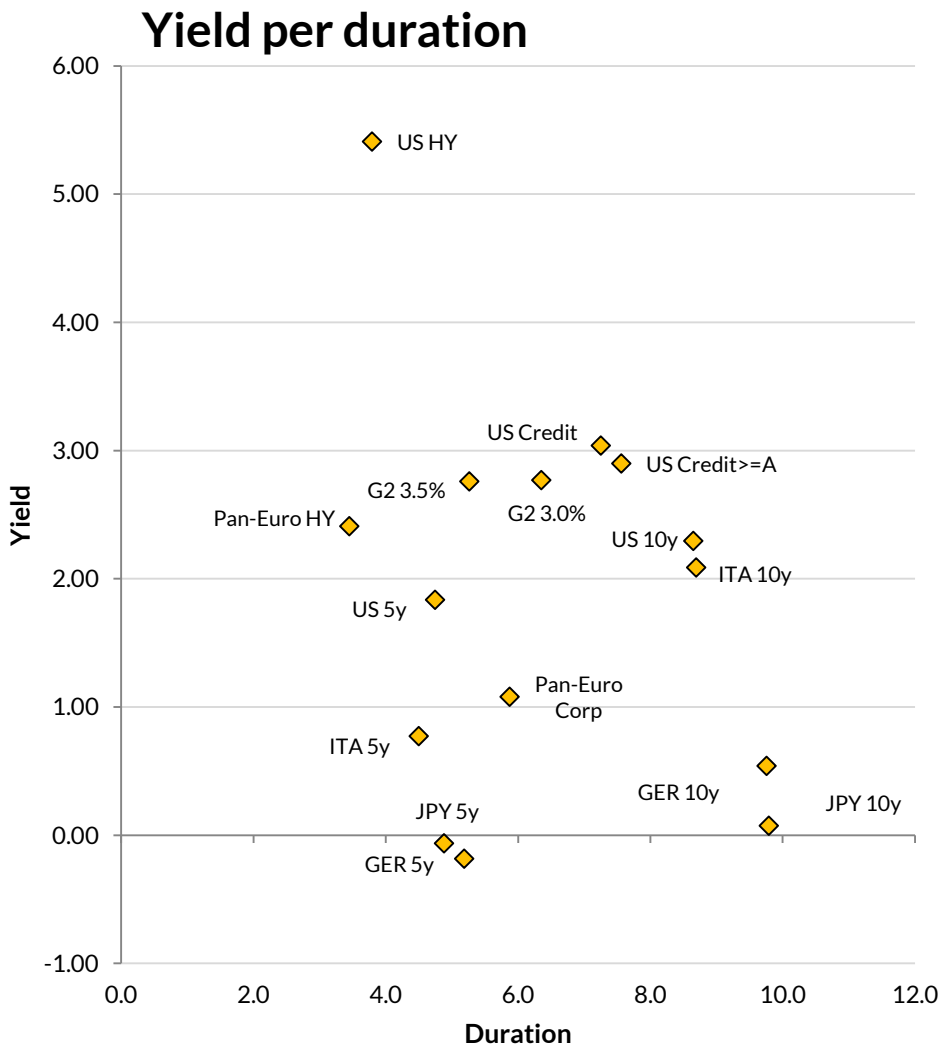
Sources: *Bloomberg and State Street Global Advisors.* ***Note:*** *Data as of July 2017*



Sources: *Bloomberg and State Street Global Advisors.* ***Note:*** *Data as of July 2017*

Relative Attractiveness of US Fixed Income and Ginnie Mae MBS

As interest rates have risen, Ginnie Mae durations have extended by more than a year. Even so, US MBS yields are about the same or higher than most securities with the same or shorter durations. The only exception is the high yield index, where interest rate risk does not fully capture the volatility of the high yield asset class. Investors are unable to match the yield on Ginnie Mae securities, while preserving the full government guarantee, even if they extend their duration significantly.



Security	Duration	Yield
US 5y	4.7	1.84
US 10y	8.7	2.30
GNMA II 3%	6.4	2.77
GNMA II 3.5%	5.3	2.76
JPY 5y	4.9	-0.06
JPY 10y	9.8	0.08
GER 5y	5.2	-0.18
GER 10y	9.8	0.54
ITA 5y	4.5	0.77
ITA 10y	8.7	2.09
US credit	7.3	3.04
US credit >= A	7.6	2.90
US HY	3.8	5.41
Pan-Euro corp	5.9	1.08
Pan-Euro HY	3.5	2.4

Sources: *Bloomberg and State Street Global Advisors.* ***Note:*** *Yields are in base currency of security and unhedged.*
Data as of July 2017.

Relative Attractiveness of US Fixed Income and Ginnie Mae MBS

The average return on the Ginnie Mae index over the past decade has been in line with the US Treasury Index, but lower than many alternatives, including the US Investment-Grade Corporate and US and European High Yield Indices. However, the standard deviation of the Ginnie Mae index is the lowest of any sector, as it has the least price volatility. The result: the excess return per unit of risk for the mortgage market is the highest of any market over the past decade.

	Average Return (Per Month)					
Time Period	US MBS Ginnie Mae	US Treasury	US Credit Corp	Pan Euro Credit Corp	US High Yield*	Pan Euro High Yield*
1 year	0.00	-0.21	0.14	-0.04	0.87	0.63
3 year	0.18	0.18	0.33	0.26	0.45	0.41
5 year	0.13	0.10	0.30	0.35	0.56	0.69
10 year	0.36	0.33	0.49	0.37	0.71	0.77

	Average Excess Return (Per Month)					
Time Period	US MBS Ginnie Mae	US Treasury	US Credit Corp	Pan Euro Credit Corp	US High Yield*	Pan Euro High Yield*
1 year	-0.05	-0.26	0.08	0.03	0.82	0.70
3 year	0.16	0.16	0.30	0.30	0.43	0.46
5 year	0.12	0.08	0.28	0.38	0.54	0.72
10 year	0.32	0.29	0.46	0.33	0.68	0.73

	Standard Deviation					
Time Period	US MBS Ginnie Mae	US Treasury	US Credit Corp	Pan Euro Credit Corp	US High Yield*	Pan Euro High Yield*
1 year	0.58	0.91	1.07	0.96	0.80	0.76
3 year	0.49	1.00	1.18	1.16	1.73	1.44
5 year	0.65	0.89	1.16	1.11	1.51	1.35
10 year	0.76	1.21	1.74	1.46	3.04	3.62

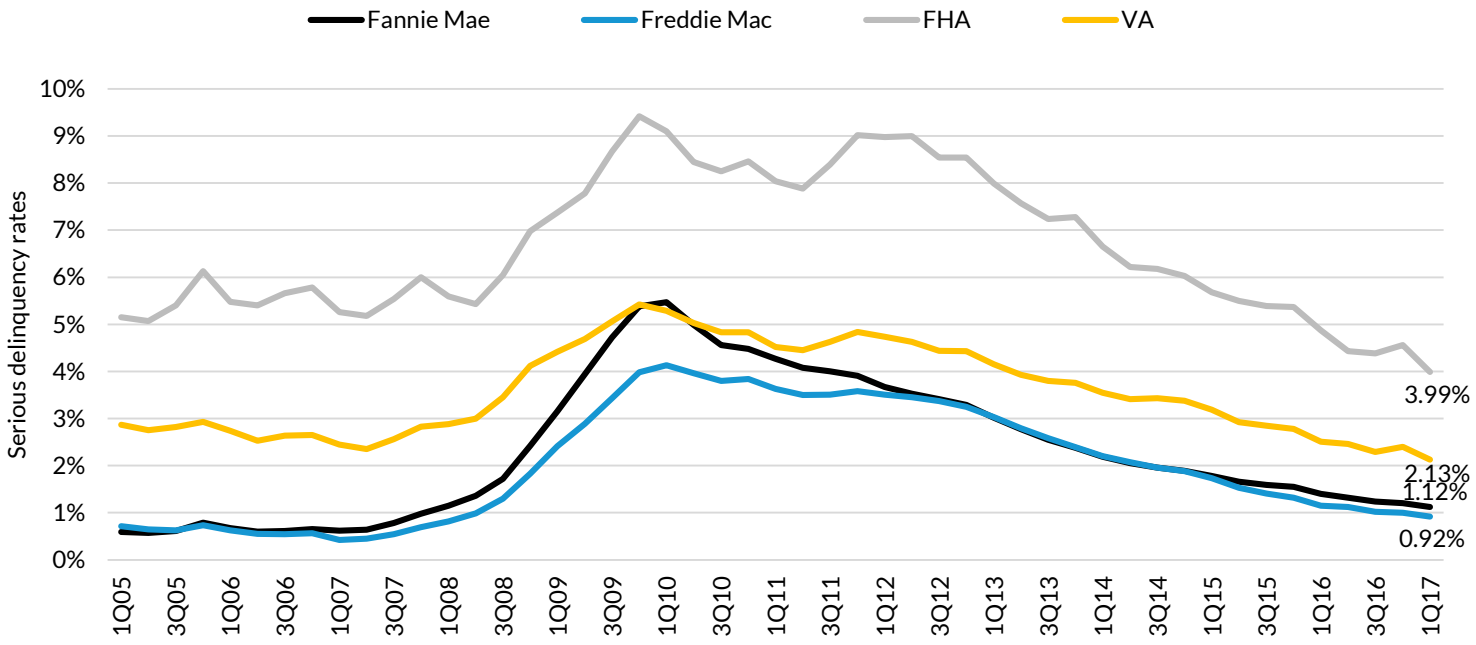
	Sharpe Ratio					
Time Period	US MBS Ginnie Mae	US Treasury	US Credit Corp	Pan Euro Credit Corp	US High Yield	Pan Euro High Yield*
1 year	-0.08	-0.29	0.08	0.03	1.02	0.92
3 year	0.33	0.16	0.26	0.26	0.25	0.32
5 year	0.18	0.09	0.24	0.34	0.36	0.53
10 year	0.42	0.24	0.26	0.23	0.22	0.20

**Assumes 2% capitalization max per issuer on high yield indices*
Sources: *Barclays Indices, Bloomberg and State Street Global Advisors* ***Note:*** *Data as of July 2017*

State of the US Housing Market

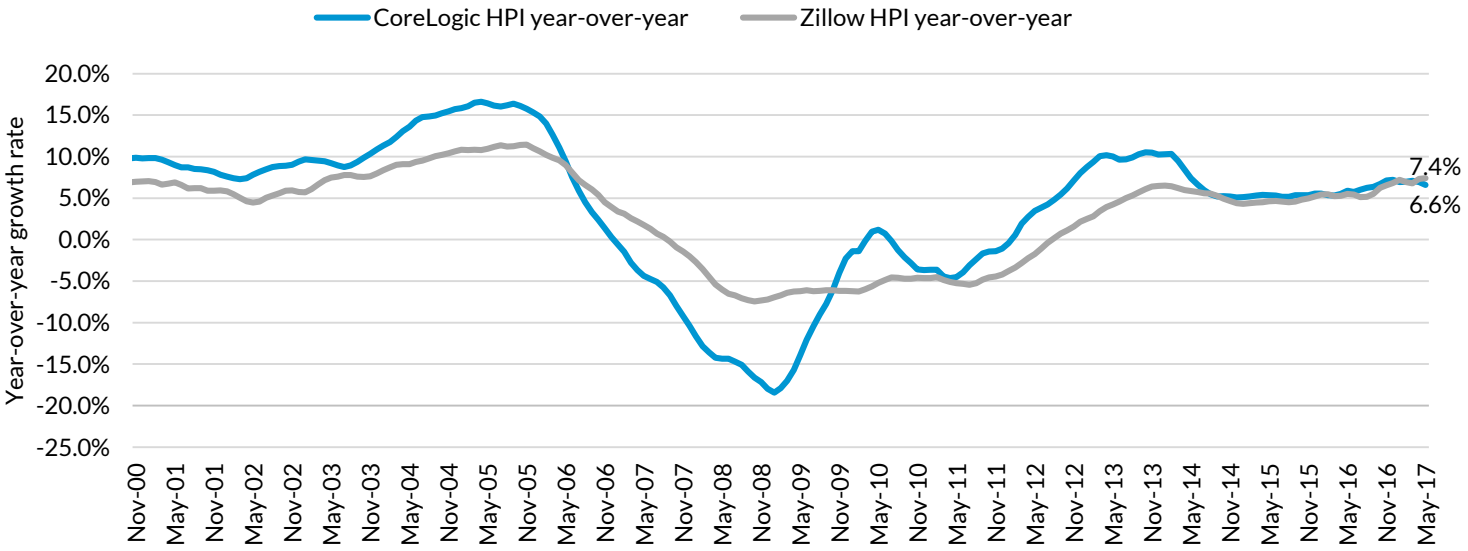
Serious delinquencies for GSE single-family loans continued to decline. After the seasonal upswing in Q4 2016, both FHA and VA delinquencies resumed their decline to 3.99 and 2.13 percent in Q1 2017. GSE delinquencies remain higher relative to 2005-2007, while FHA and VA delinquencies (which are higher than their GSE counterparts) are at levels lower than 2005-2007. Home price changes turned positive in 2012, and continue to increase at around 7 percent per year, as measured by both CoreLogic and Zillow.

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. Data as of Q1 2017.*

National Year-Over-Year HPI Growth



Sources: *CoreLogic, Zillow, and Urban Institute.* ***Note:*** *Data as of May 2017*

State of the US Housing Market

Nationally, the housing market has improved by 47.8 percent since the trough, and needs to increase by another 1.5 percent to achieve peak valuation. However, the picture is very different for different states, with many states well in excess of the prior peak, while Nevada is 38.8 percent below peak levels and Arizona, Connecticut and Florida are 24 percent below peak levels.

	HPI Changes				
State	2000 to Peak	Peak to Trough	Trough to Current	YOY	Current HPI % Below Peak
National	93.7%	-33.3%	47.8%	6.6%	1.5%
Alabama	46.1%	-20.9%	22.8%	5.6%	3.0%
Alaska	68.9%	-9.3%	17.1%	-0.3%	-5.8%
Arizona	121.5%	-50.6%	63.9%	6.1%	23.5%
Arkansas	39.3%	-7.8%	15.1%	5.1%	-5.8%
California	149.0%	-42.5%	70.0%	5.8%	2.4%
Colorado	40.3%	-13.8%	63.1%	9.7%	-28.9%
Connecticut	79.4%	-25.0%	7.7%	1.0%	23.7%
Delaware	90.3%	-24.0%	14.9%	0.4%	14.5%
District of Columbia	150.4%	-10.5%	37.8%	4.2%	-19.0%
Florida	149.2%	-49.7%	61.0%	6.4%	23.5%
Georgia	40.2%	-30.9%	50.2%	5.9%	-3.6%
Hawaii	152.3%	-20.6%	44.1%	6.4%	-12.5%
Idaho	85.7%	-41.1%	66.0%	8.4%	2.2%
Illinois	60.0%	-32.7%	29.1%	4.0%	15.1%
Indiana	24.3%	-16.4%	25.7%	4.9%	-4.8%
Iowa	25.5%	-4.8%	18.3%	3.4%	-11.2%
Kansas	33.2%	-13.8%	23.5%	2.7%	-6.0%
Kentucky	26.9%	-8.9%	17.7%	2.7%	-6.7%
Louisiana	58.3%	-7.7%	22.5%	4.0%	-11.6%
Maine	92.5%	-16.1%	35.3%	2.1%	-11.9%
Maryland	137.7%	-31.2%	19.6%	3.6%	21.5%
Massachusetts	81.8%	-21.4%	37.1%	6.5%	-7.3%
Michigan	26.0%	-43.4%	67.0%	6.8%	5.8%
Minnesota	69.8%	-28.3%	39.5%	5.5%	-0.1%
Mississippi	35.2%	-18.5%	19.9%	3.6%	2.3%
Missouri	46.2%	-22.3%	27.7%	4.7%	0.7%
Montana	80.1%	-16.5%	34.7%	4.9%	-11.1%
Nebraska	25.3%	-5.3%	24.4%	5.2%	-15.2%
Nevada	128.9%	-60.0%	80.3%	7.3%	38.8%
New Hampshire	82.6%	-24.0%	28.3%	6.0%	2.5%
New Jersey	109.6%	-26.5%	13.7%	2.4%	19.6%
New Mexico	64.5%	-26.7%	20.2%	3.8%	13.5%
New York	102.3%	-13.8%	30.5%	7.5%	-11.1%
North Carolina	39.5%	-14.6%	25.7%	5.5%	-6.8%
North Dakota	49.5%	-2.0%	45.7%	2.8%	-29.9%
Ohio	22.1%	-20.7%	24.4%	1.8%	1.4%
Oklahoma	35.6%	-3.2%	14.1%	1.7%	-9.4%
Oregon	87.5%	-29.4%	65.0%	9.0%	-14.2%
Pennsylvania	71.6%	-12.8%	14.4%	3.7%	0.2%
Rhode Island	131.0%	-34.7%	26.9%	4.2%	20.7%
South Carolina	61.4%	-22.2%	30.7%	4.6%	-1.6%
South Dakota	37.3%	-3.6%	25.8%	0.8%	-17.6%
Tennessee	41.0%	-13.5%	30.2%	4.2%	-11.2%
Texas	39.3%	-13.2%	44.9%	4.9%	-20.5%
Utah	64.7%	-31.8%	59.9%	10.4%	-8.2%
Vermont	81.2%	-9.0%	10.7%	2.6%	-0.8%
Virginia	135.2%	-30.7%	29.1%	2.4%	11.7%
Washington	90.1%	-28.2%	63.7%	12.6%	-14.9%
West Virginia	78.1%	-30.1%	17.2%	-1.2%	22.0%
Wisconsin	48.5%	-17.3%	23.5%	5.5%	-2.1%
Wyoming	75.9%	-14.9%	22.7%	-2.2%	-4.2%

Sources: *CoreLogic and Urban Institute.* ***Note:*** *HPI data as of May 2017. Negative sign indicates that state is above earlier peak. Peak refers to the month when HPI reached the highest level for each state/US during the housing boom period, ranging from 09/2005 to 09/2008. Trough represents the month when HPI fell to the lowest level for each state/US after the housing bust, ranging from 01/2009 to 03/2012. Current is 05/2017, the latest HPI data period.*

State of the US Housing Market

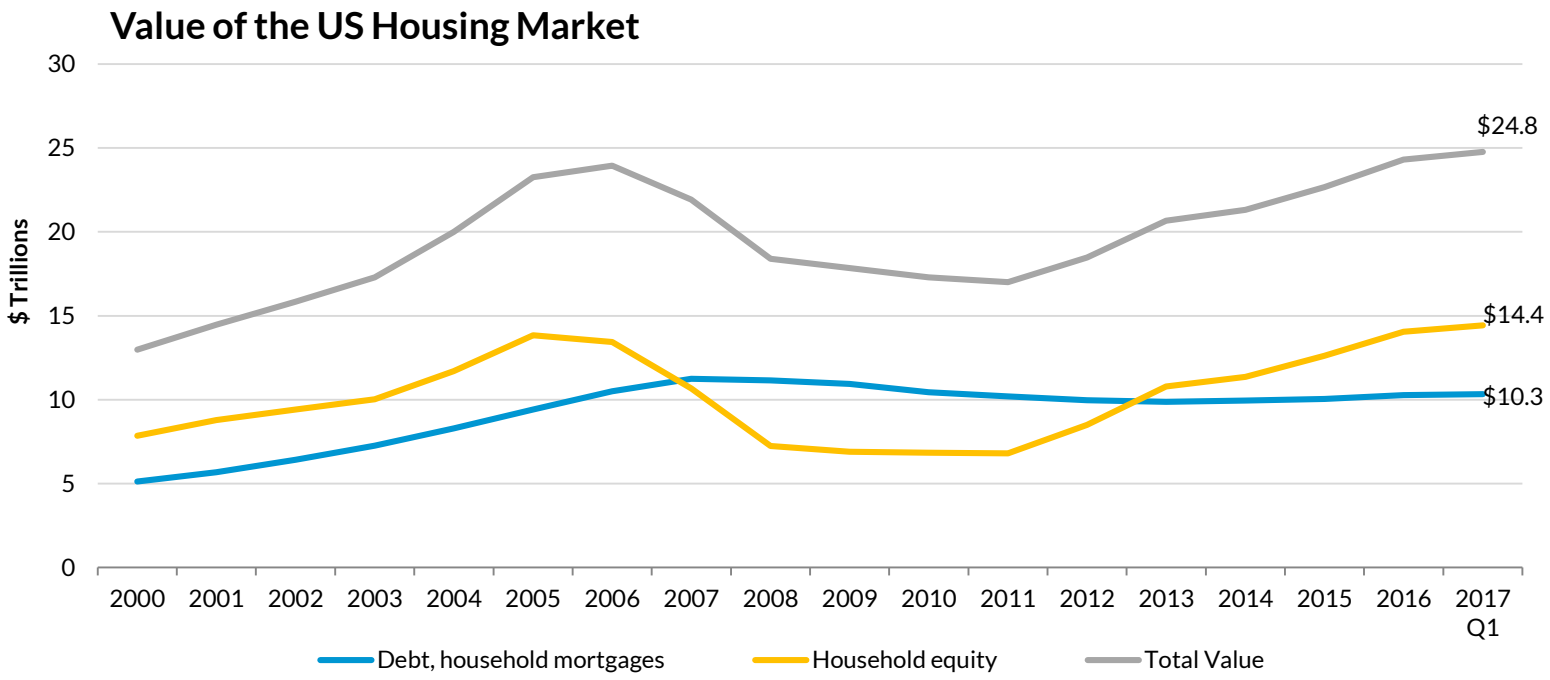
Ginnie Mae loans constitute 32.9 percent of outstanding agency issuance by loan balance, 33.3 percent of the issuance over the past year. However, the Ginnie Mae share varies widely across states, with the share of outstandings (as measured by loan balance) as low as 18.2 percent in the District of Columbia and as high as 53.3 percent in Mississippi. In general, the Ginnie Mae share is higher in states with lower home prices.

State	Agency Issuance (past 1 year)			Agency Outstanding		
	Ginnie Mae Share	Ginnie Mae Average Loan Size (Thousands)	GSE Average Loan Size (Thousands)	Ginnie Mae Share	Ginnie Mae Average Loan Size (Thousands)	GSE Average Loan Size (Thousands)
National	33.3%	210.6	229.5	32.9%	174.2	205.4
Alabama	46.0%	158.7	180.2	48.0%	139.9	166.6
Alaska	53.3%	280.3	243.5	52.5%	252.4	225.4
Arizona	37.3%	201.4	206.3	35.7%	171.4	187.2
Arkansas	43.4%	140.1	166.1	47.8%	120.8	151.0
California	26.9%	335.3	321.7	22.6%	276.8	288.3
Colorado	32.1%	263.1	256.2	31.5%	218.9	230.7
Connecticut	30.8%	214.0	228.0	30.0%	202.5	217.1
Delaware	40.1%	212.6	219.6	37.9%	196.5	205.8
District of Columbia	17.5%	401.8	360.8	18.2%	317.8	329.9
Florida	39.8%	200.3	199.1	37.2%	167.4	181.5
Georgia	41.5%	177.4	204.4	41.5%	151.0	183.3
Hawaii	39.7%	480.2	371.3	31.7%	407.4	341.1
Idaho	35.8%	184.3	188.7	36.1%	157.7	171.2
Illinois	24.6%	175.6	201.3	25.5%	153.1	181.8
Indiana	39.6%	137.6	156.2	40.5%	119.9	139.6
Iowa	24.7%	142.1	164.2	27.8%	123.1	146.6
Kansas	34.9%	150.1	173.8	38.0%	130.6	154.6
Kentucky	40.6%	146.0	166.1	40.9%	131.3	148.0
Louisiana	42.6%	167.8	189.5	44.5%	148.6	175.3
Maine	35.7%	180.7	195.7	33.2%	164.4	178.5
Maryland	44.5%	281.6	266.5	40.2%	248.6	244.9
Massachusetts	21.7%	277.8	276.7	19.9%	248.0	251.9
Michigan	26.4%	141.8	168.2	27.6%	121.1	149.2
Minnesota	25.4%	190.5	205.0	26.5%	166.5	187.3
Mississippi	49.4%	148.0	169.7	53.3%	129.9	156.1
Missouri	35.0%	148.4	173.2	37.3%	130.6	154.0
Montana	31.5%	206.8	208.1	32.6%	178.5	188.0
Nebraska	32.1%	157.0	167.9	37.0%	132.4	150.9
Nevada	43.6%	222.6	214.3	42.0%	189.8	192.8
New Hampshire	32.4%	223.5	218.8	30.7%	205.3	198.9
New Jersey	29.3%	248.4	267.0	28.6%	231.1	246.8
New Mexico	44.6%	175.1	185.1	44.7%	154.5	171.2
New York	26.6%	238.6	263.9	27.1%	201.7	239.8
North Carolina	35.0%	175.3	200.2	36.9%	152.2	182.2
North Dakota	27.1%	206.0	203.0	27.5%	176.2	182.4
Ohio	36.9%	138.3	156.7	38.8%	123.7	142.4
Oklahoma	46.4%	149.9	169.2	51.1%	129.2	155.0
Oregon	27.6%	237.0	245.0	26.4%	203.3	215.9
Pennsylvania	34.5%	166.4	193.3	34.6%	150.6	178.9
Rhode Island	37.0%	213.8	215.0	34.4%	196.8	200.7
South Carolina	40.4%	178.0	190.8	39.8%	155.1	175.1
South Dakota	35.7%	171.1	181.4	37.9%	151.8	161.7
Tennessee	42.1%	172.4	194.2	44.2%	146.6	174.8
Texas	35.9%	186.9	208.8	39.8%	148.2	187.5
Utah	32.0%	222.0	235.7	33.6%	195.3	213.1
Vermont	23.6%	195.0	194.1	19.9%	179.9	180.8
Virginia	45.3%	275.7	264.8	42.3%	239.7	242.2
Washington	31.8%	264.6	267.5	31.4%	225.6	237.4
West Virginia	47.6%	153.4	154.5	46.1%	137.0	145.8
Wisconsin	21.6%	161.2	175.2	22.1%	144.7	159.0
Wyoming	41.3%	207.7	207.7	42.4%	190.9	193.1

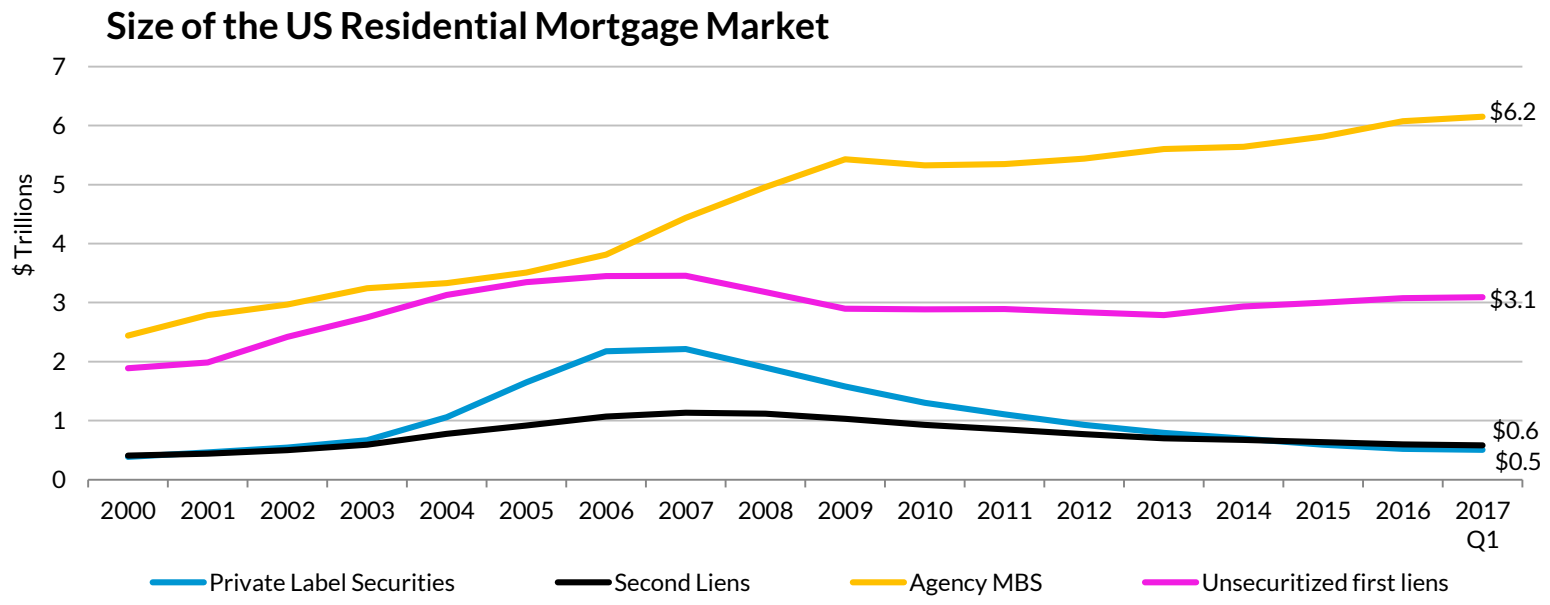
Sources: *eMBS and Urban Institute.* ***Note:*** *Ginnie Mae share are based on loan balance as of June 2017.*

State of the US Housing Market

The Federal Reserve's Flow of Funds report has consistently indicated an increasing total value of the housing market driven by growing household equity since 2012, and 2017 Q1 was no different. While total debt and mortgages was stable at $10.3 trillion, household equity reached a new high of $14.4 trillion, bringing the total value of the housing market to $24.8 trillion, surpassing the pre-crisis peak of $23.9 trillion in 2006. Agency MBS make up 59.5 percent of the total mortgage market, private-label securities make up 4.9 percent, and unsecuritized first liens at the GSEs, commercial banks, savings institutions, and credit unions make up 29.9 percent. Second liens comprise the remaining 5.7 percent of the total.



Sources: *Federal Reserve Flow of Funds and Urban Institute. Data as of Q1 2017.*

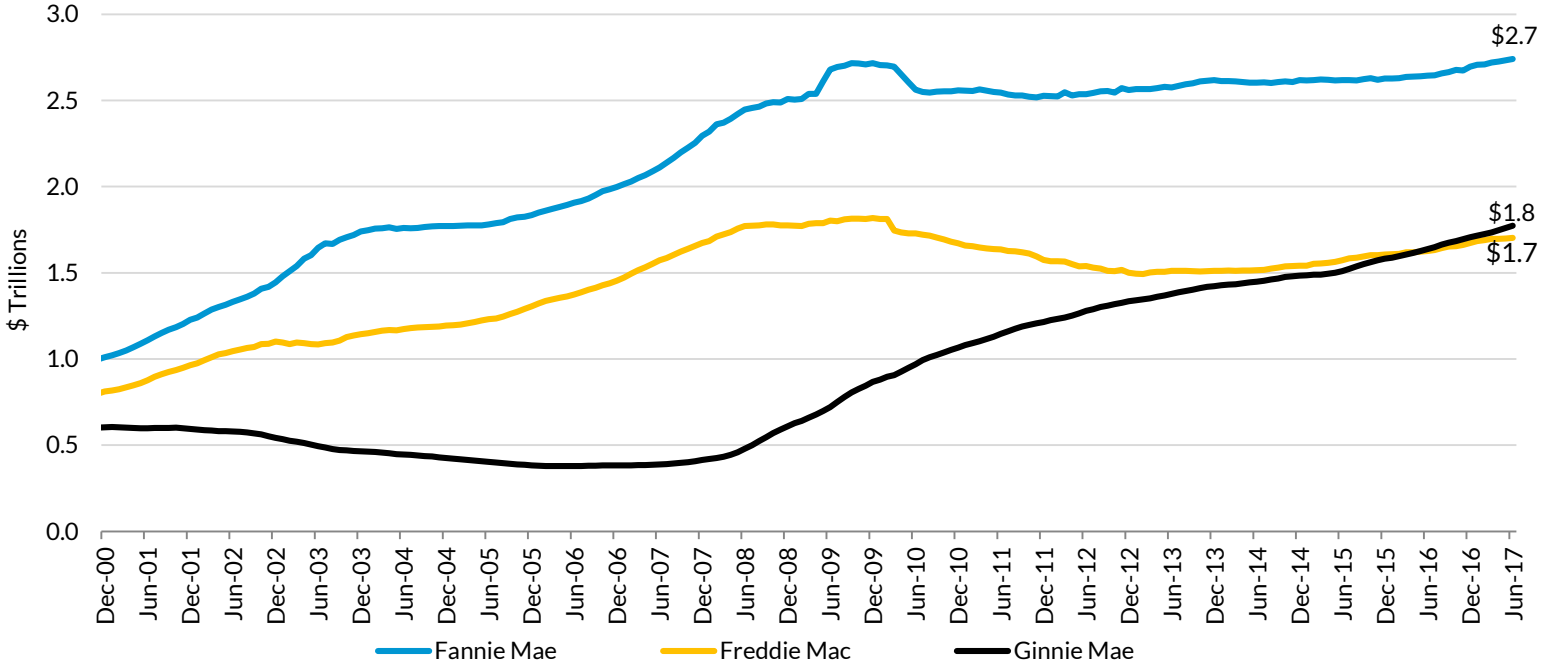


Sources: *Federal Reserve Flow of Funds, Inside Mortgage Finance, Fannie Mae, Freddie Mac, eMBS and Urban Institute.*
Note: *Unsecuritized first liens includes loans held by commercial banks, GSEs, savings institutions, and credit unions. Data as of Q1 2017.*

State of the US Housing Market

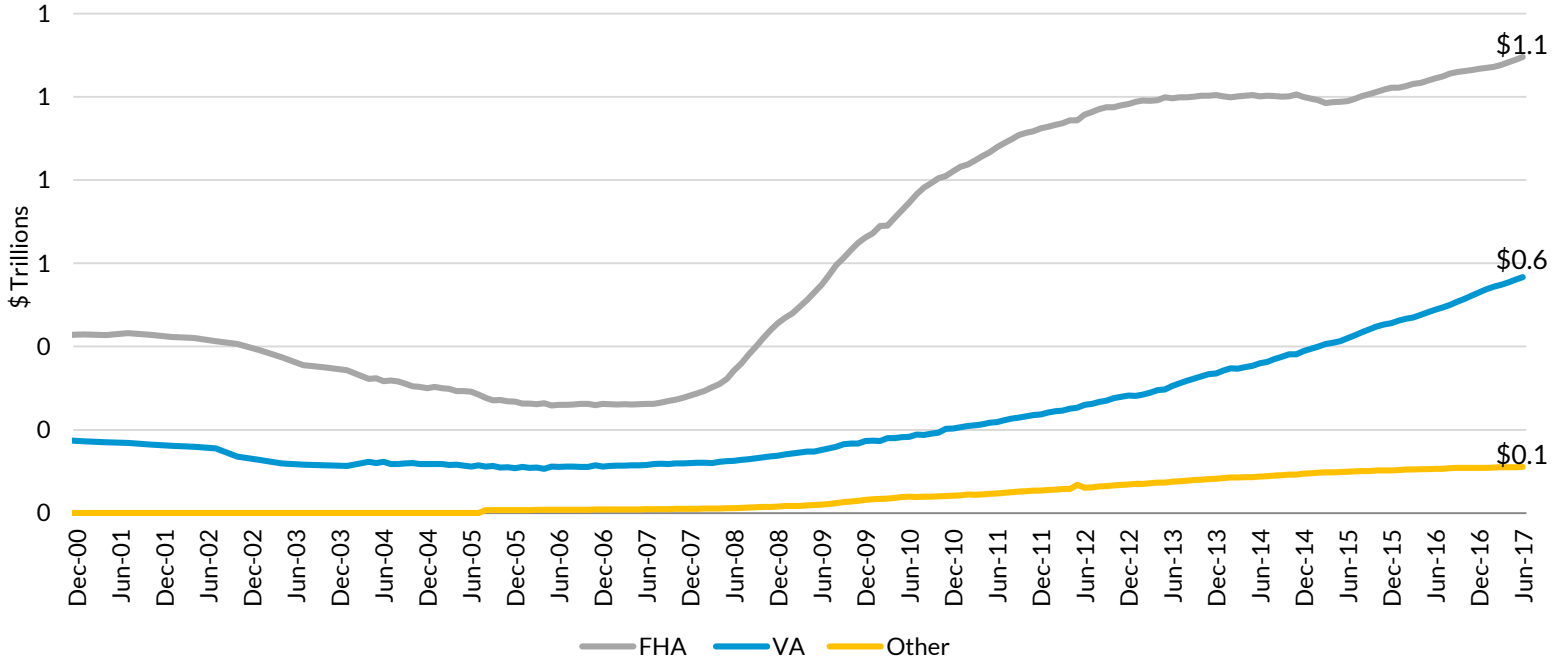
As of June 2017, outstanding securities in the agency market totaled $6.22 trillion and were 44.1 percent Fannie Mae, 27.4 percent Freddie Mac, and 28.5 percent Ginnie Mae. Ginnie Mae now has more outstandings than Freddie Mac. Within the Ginnie Mae market, VA has been growing very rapidly--comprising 32.0 percent of total Ginnie Mae outstandings.

Outstanding Agency Mortgage-Backed Securities



Sources: *eMBS and Urban Institute* **Note:** *Data as of June 2017*

Outstanding Ginnie Mae Mortgage-Backed Securities

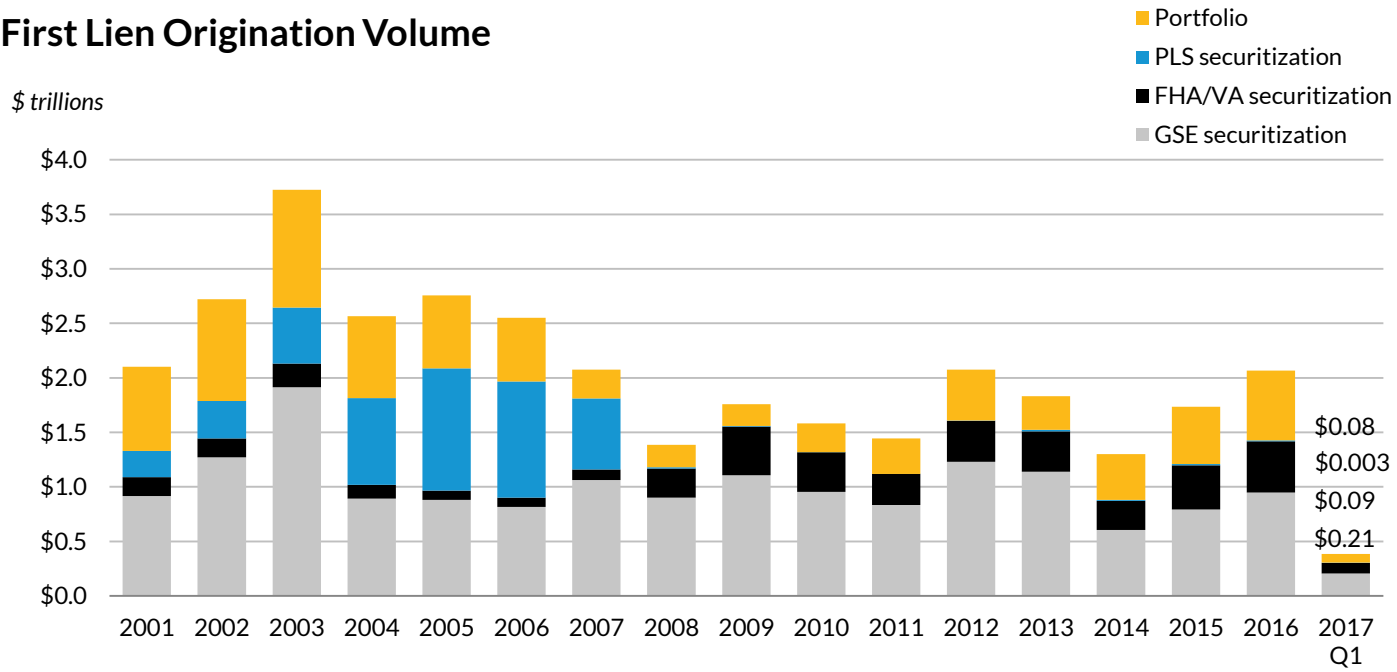


Sources: *eMBS and Urban Institute.* **Note:** *Data as of June 2017*

State of the US Housing Market

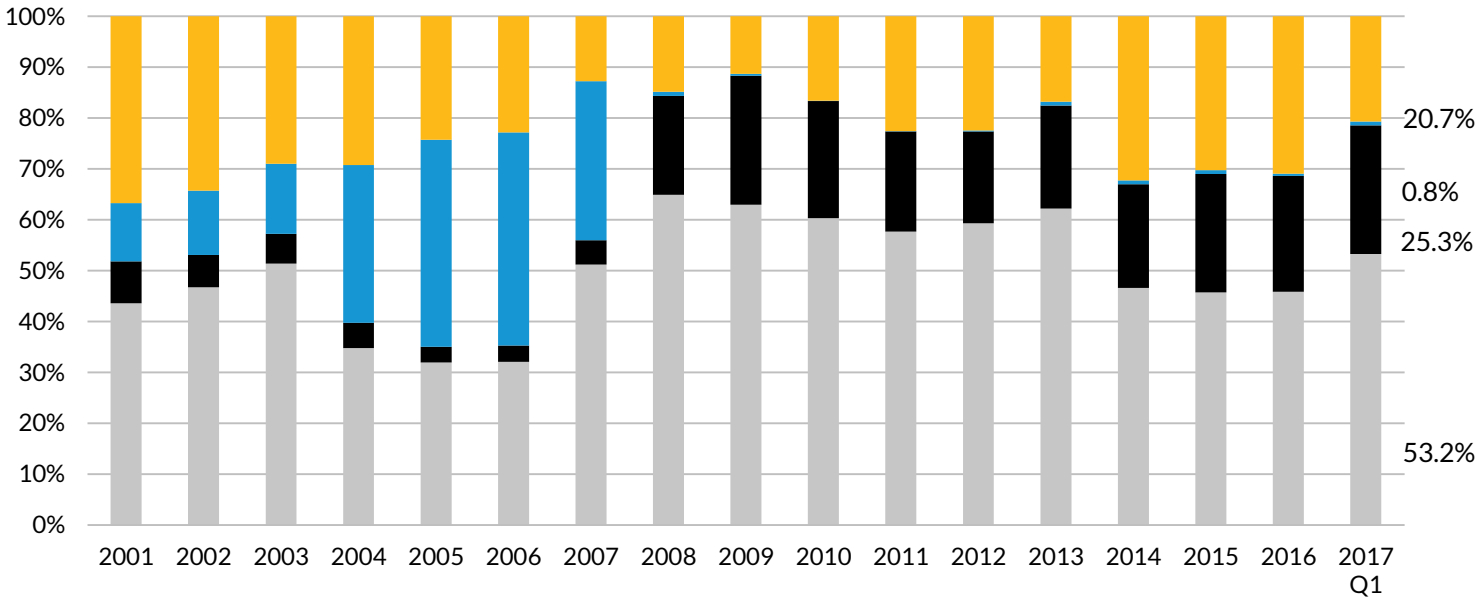
After a record high origination year in 2016 ($2.1 trillion), the first lien originations totaled $385 billion in the first quarter of 2017, mostly due to the increase in interest rates and traditionally low winter activity. The share of portfolio originations was 21 percent, down sharply from 31 percent in 2016. The GSE share went up to 53 percent, from 46 percent for 2016. The FHA/VA share was slightly up: 25 percent in Q1 2017 versus 23 percent in 2016. Origination of private-label securities was well under 1 percent in both periods.

First Lien Origination Volume



Sources: *Inside Mortgage Finance and Urban Institute.* ***Note:*** *Data as of Q1 2017.*

First Lien Origination Share



Sources: *Inside Mortgage Finance and Urban Institute.* ***Note:*** *Data as of Q1 2017.*

US Agency Market, Originations

Agency gross issuance totaled $1,273.7 billion in the first half of 2017, a 2.5 percent increase from the same, very sluggish period last year. Ginnie Mae gross issuance is down by -0.8 percent, while GSE gross issuance is up by 4.4 percent. Within the Ginnie Mae market, FHA is up by 1.1 percent while VA origination is down by 5.0 percent. As a result of higher rates, origination in 2017 is expected to be down substantially compared to 2016.

Agency Gross Issuance					
Issuance Year	Fannie Mae	Freddie Mac	GSE Total	Ginnie Mae	Total Agency
2000	$202.8	$157.9	$360.6	$102.2	$462.8
2001	$506.9	$378.2	$885.1	$171.5	$1,056.6
2002	$710.0	$529.0	$1,238.9	$169.0	$1,407.9
2003	$1,174.4	$700.5	$1,874.9	$213.1	$2,088.0
2004	$517.5	$355.2	$872.6	$119.2	$991.9
2005	$514.1	$379.9	$894.0	$81.4	$975.3
2006	$500.2	$352.9	$853.0	$76.7	$929.7
2007	$633.0	$433.3	$1,066.2	$94.9	$1,161.1
2008	$562.7	$348.7	$911.4	$267.6	$1,179.0
2009	$817.1	$462.9	$1,280.0	$451.3	$1,731.3
2010	$626.6	$377.0	$1,003.5	$390.7	$1,394.3
2011	$578.2	$301.2	$879.3	$315.3	$1,194.7
2012	$847.6	$441.3	$1,288.8	$405.0	$1,693.8
2013	$749.9	$426.7	$1,176.6	$393.6	$1,570.2
2014	$392.9	$258.0	$650.9	$296.3	$947.2
2015	$493.9	$351.9	$845.7	$436.3	$1,282.0
2016	$600.5	$391.1	$991.6	$508.2	$1,499.8
2017 YTD	$258.0	$159.1	$417.1	$219.7	$636.8
2017 %Change YOY	6.4%	1.2%	4.4%	-0.8%	2.5%
2017 Ann.	$516.0	$318.3	$834.3	$439.4	$1,273.7

Ginnie Mae Breakdown: Agency Gross Issuance				
Issuance Year	FHA	VA	Other	Total Agency
2000	$80.2	$18.8	$3.2	$102.2
2001	$133.8	$34.7	$3.1	$171.5
2002	$128.6	$37.9	$2.5	$169.0
2003	$147.9	$62.7	$2.5	$213.1
2004	$85.0	$31.8	$2.5	$119.2
2005	$55.7	$23.5	$2.1	$81.4
2006	$51.2	$23.2	$2.3	$76.7
2007	$67.7	$24.2	$3.0	$94.9
2008	$221.7	$39.0	$6.9	$267.6
2009	$359.9	$74.6	$16.8	$451.3
2010	$304.9	$70.6	$15.3	$390.7
2011	$216.1	$82.3	$16.9	$315.3
2012	$253.4	$131.3	$20.3	$405.0
2013	$239.2	$132.2	$22.2	$393.6
2014	$163.9	$111.4	$21.0	$296.3
2015	$261.5	$155.6	$19.2	$436.3
2016	$281.8	$206.5	$19.9	$508.2
2017 YTD	$127.9	$82.1	$9.7	$219.7
2017 %Change YOY	1.1%	-5.0%	13.1%	-0.8%
2017 Ann.	$255.7	$164.2	$19.5	$439.4

Sources: *eMBS and Urban Institute (top and bottom).*
Note : *Dollar amounts are in billions. Annualized figure based on data from June 2017. "Other" refers to loans insured by HUD's Office of Public and Indian Housing and the Department of Agriculture's Rural Development. All data is as of June 2017.*

US Agency Market, Originations

Agency net issuance totaled $140.4 billion for the first six months of 2017, up 51.4 percent over the same period last year. Ginnie Mae net issuance was $67.0 billion, comprising 47.7 percent of total agency net issuance. Note that Ginnie Mae net issuance is up 16.6 percent versus the same time last year. Ginnie Mae net issuance is comprised of 55.4 percent VA issuance, 41.4 percent FHA issuance and 3.3 percent other issuance.

Agency Net Issuance

Issuance Year	Fannie Mae	Freddie Mac	GSE Total	Ginnie Mae	Total Agency
2000	$92.0	$67.8	$159.8	$29.3	$189.1
2001	$216.6	$151.8	$368.4	-$9.9	$358.5
2002	$218.9	$138.3	$357.2	-$51.2	$306.1
2003	$293.7	$41.1	$334.9	-$77.6	$257.3
2004	$32.3	$50.2	$82.5	-$40.1	$42.4
2005	$62.5	$111.7	$174.2	-$42.2	$132.0
2006	$164.3	$149.3	$313.6	$0.2	$313.8
2007	$296.1	$218.8	$514.9	$30.9	$545.7
2008	$213.0	$101.8	$314.8	$196.4	$511.3
2009	$208.1	$42.5	$250.6	$257.4	$508.0
2010	-$156.4	-$146.8	-$303.2	$198.3	-$105.0
2011	-$32.6	-$95.8	-$128.4	$149.6	$21.2
2012	$32.9	-$75.3	-$42.4	$119.1	$76.8
2013	$57.5	$11.6	$69.1	$87.9	$157.0
2014	$0.5	$30.0	$30.5	$61.6	$92.1
2015	$10.2	$65.0	$75.1	$97.3	$172.5
2016	$68.6	$66.8	$135.5	$124.9	$260.4
2017 YTD	$44.5	$28.9	$73.4	$67.0	$140.4
2017 %Change YOY	183.9%	47.3%	108.0%	16.6%	51.4%
2017 Ann.	$89.0	$57.8	$146.8	$134.0	$280.8

Ginnie Mae Breakdown: Net Issuance

Issuance Year	FHA	VA	Other	Total
2000	$29.0	$0.3	$0.0	$29.3
2001	$0.7	-$10.6	$0.0	-$9.9
2002	-$22.5	-$28.7	$0.0	-$51.2
2003	-$56.5	-$21.1	$0.0	-$77.6
2004	-$45.2	$5.1	$0.0	-$40.1
2005	-$37.3	-$12.1	$7.2	-$42.2
2006	-$4.7	$3.8	$1.2	$0.2
2007	$20.2	$8.7	$2.0	$30.9
2008	$173.3	$17.7	$5.4	$196.4
2009	$206.4	$35.1	$15.8	$257.4
2010	$158.6	$29.6	$10.0	$198.3
2011	$102.8	$34.0	$12.8	$149.6
2012	$58.9	$45.9	$14.3	$119.1
2013	$20.7	$53.3	$13.9	$87.9
2014	-$4.8	$53.9	$12.5	$61.6
2015	$22.5	$66.9	$7.9	$97.3
2016	$45.6	$73.2	$6.0	$124.9
2017 YTD	$27.8	$37.1	$2.2	$67.0
2017 %Change YOY	25.4%	15.5%	-32.4%	16.6%
2017 Ann.	$55.6	$74.1	$4.4	$134.0

Sources: *eMBS and Urban Institute (top and bottom)*

Note : *Dollar amounts are in billions. Annualized figure based on data from June 2017. "Other" refers to loans insured by HUD's Office of Public and Indian Housing and the Department of Agriculture's Rural Development. All data is as of June 2017.*

US Agency Market, Originations

With the winter season and elevated mortgage rates since the election, monthly agency issuance has been declining in the first half of 2017. Freddie Mac gross issuance was cut substantially from 39 billion in January 2017 to 25 billion in June 2017. Fannie Mae's gross issuance dropped from 56 to 46 billion. Less dependent on refinances, Ginnie Mae gross issuance fell less from 43 to 40 billion in the same period, driving its share up to 36 percent in June 2017. Despite the variability in gross issuance, Ginnie Mae net issuance is relatively constant; 11.2 billion per month for the first six months of 2017, versus 9.6 billion per month in 2016.

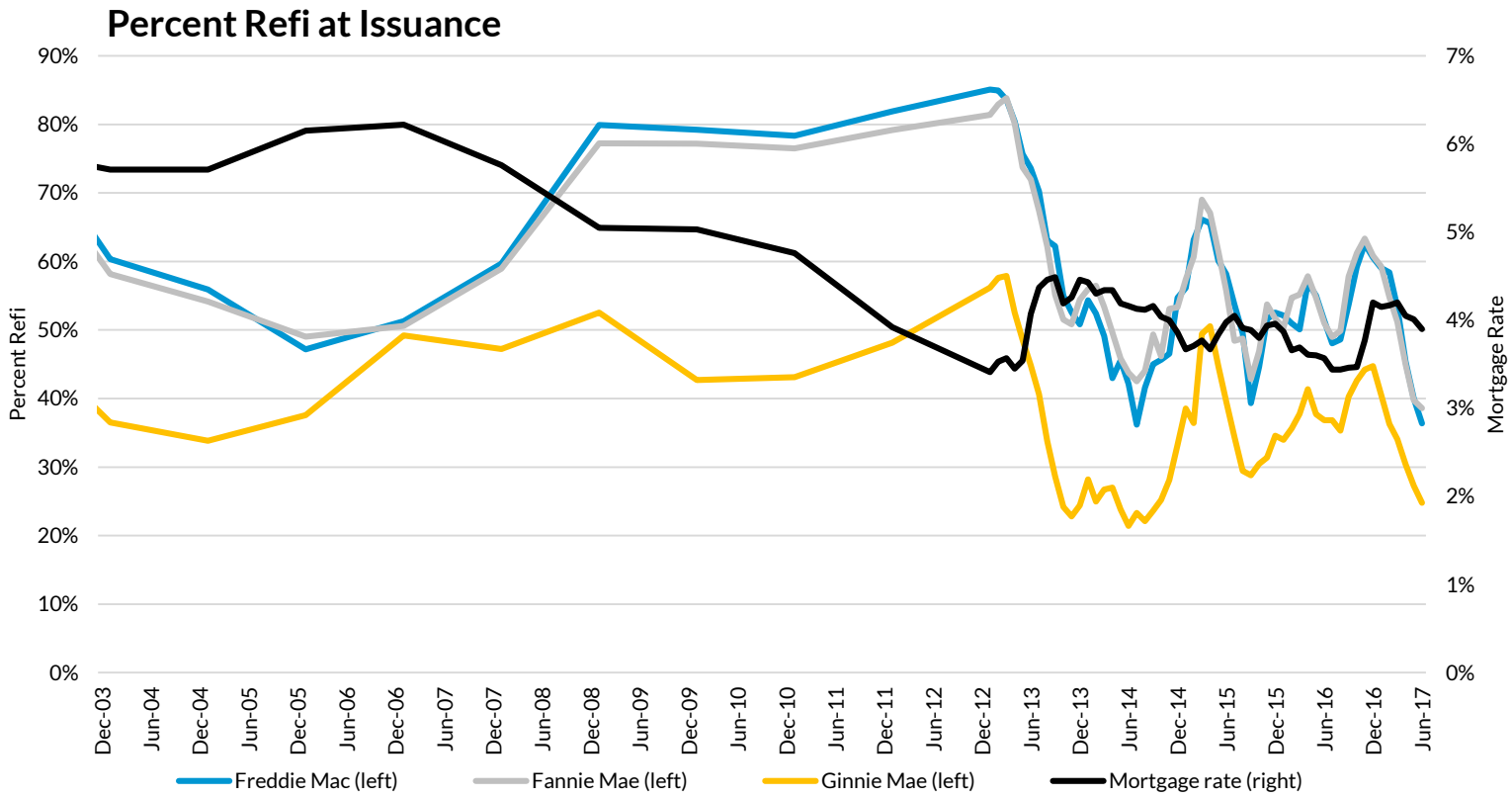
Monthly Agency Issuance

	Gross Issuance			Net Issuance		
Date	Fannie Mae	Freddie Mac	Ginnie Mae	Fannie Mae	Freddie Mac	Ginnie Mae
Jan-14	$28.2	$20.0	$21.6	-$4.9	$0.5	$4.9
Feb-14	$27.9	$17.9	$20.1	-$0.2	$1.2	$5.2
Mar-14	$24.1	$14.7	$16.7	-$2.3	-$0.9	$1.9
Apr-14	$28.0	$18.7	$21.7	-$1.9	$1.2	$5.2
May-14	$27.7	$18.1	$23.9	-$3.7	$0.0	$4.9
Jun-14	$32.1	$20.7	$24.9	-$0.4	$1.8	$4.5
Jul-14	$36.3	$23.2	$27.4	$0.6	$2.6	$5.4
Aug-14	$34.2	$28.4	$30.0	-$2.7	$7.4	$7.9
Sep-14	$39.6	$25.9	$27.0	$4.8	$5.6	$5.2
Oct-14	$39.5	$25.8	$29.9	$4.3	$6.2	$8.4
Nov-14	$32.0	$23.1	$26.4	-$3.0	$2.7	$4.2
Dec-14	$43.3	$21.6	$26.7	$9.9	$1.8	$4.1
Jan-15	$36.8	$22.9	$27.5	-$1.2	$0.8	$2.5
Feb-15	$35.4	$29.9	$23.9	$1.5	$10.1	$2.9
Mar-15	$44.8	$26.0	$30.7	$3.1	$1.1	$0.6
Apr-15	$49.3	$33.8	$40.6	-$1.2	$3.8	$4.3
May-15	$42.4	$33.2	$39.4	-$2.9	$6.6	$5.8
Jun-15	$44.6	$34.4	$40.5	$0.8	$8.3	$9.1
Jul-15	$46.0	$39.2	$45.6	$1.0	$12.3	$13.3
Aug-15	$39.4	$27.6	$43.4	-$2.2	$3.1	$14.9
Sep-15	$45.3	$30.4	$39.4	$7.6	$7.9	$12.7
Oct-15	$41.5	$28.4	$39.2	$4.8	$6.4	$12.4
Nov-15	$28.8	$23.3	$35.8	-$8.1	$1.3	$10.6
Dec-15	$39.7	$22.8	$30.3	$7.1	$3.2	$8.2
Jan-16	$35.6	$22.5	$32.5	-$0.6	$1.0	$7.3
Feb-16	$32.4	$21.2	$30.5	$2.4	$3.1	$8.4
Mar-16	$39.7	$27.5	$32.9	$7.9	$8.2	$9.6
Apr-16	$43.8	$26.2	$40.1	$0.8	-$0.2	$8.8
May-16	$44.2	$29.9	$41.6	$2.4	$4.4	$11.4
Jun-16	$46.7	$30.1	$43.9	$2.7	$3.0	$11.9
Jul-16	$49.8	$35.3	$46.1	$2.3	$6.3	$10.8
Aug-16	$54.9	$37.9	$46.7	$10.4	$11.0	$13.8
Sep-16	$65.8	$44.0	$52.5	$8.7	$9.0	$12.5
Oct-16	$66.0	$35.9	$47.4	$11.8	$2.7	$9.3
Nov-16	$48.8	$40.2	$47.2	-$3.5	$7.9	$10.3
Dec-16	$72.7	$40.5	$46.8	$23.3	$10.4	$10.8
Jan-17	$55.6	$38.5	$42.6	$10.3	$10.7	$10.3
Feb-17	$37.6	$27.4	$33.1	$3.1	$6.5	$9.2
Mar-17	$39.5	$24.4	$31.3	$10.3	$6.2	$9.6
Apr-17	$39.3	$21.2	$36.4	$4.8	$0.4	$11.7
May-17	$40.3	$22.6	$36.4	$7.6	$2.7	$13.1
Jun-17	$45.7	$25.1	$39.9	$8.3	$2.4	$13.2

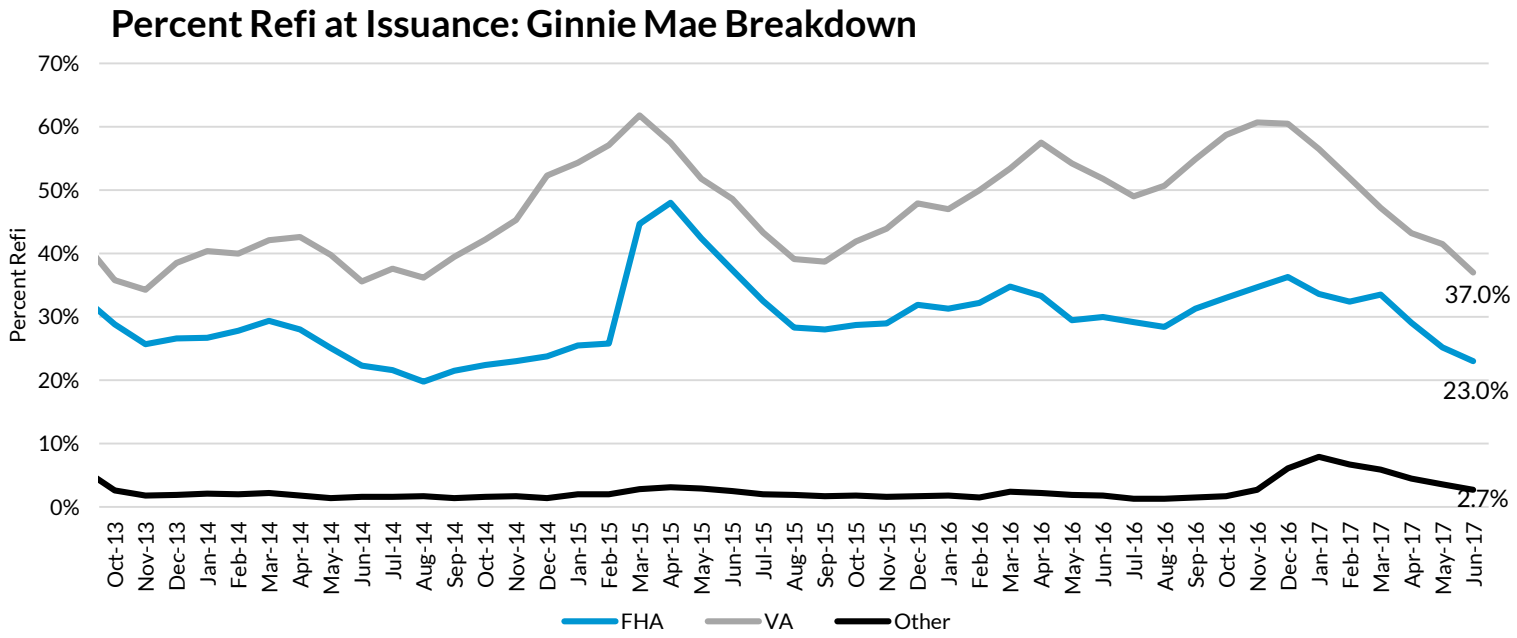
Sources: *eMBS and Urban Institute*
Note : *Dollar amounts are in billions. "Other" refers to loans insured by HUD's Office of Public and Indian Housing and the Department of Agriculture's Rural Development. All data is as of June 2017.*

US Agency Market, Originations

The Ginnie Mae refi share stood at 25 percent in June 2017, below the 39 and 36 percent shares for Fannie Mae and Freddie Mac, respectively. Within Ginnie Mae, VA had the highest refi share at 37 percent in June 2017, followed by FHA's 23 percent refi share.



Sources: *eMBS and Urban Institute.* **Note**: *Based on at-issuance balance. Data as of June 2017.*

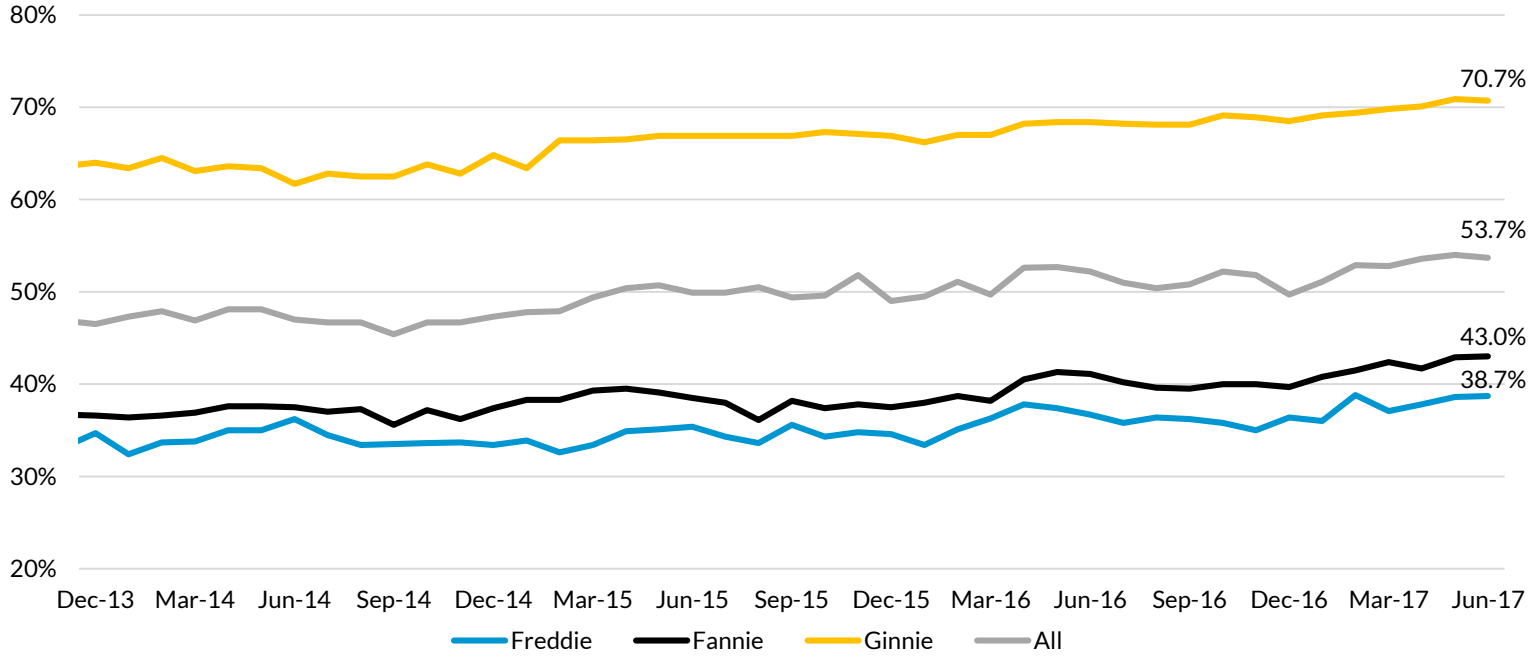


Sources: *eMBS and Urban Institute.*
Note: *Based on at-issuance balance. "Other" refers to loans insured by HUD's Office of Public and Indian Housing and the Department of Agriculture's Rural Development. Data as of June 2017.*

Credit Box

First time homebuyers are important to the Ginnie Mae market, comprising 71 percent of purchase originations, compared to Fannie and Freddie's 43 percent and 39 percent share of the first-time homebuyer market. The bottom table shows that based on mortgages originated in June 2017, the average first-time homebuyer was more likely than an average repeat buyer to take out a smaller loan and have a lower credit score, a much higher LTV and a higher DTI, thus requiring a higher interest rate.

First Time Homebuyer Share: Purchase Only Loans



Sources: *eMBS and Urban Institute*. **Note**: *Data as of June 2017.*

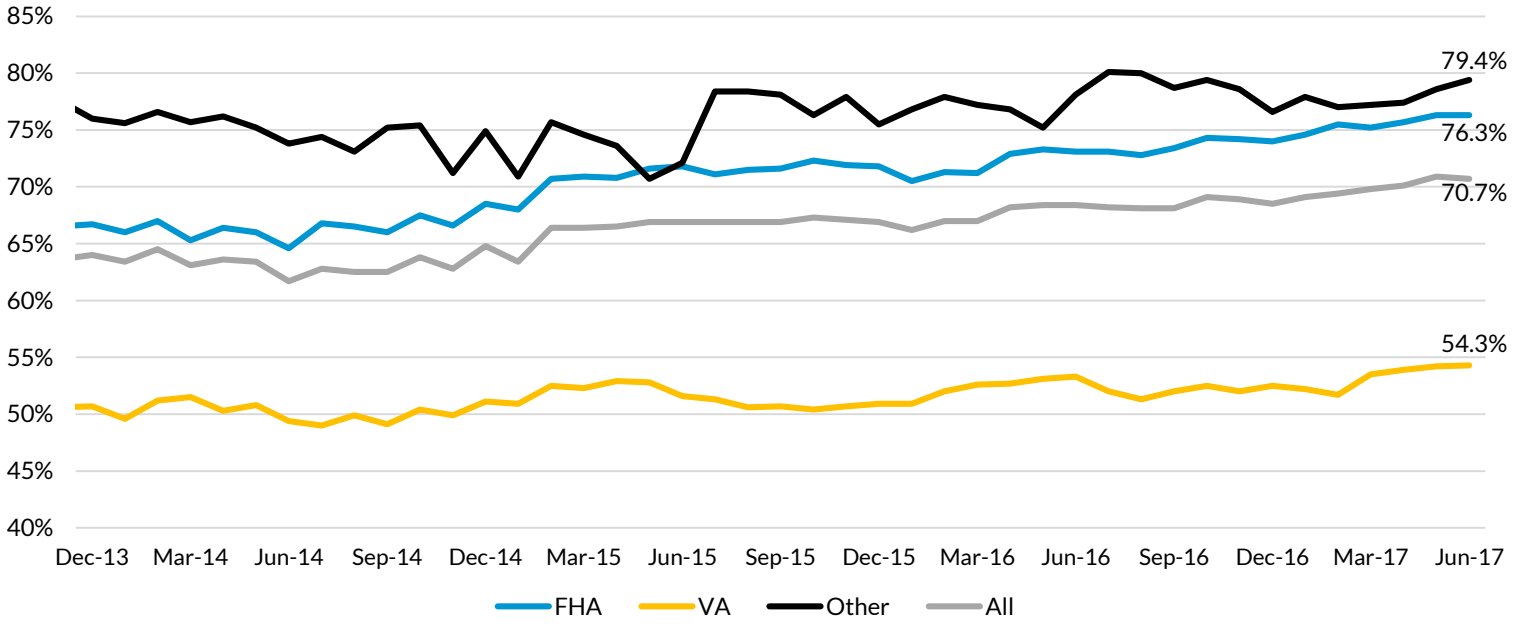
	Fannie Mae		Freddie Mac		Ginnie Mae		All	
	First-Time	Repeat	First-Time	Repeat	First-Time	Repeat	First-Time	Repeat
Loan Amount ($Thousands)	222.2	251.7	231.9	254.5	197.6	241.0	210.1	249.0
Credit Score	738.5	755.4	740.2	754.4	682.2	701.4	707.7	738.0
LTV (%)	86.7	78.4	86.7	79.9	96.9	95.5	92.3	84.2
DTI (%)	34.0	34.6	34.7	35.6	40.7	41.4	37.8	37.0
Loan Rate (%)	4.32	4.19	4.32	4.22	4.23	4.11	4.27	4.17

Sources: *eMBS and Urban Institute.*
Note: *In May 2017 Ginnie Mae began disclosing issuer-reported LTV for FHA loans, which includes the financed upfront mortgage insurance premium. To make it consistent with the previously reported LTV, we removed the financed upfront mortgage insurance premium by subtracting 169 bps from this new issuer-reported LTV. Data as of June 2017.*

Credit Box

Within the Ginnie Mae purchase market, 76 percent of FHA loans, 54 percent of VA loans and 79 percent of other loans represent financing for first time home buyers. The bottom table shows that based on mortgages originated in June 2017, the average first-time homebuyer was more likely than an average repeat buyer to take out a smaller loan and have a lower credit score, a higher LTV and slightly lower DTI, thus requiring a higher interest rate.

First Time Homebuyer Share: Ginnie Mae Purchase Only Loans Breakdown by Source



Sources: *eMBS and Urban Institute*. **Note**: *Data as of June 2017.*

	FHA		VA		Other		Ginnie Mae Total	
	First-Time	Repeat	First-Time	Repeat	First-Time	Repeat	First-Time	Repeat
Loan Amount ($ Thousands)	194.2	213.4	237.7	289.0	141.4	151.3	197.6	241.0
Credit Score	675.8	681.7	697.8	727.2	694.3	691.5	682.2	701.4
LTV (%)	95.6	94.2	99.9	96.5	99.4	99.9	96.9	95.5
DTI (%)	41.9	42.7	39.7	40.8	34.8	35.7	40.7	41.4
Loan Rate (%)	4.28	4.22	4.08	3.97	4.17	4.25	4.23	4.11

Sources: *eMBS and Urban Institute.* ***Note****: Data as of June 2017. "Other" refers to loans insured by HUD's Office of Public and Indian Housing and the Department of Agriculture's Rural Development. In May 2017 Ginnie Mae began disclosing issuer-reported LTV for FHA loans, which includes the financed upfront mortgage insurance premium. To make it consistent with the previously reported LTV, we removed the financed upfront mortgage insurance premium by subtracting 169 bps from this new issuer-reported LTV.*

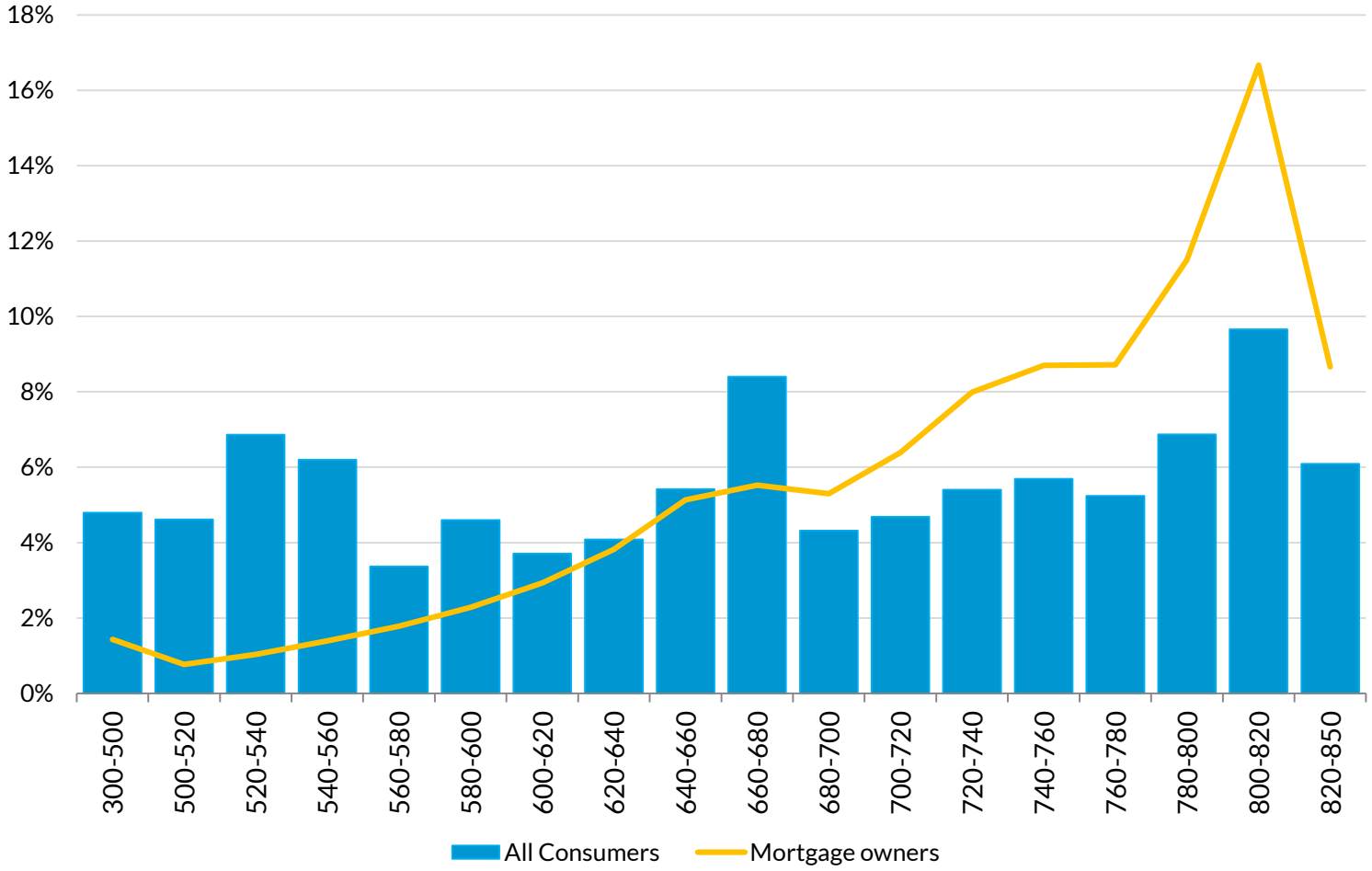
Credit Box

Consumers who have a mortgage are concentrated at the high end of the general credit score spectrum. The top table shows that the median FICO score for all consumers (675) is lower than the 25th percentile of those with a mortgage (676).

FICO Score Distribution: Mortgage Owners vs All Consumers

All Consumers- Percentiles								
Minimum	P5	P10	P25	P50	P75	P90	P95	Maximum
300	501	523	575	675	770	812	821	839

Mortgage Owners- Percentiles								
Minimum	P5	P10	P25	P50	P75	P90	P95	Maximum
306	564	609	676	749	800	818	824	839



Sources: *Credit Bureau Data and Urban Institute.*
Note: *Data as of August 2015.*

June 2017 Credit Box at a Glance

In June 2017, the median Ginnie Mae FICO score was 680 versus 751 for Fannie and Freddie. Note that the FICO score for the 10th percentile was 624 for Ginnie Mae, versus 671 for Fannie and 679 for Freddie. Within the Ginnie Mae market, FHA loans have a median FICO score of 670, VA loans have a median FICO score of 705 and other loans have a median FICO score of 690.

Purchase FICO							
	Number of Loans	**P10**	**P25**	**Median**	**P75**	**P90**	**Mean**
All	313,640	644	678	727	774	797	724
Fannie	115,058	682	717	758	788	802	749
Freddie	67,053	688	719	757	787	801	750
Ginnie	131,529	626	648	680	724	769	688
Refi FICO							
	Number of Loans	P10	P25	Median	P75	P90	Mean
All	159,564	643	679	724	771	797	721
Fannie	75,264	659	693	738	779	800	733
Freddie	43,208	666	700	740	778	800	736
Ginnie	41,092	616	645	680	723	769	684
All FICO							
	Number of Loans	P10	P25	Median	P75	P90	Mean
All	473,204	644	678	726	773	797	723
Fannie	190,322	671	707	751	785	801	743
Freddie	110,261	679	711	751	784	801	744
Ginnie	172,621	624	647	680	723	769	687

Purchase FICO: Ginnie Mae Breakdown By Source							
	Number of Loans	**P10**	**P25**	**Median**	**P75**	**P90**	**Mean**
All	131,529	626	648	680	724	769	688
FHA	83,922	623	644	671	707	745	677
VA	35,270	633	662	708	763	794	711
Other	12,337	640	658	690	729	764	694
Refi FICO: Ginnie Mae Breakdown By Source							
	Number of Loans	P10	P25	Median	P75	P90	Mean
All	41,092	616	645	680	723	769	684
FHA	22,503	605	636	667	702	743	670
VA	18,276	629	660	699	747	784	701
Other	313	619	658	700	748	781	699
All FICO: Ginnie Mae Breakdown By Source							
	Number of Loans	P10	P25	Median	P75	P90	Mean
All	172,621	624	647	680	723	769	687
FHA	106,425	621	642	670	706	745	676
VA	53,546	632	661	705	758	791	708
Other	12,650	639	658	690	730	765	694

Sources: *eMBS and Urban Institute.* ***Note:*** *"Other" refers to loans insured by HUD's Office of Public and Indian Housing and the Department of Agriculture's Rural Development. Data as of June 2017.*

June 2017 Credit Box at a Glance

In June 2017, the median loan-to-value ratio (LTV) was 96.5 percent for Ginnie Mae, and 80.0 percent for Fannie Mae and Freddie Mac. The 10th percentile was 83.0 percent for Ginnie Mae and 50-51 percent for the GSEs. Within the Ginnie Mae market, the median LTV was 96.5 for FHA, 100.0 for VA and 101.0 for other lending programs.

Purchase LTV							
	Number of Loans	**P10**	**P25**	**Median**	**P75**	**P90**	**Mean**
All	314,008	73.0	80.0	95.0	96.5	100.0	87.9
Fannie	115,164	63.0	79.0	80.0	95.0	95.0	81.6
Freddie	67,061	64.0	79.0	80.0	95.0	95.0	81.8
Ginnie	131,783	93.3	96.5	96.5	100.0	102.0	96.5
Refi LTV							
	Number of Loans	P10	P25	Median	P75	P90	Mean
All	161,928	45.0	60.0	75.0	83.0	93.1	71.0
Fannie	75,355	41.0	55.0	70.0	79.0	80.0	65.5
Freddie	43,203	41.0	56.0	70.0	79.0	81.0	66.2
Ginnie	43,370	67.7	80.6	86.5	95.9	100.0	85.4
All LTV							
	Number of Loans	P10	P25	Median	P75	P90	Mean
All	475,936	57.0	75.0	85.0	96.5	98.6	82.2
Fannie	190,519	50.0	67.0	80.0	90.0	95.0	75.3
Freddie	110,264	51.0	68.0	80.0	90.0	95.0	75.7
Ginnie	175,153	83.0	93.5	96.5	99.5	101.0	93.7

Purchase LTV: Ginnie Mae Breakdown By Source							
	Number of Loans	**P10**	**P25**	**Median**	**P75**	**P90**	**Mean**
All	131,783	93.3	96.5	96.5	100.0	102.0	96.5
FHA	84,077	93.3	96.5	96.5	96.5	96.5	95.2
VA	35,317	91.1	100.0	100.0	102.2	103.3	98.3
Other	12,389	95.5	99.3	101.0	101.0	102.0	99.5
Refi LTV: Ginnie Mae Breakdown By Source							
	Number of Loans	P10	P25	Median	P75	P90	Mean
All	43,370	67.7	80.6	86.5	95.9	100.0	85.4
FHA	22,939	67.1	79.6	86.5	89.0	96.7	82.9
VA	20,150	68.2	82.0	91.3	99.9	101.0	88.1
Other	281	80.2	89.2	96.0	100.4	102.0	93.0
All LTV: Ginnie Mae Breakdown By Source							
	Number of Loans	P10	P25	Median	P75	P90	Mean
All	175,153	83.0	93.5	96.5	99.5	101.0	93.7
FHA	107,016	83.9	93.2	96.5	96.5	96.5	92.6
VA	55,467	80.0	91.5	100.0	101.7	103.0	94.6
Other	12,670	95.0	99.2	101.0	101.0	102.0	99.3

Sources: *eMBS and Urban Institute*. **Note:** *"Other" refers to loans insured by HUD's Office of Public and Indian Housing and the Department of Agriculture's Rural Development. In May 2017 Ginnie Mae began disclosing issuer-reported LTV for FHA loans, which includes the financed upfront mortgage insurance premium. To make it consistent with the previously reported LTV, we removed the financed upfront mortgage insurance premium by subtracting 169 bps from this new issuer-reported LTV. Data as of June 2017.*

June 2017 Credit Box at a Glance

In June 2017, the median Ginnie Mae debt-to-income ratio (DTI) was 41.4 percent, considerably higher than the 36 and 37 percent median DTIs for Fannie Mae and Freddie Mac, respectively. The 90th percentile for Ginnie Mae was 53.1 percent, also much higher than the 45-46 percent DTIs for the GSEs. Fannie Mae has recently announced they will raise their DTI limit from 45 to 50. Within the Ginnie Mae market, the median FHA DTI ratio was 42.9 percent, versus 40.5 percent for VA and 35.8 percent for other lending programs.

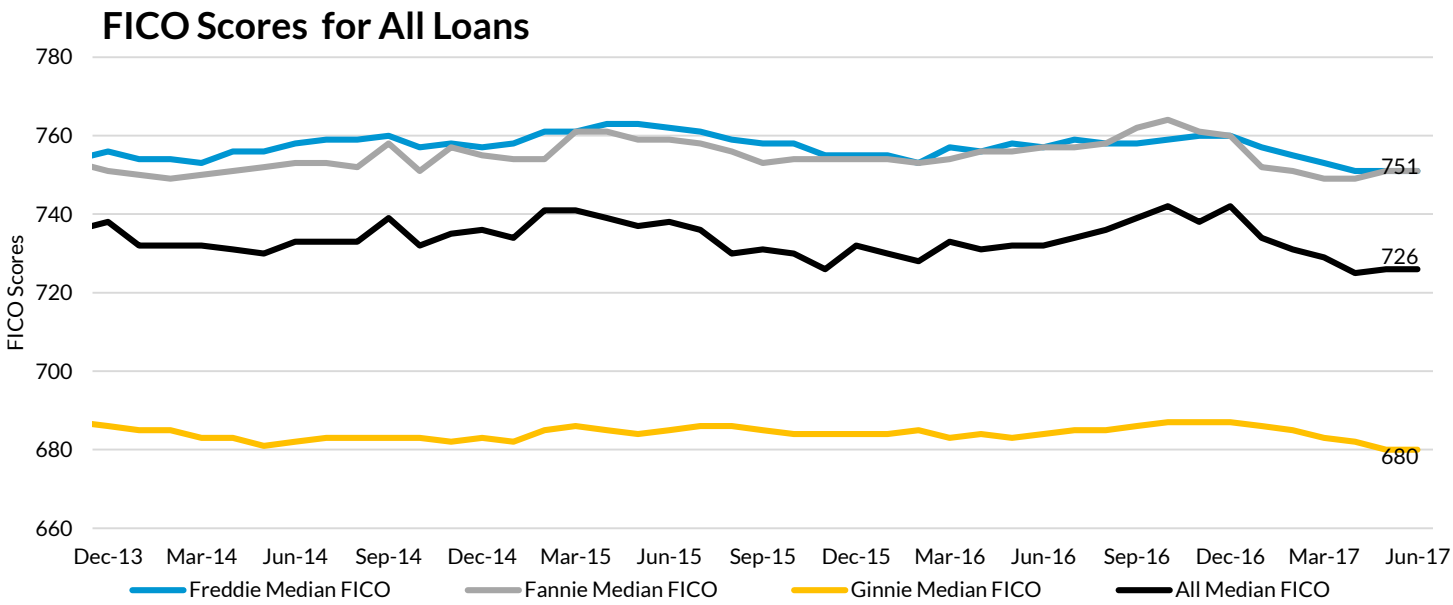
Purchase DTI							
	Number of Loans	**P10**	**P25**	**Median**	**P75**	**P90**	**Mean**
All	313,461	24.0	31.0	38.0	44.0	49.0	37.2
Fannie	115,163	22.0	28.0	36.0	41.0	44.0	34.2
Freddie	67,007	22.0	29.0	36.0	43.0	45.0	35.1
Ginnie	131,291	28.1	34.6	41.6	47.9	53.1	40.9
Refi DTI							
	Number of Loans	P10	P25	Median	P75	P90	Mean
All	147,442	22.0	29.0	37.0	43.0	47.4	35.8
Fannie	73,816	21.0	28.0	36.0	42.0	45.0	34.3
Freddie	42,020	21.0	28.0	37.0	43.0	46.0	35.3
Ginnie	31,606	25.3	32.7	40.9	47.8	52.9	39.8
All DTI							
	Number of Loans	P10	P25	Median	P75	P90	Mean
All	460,903	23.0	30.0	38.0	44.0	48.6	36.8
Fannie	188,979	21.0	28.0	36.0	42.0	45.0	34.3
Freddie	109,027	22.0	29.0	37.0	43.0	46.0	35.2
Ginnie	162,897	27.6	34.3	41.4	47.9	53.1	40.7

Purchase DTI: Ginnie Mae Breakdown By Source							
	Number of Loans	**P10**	**P25**	**Median**	**P75**	**P90**	**Mean**
All	131,291	28.1	34.6	41.6	47.9	53.1	40.9
FHA	84,101	29.5	36.1	43.0	49.0	53.7	42.1
VA	35,077	26.6	33.4	40.8	47.4	52.8	40.2
Other	12,113	25.8	30.6	35.8	40.1	43.1	35.0
Refi DTI: Ginnie Mae Breakdown By Source							
	Number of Loans	P10	P25	Median	P75	P90	Mean
All	31,606	25.3	32.7	40.9	47.8	52.9	39.8
FHA	17,319	26.4	34.0	42.1	48.5	53.2	40.7
VA	14,059	24.2	31.5	39.7	46.8	52.5	38.9
Other	228	14.5	21.5	29.9	36.9	47.3	30.8
All DTI: Ginnie Mae Breakdown By Source							
	Number of Loans	P10	P25	Median	P75	P90	Mean
All	162,897	27.6	34.3	41.4	47.9	53.1	40.7
FHA	101,420	29.0	35.7	42.9	48.9	53.6	41.8
VA	49,136	25.9	32.9	40.5	47.2	52.7	39.8
Other	12,341	25.5	30.5	35.8	40.1	43.1	34.9

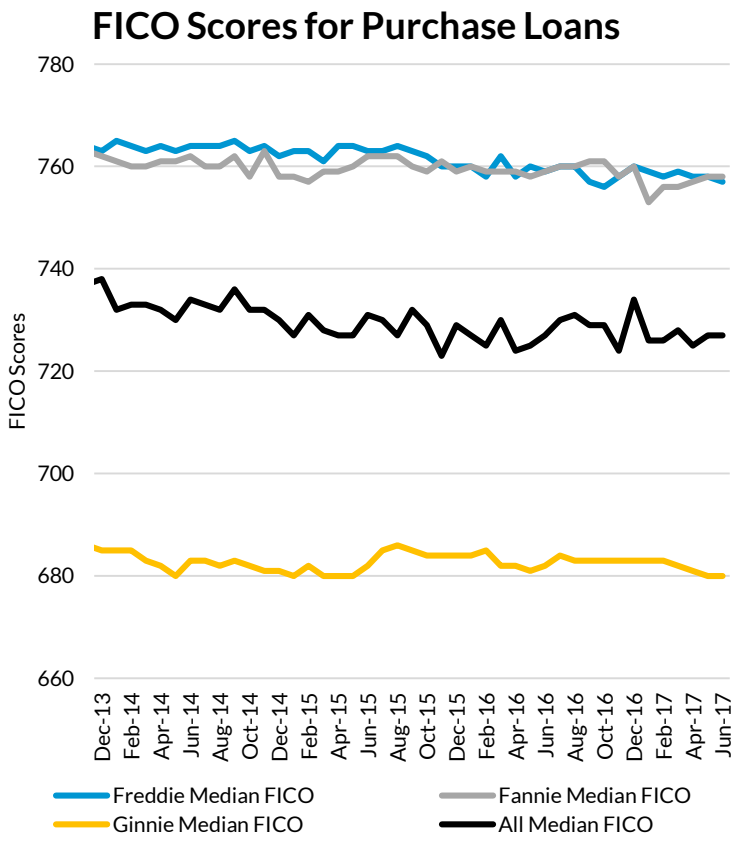
Sources: *eMBS and Urban Institute*. **Note**: *"Other" refers to loans insured by HUD's Office of Public and Indian Housing and the Department of Agriculture's Rural Development. Data as of June 2017.*

Credit Box: Historical

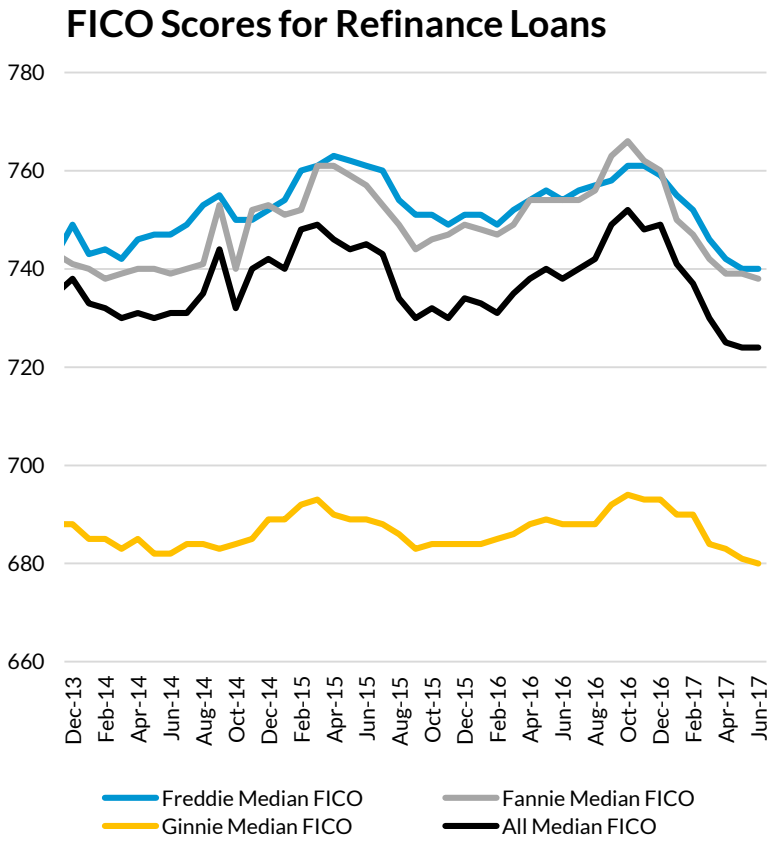
This figure, showing median FICO scores since October 2013, demonstrates that the median FICO score for Ginnie Mae has always been considerably lower than for the GSEs. The difference between Ginnie Mae and GSE FICO scores is wider in purchase loans than in refi loans. The recent drop in FICO scores reflects two factors: (1) the composition of the market has shifted more heavily toward Ginnie Mae borrowers who have lower FICO scores and (2) FICO scores have dropped sharply for refinance borrowers, indicating that lenders are willing to spend the time to refinance more marginal borrowers, as overall volumes slip.



Sources: *eMBS and Urban Institute*. **Note**: *Data as of June 2017*



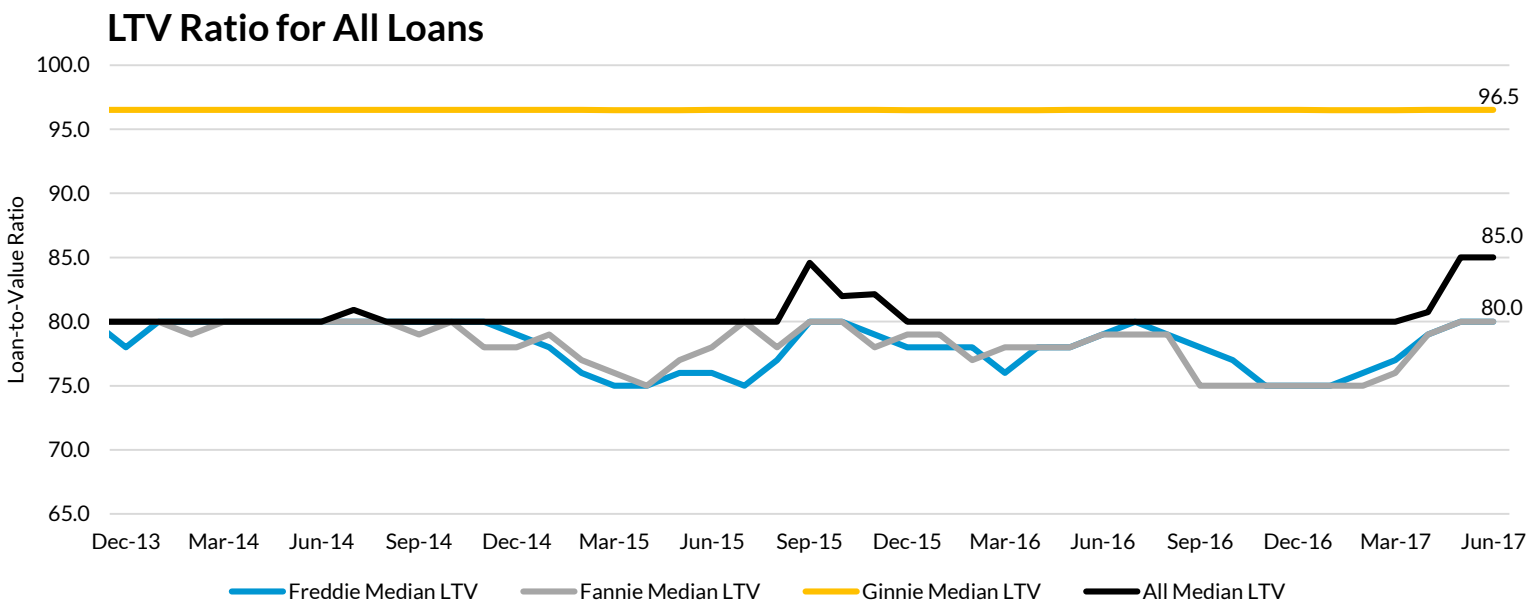
Sources: *eMBS and Urban Institute*. **Note:** *Data as of June 2017*

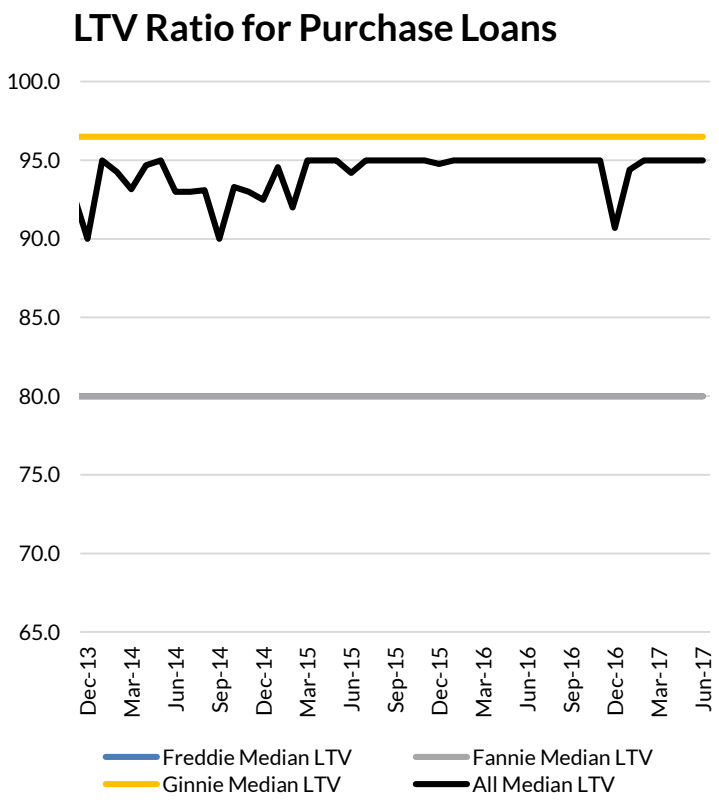


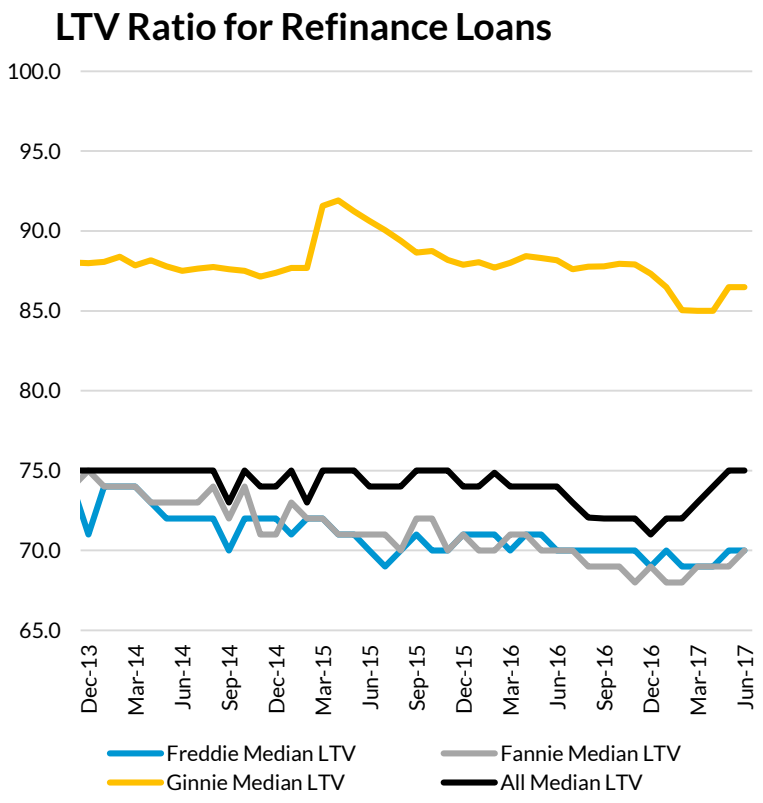
Sources: *eMBS and Urban Institute*. **Note:** *Data as of June 2017*

Credit Box: Historical

Median LTVs for Ginnie Mae loans have historically been at 96.5, much higher than the 75-80 average for the GSEs. Through time, refinances have LTVs about 10 points lower than their purchase counterparts.





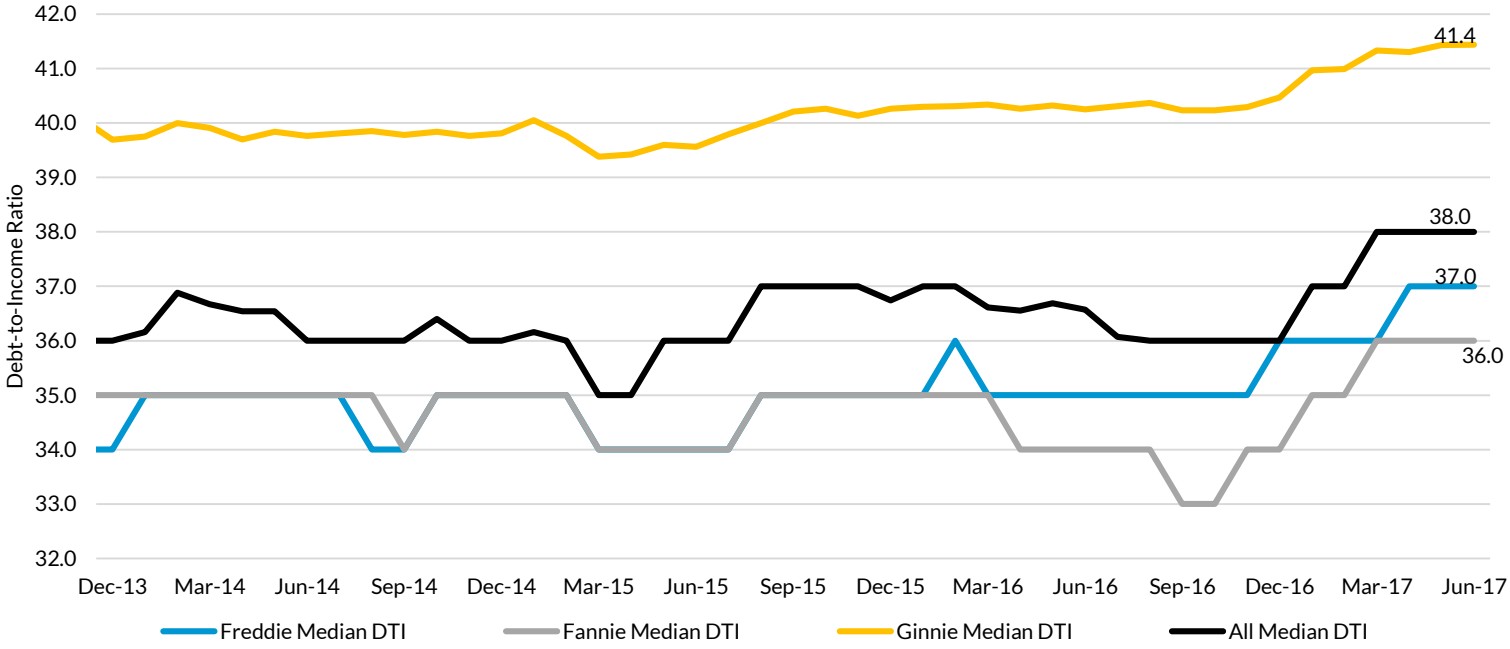


Sources: *eMBS and Urban Institute.* **Note:** *In May 2017 Ginnie Mae began disclosing issuer-reported LTV for FHA loans, which includes the financed upfront mortgage insurance premium. To make it consistent with the previously reported LTV, we removed the financed upfront mortgage insurance premium by subtracting 169 bps from this new issuer-reported LTV. Sources and note apply to all three graphs. Data as of June 2017.*

Credit Box: Historical

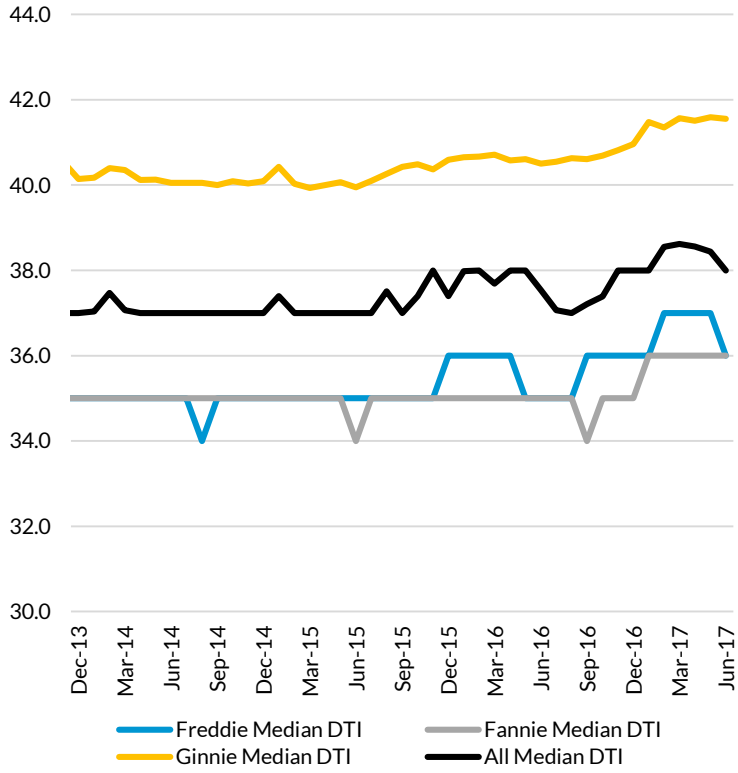
Median debt-to-income ratios on Ginnie Mae loans have historically been in the low 40s, considerably higher than the 36-37 percent DTIs for the GSEs. The DTIs for refinance loans have historically been much lower than for purchase loans, but the DTIs for refinance loans have been creeping up sharply in recent months.

DTI Ratio for All Loans



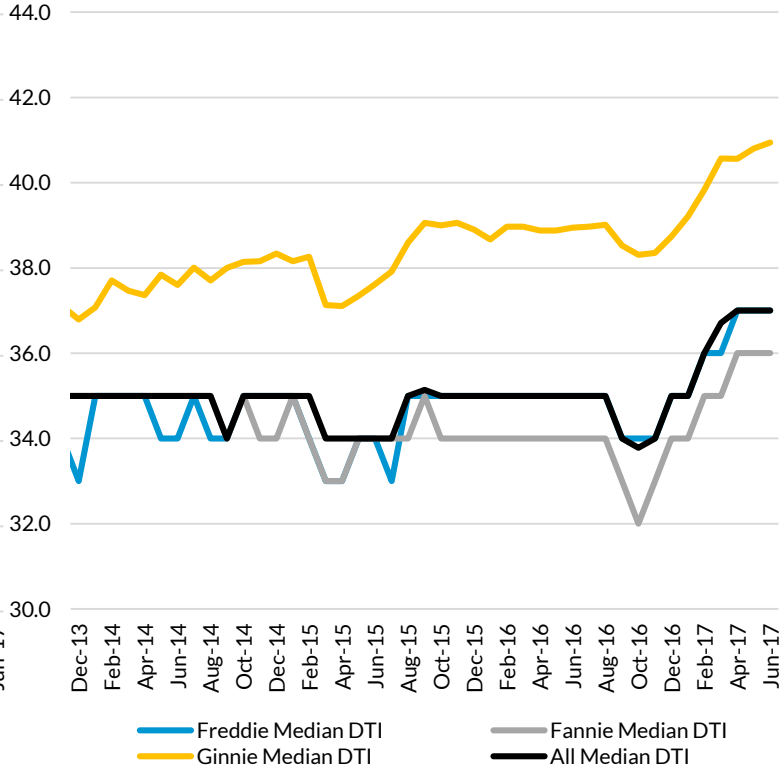
Sources: *eMBS and Urban Institute*. **Note:** *Data as of June 2017*

DTI Ratio for Purchase Loans



Sources: *eMBS and Urban Institute*.
Note: *Data as of June 2017*

DTI Ratio for Refinance Loans

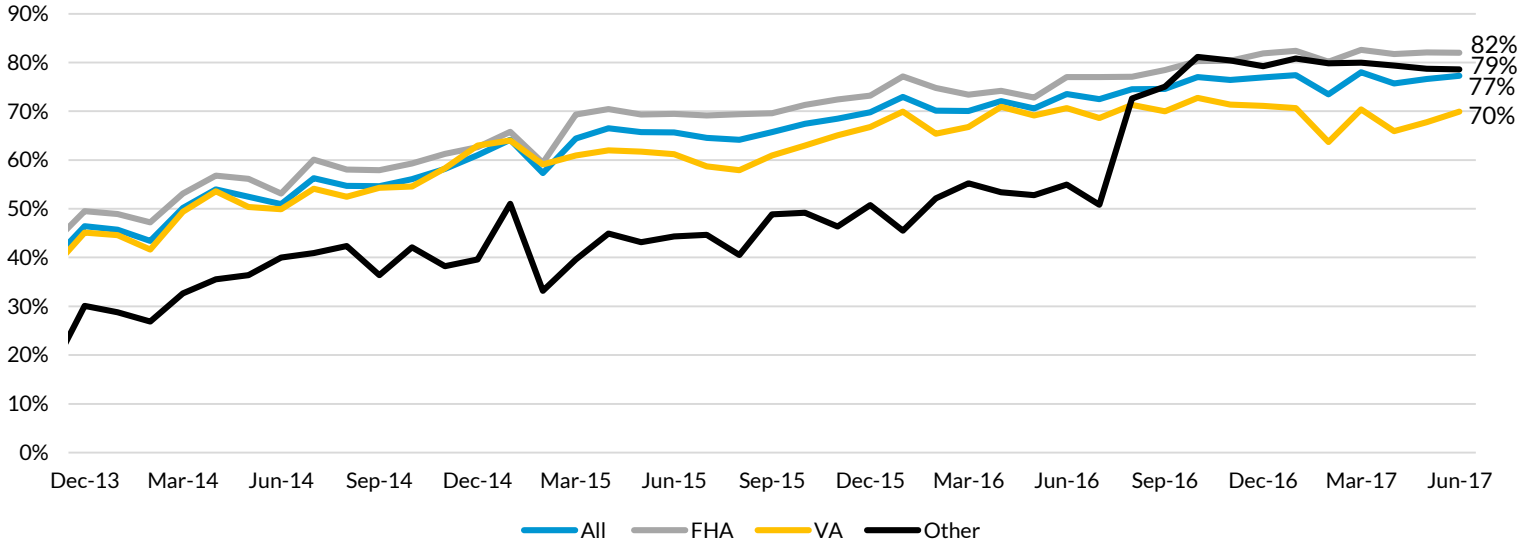


Sources: *eMBS and Urban Institute*.
Note: *Data as of June 2017*

Ginnie Mae Non-bank Originators

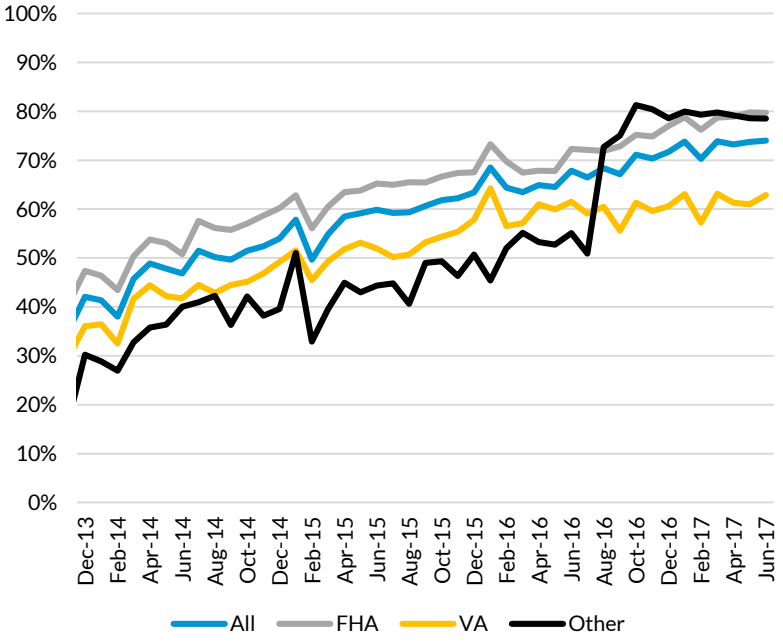
The non-bank originator share of the Ginnie Mae remained at 77 percent in June 2017, continuing to rise after a dip in April. The non-bank share of VA issuance stood at 70 percent in June, while the non-bank share of FHA issuance stood at 82 percent, and the non-bank share of Other issuance stood at 79 percent.

Ginnie Mae Non-bank Originator Share: All Loans



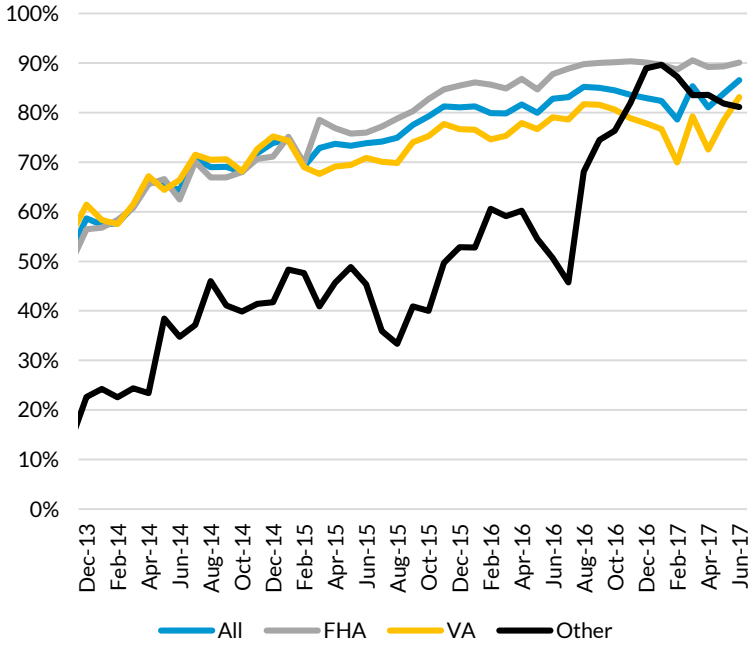
Sources: *eMBS and Urban Institute*. **Note:** *"Other" refers to loans insured by HUD's Office of Public and Indian Housing and the Department of Agriculture's Rural Development. Data as of June 2017.*

Ginnie Mae Non-bank Share: Purchase Loans



Sources: *eMBS and Urban Institute*
Note: *Data as of June 2017.*

Ginnie Mae Non-bank Share: Refi Loans



Sources: *eMBS and Urban Institute*
Note: *Data as of June 2017.*

Ginnie Mae Non-bank Originators: June 2017 Credit Box

An analysis of recent origination suggests that non-bank originators have considerably lower median borrower FICO scores than do bank originators. Overall, the median Ginnie Mae FICO score is 680-- it is 700 for bank borrowers versus 675 for non-bank borrowers. For FHA borrowers, the median FICO score for bank originators is 684 versus 667 for non-banks. For VA borrowers, the median FICO score for bank originators is 726 versus 697 for non-banks. For "Other" loans, the median FICO score for bank originators is 697 versus 688 for non-banks.

All Ginnie Mae FICO							
	Number of Loans	**P10**	**P25**	**Median**	**P75**	**P90**	**Mean**
All	171,803	624	647	680	723	769	687
Bank	38,992	641	662	700	750	787	705
Non-Bank	132,811	622	644	675	716	760	682
FHA Ginnie Mae FICO							
	Number of Loans	P10	P25	Median	P75	P90	Mean
All	105,815	621	642	670	706	745	676
Bank	19,961	639	656	684	721	761	690
Non-Bank	85,854	618	639	667	702	740	672
VA Ginnie Mae FICO							
	Number of Loans	P10	P25	Median	P75	P90	Mean
All	53,395	632	661	705	758	791	708
Bank	16,228	646	677	726	777	799	724
Non-Bank	37,167	627	655	697	747	785	701
Other Ginnie Mae FICO							
	Number of Loans	P10	P25	Median	P75	P90	Mean
All	12,593	639	658	690	730	765	694
Bank	2,803	622	656	697	750	778	695
Non-Bank	9,790	641	659	688	725	759	693

Sources: *eMBS and Urban Institute.* ***Note:*** *"Other" refers to loans insured by HUD's Office of Public and Indian Housing and the Department of Agriculture's Rural Development. Data as of June 2017.*

Ginnie Mae Non-bank Originators: June 2017 Credit Box

An analysis of the loans backing Ginnie Mae origination indicates that there are virtually no differences in median LTV ratios between bank originated loans and non-bank originated loans. Mean LTVs for banks are actually marginally higher than their non-bank counterparts.

All Ginnie Mae LTV							
	Number of Loans	**P10**	**P25**	**Median**	**P75**	**P90**	**Mean**
All	174,334	83.0	93.5	96.5	99.5	101.0	93.7
Bank	39,529	85.0	94.8	96.5	100.0	102.2	94.8
Non-Bank	134,805	82.4	92.4	96.5	98.1	101.0	93.4
FHA Ginnie Mae LTV							
	Number of Loans	P10	P25	Median	P75	P90	Mean
All	106,403	83.8	93.1	96.5	96.5	96.5	92.6
Bank	20,315	86.5	94.8	96.5	96.5	97.3	94.0
Non-Bank	86,088	82.8	91.0	96.5	96.5	96.5	92.3
VA Ginnie Mae LTV							
	Number of Loans	P10	P25	Median	P75	P90	Mean
All	55,318	79.9	91.4	100.0	101.7	103.0	94.6
Bank	16,390	80.0	93.0	100.0	100.0	103.0	94.8
Non-Bank	38,928	79.7	91.1	100.0	102.0	103.0	94.5
Other Ginnie Mae LTV							
	Number of Loans	P10	P25	Median	P75	P90	Mean
All	12,613	95.0	99.2	101.0	101.0	102.0	99.3
Bank	2,824	97.8	101.0	101.0	102.0	104.0	100.6
Non-Bank	9,789	94.3	98.9	100.9	101.0	101.0	98.9

Sources: *eMBS and Urban Institute.*
Note: *"Other" refers to loans insured by HUD's Office of Public and Indian Housing and the Department of Agriculture's Rural Development. In May 2017 Ginnie Mae began disclosing issuer-reported LTV for FHA loans, which includes the financed upfront mortgage insurance premium. To make it consistent with the previously reported LTV, we removed the financed upfront mortgage insurance premium by subtracting 169 bps from this new issuer-reported LTV. Data as of June 2017.*

Ginnie Mae Non-bank Originators: June 2017 Credit Box

An analysis of the borrowers' DTI ratios for bank versus non-bank originators indicates the former are very slightly more conservative. That is, the median DTI ratio for bank originators is 40.3, versus 41.8 for non-banks.

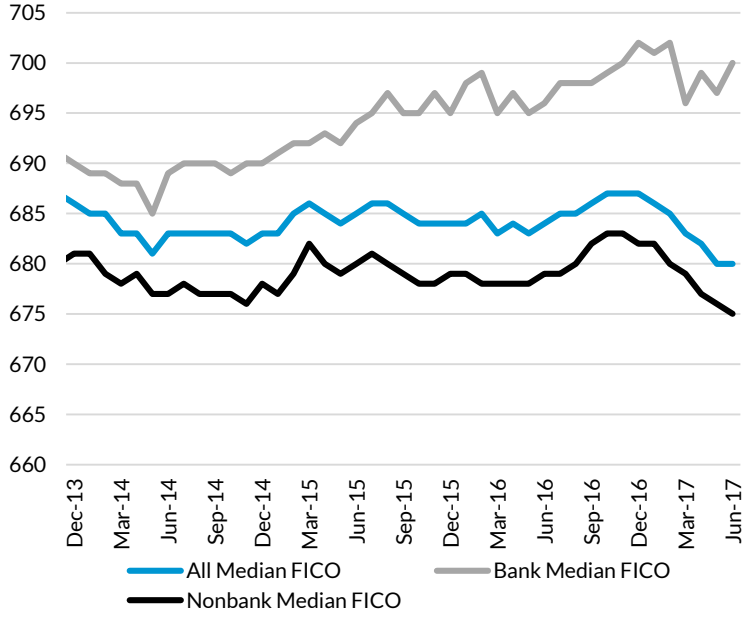
All Ginnie Mae DTI							
	Number of Loans	**P10**	**P25**	**Median**	**P75**	**P90**	**Mean**
All	162,077	27.6	34.3	41.4	47.9	53.1	40.7
Bank	37,867	26.2	33.0	40.3	46.2	51.7	39.5
Non-Bank	124,210	28.0	34.7	41.8	48.3	53.3	41.1
FHA Ginnie Mae DTI							
	Number of Loans	P10	P25	Median	P75	P90	Mean
All	100,808	29.0	35.7	42.9	48.9	53.6	41.8
Bank	19,608	28.2	35.0	41.8	47.2	52.2	40.7
Non-Bank	81,200	29.2	35.9	43.1	49.3	53.8	42.1
VA Ginnie Mae DTI							
	Number of Loans	P10	P25	Median	P75	P90	Mean
All	48,985	25.9	32.9	40.5	47.2	52.7	39.8
Bank	15,696	24.5	31.5	39.3	46.1	51.8	38.7
Non-Bank	33,289	26.7	33.6	41.1	47.7	53.1	40.4
Other Ginnie Mae DTI							
	Number of Loans	P10	P25	Median	P75	P90	Mean
All	12,284	25.5	30.5	35.8	40.1	43.1	34.9
Bank	2,563	25.0	30.1	35.6	40.2	43.5	34.8
Non-Bank	9,721	25.7	30.6	35.8	40.1	43.0	34.9

Sources: *eMBS and Urban Institute.* ***Note:*** *"Other" refers to loans insured by HUD's Office of Public and Indian Housing and the Department of Agriculture's Rural Development. Data as of June 2017.*

Ginnie Mae Nonbank Originators: Historical Credit Box

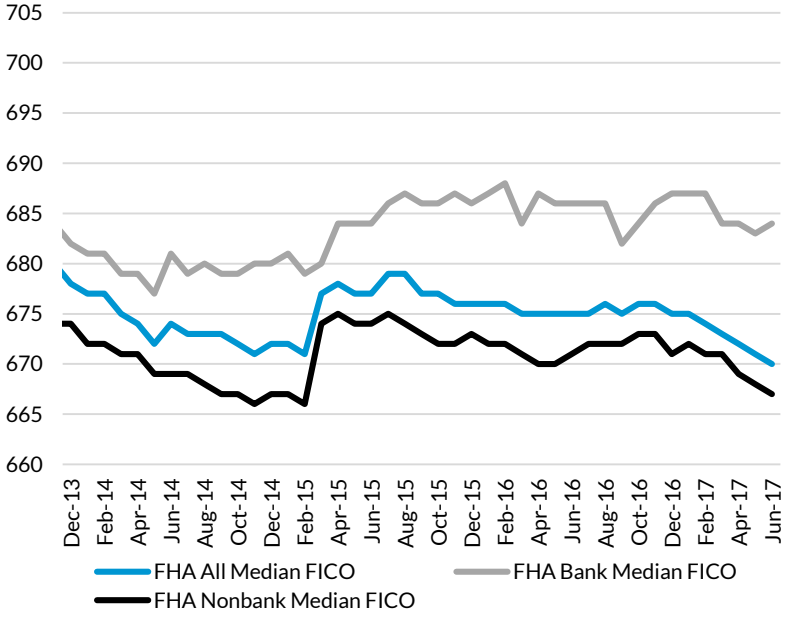
The difference in FICO scores between loans originated by banks and non-banks has widened for Ginnie Mae loans in June 2017, as the median FICO scores for bank originators increased while the median FICO scores for non-bank originators continued to decline for the FHA and VA channels.

Ginnie Mae FICO Scores Bank vs. Nonbank



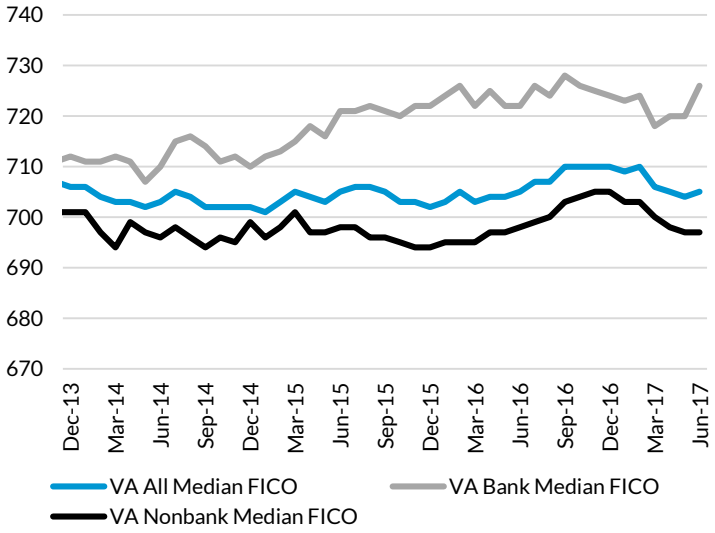
Sources: *eMBS and Urban Institute* **Note:** *Data as of June 2017*

Ginnie Mae FHA FICO Scores Bank vs. Nonbank



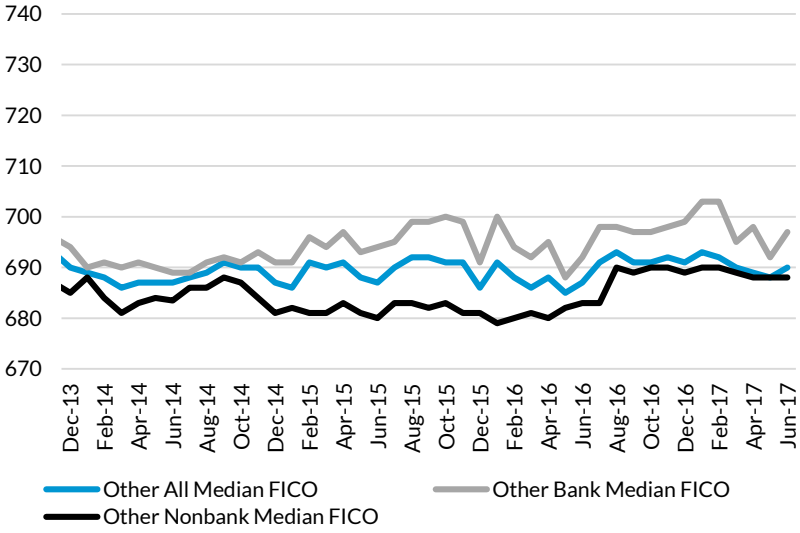
Sources: *eMBS and Urban Institute* **Note:** *Data as of June 2017*

Ginnie Mae VA FICO Scores Bank vs. Nonbank



Sources: *eMBS and Urban Institute*
Note: *Data as of June 2017*

Ginnie Mae Other FICO Scores Bank vs. Nonbank

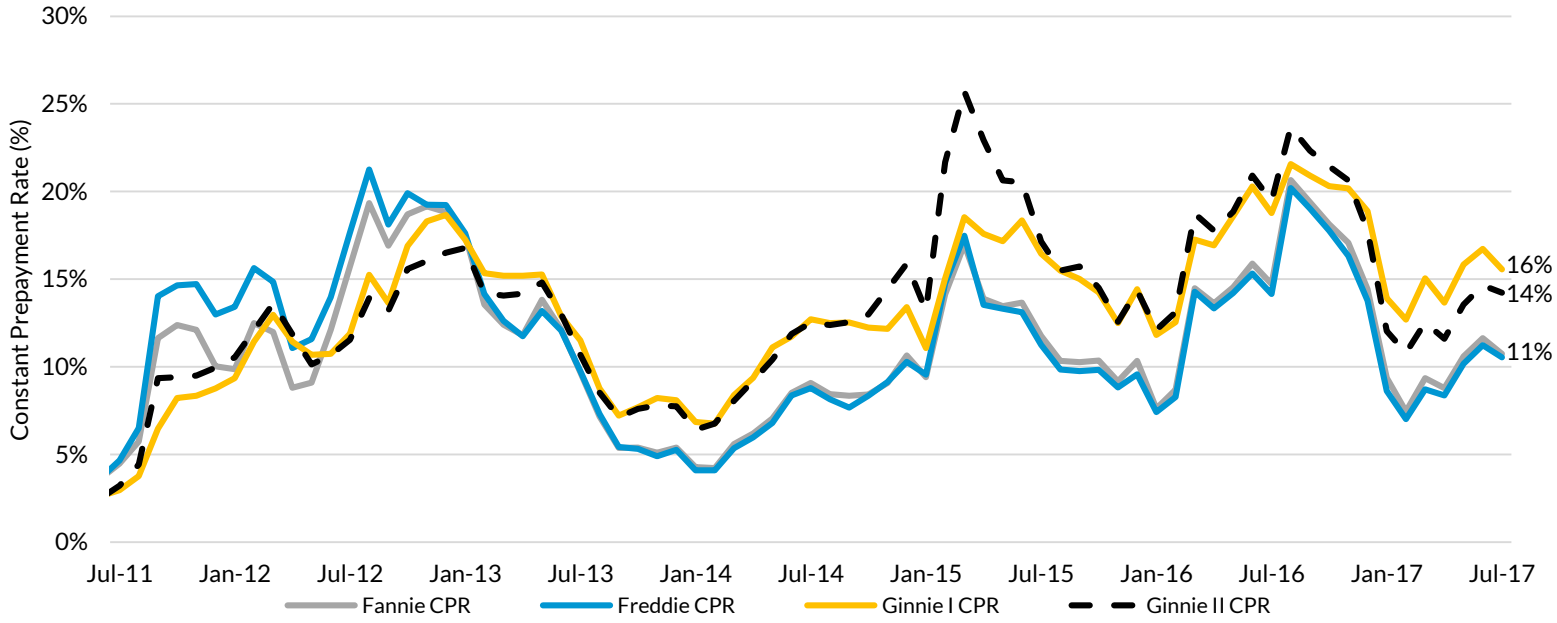


Sources: *eMBS and Urban Institute*
Note: *"Other" refers to loans insured by HUD's Office of Public and Indian Housing and the Department of Agriculture's Rural Development.*
Data as of June 2017.

Prepayments

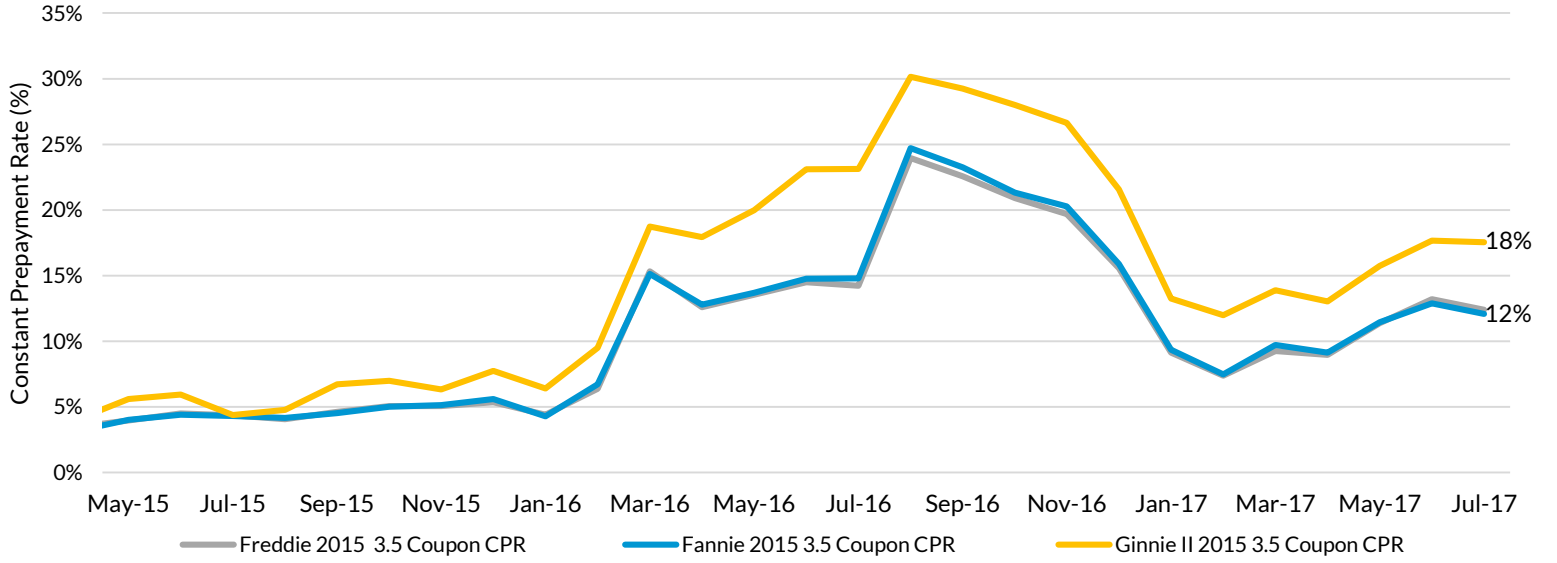
Prepayments on Ginnie Mae securities were lower than on GSE securities from 2011 through mid-2013, but have been higher since. These differences hold across all coupon buckets. The differences are especially pronounced on more recent production. These increased Ginnie speeds reflect the growing share of VA loans, which prepay at faster speeds than FHA loans. This also reflects the fact that FHA streamlined refinances apply to a wide range of borrowers and unlike GSE streamlined refinances, requires no credit report and no appraisal. Some of the upfront mortgage insurance premium can also be applied to the refinanced loan. Moreover, FHA permits refinancing of existing mortgages after 6 months, while the GSEs do not allow refinancing for a year. With the increase in interest rates since November 2016, the prepayment speeds for all agencies have slowed down considerably. In 2017, with the bulk of the mortgage universe finding it non-economic to refinance, the muted month to month variations in speeds reflect seasonality, changes in day count and changes in mortgage interest rates.

Aggregate Prepayments



Sources: *Credit Suisse and Urban Institute*. **Note:** *Data as of July 2017*

2015 Issued 3.5 Coupon CPR

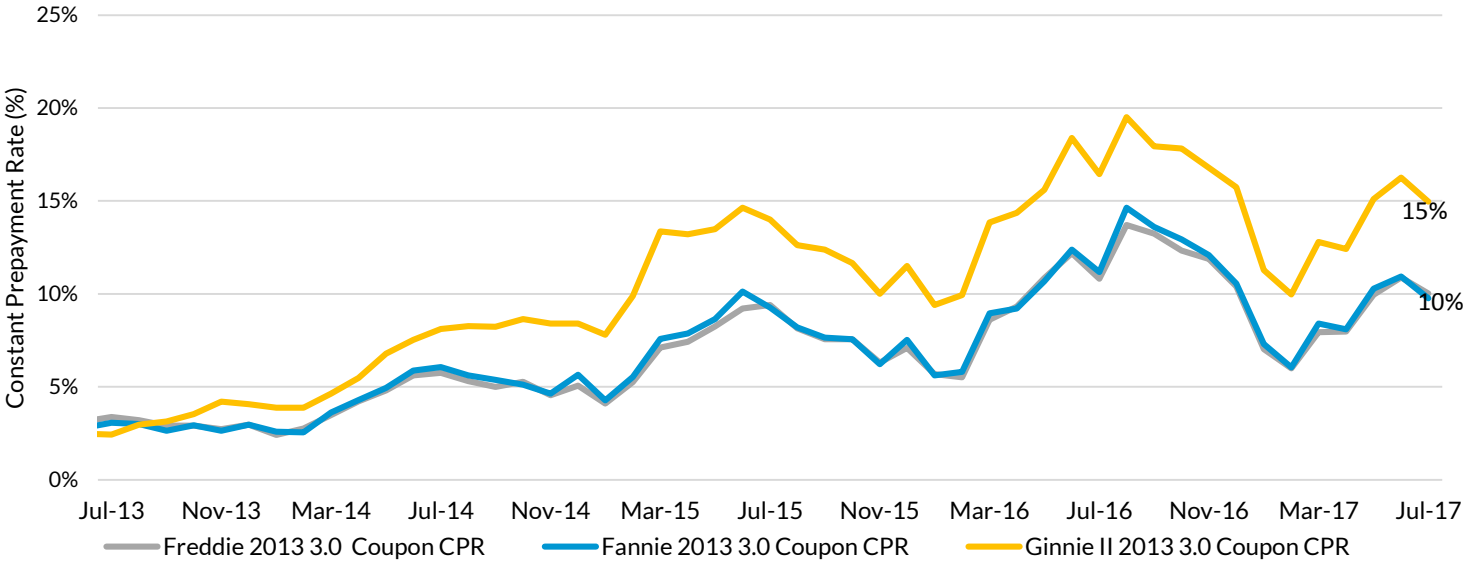


Sources: *Credit Suisse and Urban Institute*. **Note:** *Data as of July 2017*

Prepayments

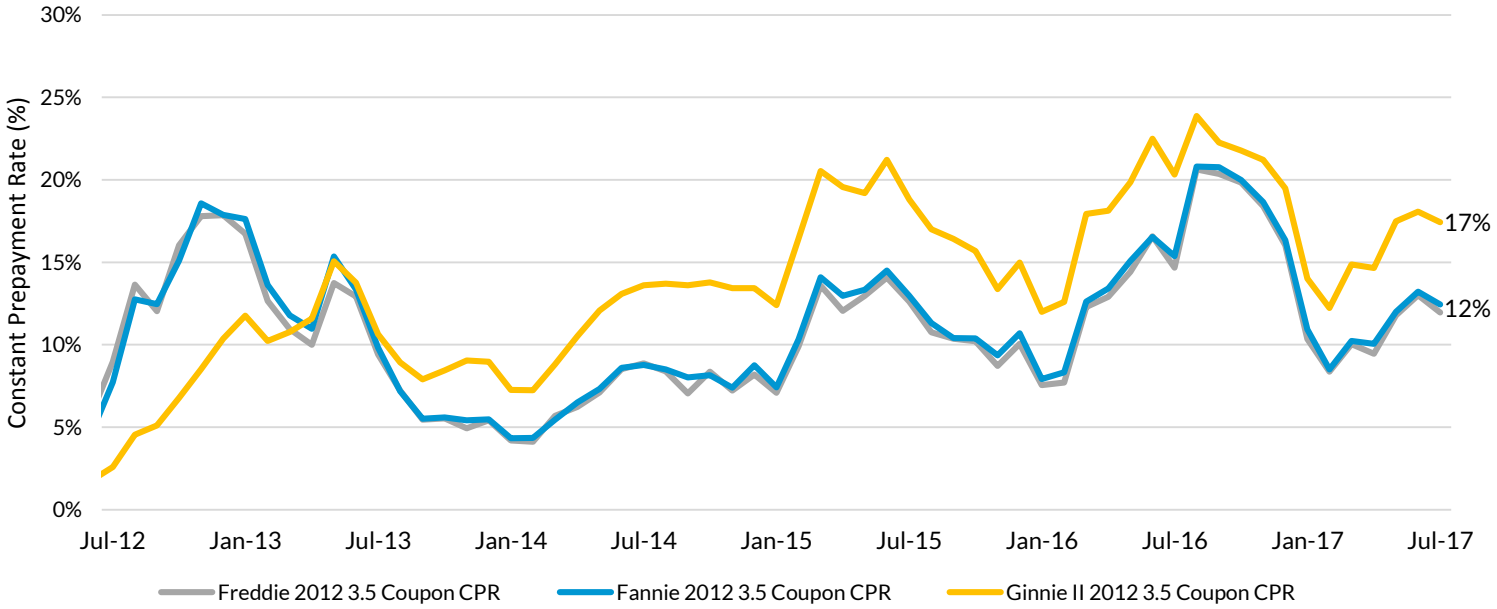
The 2013 Ginnie II 3.0s are prepaying faster than their conventional counterparts. 2012 Ginnie II 3.5s have been faster since mid-2013. The differences accelerated in 2015—potentially due to the FHA mortgage insurance premium (MIP) cut. In January 2015 FHA lowered its MIPs from 135 basis points per annum to 85 basis points per annum; this gives 2012 and 2013 FHA mortgages taken out with MIPs of 125-135 bps a 40-50 basis point rate incentive that conventional mortgages do not have. GSE guarantee fees have gone up over that same period, creating a disincentive for conventional loans. Moreover, recent originations are more heavily VA loans, which are more prepayment responsive than either FHA or Conventional loans. After a sharp mortgage rate rise in November, the prepayment speeds of Ginnie and Conventional loans both fell dramatically. In 2017, with the bulk of the mortgage universe finding it non-economic to refinance, the muted month to month variations in speeds reflect seasonality, changes in day count and changes in mortgage interest rates

2013 Issued 3.0 Coupon CPR



Sources: *Credit Suisse and Urban Institute*. **Note:** *Data as of July 2017*

2012 Issued 3.5 Coupon CPR

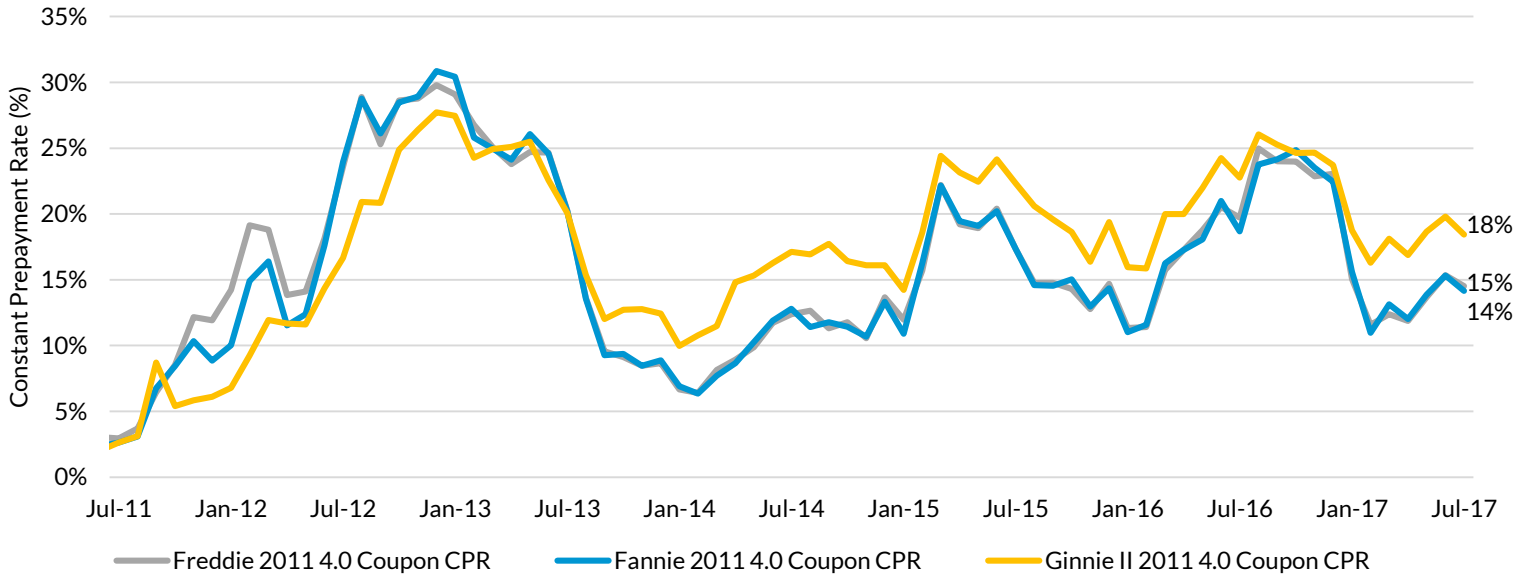


Sources: *Credit Suisse and Urban Institute*. **Note:** *Data as of July 2017*

Prepayments

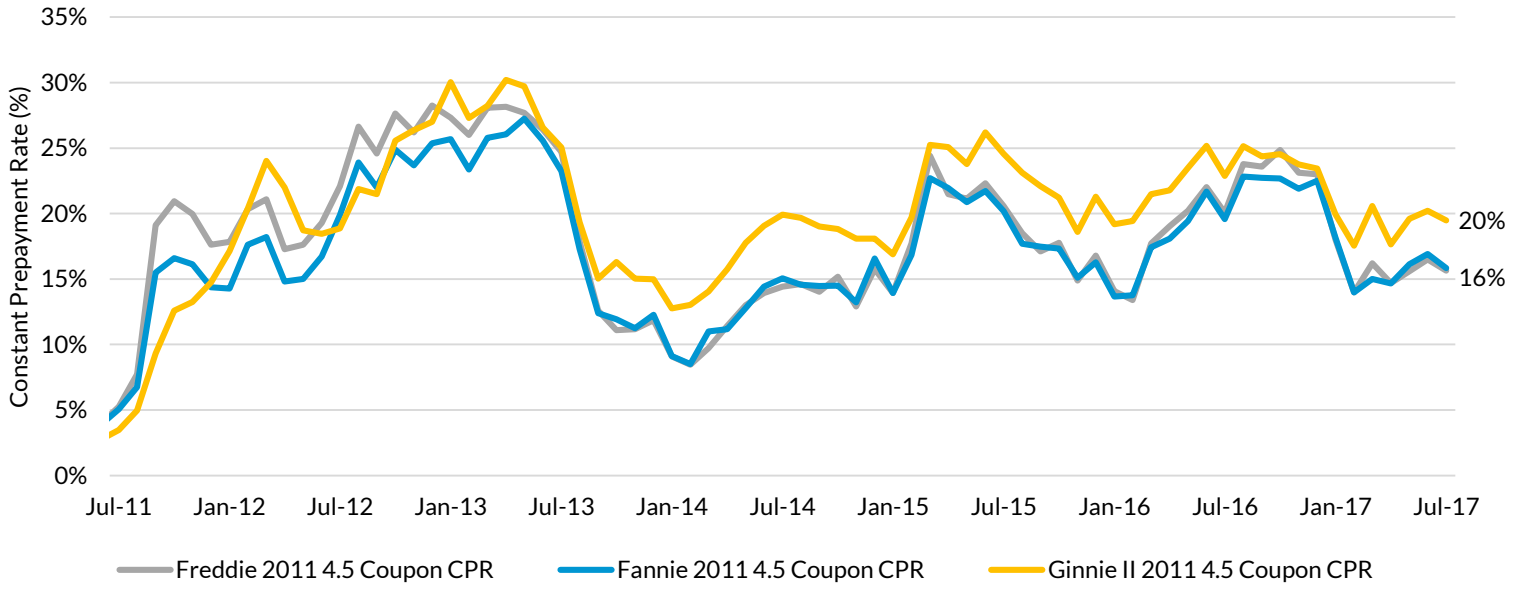
The 2011 Ginnie II 4.0s and 4.5s have been prepaying faster than their conventional counterparts since late 2013. Faster VA mortgage prepays plus simplifications to the FHA streamlined programs in 2013 are likely contributors to the faster speeds. However, as mortgage rates rose sharply since November 2016, the speeds for all agencies have slowed down considerably. The speeds trended up for all agencies since March 2017, mostly due to the recent decline in rates and a normal seasonal uptick. In July, the rates rose up again and the speeds slowed down slightly for all agencies.

2011 Issued 4.0 Coupon CPR



Sources: *Credit Suisse and Urban Institute*. **Note:** *Data as of July 2017*

2011 Issued 4.5 Coupon CPR

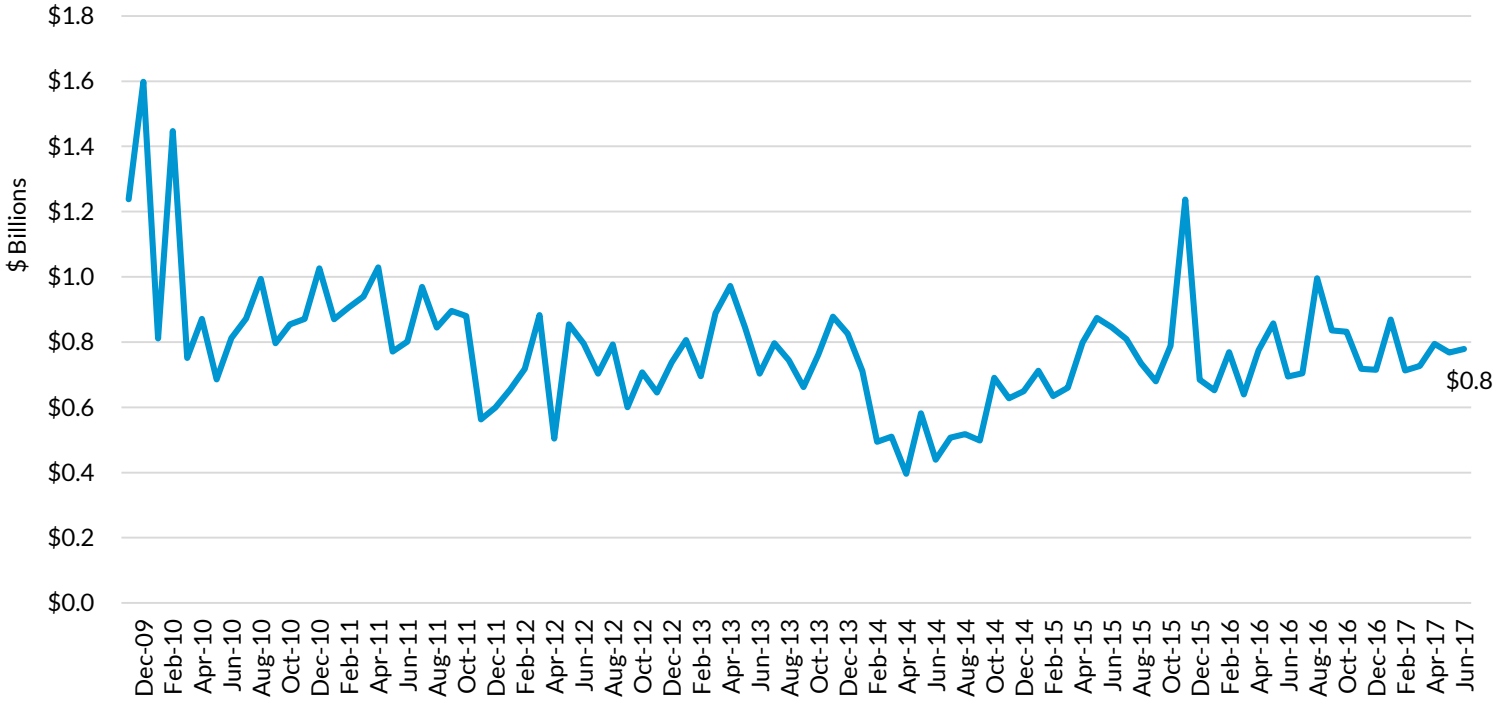


Sources: *Credit Suisse and Urban Institute*. **Note:** *Data as of July 2017*

Other Ginnie Mae Programs Reverse Mortgage Volumes

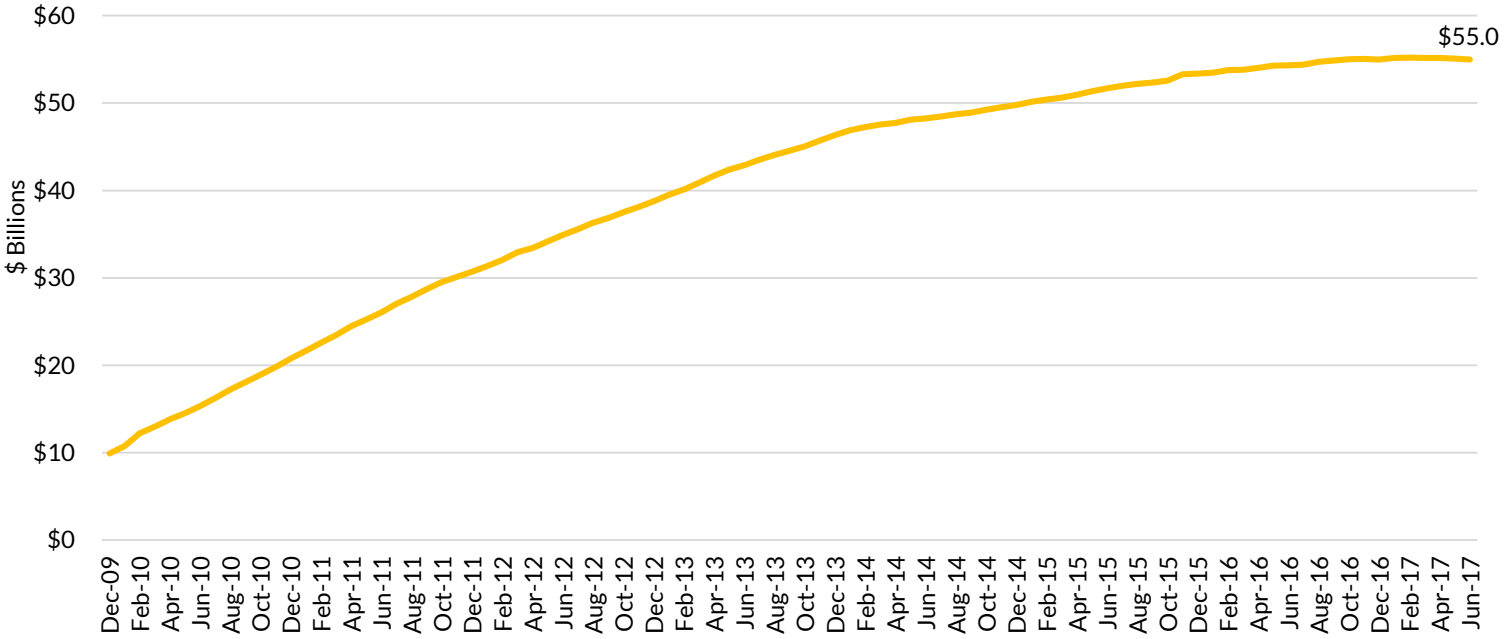
Ginnie Mae reverse mortgage volumes remain steady, with issuance of $0.8 billion in June. Outstanding securities totaled $55.0 billion in June.

HMBS Issuance Volume



Sources: *Ginnie Mae and Urban Institute.* ***Note****: Data as of June 2017*

HMBS Outstanding

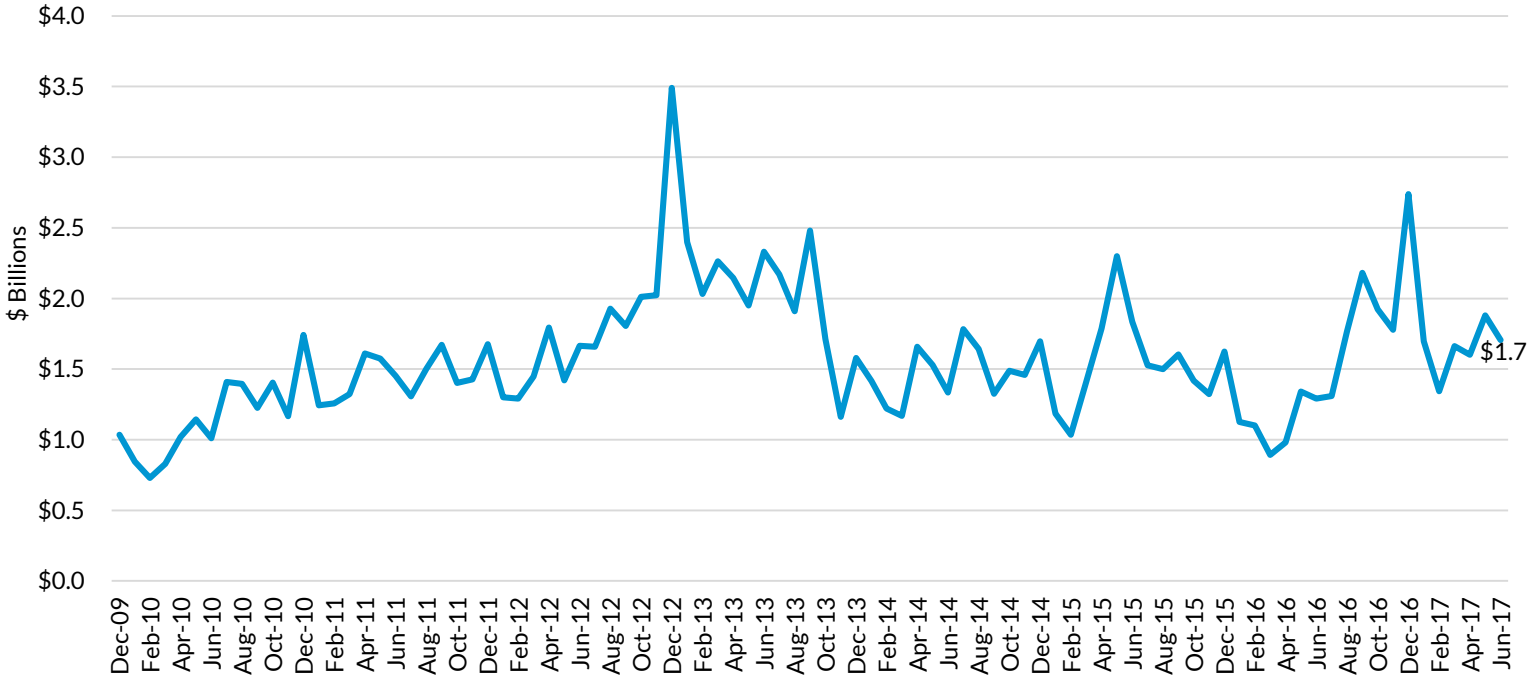


Sources: *Ginnie Mae and Urban Institute.* ***Note****: Data as of June 2017*

Other Ginnie Mae Programs Multifamily Market

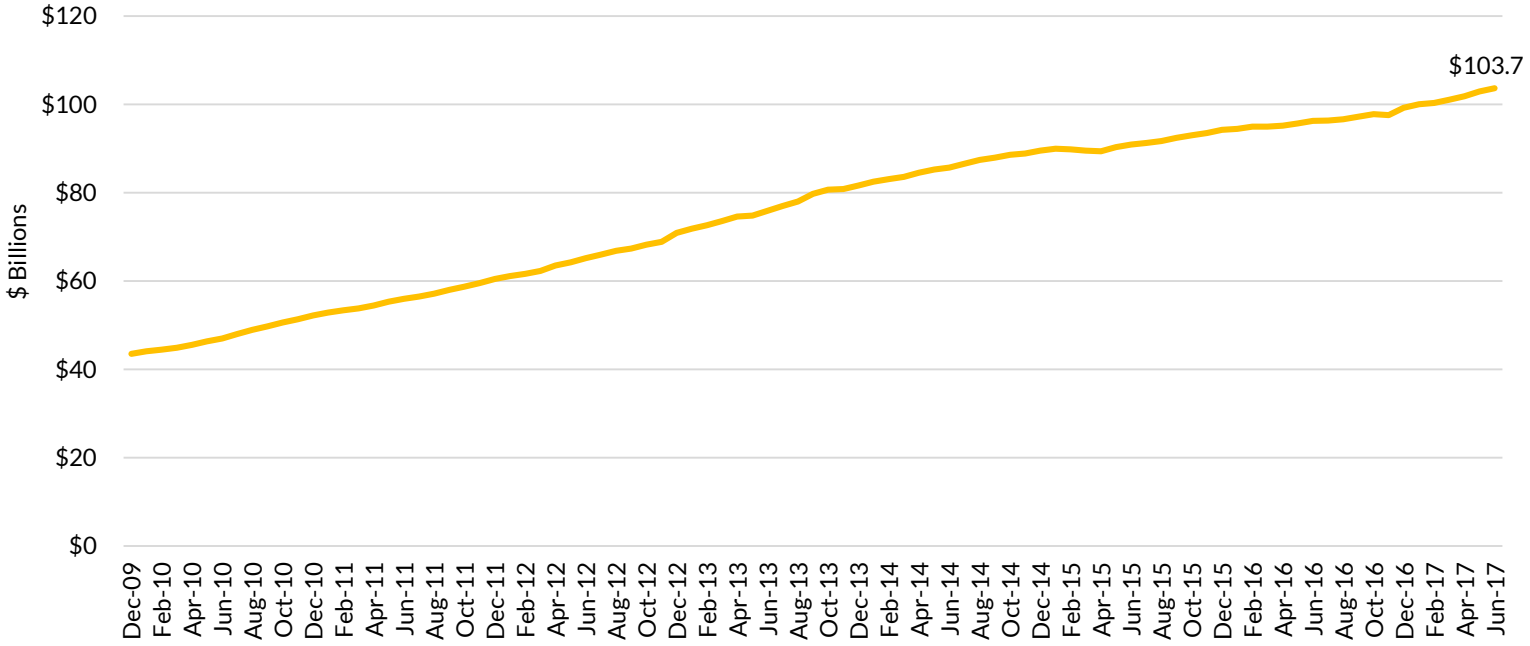
Ginnie Mae multifamily issuance volumes in June totaled $1.7 billion. Outstanding multifamily securities totaled $103.7 billion in June.

Ginnie Mae Multifamily MBS Issuance



Sources: *Ginnie Mae and Urban Institute.* ***Note****: Data as of June 2017.*

Ginnie Mae Multifamily MBS Outstanding

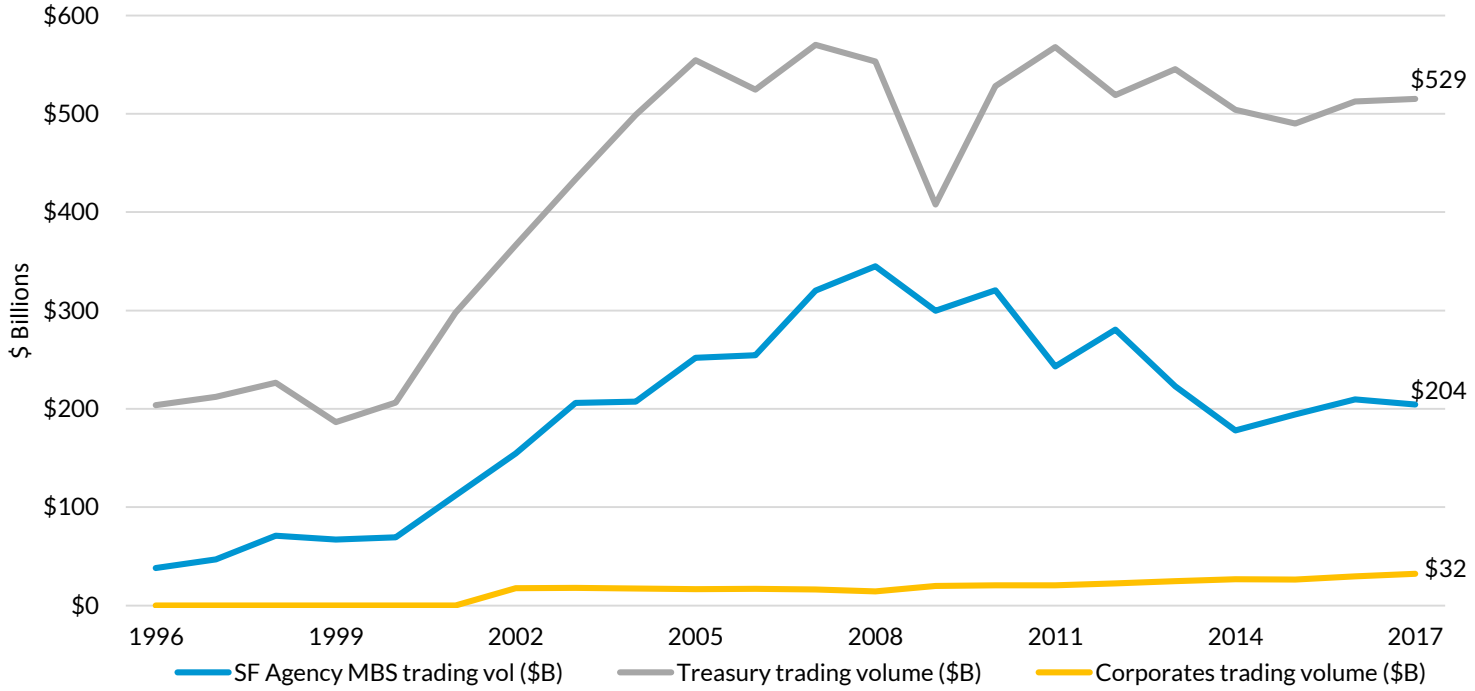


Sources: *Ginnie Mae and Urban Institute.* ***Note****: Data as of June 2017*

Market Conditions

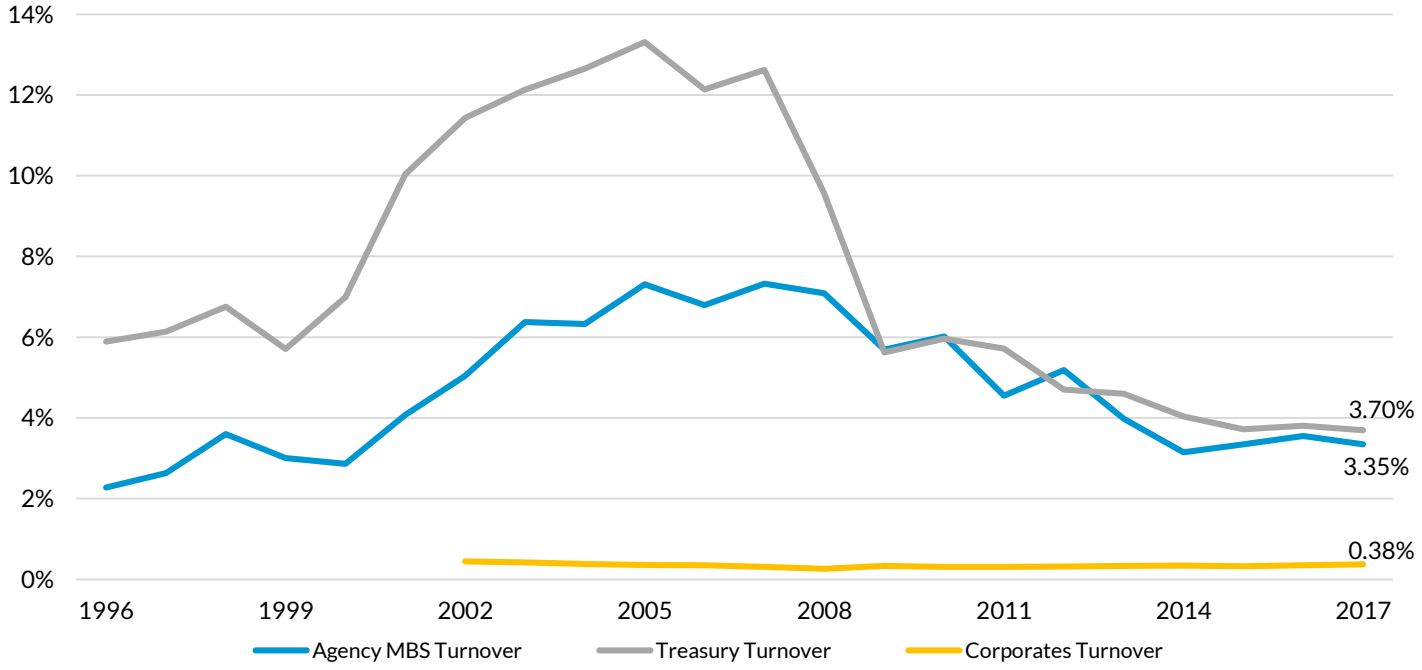
Agency MBS trading volume and turnover in 2017 has been slightly more robust than in the 2014-2015 period, and slightly less robust than 2016. In the first seven months of 2017, daily MBS turnover was 3.35 percent versus 3.55 percent in 2016 and 3.34 percent in 2015. Note that average daily Treasury turnover is also down dramatically from its 2005 peak. Corporate turnover is miniscule relative to either Agency MBS or Treasury turnover.

Average Daily Fixed Income Trading Volume by Sector



Sources: *SIFMA and Urban Institute*. ***Note:*** *Data as of July 2017*

Average Daily Turnover by Sector

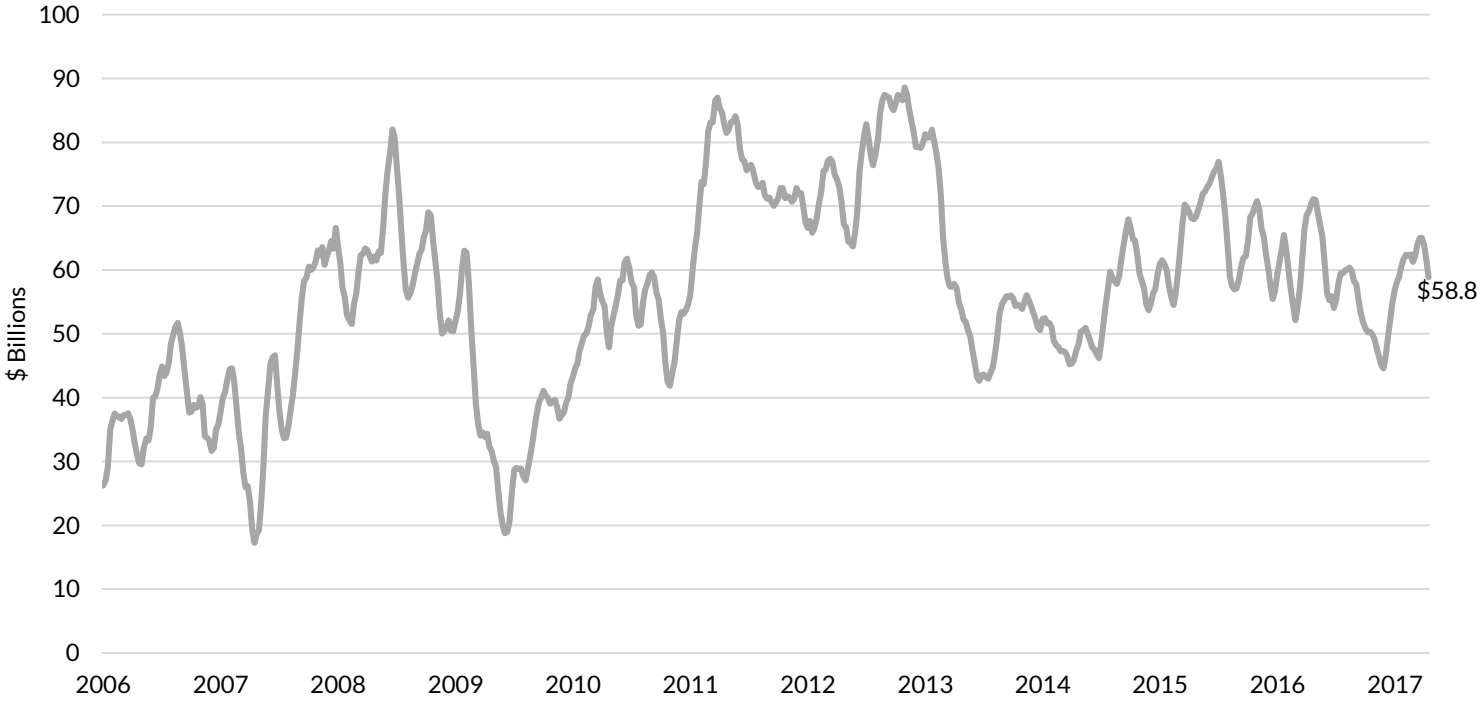


Sources: *SIFMA and Urban Institute*. ***Note:*** *Data as of July 2017*

Market Conditions

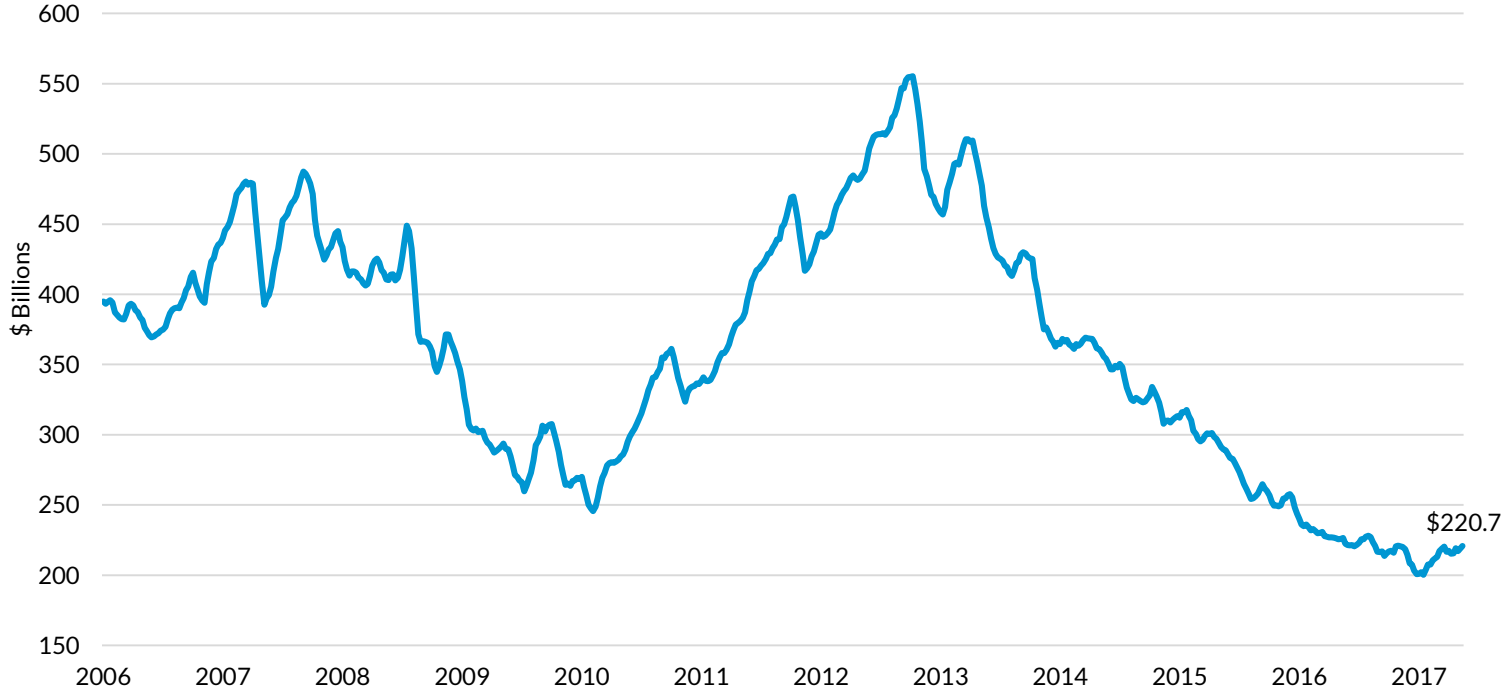
Dealer net positions in Agency MBS are currently within the recent range, although gross positions may well be down more. The volume of repurchase activity is down sharply. This reflects banks cutting back on lower margin businesses.

Dealer Net Positions: Federal Agency and GSE MBS



Sources: *Federal Reserve Bank of New York Primary Dealer Statistics and Urban Institute.* ***Note:*** *Data as of July 2017*

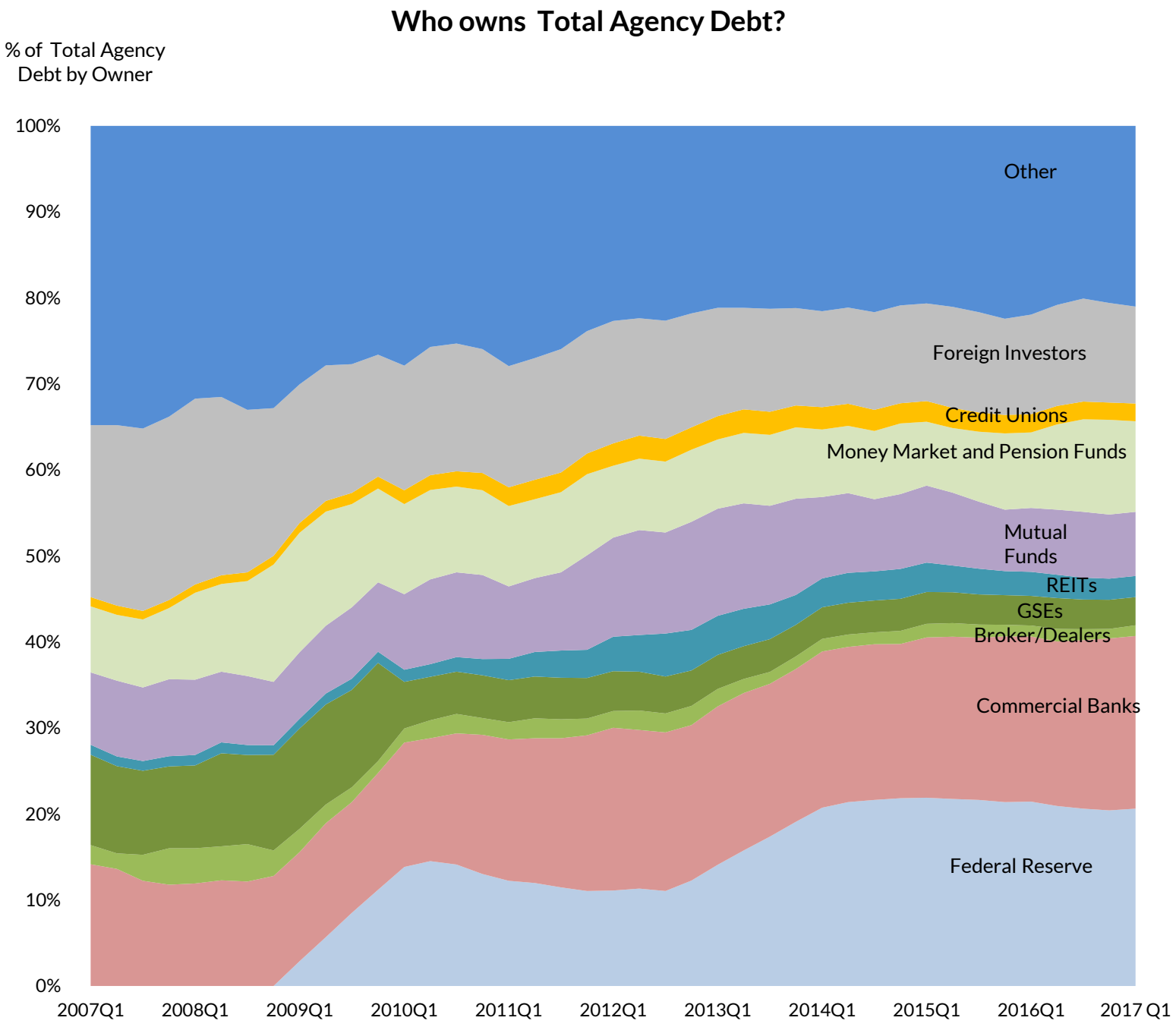
Repo Volume: Securities In



Sources: *Federal Reserve Bank of New York Primary Dealer Statistics and Urban Institute.* ***Note:*** *Data as of July 2017*

MBS Ownership

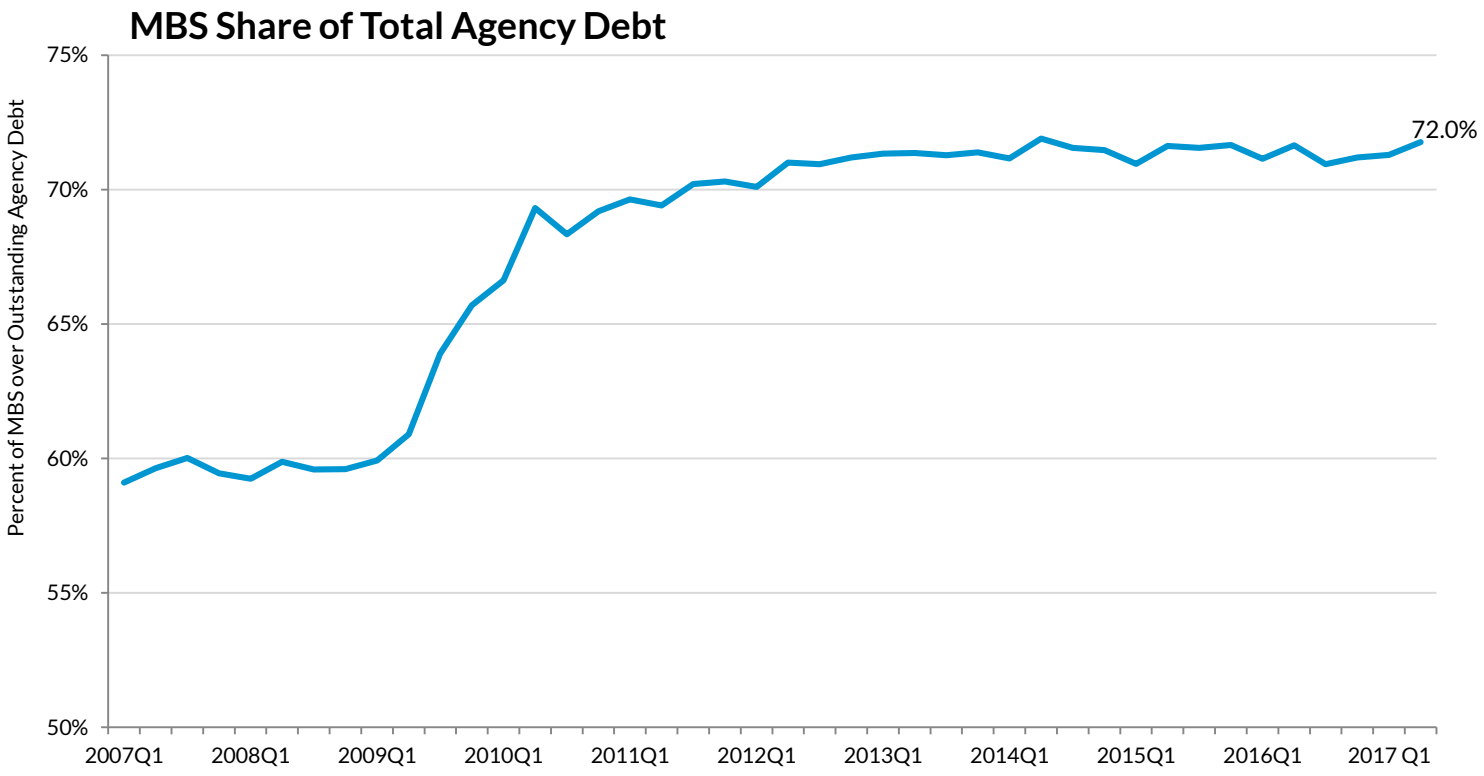
The largest holders of agency debt (Agency MBS + agency debt) include the Federal Reserve (21 percent), commercial banks (20 percent) and foreign investors (11 percent). The broker/dealer and GSE shares are a fraction of what they once were.



Sources: *Federal Reserve Flow of Funds and Urban Institute.* ***Note****: Data as of Q1 2017.*

MBS Ownership

As Fannie and Freddie reduce the size of their retained portfolio, less agency debt is required to fund that activity, hence the MBS share of total agency debt increases. For Q1 2017, the MBS share of total agency debt stood at 72.0 percent. Commercial banks are the second largest holders of Agency MBS behind the Federal Reserve. Out of their $1.8 trillion in holdings as of the end of July, $1.3 trillion of it was held by the top 25 domestic banks.



***Sources**: Federal Reserve Flow of Funds and Urban Institute. **Note**: Data as of Q1 2017.*

	Commercial Bank Holdings ($Billions)								Week Ending			
	Jun-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul 5	Jul 12	Jul 19	Jul 26
Largest Domestic Banks	1160.9	1216.9	1223.6	1229.2	1231.4	1239.7	1258.2	1273.9	1279	1283.4	1287.1	1291.4
Small Domestic Banks	436.3	452.3	457.4	458.7	461.4	463.7	467.2	468.2	470.8	473.3	474.2	473.7
Foreign Related Banks	14	12.5	12.7	13	13	12.6	11.8	12.9	12.5	12.4	13.1	13
Total, Seasonally Adjusted	1611.2	1681.7	1693.7	1700.9	1705.8	1716	1737.2	1755	1762.3	1769.1	1774.4	1778.1

***Sources**: Federal Reserve Bank and Urban Institute. **Note**: Data as of July 2017*

MBS Ownership

Out of the $1.8 trillion in MBS holdings at banks and thrifts, $1.3 trillion is in agency pass-through form: $950.7 billion in GSE pass-throughs and $329.9 billion in Ginnie Mae pass-throughs. There are another $419.3 billion in Agency CMOs. Non-agency holdings total $62.4 billion. Ginnie Mae pass-throughs have been the fastest growing sector in the past 2 years. Bank and thrift holdings of MBS are very concentrated, with the top 20 holders accounting for 69 percent of the total, and the top 5 holders accounting for 43 percent of the total.

Bank and Thrift Residential MBS Holdings

	All Banks & Thrifts ($Billions)						
	Total	Agency MBS	GSE PT	GNMA PT	Agency CMO	Private MBS	Private CMO
2000	$683.90	$392.85	$234.01	$84.26	$198.04	$21.57	$71.43
2001	$810.50	$459.78	$270.59	$109.53	$236.91	$37.62	$76.18
2002	$912.36	$557.43	$376.11	$101.46	$244.98	$20.08	$89.88
2003	$982.08	$619.02	$461.72	$75.11	$236.81	$19.40	$106.86
2004	$1,113.89	$724.61	$572.40	$49.33	$208.18	$20.55	$160.55
2005	$1,139.68	$708.64	$566.81	$35.92	$190.70	$29.09	$211.25
2006	$1,207.09	$742.28	$628.52	$31.13	$179.21	$42.32	$243.28
2007	$1,236.00	$678.24	$559.75	$31.58	$174.27	$26.26	$357.24
2008	$1,299.76	$820.12	$638.78	$100.36	$207.66	$12.93	$259.04
2009	$1,345.74	$854.40	$629.19	$155.00	$271.17	$7.53	$212.64
2010	$1,433.38	$847.13	$600.80	$163.13	$397.30	$7.34	$181.61
2011	$1,566.88	$917.10	$627.37	$214.81	$478.82	$3.28	$167.70
2012	$1,578.86	$953.76	$707.87	$242.54	$469.27	$17.16	$138.67
2013	$1,506.60	$933.73	$705.97	$231.93	$432.60	$26.11	$114.15
1Q14	$1,574.44	$1,029.68	$713.50	$232.44	$500.09	$27.08	$104.97
2Q14	$1,526.12	$951.82	$717.27	$232.75	$445.17	$24.72	$104.41
3Q14	$1,534.59	$951.99	$725.96	$226.03	$447.46	$21.89	$113.24
4Q14	$1,539.32	$964.16	$733.71	$230.45	$449.90	$20.33	$104.94
1Q15	$1,579.21	$1,012.26	$767.71	$244.55	$455.47	$17.70	$93.78
2Q15	$1,583.22	$1,032.26	$784.22	$248.05	$445.91	$16.47	$88.57
3Q15	$1,608.44	$1,064.67	$805.05	$259.62	$447.01	$13.60	$83.16
4Q15	$1,643.56	$1,115.40	$823.10	$292.30	$445.39	$11.14	$71.63
1Q16	$1,660.58	$1,133.29	$833.25	$300.04	$448.63	$10.27	$68.39
2Q 16	$1,684.33	$1,169.67	$867.64	$302.03	$440.25	$9.11	$65.29
3Q16	$1,732.36	$1,227.52	$924.81	$302.71	$435.77	$7.90	$61.17
4Q16	$1,736.93	$1,254.13	$930.67	$323.46	$419.80	$7.40	$55.60
1Q17	$1,762.38	$1,280.63	$950.72	$329.91	$419.34	$7.03	$55.39

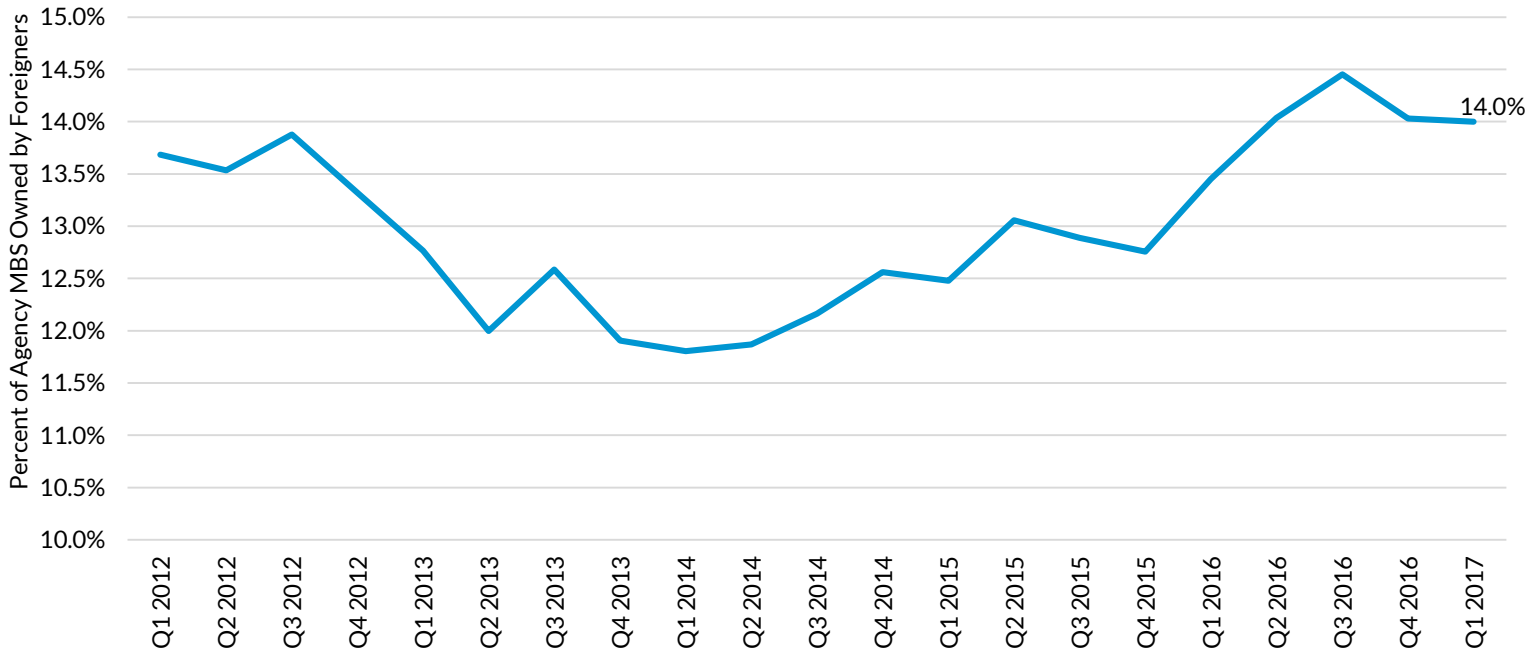
	Top Bank & Thrift Residential MBS Investors	Total ($MM)	GSE PT ($MM)	GNMA PT ($MM)	Agency REMIC ($MM)	Non-Agency ($MM)	Market Share
1	Bank of America Corporation	$310,551	$177,393	$118,070	$14,440	$648	17.6%
2	Wells Fargo & Company	$207,152	$163,855	$30,559	$5,378	$7,360	11.8%
3	JP Morgan Chase & Co.	$104,125	$69,311	$21,024	$628	$13,162	5.9%
4	U S. Bancorp.	$79,237	$29,118	$10,521	$39,597	$2	4.5%
5	Charles Schwab Bank	$63,351	$38,097	$9,533	$15,721	$0	3.6%
6	Citi Group Inc.	$60,717	$45,874	$331	$9,241	$5,271	3.4%
7	Capital One Financial Corporation	$51,675	$17,844	$9,995	$22,124	$1,751	2.9%
8	Bank of New York Mellon Corp.	$50,209	$30,533	$2,066	$15,060	$2,550	2.8%
9	PNC Bank, National Association	$41,956	$29,782	$5,180	$3,601	$3,393	2.4%
10	Branch Banking and Trust Company	$34,897	$9,732	$3,563	$20,959	$643	2.0%
11	State Street Bank and Trust Company	$29,920	$3,852	$6,777	$10,253	$9,038	1.7%
	Morgan Stanley	$25,059	$10,084	$6,669	$8,306	$0	1.4%
12	KeyBank National Association	$24,692	$1,003	$1,339	$22,350	$0	1.4%
	SunTrust Bank	$22,399	$12,125	$10,201	$0.4	$71	1.3%
13	HSBC Bank USA, National Association	$20,843	$7,468	$5,338	$8,022	$6	1.2%
16	E*TRADE Bank	$20,581	$11,650	$3,966	$4,966	$0	1.2%
17	Regions Bank	$18,641	$11,112	$5,495	$2,030	$4	1.1%
18	Fifth Third Bank	$16,244	$3,735	$3,951	$8,558	$0	0.9%
19	MUFG Union Bank, National Association	$16,044	$5,340	$4,963	$5,314	$427	0.9%
20	Santander Bank, N.A.	$15,671	$3,718	$3,413	$8,541	$0	0.9%
	Total Top 20	**$1,213,964**	**$681,626**	**$262,954**	**$225,089**	**$44,326**	**68.90%**

Sources: *Inside Mortgage Finance and Urban Institute.* ***Note:*** *Data as of Q1 2017*

MBS Ownership

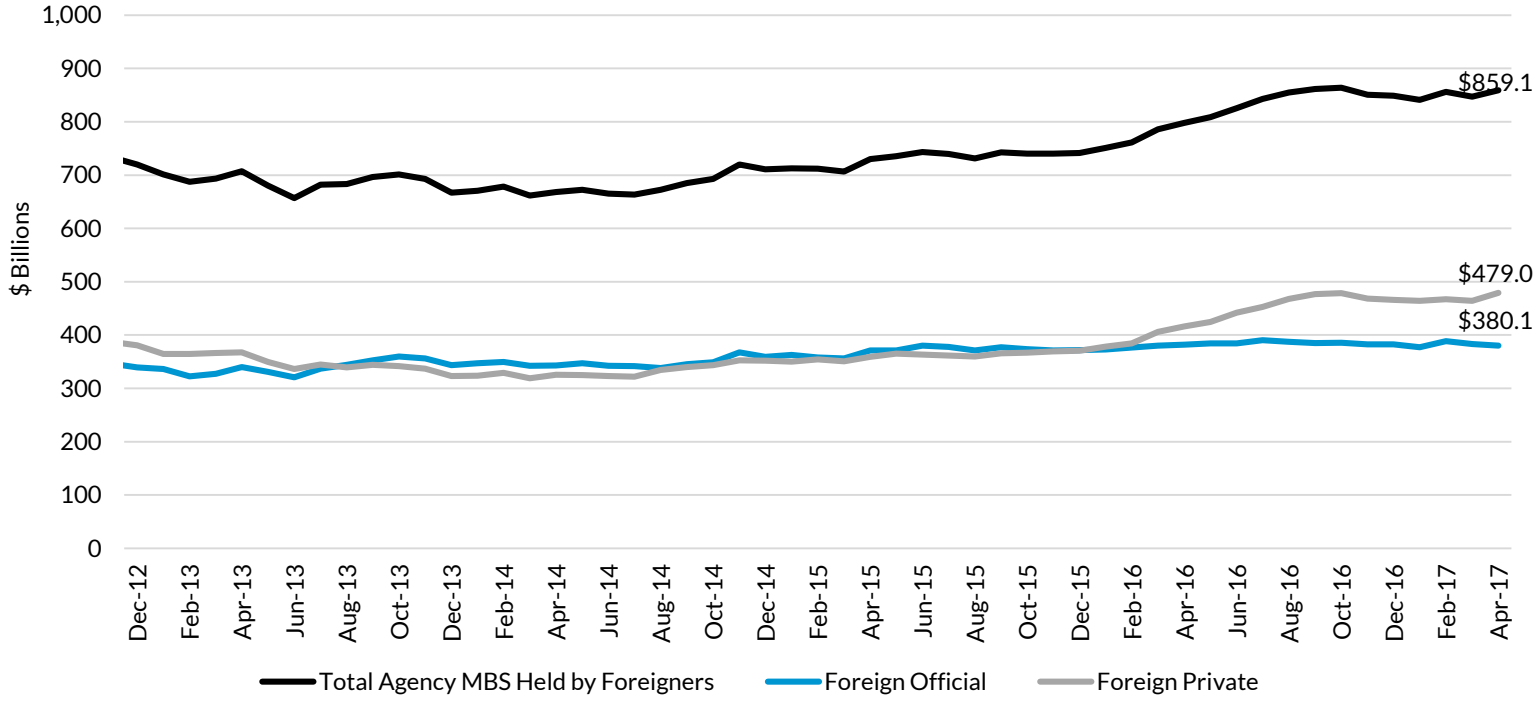
Foreign investors hold 14.0 percent of agency MBS, up considerably from the lows in 2013. For the month of April, this represents $859.1 billion in agency MBS, $380.1 billion held by official institutions and $479.0 billion held by private investors.

Foreign Share of Agency MBS



***Sources**: SIFMA and Treasury International Capital (TIC). **Note**: Data as of Q1 2017.*

Monthly Agency MBS Holdings by Foreigners



***Sources**: Treasury International Capital (TIC) and Urban Institute. **Note**: Data as of April 2017.*

MBS Ownership

The single largest foreign holders of agency MBS are Taiwan, China and Japan; these three countries comprise around 70 percent of all foreign holdings. Since June of 2016, we estimate Taiwan and Japan have expanded their holdings while China has contracted. Our estimates indicate that Japan has been the single largest buyer of MBS between June 2016 and April 2017, adding $29 billion over the 10-month period.

Agency MBS+ Agency Debt

	Level of Holdings ($ Millions)					Change in Holdings ($ Millions)			
Country	Jun-16	Sep-16	Dec-16	Mar-17	Apr-17	Q3 2016	Q4 2016	Q1 2017	Apr-17
Taiwan	207,000	208,352	204,005	212,482	222,589	1,352	-4,347	8,477	10,107
China	196,000	191,743	184,151	187,664	182,530	-4,257	-7,592	3,513	-5,134
Japan	197,000	222,116	220,644	215,327	222,180	25,116	-1,472	-5,317	6,853
Ireland	48,000	48,307	47,065	46,194	45,814	307	-1,242	-871	-380
Luxembourg	32,000	32,549	35,352	29,119	28,434	549	2,803	-6,233	-685
Cayman Islands	31,000	30,686	30,186	29,012	27,169	-314	-500	-1,174	-1,843
Switzerland	17,000	20,638	15,626	15,917	16,057	3,638	-5,012	291	140
United Kingdom	10,000	10,520	9,578	9,335	9,028	520	-942	-243	-307
Canada	6,000	6,578	5,047	5,250	5,481	578	-1,531	203	231
Belgium	5,000	4,336	4,597	4,712	5,324	-664	261	115	612
Rest of World	206,000	208,604	208,353	189,413	190,403	2,604	-251	-18,940	990
Total	955,000	984,429	964,604	944,425	955,009	29,429	-19,825	-20,179	10,584

Agency MBS Only (Estimates)

	Level of Holdings ($Millions)*					Change in Holdings ($Millions)*			
Country	Jun-16	Sep-16	Dec-16	Mar-17	Apr-17	Q3 2016	Q4 2016	Q1 2017	Apr-17
Taiwan	207,000	208,352	204,005	212,482	222,589	1,352	-4,347	8,477	10,107
China	187,000	184,579	179,137	185,778	181,547	-2,421	-5,442	6,641	-4,231
Japan	185,000	207,491	207,653	207,776	214,497	22,491	162	124	6,720
Ireland	38,000	38,551	37,765	37,912	37,670	551	-787	148	-243
Luxembourg	27,000	27,660	30,260	25,434	24,875	660	2,600	-4,825	-559
Cayman Islands	23,000	22,922	22,667	22,205	20,601	-78	-254	-463	-1,604
Switzerland	12,000	15,188	11,020	11,570	11,731	3,188	-4,167	550	160
United Kingdom	8,000	8,502	7,756	7,722	7,465	502	-746	-33	-258
Canada	4,000	4,526	3,252	3,518	3,737	526	-1,274	266	219
Belgium	2,000	1,467	1,713	1,901	2,464	-533	246	188	563
Rest of World	139,000	142,457	143,461	130,681	131,968	3,457	1,004	-12,779	1,287
Total	832,000	861,694	848,688	846,981	859,143	29,694	-13,006	-1,707	12,162

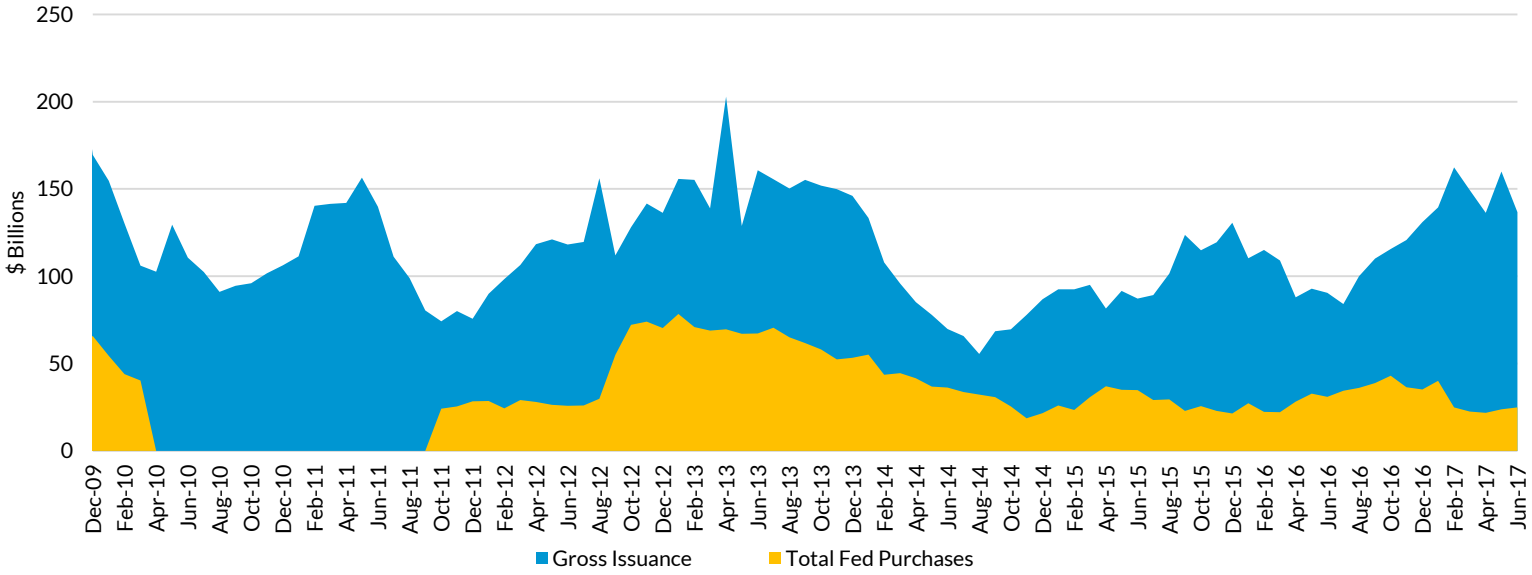
Sources *:Treasury International Capital (TIC) and Urban Institute.*
Note: *Data as of April 2017.*

*calculated based on June 2016 report with amount asset backed per country

MBS Ownership

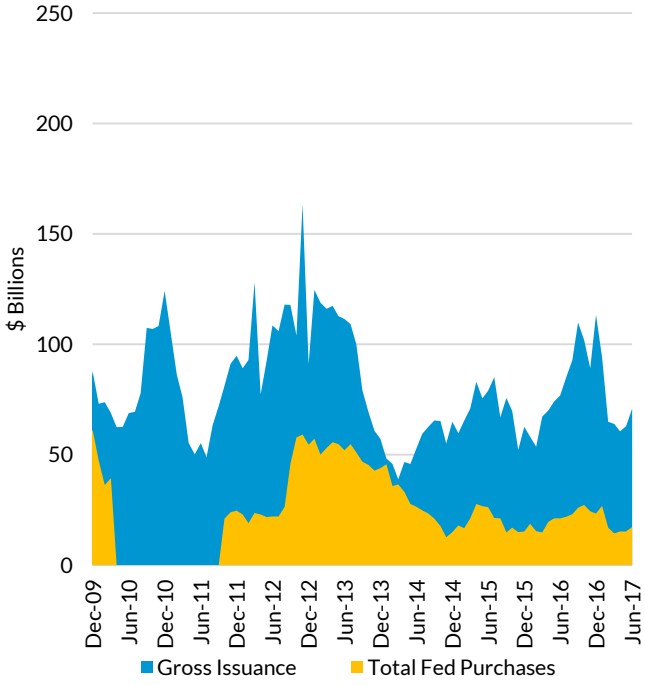
In October 2014, the Fed ended its purchase program, but continued buying at a significantly reduced level, reinvesting funds from pay downs on mortgages and agency debt into the mortgage market. Since then, the Fed's absorption of gross issuance has been between 20 and 30 percent; it was 22.5% percent for June 2017. During this month, the Fed has been buying Ginnie Mae securities and GSE securities at similar rates. Over the past year, the Fed has absorbed an average of 25.1 percent of GSE issuance and 23.7 percent of Ginnie Mae issuance. In their June 2017 meeting, the Fed announced a portfolio wind down strategy for both MBS and Treasury's that is expected to be implemented later this year.

Total Fed Absorption



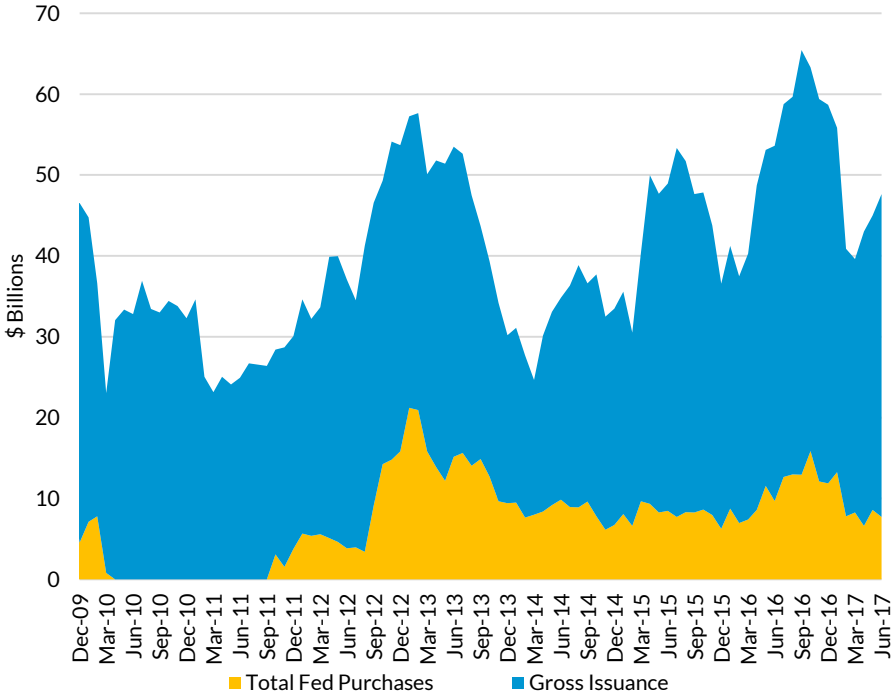
***Sources**: eMBS, Federal Reserve Bank of New York and Urban Institute. **Note:** Data as of June 2017.*

Fed Absorption of GSE MBS



***Sources**: eMBS, Federal Reserve Bank of New York and Urban Institute. **Note:** Data as of June 2017.*

Fed Absorption of Ginnie Mae MBS



***Sources**: eMBS, Federal Reserve Bank of New York and Urban Institute. **Note:** Data as of June 2017.*

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