FANNIE MAE AND FREDDIE MAC SINGLE-FAMILY GUARANTEE FEES IN 2016

October 2017

Division of Housing Mission & Goals

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Executive Summary

Section 1601 of the Housing and Economic Recovery Act of 2008 (HERA) requires the Federal Housing Finance Agency (FHFA) to conduct an ongoing study of the guarantee fees charged by Fannie Mae and Freddie Mac (the Enterprises) and to submit a report to Congress each year.[1] HERA requires an analysis of the average guarantee fee and a breakdown by product type, risk class, and volume of a lender's business. The report also must analyze the costs of providing the guarantee and provide a comparison to the prior year. FHFA issued the first such report in 2009.[2]

This report discusses the guarantee fees charged in 2016 and provides a five-year perspective with data back to 2012. The major findings in this report are:

- For all loan products combined, the average single-family guarantee fee fell by 2 basis points from 59 basis points to 57 basis points in 2016. The upfront portion of the guarantee fee, which is based on the credit risk attributes (e.g., loan purpose, loan-to-value ratio, and credit score), remained unchanged at 16 basis points. The ongoing portion of the guarantee fee, which is based on the product type (fixed-rate or ARM, and loan term) fell from 42 basis points to 40 basis points. Ongoing fees fell primarily because of competitive pressures between the Enterprises, and less because of changes in the product type mix from 2015.
- The average guarantee fee in 2016 on fixed-rate, 30-year loans fell by 2 basis points to 61 basis points, while the fee on fixed-rate, 15-year loans fell by 4 basis points to 37 basis points. The pricing on adjustable-rate mortgage (ARM) loans remained steady at 59 basis points.
- The lower guarantee fees in 2016 resulted in a small decline in the expected profitability of the loan acquisitions. The Enterprises measure expected profitability as the difference between the total charged guarantee fee and modeled costs, including a targeted return on the modeled economic capital calculated for these loans.
- In 2016, extra-small lenders paid, on average, 2 basis points less than extra-large lenders in total guarantee fees. Since 2013, the guarantee fees among the size groups has been comparable, with only small differences in a given year.

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[1] Section 1601 of the Housing and Economic Recovery Act of 2008, Public Law 110-289, 122 Stat 2824, which may be found at https://www.congress.gov/110/plaws/publ289/PLAW-110publ289.pdf.

[2] See prior guarantee fee reports at http://www.fhfa.gov/DataTools/Pages/Data-Reports.aspx.

- Based on quarterly monitoring of guarantee fees, FHFA observed that average fees were declining as the ongoing portion of the overall guarantee fees declined for both Enterprises. FHFA responded by issuing direction in July 2016 to set minimum ongoing guarantee fees by product type, effective in November 2016, consistent with our responsibility to ensure safety and soundness.

Questions and comments about this report may be addressed to FHFA at:
https://www.fhfa.gov/AboutUs/Contact/Pages/General-Questions-and-Comments.aspx

Guarantee Fees: Background

Guarantee fees are intended to cover the credit risk and other costs that Fannie Mae and Freddie Mac incur when they acquire single-family loans from lenders. Loans are acquired through two methods. A lender may exchange a group of loans for a Fannie Mae- or Freddie Mac-guaranteed mortgage-backed security (MBS), which may then be sold by the lender into the secondary market to recoup funds to make more loans to borrowers. Alternatively, a lender may deliver loans to an Enterprise in return for a cash payment. Larger lenders tend to exchange loans for MBS, while smaller lenders tend to sell loans for cash and these loans are later bundled by the Enterprises into MBS.

While the private holders of MBS assume market risk (the risk that the price of the security may fall due to changes in market interest rates), the Enterprises assume the credit risk on the loans.[3] The Enterprises charge a guarantee fee in exchange for providing this guarantee, which covers administrative costs, projected credit losses from borrower defaults over the life of the loans, and the cost of holding capital to protect against projected credit losses that could occur during stressful macroeconomic conditions, if the Enterprises held capital.[4] Investors are willing to pay a higher price for Enterprise MBS due to their guarantee of principal and interest. The higher value of the MBS leads to lower interest rates for borrowers.

There are two types of guarantee fees: ongoing and upfront. Ongoing fees are collected each month over the life of a loan. Upfront fees are one-time payments made by lenders upon loan delivery to an Enterprise. Fannie Mae refers to upfront fees as "loan level pricing adjustments,"

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[3] Although the Enterprises are always the ultimate guarantors, they may choose to retain the credit risk on their own balance sheet or, as part of their credit risk transfer programs, pay private entities to bear some of the credit risk.

[4] Currently, the guarantee fee also includes a 10 basis point charge as required by Section 401 of the Temporary Payroll Tax Cut Continuation Act of 2011, codified at 12 USC 4547.

while Freddie Mac refers to them as "delivery fees." Both ongoing and upfront fees compensate the Enterprises for the costs of providing the guarantee. Ongoing fees are based primarily on the product type, such as a 30-year fixed rate or a 15-year fixed rate loan. Upfront fees are used to price for specific risk attributes, such as the loan-to-value ratio (LTV) and credit score.

Ongoing fees are set by the Enterprises with lenders that exchange loans for MBS, while those fees are embedded into the price offered to lenders that sell loans for cash. In contrast to ongoing fees, the upfront fees are publicly posted on each Enterprise's website.[5] Upfront fees are paid by the lender at the time of loan delivery to an Enterprise, and those charges are typically rolled into a borrower's interest rate in the same manner as ongoing fees.

Under the existing protocols of the Enterprises' conservatorships, FHFA requires each Enterprise to seek FHFA approval for any proposed change in upfront fees. The upfront fees assessed by the two Enterprises generally are in alignment.

Factors Considered in Setting Fees

I. Estimated Cost

Guarantee fees cover several cost components that the Enterprises expect to incur in providing their guarantee on mortgage-backed securities: 1) the expected costs that result from the failure of some borrowers to make their payments; 2) the cost of holding the modeled capital amount necessary to protect against potentially much larger unexpected and catastrophic losses that result from the failure of some borrowers to make their payments in a severe stress environment; 3) general and administrative expenses; and 4) 10 basis points allocated to the U.S. Department of the Treasury as required by the Temporary Payroll Tax Cut Continuation Act of 2011.

Of these components, the cost of holding capital is by far the most significant. A firm bearing mortgage credit risk needs enough capital to survive a stressful credit environment, such as what occurred during the recent housing market crisis. The annual cost of holding capital to protect against unexpected losses is the amount of capital required multiplied by the target rate of return on that capital.

[5] See Enterprise upfront fees at https://www.fanniemae.com/content/pricing/llpa-matrix.pdf and http://www.freddiemac.com/singlefamily/pdf/ex19.pdf.

Each Enterprise is subject to a Senior Preferred Stock Purchase Agreement with the U.S. Department of the Treasury, which restricts the ability to retain capital. Furthermore, FHFA suspended its quarterly classifications of the capital adequacy of each Enterprise when it placed the Enterprises into conservatorship. In order to maintain a sound pricing framework, however FHFA has asked each Enterprise to set guarantee fees consistent with the amount of capital they would need to support their guarantee businesses if they were able to retain capital.

Each Enterprise uses a proprietary model to estimate the costs it expects to bear and the amount of capital that it needs to set aside to cover unexpected losses. The capital estimates are most sensitive to the macroeconomic scenario specified in the model. The two primary components of the macroeconomic scenario are the stressed house price path and stressed interest rate path.

In addition to the macroeconomic scenarios, the main risk characteristics included in the models that determine the estimated cost of guaranteeing a single-family loan are:

- Borrower credit history;
- Debt-to-income ratio;
- Loan-to-value ratio;
- Mortgage insurance coverage;
- Loan purpose (purchase, rate-term refinance, cash-out refinance);
- Occupancy status (primary home, investor);
- Property type (single-family, condo/co-op, 2-4 unit);
- Product type (fixed, adjustable rate, maturity term); and
- Loan interest rate.

Using the models to estimate a required amount of capital and subjecting that estimate to a target rate of return, the Enterprises calculate a model guarantee fee and, from that, a gap. The gap is the difference between the fee charged on a loan and the model-estimated cost of providing the credit guarantee, including a target return on capital.[6] If the gap on a loan is positive or zero, the Enterprise expects to achieve at least its target rate of return on capital. If the gap is negative, the Enterprise may still earn a positive return on the loan although not achieve its overall target rate of return on the loan. At acquisition, the Enterprises expect to earn a positive return, whether

[6] Models and the target return on capital are updated over time, so caution must be exercised when comparing gaps from different time periods.

above or below target, on nearly all of their loans. Lower expected returns may help the Enterprises to fulfill their affordable housing missions.[7]

II. Other Factors

Another factor in determining guarantee fees is the lending environment. For example, Fannie Mae and Freddie Mac compete with each other for a lender's business,[8] and lenders may choose an alternative to the Enterprises such as retaining loans in portfolio, originating loans insured by the Federal Housing Administration, or securitizing loans in the private-label securities market. If the Enterprises' guarantee fees rise relative to the prices of these alternatives, some reduction in the market share for the Enterprises for certain types of loans would be expected.

In addition to the estimated cost and lending environment, the Enterprises consider the mandates of safety and soundness, regulatory affordable housing goals, and their charter obligations to provide broad access to mortgage credit in determining their guarantee fees.

Timeline of Changes in Guarantee Fees

Faced with deteriorating conditions in the housing market, each Enterprise implemented a guarantee fee increase in March 2008 to better align fees with credit risk. Specifically, the Enterprises increased ongoing fees and introduced two new upfront fees: a fee based on a borrower's LTV ratio and credit score, and an adverse market charge. Later in 2008, the Enterprises refined their LTV ratio and credit score-based upfront fees, and in subsequent years gradually raised their fees to better reflect credit risk.

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[7] The Federal Housing Enterprises Financial Safety and Soundness Act, as amended by HERA, requires FHFA "to ensure that the operations and activities of each regulated entity foster liquid, efficient, competitive, and resilient national housing finance markets (including activities relating to mortgages on housing for low- and moderate-income families involving a reasonable economic return that may be less than the return earned on other activities)."

[8] Fannie Mae's MBS tend to trade at higher prices (with corresponding lower interest rate yields) than similar securities from Freddie Mac. This is mainly due to the liquidity benefit of a larger volume of Fannie Mae securities in the market. Freddie Mac is able to compete with Fannie Mae for business by offering market adjusted pricing (MAP) to its lenders that exchange loans for MBS. In effect, MAP provides a discount from the contractual ongoing guarantee fee. The magnitude of the MAP discount is generally based on the spread between Fannie Mae and Freddie Mac MBS. While the guarantee fees in this report are shown on a combined basis (Fannie Mae and Freddie Mac fees together weighted by the respective acquisition volumes), the Freddie Mac component of the combined guarantee fees include the effect of the MAP pricing discount.

On December 23, 2011, the President signed into law the Temporary Payroll Tax Cut Continuation Act of 2011 (TCCA) to fund an extension of the payroll tax cut. Consistent with the TCCA, in late December 2011, FHFA directed the Enterprises to increase the ongoing fees for all loans by 10 basis points effective with April 2012 deliveries.[9]

In August 2012, FHFA directed the Enterprises to increase their guarantee fees by 10 basis points on average. This increase was intended to more fully compensate taxpayers for bearing credit risk. The increase was allocated in a way that more closely aligned the gaps of 15-year and 30-year loans and reduced differences in the ongoing fees of small volume lenders and large volume lenders. This change was effective with December 2012 deliveries.

FHFA announced another guarantee fee change in December 2013 that would have increased ongoing fees by 10 basis points and made other changes to the fee structure. However, in January 2014, FHFA suspended implementation of the change pending further review.

In April 2015, the Agency completed its further review of the adequacy of the Enterprises' guarantee fees. FHFA found no compelling economic reason to change the overall level of fees. However, the Agency directed the Enterprises to make certain minor and targeted fee adjustments effective with September 2015 deliveries:

- Due to improvements in the housing market, the 25 basis point upfront adverse market charge in place since 2008 was removed for all states.

- Offsetting the revenue lost from the removal of the adverse market charge, FHFA made targeted increases in upfront fees for a subset of loans, including some higher-risk loan segments (cash-out refinances, jumbo conforming loans, investment properties, and loans with secondary financing) and those with both high credit scores and low LTV ratios.

Fees were not increased on loans with lower credit scores or higher LTV ratios. Contributing to the determination to leave the upfront fees the same for higher LTV ratio loans was FHFA's separate action in April 2015 to finalize new standards for mortgage insurers – Private Mortgage Insurer Eligibility Requirements (PMIERs). Loans with less than a 20 percent down payment are required to share credit risk with the private sector through charter-eligible credit enhancements, which lenders typically satisfy with private mortgage insurance. The finalized

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[9] The Enterprises collect the TCCA fee and pass it through to the U.S. Department of the Treasury. For reporting purposes to FHFA, the Enterprises include the 10 basis point TCCA fee in both the guarantee fee and model fee. The gaps shown in this report do not reflect the benefit of the 10 basis point fee because it is both an income and an expense item.

PMIERs provide modest cost savings to the Enterprises from reduced mortgage insurer counterparty exposure. Overall, the set of changes to guarantee fees aimed to be approximately revenue neutral, with little or no change in loan interest rates for most borrowers.

In 2016, as part of its quarterly monitoring of guarantee fees, FHFA observed that the average ongoing fees being charged by the two Enterprises were declining. FHFA issued direction in July 2016 to set minimum ongoing guarantee fees by product type, effective in November 2016, consistent with our responsibility to ensure safety and soundness.

Table 1 shows a timeline of the major changes to guarantee fees, dating back to 2008, including each of the directions issued by FHFA to the Enterprises.

Table 1: Timeline of Changes in Fees

Event Date	Change
March 2008	The Enterprises increased ongoing fees and added two new upfront fees: a fee based on the borrower's LTV ratio and credit score, and a 25 basis point adverse market charge.
Late 2008 through 2011	The Enterprises gradually raised fees and refined their upfront fee schedules.
December 2011	Pursuant to the Temporary Payroll Tax Cut Continuation Act of 2011, FHFA directed the Enterprises to increase the ongoing fee for all loans by 10 basis points. This fee is paid to the U.S. Department of the Treasury and not to the Enterprises. This fee increase was effective with April 2012 deliveries and expires after 10 years.
August 2012	FHFA directed the Enterprises to raise fees by an additional 10 basis points on average to better compensate taxpayers for the credit risk. Fees were raised more on loans with terms longer than 15 years than on shorter-term loans to better align the gaps, and the fees were made more uniform for lenders that deliver larger and smaller volumes of loans. These changes were effective with December 2012 MBS deliveries.

December 2013	FHFA directed the Enterprises to increase ongoing fees by 10 basis points, change upfront fees to better align pricing with credit risk characteristics, and remove the 25 basis point adverse market charge for all but four states. However, in January 2014, FHFA suspended the implementation of these changes pending further review.
April 2015	FHFA completed its fee review and directed the Enterprises to eliminate the adverse market charge in all markets and add targeted increases for specific loan groups effective with September 2015 deliveries. These changes were approximately revenue neutral with little or no impact for most borrowers.
July 2016	Based on findings from FHFA's quarterly guarantee fee reviews, the agency issued direction that set minimum ongoing guarantee fees by product type for the Enterprises, effective in November 2016, consistent with FHFA's responsibility to ensure the safety and soundness of the Enterprises.

Guarantee Fee Results for 2016

This report uses data on single-family loans acquired from 2012 to 2016 to present the average guarantee fee charged by the Enterprises, as well as a breakdown of fees by product type, risk class (loan purpose, LTV ratio, and credit score), and lender delivery volume. Because this report uses economic concepts, rather than accounting data, to analyze guarantee fees, the guarantee fee presentation in this report is different from the published financial statements of the Enterprises which are prepared in accordance with Generally Accepted Accounting Principles (GAAP).

This report includes loans acquired by the Enterprises under their standard underwriting and delivery guidelines.[10] The study population is show in Table 2.

Table 2: Study Population[11]

	2012	2013	2014	2015	2016	Change 2015 to 2016
Dollars (in Billions)	$1,014	$942	$564	$760	$910	$150
Loans (in Millions)	4.7	4.5	2.7	3.4	3.9	0.5

I. Average Guarantee Fee, Gap, and Risk Profile

Chart 1 shows the average guarantee fee across all loans acquired each year. Upfront fees have been converted to the ongoing fee equivalent for ease of comparison.[12] Guarantee fees increased sharply from an average of 36 basis points in 2012 to 51 basis points in 2013, as the Enterprises implemented an FHFA-directed fee increase effective with December 2012 loan deliveries. Since that time, guarantee fees generally have had more modest changes. In 2016, the average overall guarantee fee fell slightly from its level in 2015, with the average guarantee fee declining from 59 basis points to 57 basis points.

The decline in 2016 pricing was not a function of changes in the credit risk of loans. As reported in Chart 1, the average upfront fee, which directly reflects the specific risk attributes (e.g., loan purpose, LTV ratio, and credit score) of new loans, did not change in 2016. Rather, the decline in the average guarantee fee was a result of pricing decisions by each Enterprise. As indicated earlier, FHFA observed these actions as part of its guarantee fee reviews and issued direction in the second part of 2016 to establish minimums for the ongoing fees.

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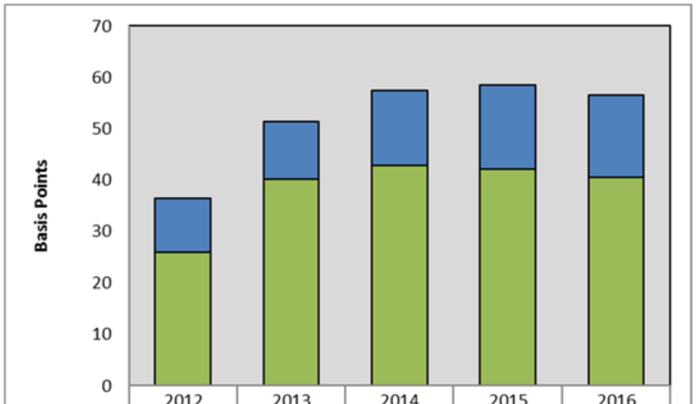
[10] The study population does not include the Home Affordable Refinance Program (HARP), manufactured housing, FHA loans, second liens, and other loans outside standard underwriting and delivery guidelines.

[11] Prior-year data in this and subsequent tables and charts may not be consistent with data in previous FHFA reports due to changes in methodology or data corrections. The individual numbers in the tables, charts and narrative in this report may not compute exactly to the totals, due to rounding.

[12] The Enterprises use present value multiples (PVM) to convert upfront fees into the ongoing fee equivalent. The PVM is based on the specific characteristics of each loan. As an example, when a loan has a PVM of 5, a 25 basis point upfront fee is equivalent to a 5 basis point ongoing fee. The total guarantee fees shown in this report are actually estimated fees because the upfront fee portion is annualized based on the assumed life of a loan at the time of acquisition. Fannie Mae updated its PVM calculations in 2015, which makes it difficult to compare both the upfront and total fees with the results from prior years.

Chart 1: Average Guarantee Fee



	2012	2013	2014	2015	2016
Upfront	11	11	15	16	16
Ongoing	26	40	43	42	40
Total	36	51	57	59	57

Chart 2 shows that the average gap for 2015 was close to zero, meaning that the Enterprises expected their acquisitions during the year to generate overall returns in line with their targeted levels. In 2016, the average charged guarantee fee was down by 2 basis points, while the average model fee declined by about 1 basis point and loan mix was little changed. The lower charged fees compared with the model fees led to a larger negative gap, which reflects expected returns slightly below the target returns.[13]

Three main factors contribute to the movement in gaps over time. First, and most intuitively, changes in guarantee fees affect the gaps, as guarantee fee increases improve returns. Second, yearly changes to each Enterprise's credit model and capital-related assumptions affect the gaps. Third, changes in the loan mix affect the gap, as the Enterprises acquire more or less loans in different risk categories each year.

[13] The gap charts in this report allow the reader to see whether the gaps are negative (below the targeted level) or positive (above the targeted level) and the relative changes from year to year. The actual values are not provided in order to protect confidential Enterprise information.

Chart 2: Average Gap

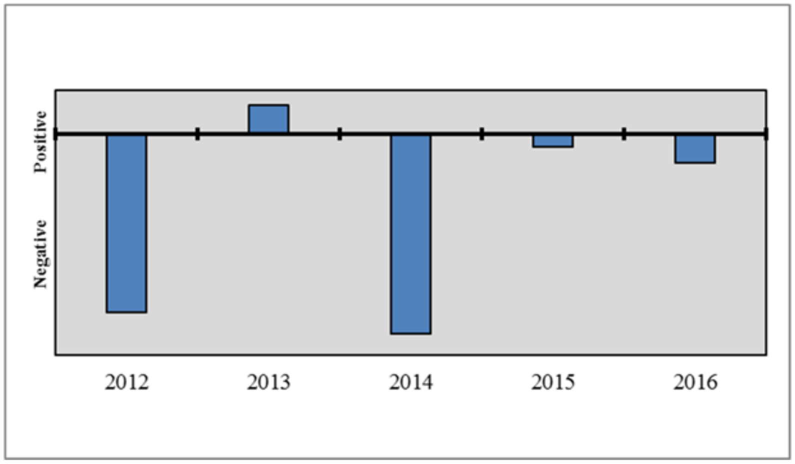


Table 3 shows the acquisition share by risk profile over the five-year study period. Overall, the acquisition profile in 2016 was not materially different from the profile in 2015. Low interest rates in 2016 led to a small decrease in the share of ARM loans to 2 percent of total acquisitions. House price appreciation and low interest rates also drove a slight increase in the share of cash-out refinance loans for the year. About a 2 percentage point increase of loans acquired in 2016 had at least 30 percent borrower equity (equivalent to a 70 percent or lower LTV ratio). There was no change in the average credit score.

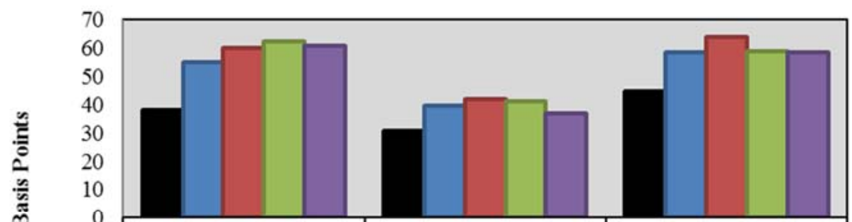
Table 3: Acquisition Share by Risk Profile

Product Type	2012	2013	2014	2015	2016	Change 2015 to 2016
Fixed 30-Year	63%	68%	75%	75%	76%	1%
Fixed 15-Year	26%	23%	16%	16%	16%	0%
Fixed Other Terms	6%	5%	4%	6%	7%	1%
ARM	4%	3%	6%	3%	2%	-2%
Loan Purpose						
Purchase	24%	35%	57%	46%	45%	-1%
Rate-Term Refinance	58%	48%	26%	34%	34%	0%
Cash-Out Refinance	18%	17%	17%	20%	20%	1%
LTV Ratio						
<=70 Percent	48%	42%	29%	33%	35%	2%
70.1 - 80 Percent	40%	41%	44%	42%	39%	-2%
80.1 - 90 Percent	6%	8%	12%	12%	12%	0%
> 90 Percent	6%	9%	16%	14%	14%	0%
Credit Score						
>= 720	87%	82%	74%	77%	77%	0%
660 - 719	12%	16%	21%	20%	20%	0%
< 660	1%	2%	4%	4%	3%	0%
Risk Layering						
Jumbo Conforming	9%	9%	8%	9%	10%	1%
Condo/Cooperative	10%	11%	10%	10%	9%	-1%
Investment Properties	5%	6%	6%	5%	5%	-1%

II. Guarantee Fees by Product Type

Chart 3 shows the guarantee fees by product type. The all-loans guarantee fee decrease of 2 basis points in 2016 (see Chart 1) was driven by a 2 basis point decrease in the average guarantee fee for fixed-rate 30-year loans and 4 basis point decrease for fixed-rate 15-year loans.[14] The average guarantee fee for ARM loans did not change in 2016, and these loans accounted for only 2 percent of the Enterprises' acquisitions in the year. Decisions by the Enterprises to reduce the ongoing fees were the primary driver for the changes in the fixed-rate pricing.

Chart 3: Guarantee Fee by Product Type

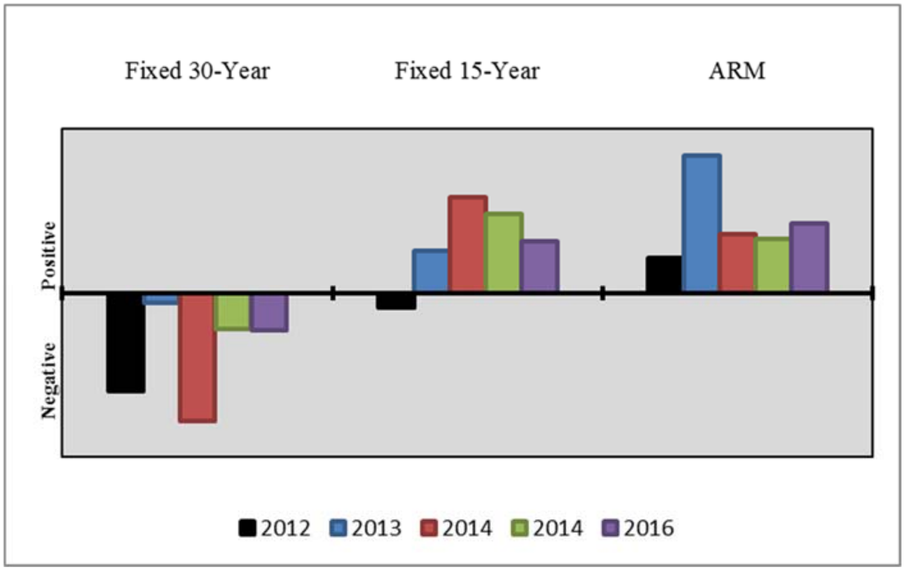


	Fixed 30-Year	Fixed 15-Year	ARM
2012	38	31	45
2013	55	40	59
2014	60	42	64
2015	62	41	59
2016	61	37	59

Chart 4 shows that the gap for fixed-rate 30-year loans was generally unchanged in 2016 as the decline in the average guarantee fee was offset by a decline in the modeled costs. The average fee decrease of 4 basis points for fixed-rate 15-year loans led to a decrease in that category's gap, but the gap was still positive. ARM guarantee fees did not change in 2016, but lower modeled costs led to a slightly more positive gap.

[14] While chart 3 shows that the fixed 30-year guarantee fee fell from 62 basis points in 2015 to 61 basis points in 2015, the actual decline was 2 basis points when non-rounded numbers were used for the calculation.

Chart 4: Gap by Product Type



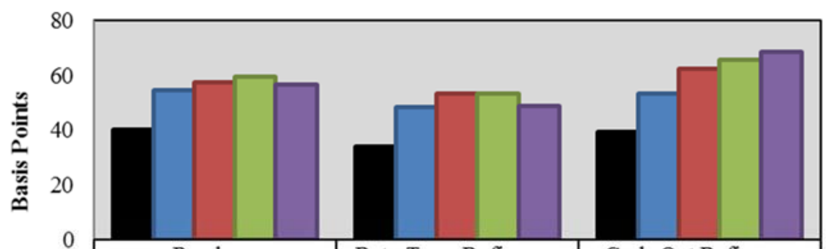
III. Guarantee Fees by Risk Class

A. Loan Purpose

Chart 5 shows the guarantee fees by loan purpose. The average fee for cash-out refinance loans increased by 3 basis points in 2016, reflecting the full-year impact of FHFA's upfront fee increase implemented in September 2015. The average guarantee fees for purchase and rate-term refinance loans decreased by 3 basis points and 4 basis points respectively, driven primarily by the Enterprises' decisions to reduce the ongoing fees.[15] The greater fee decrease for rate-term refinance loans reflects lower upfront fees in that group, as the share of lower-LTV loans increased.

[15] While chart 5 shows that the purchase guarantee fee fell from 59 basis points in 2015 to 57 basis points in 2015, the actual decline was 3 basis points when non-rounded numbers were used for the calculation.

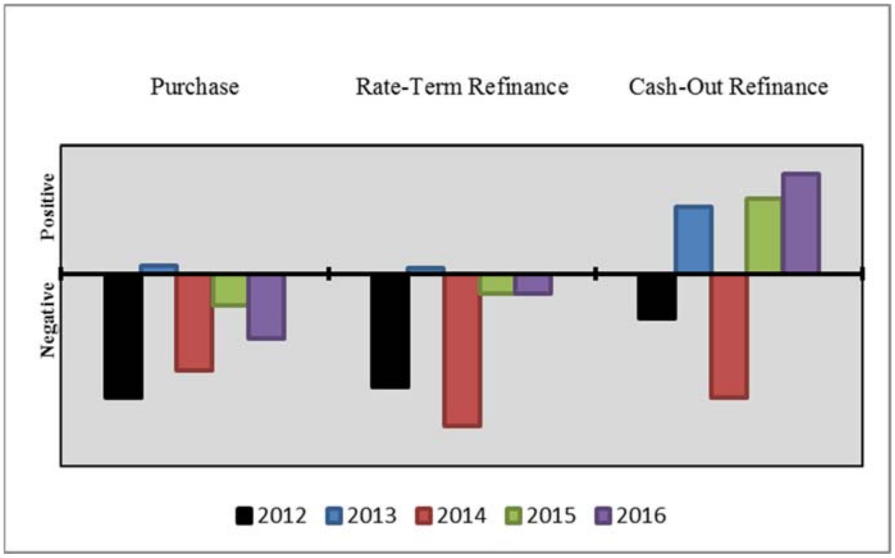
Chart 5: Guarantee Fee by Loan Purpose



	Purchase	Rate-Term Refinance	Cash-Out Refinance
2012	40	34	39
2013	55	48	53
2014	58	53	63
2015	59	53	66
2016	57	49	69

Chart 6 shows that the lower charged fees on purchase loans led to a slightly larger negative gap in 2016. The rate-term refinance gap did not change as the decline in guarantee fees was offset by a decline in the modeled costs. The gap for cash-out refinance loans improved slightly due to the full year impact of the fee increase implemented in late 2015.

Chart 6: Gap by Loan Purpose

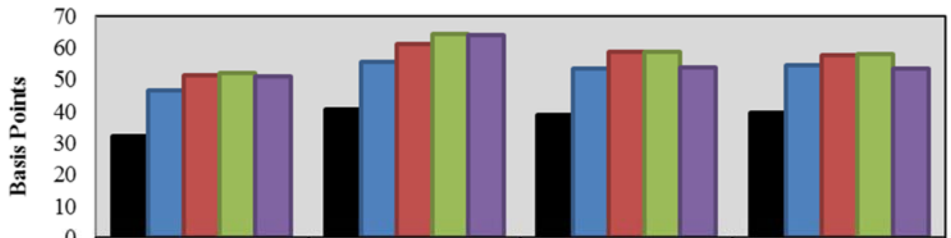


B. Loan-to-Value Ratio

Chart 7 shows the guarantee fees by loan-to-value ratio. Total guarantee fees include upfront and ongoing components. Each LTV group had the same 2 basis point decline in the ongoing fee, which reflected the Enterprises' decisions to lower the ongoing fees. The upfront fees rose slightly for the two lower LTV groups (<=70 and 70.1-80), and fell for the two higher LTV groups (80.1-90 and >90).

FHFA directed fee changes implemented in late 2015 removed the adverse market charge on all loans, but added an upfront fee to loans with both high credit scores and low LTV ratios. Because the upfront fees were not increased on loans with lower credit scores or higher LTV ratios (due to expected cost savings from PMIERs), those loans experienced lower upfront fees overall from the elimination of the adverse market charge.

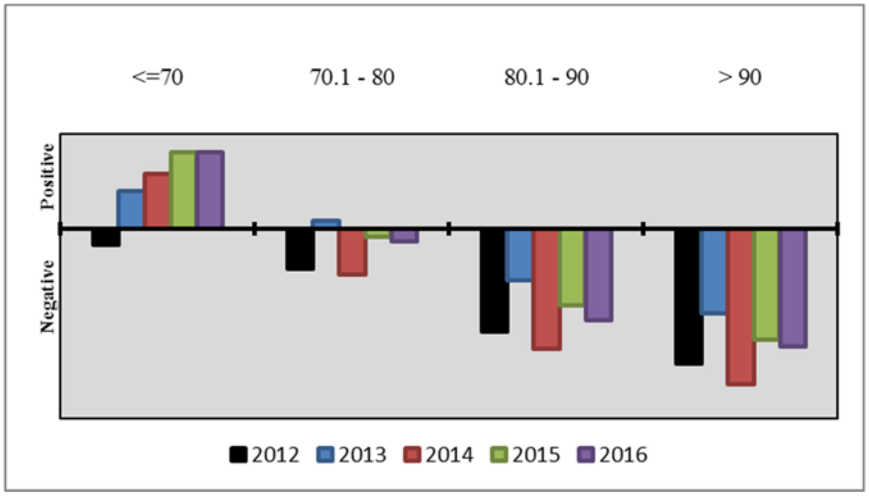
Chart 7: Guarantee Fee by Loan-to-Value Ratio



	<=70	70.1 - 80	80.1 - 90	> 90
2012	32	40	39	39
2013	47	55	53	54
2014	51	61	59	58
2015	52	64	58	58
2016	51	64	54	53

Chart 8 shows that in 2016, as in recent years, the Enterprises expected to earn more than their target rate of return on loans with LTV ratios up to 70 percent, while they expected to earn below-target returns on loans with LTV ratios greater than 80 percent. Loans in the 20 percent down payment category (70.1-80% LTV) were expected to earn returns in-line with the target. The larger fee reductions for the higher LTV groups led to more negative gaps for those loan groups.

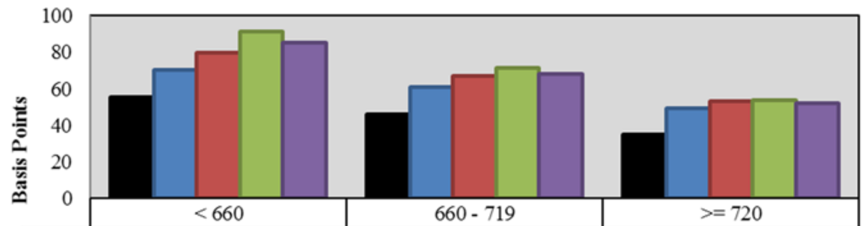
Chart 8: Gap by Loan-to-Value Ratio



C. Credit Score

Chart 9 shows the guarantee fees by credit score. Each credit score group had the same decline in the ongoing fee, which reflected the Enterprises' decision to lower the ongoing fees. The upfront fees were nearly unchanged for the mid-range credit score (660-719) and highest credit score (720 or higher) groups. However, the upfront fee fell for the lowest credit score group (less than 660). This decline meant that the decline in the overall guarantee fee (reflected in Chart 9) for the lowest credit score group was more significant than for other groups. This resulted from FHFA's directed fee changes implemented in 2015 which removed the adverse market fee on all loans and a decision not to seek offsetting revenue on loans with lower credit scores or higher LTV ratios.

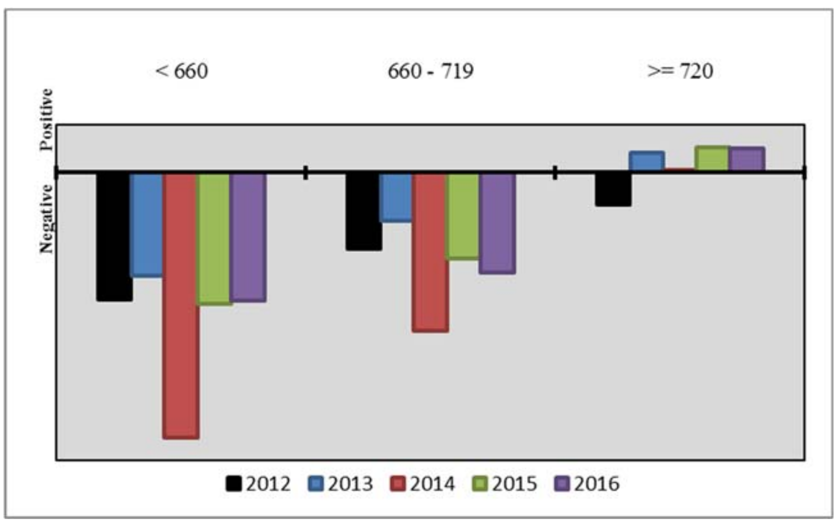
Chart 9: Guarantee Fee by Credit Score



	< 660	660 - 719	>= 720
2012	56	46	35
2013	70	61	49
2014	80	67	53
2015	91	71	54
2016	85	68	52

Chart 10 shows that while the charged guarantee fees fell by 6 basis points for the lowest credit score loans, the modeled costs for that group also fell by the same amount, Consequently, the gap was held steady. A modest drop in modeled costs also offset the fee decrease in the highest credit score group. As in prior years, the expected returns were below the targeted levels for credit scores below 720. However, these loan categories were still expected to generate positive returns for the Enterprises.

Chart 10: Gap by Credit Score



IV. Guarantee Fees by Lender Volume

Prior to 2012, the Enterprises historically provided a pricing discount to lenders that delivered a larger volume of loans. However, in August 2012 FHFA took action to remove that pricing disparity. FHFA issued direction to each Enterprise to increase guarantee fees by an average of 10 basis points. In implementing that fee increase, the ongoing portion of the guarantee fee was raised more for lenders that exchange loans for MBS than for lenders that sell loans for cash. This helped reduce the pricing disparity between large and small volume lenders because smaller lenders tend to sell loans for cash.

Table 4 shows the number of lenders by Enterprise. Each Enterprise has a little over a thousand lenders. In 2016, Fannie Mae gained 6 lenders and Freddie Mac gained 20 lenders.

Table 4: Number of Lenders by Enterprise

	2012	2013	2014	2015	2016	Change 2015 to 2016
Fannie Mae	1,118	1,173	1,207	1,216	1,222	6
Freddie Mac	1,019	1,055	1,078	1,042	1,062	20

Table 5 shows the acquisition share by lender volume group. For this analysis, FHFA created five lender groups based on volume size: the top 5 lenders for each Enterprise each year (XL), the next 10 lenders (L), the next 10 lenders (M), the next 75 lenders (S), and all others (XS).[16] The percentage of acquisitions from the extra-large group fell from 50 percent in 2012 to 31 percent in 2016. The percentage of acquisitions from the small and extra-small group increased from 28 percent to 40 percent over the same period.

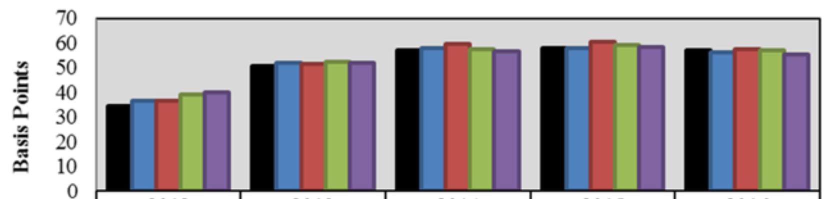
Table 5: Acquisition Share by Lender Volume Group

Group	Lender Rank	2012	2013	2014	2015	2016	Change 2015 to 2016
XL	1-5	50%	45%	34%	32%	31%	-1%
L	6-15	15%	16%	19%	19%	19%	0%
M	16-25	7%	8%	9%	9%	10%	1%
S	26-100	15%	19%	22%	23%	23%	-1%
XS	101+	13%	13%	16%	17%	17%	0%

[16] The groups at Fannie Mae and Freddie Mac may contain different lenders. For example, the XL Rank 1-5 corresponds to the top 5 lenders for Fannie Mae and the top 5 lenders for Freddie Mac, based on each Enterprise's acquisition volume from a particular lender by year.

Chart 11 shows the guarantee fees by lender volume group. In 2016, the extra-small lenders paid on average 2 basis points less than the extra-large lenders in total guarantee fees. This contrasts with 2012 when the extra-small lenders paid 6 basis points more than the extra-large lenders. Since FHFA took action to reduce the fee disparity by volume groups in late 2012 the guarantee fees among the size groups has been comparable, with only small differences in a given year.

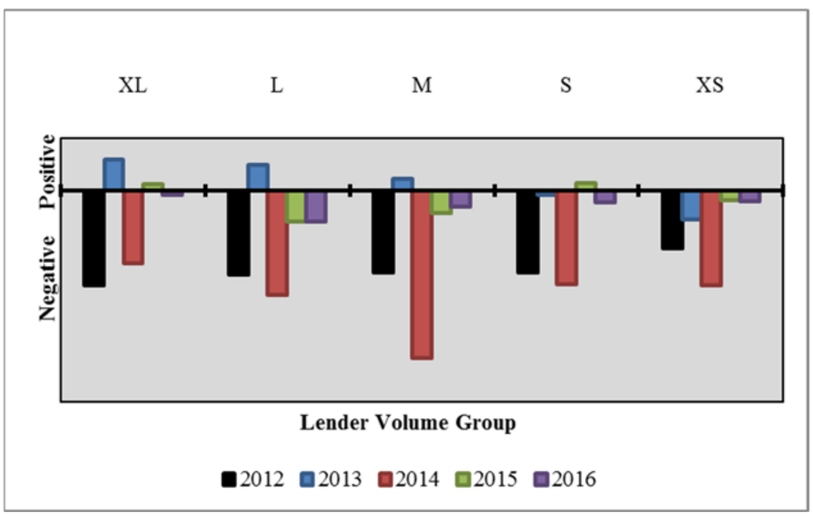
Chart 11: Guarantee Fee by Lender Volume Group



	2012	2013	2014	2015	2016
XL, Rank 1-5	34	51	57	58	57
L, Rank 6-15	37	52	58	58	56
M, Rank 16-25	37	52	59	61	57
S, Rank 26-100	39	52	58	59	57
XS, Rank 101+	40	52	57	58	55

Chart 12 shows that in both 2015 and 2016 the extra-large and extra-small lender volume groups had gaps close to zero, indicating that the Enterprises expected each of these groups, on average, to earn returns in line with their targeted level. Gap analysis is useful because it reflects the risk-adjusted returns, while the fee analysis on each lender group does not take into account risk attributes such as the product type, LTV ratio, or credit score.

Chart 12: Gap by Lender Volume Group



FHFA continuously monitors Enterprise g-fees and makes adjustments as deemed appropriate to accomplish the objectives described in this report. We will also continue to refine our analyses and metrics to ensure transparency and that the annual report is understandable.