FANNIE MAE AND FREDDIE MAC SINGLE-FAMILY GUARANTEE FEES IN 2017

December 2018

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.\(^1\) The report is required to contain 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 single-family guarantee fee report in 2009.\(^2\)

This report discusses the guarantee fees charged in 2017 and provides a five-year perspective with data back to 2013.\(^3\) The major findings in this report are:

- For all loan products combined, the average single-family guarantee fee in 2017 remained unchanged from last year’s fee of 56 basis points. 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), fell 1 basis point to 15 basis points. The ongoing portion of the guarantee fee, which is based on the product type (fixed-rate or ARM, and loan term) increased 1 basis point to 41 basis points.

- The average guarantee fee in 2017 on 30-year fixed rate loans fell by 1 basis point to 59 basis points, while the fee on 15-year fixed rate loans increased by 1 basis point to 38 basis points. The fee on adjustable-rate mortgage (ARM) loans fell 1 basis point to 58 basis points.

- Higher interest rates in 2017 led to a smaller share of both rate-term refinances and 15-year loans acquired by the Enterprises. The larger share of purchase loans and a growing focus on pilot programs for first-time homebuyers and affordable housing led to a slight increase in the share of loans with higher loan-to-value (LTV) ratios and lower credit scores.

- In 2017, the Enterprises began using FHFA’s Conservatorship Capital Framework (CCF) to calculate the cost of holding capital. The overall expected profitability of the loan acquisitions

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\(^2\) See prior guarantee fee reports at https://go.usa.gov/xP6mE.

\(^3\) Prior-year data in the text and subsequent tables and charts may not be consistent with data in previous FHFA reports due to changes in methodology or data corrections. Also, due to rounding, the individual numbers in the text, tables, and charts may not compute exactly to the totals.
was nearly unchanged and in-line with the targeted level. The Enterprises measure expected profitability as the difference between the total charged guarantee fee and estimated costs, including a targeted return on the capital requirement calculated for these loans.

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 or swap 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. 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. 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

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4 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 (CRT) programs, pay private entities to bear some of the credit risk. Loans with front-end risk transfer and lender recourse have been excluded from the study population due to non-standard guarantee fee pricing. While the other loans in the study population may have risk transfer after acquisition, this report does not include any impact from CRT in the estimated costs or profitability (gap).

5 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.
Single-Family Guarantee Fees

delivery to an Enterprise. Fannie Mae refers to upfront fees as “loan level pricing adjustments,” 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 LTV ratio 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.6 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 the posted 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 most 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. In 2017, the Enterprises began using FHFA’s Conservatorship Capital Framework (CCF) to calculate the cost of holding capital.\(^7\)

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 beyond a $3 billion capital reserve. Furthermore, FHFA suspended its quarterly classifications of the capital adequacy of each Enterprise when it placed the Enterprises into conservatorship. However, in order to maintain a sound pricing framework, FHFA expects 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 fully retain capital.

The following are the main risk characteristics that determine the estimated cost of guaranteeing a single-family loan:

- 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 or adjustable rate, maturity term);
- Loan interest rate; and
- Target return on capital.

Using the CCF and its own proprietary data as inputs, each Enterprise determines the estimated cost of a loan, which is the amount of capital required by the CCF, multiplied by a target return on capital. The difference between the guarantee fee actually charged on a loan and the estimated cost is known as the gap. The gap serves as the measure of estimated profitability of

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\(^7\) FHFA developed this aligned risk management framework to better inform each Enterprise’s business decisions while in conservatorship. Both Enterprises use the CCF to make their regular business decisions. FHFA also uses the CCF in its role as conservator to assess Enterprise guarantee fees, activities, and operations and to guard against the Enterprises making competitive decisions that could adversely impact safety and soundness.
the loan acquisition.\(^8\) 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 despite not achieving its overall target rate of return on the loan. At acquisition, each Enterprise expects to earn a positive return, whether above or below target, on nearly all of its loans. Lower expected returns may help the Enterprises to fulfill their affordable housing requirements.\(^9\)

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,\(^10\) and lenders may choose among alternatives 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.

**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

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\(^8\) The Enterprise models, CCF, and target return on capital, which are used to determine the estimated cost, are updated over time, so caution must be exercised when comparing gaps from different time periods.

\(^9\) 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).”

\(^10\) 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. As the spread between the securities narrowed from 2016 to 2017, the MAP costs fell. 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.
Enterprises refined their LTV ratio and credit score-based upfront fees, and in subsequent years gradually raised their fees to better reflect credit risk.

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. To comply 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.\(^{11}\)

In August 2012, FHFA directed the Enterprises to increase their guarantee fees by an additional 10 basis points on average 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, FHFA completed its further review of the adequacy of the Enterprises’ guarantee fees and found no compelling economic reason to change the overall level of fees. However, FHFA 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.

- To offset 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 low credit scores or high LTV ratios. An important factor that contributed to FHFA’s 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 – the Private Mortgage Insurer Eligibility Requirements (PMIERs). Loans with less than a 20

\(^{11}\) 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.
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 PMIERs provide modest cost savings to the Enterprises by reducing mortgage insurer counterparty exposure. Overall, the changes to guarantee fees implemented with September 2015 deliveries were approximately revenue neutral and resulted in 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 of ongoing fees charged by the two Enterprises was declining. FHFA issued direction in July 2016 to set minimum ongoing guarantee fees by product type effective in November 2016, consistent with its responsibility to ensure safety and soundness.

In December 2017, FHFA directed the Enterprises to meet specified return on capital targets, effective with February 2018 loan deliveries.

Table 1 shows a timeline of the major changes to guarantee fees dating back to 2008.
### Table 1: Timeline of Changes in Fees

<table>
<thead>
<tr>
<th>Event Date</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2008</td>
<td>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.</td>
</tr>
<tr>
<td>Late 2008 through 2011</td>
<td>The Enterprises gradually raised fees and refined their upfront fee schedules.</td>
</tr>
<tr>
<td>December 2011</td>
<td>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. This fee increase was effective with April 2012 deliveries and will expire after 10 years.</td>
</tr>
<tr>
<td>August 2012</td>
<td>FHFA directed the Enterprises to raise fees by an additional 10 basis points on average to better compensate for credit risk exposure. 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.</td>
</tr>
<tr>
<td>December 2013</td>
<td>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 review.</td>
</tr>
<tr>
<td>April 2015</td>
<td>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.</td>
</tr>
<tr>
<td>July 2016</td>
<td>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.</td>
</tr>
<tr>
<td>December 2017</td>
<td>FHFA directed the Enterprises to meet specified return on capital targets, effective with February 2018 loan deliveries.</td>
</tr>
</tbody>
</table>
Guarantee Fee Results for 2017

This report uses data on single-family loans acquired from 2013 to 2017 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, this report differs 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. The size of the study population is shown in Table 2.

<table>
<thead>
<tr>
<th>Table 2: Study Population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Dollars (in Billions)</td>
</tr>
<tr>
<td>$942</td>
</tr>
<tr>
<td>Loans (in Millions)</td>
</tr>
<tr>
<td>4.5</td>
</tr>
</tbody>
</table>

12 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.
I. Average Guarantee Fee, Gap, and Risk Profile

Chart 1 shows that guarantee fees increased between 2013 and 2014, and then were essentially flat in more recent years. In 2017, the average guarantee fee of 56 basis points was unchanged from 2016. While the total guarantee fee was unchanged, the ongoing fee component was up slightly by 1 basis point, while the upfront fee component fell by 1 basis point.

Table 3 shows the acquisition share by risk profile over the five-year study period. The acquisition profile in 2017 reflects a slightly higher risk mix overall compared to 2016. Rising interest rates led to the Enterprises acquiring a lower share of rate-term refinance loans and a greater share of purchase loans. The greater share of purchase loans contributed to having a greater share of higher LTV loans, because purchasers usually have less equity in a property than rate-term refinancers. More purchase and fewer rate-term refinance loans also led to an increase in the share of 30-year fixed rate loans, and a decrease in the share of 15-year fixed rate loans. The share of lower credit score loans also increased in 2017.

The greater share of loans with higher LTV ratios and lower credit scores would normally result in higher upfront fees. However, upfront fees fell by 1 basis point from the 2016 level in part due to FHFA-approved pilot programs in which upfront fees were capped to support affordable and first-time buyer housing programs. The 1 basis point increase in the ongoing fee was driven by the shift from 15-year fixed rate loans to 30-year fixed rate loans, as the 30-year loans have higher ongoing fees than the 15-year loans.
# Table 3: Acquisition Share by Risk Profile

<table>
<thead>
<tr>
<th>Product Type</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>Change 2016 to 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-Year Fixed</td>
<td>68%</td>
<td>75%</td>
<td>75%</td>
<td>76%</td>
<td>78%</td>
<td>2%</td>
</tr>
<tr>
<td>15-Year Fixed</td>
<td>23%</td>
<td>16%</td>
<td>16%</td>
<td>16%</td>
<td>13%</td>
<td>-3%</td>
</tr>
<tr>
<td>Fixed Other Terms</td>
<td>5%</td>
<td>4%</td>
<td>6%</td>
<td>7%</td>
<td>6%</td>
<td>-1%</td>
</tr>
<tr>
<td>ARM</td>
<td>3%</td>
<td>6%</td>
<td>3%</td>
<td>2%</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>Loan Purpose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase</td>
<td>35%</td>
<td>57%</td>
<td>46%</td>
<td>45%</td>
<td>57%</td>
<td>12%</td>
</tr>
<tr>
<td>Rate-Term Refinance</td>
<td>48%</td>
<td>26%</td>
<td>34%</td>
<td>34%</td>
<td>21%</td>
<td>-13%</td>
</tr>
<tr>
<td>Cash_Out Refinance</td>
<td>17%</td>
<td>17%</td>
<td>20%</td>
<td>20%</td>
<td>22%</td>
<td>1%</td>
</tr>
<tr>
<td>LTV Ratio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;=70 Percent</td>
<td>42%</td>
<td>29%</td>
<td>33%</td>
<td>35%</td>
<td>31%</td>
<td>-4%</td>
</tr>
<tr>
<td>70.1 - 80 Percent</td>
<td>41%</td>
<td>44%</td>
<td>42%</td>
<td>39%</td>
<td>40%</td>
<td>1%</td>
</tr>
<tr>
<td>80.1 - 90 Percent</td>
<td>8%</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
<td>0%</td>
</tr>
<tr>
<td>&gt; 90 Percent</td>
<td>9%</td>
<td>16%</td>
<td>14%</td>
<td>14%</td>
<td>17%</td>
<td>3%</td>
</tr>
<tr>
<td>Credit Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;= 720</td>
<td>82%</td>
<td>74%</td>
<td>77%</td>
<td>77%</td>
<td>73%</td>
<td>-4%</td>
</tr>
<tr>
<td>660 - 719</td>
<td>16%</td>
<td>21%</td>
<td>20%</td>
<td>20%</td>
<td>22%</td>
<td>3%</td>
</tr>
<tr>
<td>&lt; 660</td>
<td>2%</td>
<td>4%</td>
<td>4%</td>
<td>3%</td>
<td>4%</td>
<td>1%</td>
</tr>
<tr>
<td>Risk Layering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jumbo Conforming</td>
<td>9%</td>
<td>8%</td>
<td>9%</td>
<td>10%</td>
<td>9%</td>
<td>-1%</td>
</tr>
<tr>
<td>Condo/Cooperative</td>
<td>9%</td>
<td>9%</td>
<td>9%</td>
<td>9%</td>
<td>9%</td>
<td>0%</td>
</tr>
<tr>
<td>Investment Properties</td>
<td>6%</td>
<td>6%</td>
<td>5%</td>
<td>5%</td>
<td>6%</td>
<td>1%</td>
</tr>
</tbody>
</table>
Chart 2 shows that the average gap in 2017 was slightly negative for the third consecutive year. This indicates that the expected profitability on new loan acquisitions was roughly in-line with the Enterprises’ return on capital targets.\(^1\)

Three main factors contribute to the movement in gaps over time. First, changes in guarantee fees affect the gaps (e.g., guarantee fee increases would improve returns). Second, yearly changes to each Enterprise’s cost estimation 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.

II. Guarantee Fees by Product Type

Chart 3 shows the guarantee fees by product type. The average guarantee fee fell by 1 basis point on 30-year fixed rate loans to 59 basis points, while the average fee for 15-year fixed rate loans increased 1 basis point to 38 basis points. The average guarantee fee fell by 1 basis point to 58 basis points for ARM loans. Although the average 30-year fixed rate fee fell, the market share shift away from lower fee 15-year fixed rate loans to higher fee 30-year fixed rate loans helped to keep the all-product average fee unchanged as reported in Chart 1.

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\(^1\) 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 to protect confidential Enterprise information.
Chart 4 shows modest changes in the product type gaps for 2017. Expected profitability improved slightly for 30-year fixed rate loans, while expected profitability declined slightly for 15-year fixed rate and ARM loans. However, 30-year fixed rate loans were still expected to generate returns slightly below the targeted level, while the 15-year fixed rate and ARM loans were expected to generate returns above the targeted level.
### III. Guarantee Fees by Risk Class

#### A. Loan Purpose

Chart 5 shows the guarantee fees by loan purpose. The average fee for rate-term refinance loans was unchanged in 2017, while the average guarantee fees for purchase and cash-out refinance loans decreased by 2 basis points and 1 basis point respectively. The differences were driven by small changes in the loan mix attributes within each group.

**Chart 5: Guarantee Fee by Loan Purpose**

![Chart 5: Guarantee Fee by Loan Purpose](image)

Chart 6 shows a significant increase in the gap for cash-out refinance loans and only slight changes in the gaps for purchase and rate-term refinance loans. In late 2015, FHFA directed a fee increase for cash-out refinances, and the expected returns on these loans now significantly exceed the Enterprise-wide target. Rate-term refinance and purchase loans still had expected returns below the targeted levels.

**Chart 6: Gap by Loan Purpose**

![Chart 6: Gap by Loan Purpose](image)
B. Loan-to-Value Ratio

Chart 7 shows modest changes in the guarantee fees by loan-to-value ratio. The average fee increased by 1 basis point for loans with borrower equity of at least 30 percent (<=70 LTV). The average fee decreased by 2 basis points for loans with less than 10 percent borrower equity (>90 LTV). The acquisition share for the lowest LTV group fell by 4 percent, while the acquisition share for the highest LTV group grew by 3 percent (see Table 3). Guarantee fees decreased most for the highest LTV group.

Chart 8 shows a slight decrease in the gap on loans with an LTV ratio below 70 percent in 2017 and better gap performance in each of the other LTV ratio groups. 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, in-line returns for loans with LTV ratios between 70.1 and 80 percent, and below-target returns on loans with LTV ratios greater than 80 percent.
C. Credit Score

Chart 9 shows guarantee fees by credit score. The lowest credit score group (<660) had a decrease of 5 basis points in the average guarantee fee in 2017, and the mid-range group (660-719) had a decrease of 2 basis points. The average guarantee fee for the highest credit score group (>=720) was unchanged. While the acquisitions were still concentrated in the highest credit score loans, Table 3 shows a 4 percent increase in the share of loans with credit scores below 720. The decrease in the guarantee fees for the lower credit score groups reflects that FHFA capped upfront fees on some approved pilot programs that support affordable housing and first-time buyers.

Chart 10 shows significant gains in the expected profitability of the two lowest credit score groups in 2017, while the gap on the highest credit score loans held steady. Despite the gap improvements, however, expected returns were still below the targeted levels for the credit score groups below 720. While these loan groups were below target, they are still expected to generate positive returns for the Enterprises.

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14 While Chart 9 shows that the 660-719 credit score group paid 68 and 65 basis points, respectively, in average guarantee fees in 2016 and 2017, the actual difference between the two groups was 2 basis points when non-rounded numbers were used for the calculation.
IV. Guarantee Fees by Lender Volume

Prior to 2012, the Enterprises had historically provided pricing discounts to lenders that delivered a larger volume of loans. However, in August 2012 FHFA took action to remove that pricing disparity. In implementing a 10 basis point 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.

Each Enterprise acquired loans from slightly more than one thousand lenders in 2017 as reflected in Table 4. Fannie Mae gained 13 lenders in 2017, while Freddie Mac ended the year with 17 fewer lenders.

Table 4: Number of Lenders by Enterprise

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fannie Mae</td>
<td>1,173</td>
<td>1,207</td>
<td>1,216</td>
<td>1,218</td>
<td>1,231</td>
<td>13</td>
</tr>
<tr>
<td>Freddie Mac</td>
<td>1,055</td>
<td>1,078</td>
<td>1,042</td>
<td>1,062</td>
<td>1,045</td>
<td>-17</td>
</tr>
</tbody>
</table>
Table 5 shows the acquisition share by lender volume group. For this analysis, FHFA created five lender groups based on volume size. The top five lenders increased their share of the acquisitions by 7 percent in 2017.

### Table 5: Acquisition Share by Lender Volume Group

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>XL</td>
<td>1-5</td>
<td>45%</td>
<td>34%</td>
<td>32%</td>
<td>31%</td>
<td>38%</td>
<td>7%</td>
</tr>
<tr>
<td>L</td>
<td>6-15</td>
<td>16%</td>
<td>19%</td>
<td>19%</td>
<td>19%</td>
<td>19%</td>
<td>0%</td>
</tr>
<tr>
<td>M</td>
<td>16-25</td>
<td>8%</td>
<td>9%</td>
<td>9%</td>
<td>10%</td>
<td>9%</td>
<td>-1%</td>
</tr>
<tr>
<td>S</td>
<td>26-100</td>
<td>19%</td>
<td>22%</td>
<td>23%</td>
<td>23%</td>
<td>19%</td>
<td>-3%</td>
</tr>
<tr>
<td>XS</td>
<td>101+</td>
<td>13%</td>
<td>16%</td>
<td>17%</td>
<td>17%</td>
<td>14%</td>
<td>-3%</td>
</tr>
</tbody>
</table>

Chart 11 shows guarantee fees by lender volume group. In both 2016 and 2017, extra-small lenders paid on average 1 basis point less than extra-large lenders in total guarantee fees. Since 2013, all of the lender volume groups have paid similar guarantee fees. This contrasts to 2012 when extra-small lenders paid 6 basis points more than extra-large lenders.

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15 The lender volume groups are 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). 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.

16 While Chart 11 shows that the XL and XS lender volume groups paid 57 and 55 basis points, respectively, in average guarantee fees in both 2016 and 2017, the actual difference between the two groups was 1 basis point when non-rounded numbers were used for the calculation.
Chart 12 shows small changes in the expected profitability of the different lender volume groups in 2017. All of the groups had expected returns in-line with the targeted level, except for the group comprised of the 10 lenders for each Enterprise ranked between 6 and 15 in delivery volume (large lenders).

FHFA continuously monitors the Enterprise guarantee fees and makes adjustments as deemed appropriate to accomplish the objectives described in this report. We also continue to refine our analysis and metrics to ensure transparency and in an effort to make the annual report more understandable.