FANNIE MAE AND FREDDIE MAC SINGLE-FAMILY GUARANTEE FEES IN 2021

November 2022
# Table of Contents

Executive Summary  
Guarantee Fees: Background  
Costs of Providing the Guarantee  
Timeline of Changes in Guarantee Fees  
Market Overview  
Guarantee Fee and Profitability Gap Results for 2021  
  I. Average Guarantee Fee  
  II. Guarantee Fees by Product Type  
  III. Guarantee Fees by Risk Class  
    A. Loan Purpose  
    B. Loan-to-Value Ratio  
    C. Credit Score  
  IV. Guarantee Fees by Seller Volume
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) for guaranteeing a mortgage. HERA further requires that FHFA annually submit a report to Congress on the results of its guarantee-fee study. HERA requires the report to contain an analysis of the average guarantee fee and a breakdown by product type, risk class, and seller size. Finally, HERA requires that the report reflect an analysis of the costs associated with providing guarantees and an analysis of any increase or decrease in guarantee fees from the preceding year.

In this report, FHFA identifies and analyzes the single-family guarantee fees charged by the Enterprises in 2021. This report compares and contrasts the Enterprises’ 2021 guarantee fees with the preceding year. Further, it provides additional historical guarantee fee data back to 2018.

Below are the major findings comparing single-family guarantee fees from 2020 to 2021:

Average guarantee fees

- Total average guarantee fees increased 2 basis points (to 56 basis points).
- Average upfront guarantee fees increased 2 basis points (to 13 basis points).
- Average ongoing guarantee fees remained unchanged at 43 basis points.

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2 In lieu of presenting costs of providing the guarantee, in this report FHFA presents the difference between the revenue (guarantee fees) received and the estimated cost of guaranteeing a loan for a given target rate of return on capital.
3 See prior guarantee fee reports at https://go.usa.gov/xP6mE.
4 Due to rounding, the individual numbers in the text, tables, and charts may not compute exactly to the totals.
5 Fannie Mae refers to upfront fees as “loan level price adjustments,” while Freddie Mac refers to them as “credit fees in price.” For the purposes of reporting to FHFA, the Enterprises annualize upfront fees by dividing the upfront fee for a given loan by that loan’s specific present value multiplier (PVM). For example, a loan with an upfront fee of 75.15 basis points and a PVM of 6.18 would have an annualized upfront fee of 75.15/6.18 = 12.16 basis points. Depending on the attributes of the loan, a typical new 30-year loan may be expected to have a PVM of about 6 on average, whereas a 15-year loan may be expected to have a PVM closer to 4.
6 Upfront guarantee fees are a subcomponent of total guarantee fees and they reflect credit risk attributes such as loan purpose, loan-to-value (LTV) ratio, and credit score.
7 Ongoing guarantee fees are a subcomponent of total guarantee fees and they reflect a loan’s product type (i.e., fixed-rate or adjustable-rate, and loan term).
Guarantee fees by product type

- Average guarantee fees on 30-year fixed-rate loans rose by 1 basis point (to 59 basis points), and average guarantee fees on 15-year fixed-rate loans rose by 6 basis points (to 42 basis points). The average guarantee fee increase on 15-year fixed-rate loans exceeded the total average increase because 15-year fixed-rate loans are more likely to be refinance acquisitions compared to overall acquisitions and, for the first seven months of 2021, the Enterprises’ refinance acquisitions were required to include an Adverse Market Refinance Fee (AMRF), designed to cover projected COVID-19 losses.

- Average guarantee fees for rate-term refinance loans increased by 3 basis points (to 52 basis points), and average fees for purchase loans decreased by 1 basis point (to 55 basis points).

Average guarantee fees by risk class

- Average guarantee fees increased more for loans with lower LTV than higher LTV primarily because in 2021 lower LTV loans were more likely to be refinance loans and, for the first seven months of 2021, the Enterprises’ refinance acquisitions were required to include an AMRF.

  - Average guarantee fees for loans with LTV at or below 70 percent increased by 3 basis points (to 53 basis points).
  - Average guarantee fees for loans with LTV above 70 percent and at or below 80 percent increased 1 basis point (to 62 basis points).
  - Average guarantee fees for loans with LTV above 80 percent and at or below 90 percent increased 1 basis point (to 55 basis points).
  - Average guarantee fees for loans with LTV above 90 percent remained unchanged at 54 basis points.

- Average guarantee fees for loans with a credit score below 660 decreased by 3 basis points (to 79 basis points) because of lower average LTVs. Average guarantee fees for loans with credit scores in the range of 660 to 719 remained unchanged at 66 basis points. Average guarantee fees for loans with credit scores at or above 720 increased by 2 basis points (to 54 basis points).

Guarantee fees by seller size

- The average guarantee fee by seller size was 56 basis points for the medium and small seller groups, and 57 basis points for the large seller group.

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 expected credit losses, administrative costs, and the cost of capital associated with guaranteeing single-family loans. The Enterprises acquire loans through two channels. A seller\(^8\) may exchange or swap a group of loans for a Fannie Mae or Freddie Mac-guaranteed mortgage-backed security (MBS) collateralized by these loans, which the seller may then sell into the secondary market. This is known as the MBS swap acquisition channel. Alternatively, a seller may deliver loans to an Enterprise in return for a cash payment. The Enterprises bundle these loans into MBS and sell the MBS into the secondary market. This is known as the cash window acquisition channel. Larger sellers tend to exchange loans for MBS, while smaller sellers tend to sell loans for cash.

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, guaranteeing that investors receive scheduled principal and interest payments.\(^9\) The Enterprises charge a guarantee fee in exchange for providing this guarantee. Investors are willing to pay a higher price for Enterprise MBS than for private-label MBS because of the guarantee of principal and interest, and because of the liquidity of the MBS markets.

There are two types of guarantee fees: ongoing and upfront. Ongoing fees are factored into each loan’s interest rate and collected each month over the life of a loan. Upfront fees are one-time payments made by sellers upon loan delivery to an Enterprise that are similarly factored into the interest rate paid by the borrower and thus recouped by the seller. In this report, FHFA presents the upfront fees in an annualized form (see footnote 5).

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\(^8\) The term seller refers to an entity that is the ultimate seller of a loan to the Enterprises, which may include mortgage originators that sell directly to the Enterprises or mortgage aggregators that purchase mortgages from other financial institutions and resell the loans to the Enterprises.

\(^9\) Although the Enterprises are always the ultimate guarantors of their MBS securities, they may choose to retain the full credit risk or, as part of their credit risk transfer (CRT) programs, pay private entities to bear some of the credit risk. In this report, FHFA excludes loans with front-end risk transfer and seller recourse from the study population due to non-standard guarantee fee pricing. While the Enterprises may transfer risk on other loans in the study population after acquisition, this report does not include the CRT effect in the estimated costs or profitability.
The Enterprises set ongoing fees. These fees are based primarily on the product type, such as whether the loan is a 30-year fixed rate or a 15-year fixed rate loan. Ongoing fees presented in this report include the net gain or loss generated from buy-up/buy-down transactions, in which the Enterprise buys from or sells to the seller a portion of the loan’s ongoing interest to allow for loans to be pooled more flexibly during the creation of MBS.

In contrast to ongoing fees, FHFA has directed the Enterprises to set some upfront fees charged on loans with specific attributes which are publicly posted on each Enterprise’s website.¹⁰ Specific risk attributes include but are not limited to the following:

- High-LTV adjustable-rate mortgages
- LTV ratio
- Borrower’s credit score
- Certain occupancy types (investment properties or second homes)
- Cash-out refinances
- Certain property types (condominiums, multi-units, manufactured homes)
- Level of mortgage insurance coverage relative to requirements
- Whether the loan exceeds the baseline conforming loan limit
- Whether and how much subordinate financing was taken
- Participation in special programs

As the risk attribute mix of loan acquisitions changes over time, the Enterprises accordingly charge different levels of upfront fees. Acquisition years that reflect significant refinance activity tend to have lower upfront fees because refinance loans tend to have lower LTVs.

Costs of Providing the Guarantee

FHFA’s analysis of the Enterprises’ costs of providing their guarantee centers on estimates of Enterprises’ profitability gaps, or differences between an Enterprises’ revenue (guarantee fees) received and its estimated total costs. The Enterprises’ revenues include their upfront and ongoing guarantee fees. The Enterprises’ total costs include: 1) the expected default costs that result from the failure of some borrowers to make their payments during expected economic conditions; 2) the cost of holding capital to protect against unexpected 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 (TCCA). The fee was extended to 2032 by the Infrastructure Investment and Jobs Act in November 2021.

An Enterprise’s cost of holding capital is its greatest cost. In 2021 the Enterprises used i) FHFA’s Conservatorship Capital Framework (CCF) to determine the capital requirements for single family loans, and ii) a target rate of return set by FHFA.

In 2008 when FHFA placed the Enterprises into conservatorship, it suspended its quarterly classifications of the capital adequacy of each Enterprise. 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 as if they were well capitalized.

11 Please see the following section, Timeline of Changes in Guarantee Fees, for a brief introduction to the fourth cost component related to the TCCA.
12 FHFA developed the CCF, an aligned risk management framework, to better inform each Enterprise’s business decisions during conservatorship. The Enterprises began using the CCF in 2017. During 2020, both Enterprises used the CCF to make their regular business decisions and FHFA used the framework 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.
13 In 2022, the Enterprises began to manage their single-family businesses under FHFA’s Enterprise Regulatory Capital Framework (ERCF), which replaced the CCF. In future reports, guarantee fees will be analyzed relative to ERCF capital requirements.
Using FHFA’s CCF and Enterprise estimated losses, each Enterprise estimates a profitability gap on its newly acquired loans. The gap serves as the measure of estimated profitability given a target rate of return on capital. If the gap on a loan is positive or zero, the Enterprise expects to achieve at least its target rate of return on capital. A negative gap does not imply a product is unprofitable. If the gap is negative, the Enterprise expects to earn a return on the loan that is below its overall target rate of return on capital.

The Enterprises limit guarantee fees on certain loans to fulfill their affordable housing requirements. This may result in a negative gap on some business segments. However, the FHFA expects each Enterprise to earn at least the target rate of return on capital over its entire portfolio of loans.

Two main factors contribute to the movement in gaps over time. The first is yearly changes to each Enterprise’s cost estimation model and capital-related assumptions. The second is changes in loan mix, as the Enterprises acquire a greater or fewer number of loans in different risk categories each year.

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14 Over time, the Enterprises update the factors that determine cost, so readers should exercise caution when comparing gaps from different time periods. Readers should also note that each Enterprise uses a different model to determine cost, which will have some impact on gaps averaged across Enterprises.

15 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).”

16 Please note that the gap values presented for 2018 in this report do not match the gap values presented for the same year in the Annual G-fee Report on 2018. This is due to an Enterprise having made corrections to the calculation of estimated cost under FHFA’s Conservatorship Capital Framework.
Transition to the Enterprise Regulatory Capital Framework

FHFA’s Enterprise Regulatory Capital Framework (ERCF) is intended to ensure that the Enterprises operate in a safe and sound manner and are positioned to fulfill their statutory mission to provide stability and liquidity to the secondary mortgage market across the economic cycle, particularly during periods of financial stress. The ERCF became effective in 2022, and the Enterprises transitioned from using CCF to ERCF for measuring capital requirements and buffers. This is the last G-Fee Report that relies on the CCF, and future G-Fee Reports will be based on ERCF requirements.

The transition to ERCF’s requirements will increase the aggregate amount of capital required compared to CCF. The aggregate increase reflects the following components of ERCF: (i) a risk-weight floor minimum requirement for single-family mortgage exposures, (ii) a countercyclical adjustment to single-family credit risk capital requirements that elevates single-family requirements when real single-family house prices are significantly above their long-run trend, and (iii) capital buffers, which include capital buffers for stability and stress.

The transition to the ERF will also change capital requirements across credit characteristics. The credit risk-weight floor of 20 percent on single-family mortgage exposures in the ERCF increases capital more significantly for loans with lower credit risk characteristics (e.g., lower LTVs, higher credit scores, lower DTIs, and 15/20-year fixed rate products) than for loans with higher credit risk characteristics. The single-family risk multipliers in the ERCF exclude multipliers for loan balance and the number of borrowers that are in the CCF. The capital requirements associated with these multipliers are distributed across the single-family base grids. As evidenced in the following figure, these changes reduced risk gradients in the ERCF compared to CCF.
The transition to the ERCF will have important implications for returns and profitability gaps. Higher capital requirements and flatter risk gradients in the ERCF compared to CCF result in a lower and flatter return profile and profitability gap profile across the credit risk spectrum. Returns on loans with lower credit risk characteristics under the ERCF will be considerably lower compared to CCF and returns on loans with higher credit risk characteristics will be notably lower compared to CCF.

**Timeline of Changes in Guarantee Fees: 2008 to 2021**

The Enterprises’ guarantee fees have changed dramatically since 2008. The following section provides a narrative of the major changes to the ongoing and upfront fees over the past 13 years.

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 the following two new upfront fees: (1) a fee based on a borrower’s LTV ratio and credit score, and (2) 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.
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.17

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 sellers and large volume sellers. 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:

- Because of improvements in the housing market, FHFA removed the 25 basis point upfront adverse market charge, in place since 2008.

- 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 refinance loans, jumbo conforming loans, investment properties, and loans with secondary financing) and those with both high credit scores and low LTV ratios.

FHFA did not increase fees for 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 ratios was FHFA’s separate action in April 2015 to finalize new standards for mortgage insurers – the Private Mortgage Insurer Eligibility Requirements (PMIERs). On loans with down payments less than 20 percent, the Enterprises’ charters require them to share credit risk with the private sector through charter-eligible credit enhancements. The finalized PMIERs provide modest cost

17 The Enterprises collect the TCCA fee and pass it through to the U.S. Department of the Treasury. For the purposes of reporting to FHFA, the Enterprises include the 10-basis point TCCA fee in both the guarantee fee and model fee (estimated total cost). 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.
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 regular monitoring of guarantee fees, FHFA observed that the average of ongoing fees charged by the two Enterprises was declining. FHFA directed the Enterprises in July 2016 to set minimum ongoing guarantee fees by product type, effective in November 2016, consistent with its responsibility to ensure the safety and soundness of the Enterprises. Between September 2018 and February 2019, both Enterprises implemented a 25 basis point upfront fee on second homes.

In April 2020, following the start of the COVID-19 pandemic, FHFA allowed the Enterprises to purchase loans already in forbearance, which previously would not have been deliverable, with an upfront fee add-on of 500 basis points for first-time home buyers and 700 basis points for all others. After multiple extensions, this expired with loans closed through December 31, 2020. In August 2020, FHFA directed the Enterprises to introduce a 50-basis point upfront Adverse Market Refinance Fee (AMRF) on cash-out and rate-term refinances effective on December 1, 2020. The intent of this fee was to cover projected COVID-19 losses of at least $6 billion at the Enterprises. The Enterprises excluded from the fee loans with principal balance at or below $125,000, those associated with Fannie Mae’s HomeReady and Freddie Mac’s Home Possible (low down payment financing products), and construction-to-permanent loans meeting certain criteria.18

In July 2021, FHFA announced that the Enterprises would eliminate the AMRF for loan deliveries effective August 1, 2021, because of the success of FHFA’s and the Enterprises' COVID-19 policies in reducing the impact of the pandemic. In November 2021, the Infrastructure Investment and Jobs Act extended to 2032 the existing 10 basis point ongoing TCCA fee. This fee was previously due to expire in 2022. The Enterprises remit the proceeds from this fee to the U.S. Department of the Treasury.

Table 1 shows a timeline of the major changes to guarantee fees dating back to 2008.

**Table 1: Timeline of Changes in Fees from 2008 to 2021**

<table>
<thead>
<tr>
<th>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 fee.</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. The Enterprises pay this fee to the U.S. Department of the Treasury. This fee increase was effective with April 2012 deliveries and was set to 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. FHFA raised fees more on loans with terms longer than 15 years than on shorter-term loans to better align the gaps and made fees more uniform across sellers with varying loan delivery volumes. 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 fee 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 fee 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 directed the Enterprises to set minimum ongoing guarantee fees by product type, effective in November 2016, consistent with FHFA’s responsibility to ensure the safety and soundness of the Enterprises.</td>
</tr>
<tr>
<td>September 2018 &amp; March 2019</td>
<td>The Enterprises implemented a 25-basis point upfront fee for loans on second homes where LTV exceeds 85 percent.</td>
</tr>
<tr>
<td>April 2020</td>
<td>FHFA allowed the Enterprises to purchase loans in forbearance, with an upfront fee add-on of 500 basis points for first-time home buyers and 700 basis points for all others, effective for loans closed through December 31, 2020, following multiple extensions.</td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>August 2020</td>
<td>FHFA directed the Enterprises to introduce a 50-basis point upfront adverse market refinance fee, effective December 1, 2020, for cash-out and rate-term refinances. The Enterprises excluded loans with principal balance less than or equal to $125,000, those associated with HomeReady/Home Possible, and construction-to-permanent loans meeting certain criteria.</td>
</tr>
<tr>
<td>July 2021</td>
<td>FHFA announced that the Enterprises would eliminate the adverse market refinance fee for loan deliveries effective August 1, 2021.</td>
</tr>
<tr>
<td>November 2021</td>
<td>The Infrastructure Investment and Jobs Act extended to 2032 the existing 10-basis point ongoing fee arising from the Temporary Payroll Tax Cut Continuation Act of 2011, which was due to expire in 2022. The Enterprises remit the proceeds from this fee to the U.S. Department of the Treasury.</td>
</tr>
</tbody>
</table>

**Market Overview for 2021**

Total loan acquisitions for 2021 exceeded the record levels from 2020. Acquisitions were buoyed by record low mortgage rates and significant refinance activity. The Enterprises acquired 8.8 million mortgages for a total dollar volume of $2.5 trillion, accounting for an estimated 70 percent of the total mortgage market in 2021. This compares to 8.4 million mortgages acquired by the Enterprises in 2020 with a total dollar volume of $2.4 trillion. Of the Enterprise acquisitions in 2021, 35 percent were purchase mortgages, 41 percent were refinance mortgages done to secure new interest rates or loan terms, and 24 percent were refinance mortgages for which cash was taken out.
Guarantee Fee and Profitability Gap Results for 2021

This report compares average guarantee fees and average profitability gaps on Enterprise loan acquisitions from 2018 to 2021. The report includes breakouts by year, product type, risk class (loan purpose, LTV ratio, and credit score), and seller delivery volume. The breakouts allow for attributing changes in the average guarantee fee and the average gap to changes over time in the acquisition composition. 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.

I. Average Guarantee Fee

The study population consists of single-family mortgages acquired by the Enterprises under their standard underwriting and delivery guidelines each year over the four-year period from 2018 through 2021.19 Dollar volumes in 2020 and 2021 were at extremely high levels due to the record low interest rates and increased housing demand due to Covid-19.

Table 2: Total Study Population – Loan and Dollar Volume

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dollars (in Billions)</td>
<td>$692</td>
<td>$955</td>
<td>$2,398</td>
<td>$2,522</td>
</tr>
<tr>
<td></td>
<td>Loans (in Millions)</td>
<td>3.0</td>
<td>3.7</td>
<td>8.4</td>
<td>8.8</td>
</tr>
<tr>
<td></td>
<td>Change 2020 to 2021</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The average guarantee fee was 56 basis points in 2021, 2 basis points higher than in 2020. The increase in the average guarantee fee was driven by the upfront component, which also increased by 2 basis points (or 18 percent); the ongoing component remained unchanged at 43 basis points. The increase in upfront fees can be attributed to the collection of the AMRF.

19 The study population excludes loans associated with bulk purchase transactions, manufactured housing, and the Federal Housing Administration. It also excludes other loans outside standard guarantee fee pricing guidelines. See footnote 9 for examples of loans with non-standard guarantee fee pricing.
In 2021, the average gap was higher than the average gap in 2020, indicating that the (risk-adjusted) profitability on new loan acquisitions increased. The gap increased both because fees increased and because the credit quality of the loans increased.

*The gap measures the charged fee minus the costs and the target rate of return.*
II. Guarantee Fees by Product Type

From 2020 to 2021, the 30-year fixed rate loan share of the study population decreased by 1 percent.

Table 3: Study Population Distribution by Product Type

<table>
<thead>
<tr>
<th>Product Type</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>Change 2020 to 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-Year Fixed</td>
<td>85%</td>
<td>85%</td>
<td>79%</td>
<td>78%</td>
<td>-1%</td>
</tr>
<tr>
<td>15-Year Fixed</td>
<td>9%</td>
<td>10%</td>
<td>14%</td>
<td>14%</td>
<td>0%</td>
</tr>
<tr>
<td>Fixed Other Terms</td>
<td>4%</td>
<td>4%</td>
<td>7%</td>
<td>7%</td>
<td>0%</td>
</tr>
<tr>
<td>ARM</td>
<td>2%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Note: due to rounding shares may not add up to 100 percent for each year.

From 2020 to 2021, the average guarantee fees on 15-year fixed rate loans increased to 42 basis points, driven by the AMRF. 30-year fixed rate loans had a much greater proportion of home purchase loans, which had no AMRF, so the impact of the charge appears muted.

Chart 3: Guarantee Fee by Product Type
Profitability increased for all products, but especially for 15-year fixed rate loans due to the higher fees.

**Chart 4: Gap* by Product Type**

*The gap measures the charged fee minus the costs and the target rate of return.*
III. Guarantee Fees by Risk Class

Following the onset of the COVID-19 pandemic, the decreasing interest rate environment and historic house price appreciation contributed to a large increase in the share of rate-term refinance loans and a corresponding decrease in the share of purchase loans. 2020 and 2021 both had high shares of refinance loans, which resulted in a high share of lower LTV loans. Usually rate-term refinancers have more equity in a property than purchasers; in 2020 and 2021 this effect was further amplified by historic price appreciation. Similarly, the larger share of rate-term refi nances contributed to a larger share of higher credit score loans.

The subsections that follow show average guarantee fees for each risk class.

Table 4: Study Population Distributions by Risk Class

<table>
<thead>
<tr>
<th>Loan Purpose</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>Change 2020 to 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase</td>
<td>67%</td>
<td>54%</td>
<td>30%</td>
<td>35%</td>
<td>5%</td>
</tr>
<tr>
<td>Rate-Term Refinance</td>
<td>12%</td>
<td>27%</td>
<td>51%</td>
<td>41%</td>
<td>-10%</td>
</tr>
<tr>
<td>Cash-Out Refinance</td>
<td>20%</td>
<td>19%</td>
<td>18%</td>
<td>24%</td>
<td>6%</td>
</tr>
<tr>
<td><strong>LTV Ratio</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;=70 Percent</td>
<td>27%</td>
<td>29%</td>
<td>43%</td>
<td>47%</td>
<td>4%</td>
</tr>
<tr>
<td>70.1 - 80 Percent</td>
<td>38%</td>
<td>37%</td>
<td>34%</td>
<td>32%</td>
<td>-2%</td>
</tr>
<tr>
<td>80.1 - 90 Percent</td>
<td>13%</td>
<td>14%</td>
<td>12%</td>
<td>10%</td>
<td>-2%</td>
</tr>
<tr>
<td>&gt; 90 Percent</td>
<td>22%</td>
<td>20%</td>
<td>12%</td>
<td>12%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Credit Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;= 720</td>
<td>73%</td>
<td>77%</td>
<td>84%</td>
<td>80%</td>
<td>-4%</td>
</tr>
<tr>
<td>660 - 719</td>
<td>23%</td>
<td>20%</td>
<td>14%</td>
<td>17%</td>
<td>3%</td>
</tr>
<tr>
<td>&lt; 660</td>
<td>5%</td>
<td>3%</td>
<td>2%</td>
<td>3%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Note: due to rounding shares may not add up to 100 percent for each year.
A. Loan Purpose

The higher fees on cash-out refinance loans shown below reflect both the higher upfront fees required for this loan purpose and the AMRF. The average fee for rate-term refinance loans increased due to the AMRF.

Chart 5: Guarantee Fee by Loan Purpose

![Chart 5: Guarantee Fee by Loan Purpose]

Gaps increased particularly for rate-term refinance loans, due to the AMRF.

Chart 6: Gap* by Loan Purpose

![Chart 6: Gap* by Loan Purpose]

* The gap measures the charged fee minus the costs and the target rate of return.
B. Loan-to-Value Ratio

Guarantee fees increased the most for low LTV loans because of the high prevalence of rate-term refinances in low LTV loans.

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

Note: 0.1 denotes “greater than.” For example, 70.1 denotes “greater than 70.”

Chart 8: Gap* by Loan-to-Value Ratio

* The gap measures the charged fee minus the costs and the target rate of return. Note: 0.1 denotes “greater than.” For example, 70.1 denotes “greater than 70.”
C. Credit Score

Guarantee fees decreased by 3 basis points for loans with borrower credit scores below 660. Affordable refinance products – Home Ready and Home Possible – and low balance loans were exempt from the AMRF.

Chart 9: Guarantee Fee by Credit Score

![Chart 9: Guarantee Fee by Credit Score]

<table>
<thead>
<tr>
<th>Credit Score</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 660</td>
<td>81</td>
<td>82</td>
<td>82</td>
<td>79</td>
</tr>
<tr>
<td>660 - 719</td>
<td>64</td>
<td>66</td>
<td>66</td>
<td>66</td>
</tr>
<tr>
<td>&gt;= 720</td>
<td>50</td>
<td>52</td>
<td>52</td>
<td>54</td>
</tr>
</tbody>
</table>

Chart 10: Gap* by Credit Score

![Chart 10: Gap* by Credit Score]

* The gap measures the charged fee minus the costs and the target rate of return.
IV. Guarantee Fees by Seller Volume

Together the Enterprises acquired loans from 1,835 sellers in the study population in 2021, with each Enterprise individually acquiring loans from about 1,000 sellers. FHFA divided these sellers into three seller groups based on their share of total Enterprise acquisition volume. The seller volume groups are comprised of those sellers with a share of total Enterprise acquisition volume at or above 2 percent (Large), greater than or equal to 0.1 percent and less than 2 percent (Medium), and below 0.1 percent (Small), within each year studied. Generally, smaller sellers tend to sell loans for cash, and larger sellers exchange loans for MBS, as reflected in Tables 5a and 5b.

Table 5a: Study Population Distribution by Seller Volume Group, MBS Swap

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Large</td>
<td>&gt;= 2%</td>
<td>71%</td>
<td>71%</td>
<td>73%</td>
<td>75%</td>
<td>2%</td>
</tr>
<tr>
<td>Medium</td>
<td>&gt;= 0.1% and &lt; 2%</td>
<td>28%</td>
<td>28%</td>
<td>26%</td>
<td>25%</td>
<td>-1%</td>
</tr>
<tr>
<td>Small</td>
<td>&lt; 0.1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Note: due to rounding shares may not add up to 100 percent for each year.

Table 5b: Study Population Distribution by Seller Volume Group, Cash Window

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Large</td>
<td>&gt;= 2%</td>
<td>22%</td>
<td>23%</td>
<td>10%</td>
<td>14%</td>
<td>4%</td>
</tr>
<tr>
<td>Medium</td>
<td>&gt;= 0.1% and &lt; 2%</td>
<td>48%</td>
<td>48%</td>
<td>59%</td>
<td>51%</td>
<td>-8%</td>
</tr>
<tr>
<td>Small</td>
<td>&lt; 0.1%</td>
<td>30%</td>
<td>29%</td>
<td>31%</td>
<td>34%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Note: due to rounding shares may not add up to 100 percent for each year.

Across both MBS swap and cash window channels combined, the average guarantee fee by seller size was 56 basis points for the medium (M) and small (S) seller groups, and 57 basis points for the large (L) seller group. The charts on the following pages show guarantee fees by seller volume group, separately for MBS swap acquisitions and cash window acquisitions. In the cash window channel, the Enterprises hold the acquired loans in portfolio until they can be securitized. In the process, the Enterprises take on additional risk and costs, including but not limited to liquidity risk and hedging costs. Therefore, guarantee fees through the cash window channel are not comparable to guarantee fees through the MBS swap channel.
Chart 11a: Guarantee Fee by Seller Volume Group, MBS Swap

![Chart showing guarantee fee by seller volume group for MBS Swap]

<table>
<thead>
<tr>
<th>Year</th>
<th>L</th>
<th>M</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>53</td>
<td>55</td>
<td>49</td>
</tr>
<tr>
<td>2019</td>
<td>55</td>
<td>57</td>
<td>51</td>
</tr>
<tr>
<td>2020</td>
<td>55</td>
<td>55</td>
<td>53</td>
</tr>
<tr>
<td>2021</td>
<td>57</td>
<td>57</td>
<td>50</td>
</tr>
</tbody>
</table>

Chart 11b: Guarantee Fee by Seller Volume Group, Cash Window

![Chart showing guarantee fee by seller volume group for Cash Window]

<table>
<thead>
<tr>
<th>Year</th>
<th>L</th>
<th>M</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>54</td>
<td>56</td>
<td>57</td>
</tr>
<tr>
<td>2019</td>
<td>55</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td>2020</td>
<td>53</td>
<td>54</td>
<td>54</td>
</tr>
<tr>
<td>2021</td>
<td>55</td>
<td>56</td>
<td>56</td>
</tr>
</tbody>
</table>
The substantially below-target profitability of loans from the small (S) seller group in 2019 was due to roughly half of acquisitions coming from housing finance authorities (HFAs). Many of these loans were exempt from upfront delivery fees and some had subsidies, which resulted in the large, negative gap shown below for that year.20

Chart 12a: Gap* by Seller Volume Group, MBS Swap

![Chart 12a: Gap* by Seller Volume Group, MBS Swap](chart)

* The gap measures the charged fee minus the costs and the target rate of return.

Chart 12b: Gap* by Seller Volume Group, Cash Window

![Chart 12b: Gap* by Seller Volume Group, Cash Window](chart)

* The gap measures the charged fee minus the costs and the target rate of return.

20 From 2019 to 2020, the HFA share of the MBS Swap small (S) seller group dropped substantially. Additionally, the Enterprises eliminated exemptions for certain types of HFA loans.