



**Congressional
Research Service**

Informing the legislative debate since 1914

Fannie Mae and Freddie Mac: Recent Administrative Developments

April 5, 2021

Congressional Research Service

<https://crsreports.congress.gov>

R46746



R46746

April 5, 2021

Darryl E. Getter
Specialist in Financial
Economics

Fannie Mae and Freddie Mac: Recent Administrative Developments

Congress chartered Fannie Mae and Freddie Mac, also known collectively as the government-sponsored enterprises (GSEs), to promote homeownership by providing liquidity to the secondary mortgage market. The GSEs specifically facilitate financing for single-family residential mortgages and multifamily (apartment and condominium) construction. After purchasing pools of single-family 30-year fixed rate mortgages, the GSEs retain the credit (default) risks from the whole mortgages and subsequently issue mortgage-backed securities (MBSs), which are bond-like securities. Investors who purchase MBSs are guaranteed a return on their initial principal and interest, but they assume prepayment risk, which is the risk that borrowers prepay their mortgages ahead of schedule. In contrast to the original mortgages, the MBSs are relatively more liquid, meaning they can be exchanged for cash more quickly with little change in their quoted prices. If institutional investors from around the globe are willing to hold liquid MBSs, then additional funds are channeled to the nation's mortgage market (particularly to support 30-year fixed rate mortgages). National mortgage rates tend to fall as the supply of funds in this market increases, making homeownership more affordable.

The Federal Housing Finance Agency (FHFA), an independent federal government agency created by the Housing Economic and Recovery Act of 2008 (HERA, P.L. 110-289), is the GSEs' primary supervisor. FHFA regulates the GSEs for prudential safety and soundness and to ensure that they meet their affordable housing mission goals. In September 2008, the GSEs experienced losses that exceeded their statutory minimum capital requirement levels as a result of above-normal mortgage defaults. The GSEs also experienced losses following spikes in short-term borrowing rates that occurred while they were funding long-term assets held in their portfolios. The GSEs were subsequently placed into conservatorship by FHFA, which currently has the powers of management, boards, and shareholders until the GSEs' financial safety and soundness can be restored. In addition, the U.S. Treasury provides financial support through the Senior Preferred Stock Purchase Agreements (PSPAs), which stipulate that the GSEs must pay dividends to Treasury rather than private shareholders while they are under conservatorship. On September 30, 2019, Treasury announced stipulations to the PSPAs that would allow the GSEs to retain their earnings for the purpose of accumulating capital reserves in preparation for eventual release from conservatorship.

Congressional interest in the GSEs has continued since conservatorship. For one reason, the final costs to the U.S. Treasury (and, by proxy, to U.S. taxpayers) of providing the GSEs financial support are unknown. In addition, the GSEs' future viability could affect the availability of single-family 30-year fixed rate mortgage loan products. Although these mortgage products are arguably popular with borrowers, private lenders may be reluctant to retain in portfolio and fund relatively less liquid mortgages for several decades. Congressional interest has been reflected by various draft proposals, bills, and oversight hearings on housing finance reform. During the 116th Congress, for example, the Senate Committee on Banking, Housing, and Urban Affairs released a proposal regarding the GSEs' role in the housing finance system.

Meanwhile, FHFA's conservatorship goals have focused primarily on managing the GSEs' liquidity, operational, and credit risks. FHFA has directed the GSEs to standardize numerous processes to foster greater liquidity in the market for their MBSs. The GSEs are also being required to share more of the credit risk linked to their single-family mortgage purchases with the private sector. Greater uniformity is expected to provide greater data integrity and reduce pricing irregularities, thereby fostering efficient operation of the primary and secondary mortgage markets.

On October 28, 2019, FHFA announced a strategic plan to prepare the GSEs for their eventual exit from conservatorship. FHFA also adopted a final rule on December 17, 2020, that establishes a capital regulatory framework for GSEs to be in place once they exit conservatorship. The capitalization requirements are designed to increase the GSEs' resiliency to another severe financial downturn. Furthermore, FHFA directs the GSEs to pursue programs to meet affordable mission goals for low- and moderate-income households as mandated in their congressional charters. However, FHFA has also limited the GSEs' activities in the multifamily (e.g., apartments) lending space that are not explicitly linked to their affordable mission goals. If the GSEs were to exit conservatorship under current circumstances, their attempts to sustain profitability levels to meet shareholder equity requirements with limitations on lending activities could pose a future dilemma.

Contents

Introduction	1
The GSEs' Secondary Mortgage Market Activities	3
Retention of Mortgage Credit Risk, Transfer of Prepayment Risk.....	5
Liquidity Risk in the Markets for MBSs.....	5
FHFA's Conservatorship Priorities for the GSEs.....	7
Directives to Reduce the GSEs' Credit Risks	7
Loan-to-Value Ratios and Mortgage Reinsurance Transactions.....	7
Guarantee Fees	8
Credit Risk Transfer Programs.....	9
Standardization Initiatives to Foster MBS Liquidity	11
Mortgage Data Standardization	11
The Common Securitization Platform.....	12
The Uniform MBS Single Security Initiative	14
Potential Post-Conservatorship Issues for the GSEs.....	15
Heightened Capital Buffer Requirements: The 2020 Capital Rule.....	16
The GSEs' Multifamily Business Models	18
Duty to Serve: Manufactured Housing Chattel Loans	21

Contacts

Author Information	24
--------------------------	----

Introduction

Congress chartered Fannie Mae and Freddie Mac,¹ also known collectively as the government-sponsored enterprises (GSEs),² to promote homeownership by providing liquidity to the secondary markets for single-family residential mortgages and multifamily (apartment and condominium) mortgages. Guaranteeing single-family residential mortgages is their core business activity. Specifically, the GSEs retain the credit (default) risks from the mortgages they purchase from loan originators and subsequently issue bond-like instruments known as mortgage-backed securities (MBSs).³ Investors who purchase the MBSs are guaranteed to get their initial principal investment returned, but they assume the risk of declining cash flows if borrowers choose to repay their mortgages ahead of schedule, known as prepayment risk.⁴ Hence, unlike mortgages with both attached lending risks, MBSs are arguably considered more liquid (e.g., can be traded or sold for cash more quickly) largely because they contain only one type of lending risk. When investors hold MBSs, more private-sector funds are channeled toward offering relatively less liquid mortgages—namely 30-year fixed-rate mortgages. National mortgage rates tend to fall as the supply of funds in this market increases, making homeownership more affordable.

The Federal Housing Finance Agency (FHFA), an independent federal government agency created by the Housing and Economic Recovery Act of 2008 (HERA, P.L. 110-289), is the GSEs' primary supervisor.⁵ FHFA regulates the GSEs for prudential safety and soundness and ensures they meet their affordable housing mission goals. In September 2008, the GSEs experienced losses that exceeded their statutory minimum capital requirement levels due to the high rate of mortgage defaults. At the same time, the GSEs also experienced losses following spikes in short-term borrowing rates that occurred while they were funding long-term assets held in their portfolios. The GSEs subsequently agreed to be placed under conservatorship, meaning that FHFA has the powers of management, boards, and shareholders until restoration of the GSEs' financial safety and soundness.⁶

In addition, the terms in the Senior Preferred Stock Purchase Agreements (PSPAs) between the GSEs and the U.S. Treasury stipulate the conditions under which it will provide them with financial support while they are under conservatorship.⁷ The initial PSPAs required the GSEs to

¹ For more historical information about the chartering of Fannie Mae and Freddie Mac, see “Why Were Fannie Mae and Freddie Mac Created?” in CRS Report R44525, *Fannie Mae and Freddie Mac in Conservatorship: Frequently Asked Questions*, by Darryl E. Getter.

² The term *GSEs* refers only to Fannie Mae and Freddie Mac in this report. Other entities, such as the Federal Home Loan Bank System, are also sometimes referred to as GSEs but are not included in this discussion.

³ Fannie Mae calls its securities MBSs, and Freddie Mac calls its securities participation certificates. Common industry practice is to refer to both Fannie's MBSs and Freddie's participation certificates generically as MBSs.

⁴ In addition to Fannie Mae and Freddie Mac, Congress created Ginnie Mae, a federal corporation that guarantees the timely repayment of principal and interest to investors in MBSs (created by Ginnie Mae–approved issuers) linked to mortgages in which the default risk has already been guaranteed by federal agencies, such as the Federal Housing Administration (FHA), the U.S. Department of Veterans Affairs (VA), and the U.S. Department of Agriculture (USDA). Hence, Ginnie Mae does not retain credit risk.

⁵ Prior to FHFA's creation, the Office of Federal Housing Enterprise Oversight (OFHEO), which was an agency under the Department of Housing and Urban Development (HUD), was the safety and soundness regulator for Fannie Mae and Freddie Mac. OFHEO ensured that the GSEs complied with their statutory capital requirements. The GSEs' annual housing mission goals were set by HUD but not by OFHEO.

⁶ See FHFA, “Conservatorship,” <https://www.fhfa.gov/Conservatorship>.

⁷ P.L. 110-289 gave the Secretary of the Treasury authority to lend or invest in the GSEs. The Treasury's response to the GSEs after they were undercapitalized was similar to its response after the banking system became undercapitalized, in which it purchased preferred shares from the banks via the Troubled Assets Relief Program. For

pay Treasury a 10% cash dividend on the amount of the outstanding preferred shares, and dividend payments were suspended for all private GSE stockholders. The GSEs did not have the option to issue additional stock shares or obtain funds elsewhere if they lacked the cash to make full dividend payments to Treasury.⁸ The 10% dividend, therefore, was subsequently replaced with a “profit sweep” dividend.⁹ The PSPAs also required the GSEs to reduce the size of their lending (retained) portfolios to \$250 billion.¹⁰ On September 30, 2019, Treasury further modified the PSPAs to allow Fannie Mae and Freddie Mac to retain earnings and accumulate capital reserves of \$25 billion and \$20 billion, respectively.¹¹ On October 28, 2019, FHFA announced a strategic plan to prepare the GSEs for their eventual exit from conservatorship.¹² On January 14, 2021, the PSPAs were again modified to allow Fannie Mae and Freddie Mac to accumulate the necessary amount of reserves to satisfy the prudential requirements of the 2020 capital rule.¹³

Congressional interest in the GSEs since they were placed in conservatorship has continued due to uncertainty in the housing, mortgage, and financial markets. For example, the final amount and duration of financial support that Treasury will eventually provide the GSEs is difficult to predict at present. Furthermore, reforming or replacing the GSEs might affect the availability of single-family 30-year fixed-rate mortgage loan products. This mortgage product is arguably popular with borrowers, but private lenders may be reluctant to retain them in their lending portfolios because they are relatively less liquid mortgages—with both credit and prepayment risks attached—and may last for several decades.¹⁴ Congressional interest has been reflected by various draft proposals, bills, and oversight hearings on housing finance reform. During the 116th Congress, for example, the Senate Committee on Banking, Housing, and Urban Affairs released a proposal that would affect the GSEs’ role in the housing finance system.¹⁵

information, see CRS Report R43413, *Costs of Government Interventions in Response to the Financial Crisis: A Retrospective*, by Baird Webel and Marc Labonte.

⁸ See Don Layton, “Temporarily Ending the GSEs Net Worth Sweep: A Limited but Important Step Towards GSE Reform,” Joint Center for Housing Studies, October 2, 2019, <https://www.jchs.harvard.edu/blog/temporarily-ending-the-gse-net-worth-sweep-a-limited-but-important-step-towards-gse-reform>.

⁹ See U.S. Department of Treasury, “Treasury Department Announces Further Steps to Expedite Wind Down of Fannie Mae and Freddie Mac,” press release, August 17, 2012, <https://www.treasury.gov/press-center/press-releases/Pages/tg1684.aspx>. Each GSE was allowed to retain a capital buffer of \$3 billion. See FHFA, Office of Inspector General, *Analysis of the 2012 Amendments to the Senior Preferred Stock Purchase Agreements*, March 20, 2013, https://www.fhfaog.gov/Content/Files/WPR-2013-002_2.pdf.

¹⁰ See the third amendment to the GSEs’ PSPAs at <https://www.treasury.gov/press-center/press-releases/Documents/Freddie.Mac.Amendment.pdf> and <https://www.treasury.gov/press-center/press-releases/Documents/Fannie.Mac.Amendment.pdf>.

¹¹ See U.S. Department of Treasury, “Treasury Department and FHFA Modify Terms of Preferred Stock Purchase Agreements for Fannie Mae and Freddie Mac,” press release, September 30, 2019, <https://home.treasury.gov/news/press-releases/sm786>.

¹² See FHFA, “FHFA Releases New Strategic Plan and Scorecard for Fannie Mae and Freddie Mac,” press release, October 28, 2019, <https://www.fhfa.gov/Media/PublicAffairs/Pages/FHFA-Releases-New-Strategic-Plan-and-Scorecard-for-Fannie-Mae-and-Freddie-Mac-.aspx>.

¹³ See FHFA, “FHFA and Treasury Allow Fannie Mae and Freddie Mac to Continue to Retain Earnings,” press release, January 14, 2021, <https://www.fhfa.gov/Media/PublicAffairs/Pages/FHFA-and-Treasury-Allow-Fannie-Mae-and-Freddie-Mac-to-Continue-to-Retain-Earnings.aspx>. The 2020 capital rule will be discussed in the section of this report entitled “Heightened Capital Buffer Requirements: The 2020 Capital Rule.”

¹⁴ See Richard K. Green and Susan M. Wachter, “The American Mortgage in Historical and International Context,” *Journal of Economic Perspectives*, vol. 19, no. 4 (Fall 2005), pp. 93-114.

¹⁵ U.S. Congress, Senate Committee on Banking, Housing, and Urban Affairs, “Chairman Crapo Releases Outline for Housing Finance Reform,” press release, February 1, 2019, <https://www.banking.senate.gov/newsroom/majority/chairman-crapo-releases-outline-for-housing-finance-reform>.

This report first describes Fannie Mae’s and Freddie Mac’s activities and mission. It then summarizes FHFA’s conservatorship goals that focus primarily on the management of the GSEs’ credit and liquidity risks. The report explains various directives issued by FHFA to the GSEs, which include reducing potential risks that could be borne by U.S. taxpayers, standardizing numerous processes to foster greater liquidity in the market for their MBSs, and increasing their capital reserves to prepare for their exit from conservatorship. Finally, this report discusses some challenges the GSEs may face attempting to achieve other mission goals while simultaneously satisfying their prudential requirements.

The GSEs’ Secondary Mortgage Market Activities

By law, the GSEs cannot originate mortgages directly to borrowers, who obtain their mortgages from loan originators in the primary market. Instead, the GSEs operate in the secondary mortgage market, interacting with loan originators (which sell mortgages to the GSEs) and investors (which purchase the GSEs’ debt and MBS issuances).

In the secondary market, the GSEs purchase homeowners’ *conforming mortgages* from loan originators. Conforming mortgages are single-family mortgages that meet certain eligibility criteria set by the GSEs based on size and creditworthiness.¹⁶ These mortgages must meet the GSEs’ underwriting standards and cannot exceed the *conforming loan limit*, which is adjusted each year to reflect the changes in the national average home price.¹⁷ The GSEs use two methods to acquire conforming mortgages. A GSE may pay cash (directly from its cash window) to a loan originator for delivery of a small number of mortgages. Alternatively, the GSEs may enter into a *swap agreement* with a loan originator to purchase a large number (or pool) of mortgages. In exchange for a pool, the purchasing GSE delivers one (or more) MBS that is linked to the *MBS trust* holding the mortgages. An MBS trust is a legal entity established to hold pools of conforming mortgage loans.¹⁸

As borrowers repay their mortgages, the streams of principal and interest are collected by loan servicers and forwarded to investors in MBSs issued by the GSEs. MBSs are essentially derivative products that contain one, rather than both, of the financial risks attached to the original mortgages that the GSE purchased.¹⁹ Investors that purchase an MBS receive a *coupon*, which is the yield composed of the principal and interest repayments from borrowers whose mortgages are held in MBS trusts.²⁰ However, various fees are subtracted before the coupons are

¹⁶ These mortgages tend to have fixed interest rates with a 30-year maturity.

¹⁷ The 2021 maximum conforming loan limit for one-unit properties is \$548,250. For most areas in which the median local house value exceeds the national average house value by 115%, the conforming loan limit is set at 115% of the median home value. Thus, the conforming loan limit for one-unit properties in most high-cost areas is \$822,375 in 2021. The conforming loan limit for Alaska, Hawaii, Guam, and the U.S. Virgin Islands is \$822,375 for one-unit properties. See FHFA, “FHFA Announces Conforming Loan Limits for 2021,” press release, November 24, 2020, <https://www.fhfa.gov/Media/PublicAffairs/Pages/FHFA-Announces-Conforming-Loan-Limits-for-2021.aspx>.

¹⁸ The MBS trusts are bankruptcy-remote or special-purpose entities, meaning that the parent company (e.g., one of the GSEs) isolates and holds these assets in the trust rather than on its own balance sheets. If, for example, a parent company goes bankrupt, then the stipulated activities of a special-purpose entity are not disrupted given that the trust assets are legally not owned by the parent company. In this case, the assets (mortgages) held in the MBS trusts are funded by MBS issuances.

¹⁹ In finance, a *derivative* is a financial instrument with value linked to at least one but not all of the risks contained in a reference bond. In this case, the MBS derivative instruments have the prepayment risk but not the default risk that is contained in the underlying reference mortgage.

²⁰ For detailed descriptions of loan securitizations and MBS trust guarantees, see Fannie Mae, *Basics of Fannie Mae*

paid to investors.²¹ For example, a designated mortgage servicer retains a fee to collect borrowers' regular payments, resolves borrower delinquency and default problems, and disburses payments to the GSEs (which subsequently disburse payments to MBS investors). Other fees related to the home purchase (e.g., settlement costs) that borrowers may have chosen not to pay upfront may also be subtracted. Simply put, the MBS coupon is the rate of return net of fees that an investor receives for purchasing or investing in an MBS.

The GSEs, like banks, are financial intermediaries that match mortgage borrowers with ultimate lenders. Under a traditional banking model, banks borrow funds from their depositors and use the funds to originate longer-term consumer and business loans. Consumers and businesses pay higher interest rates to banks for these longer-term loans than the banks pay to their depositors for successive sequences of relatively lower-rate loans (e.g., recurring deposits) for shorter periods of time. Generally speaking, profits are calculated as revenues minus costs. *Lending spreads*—the difference between lending at higher rates and borrowing at successive sequences of shorter rates—is a common approach deployed by financial institutions to generate revenues. A bank can retain all of the revenues generated by its lending spreads if the entire lending process and associated financial risks are retained on its balance sheet.

Similar to banks, the GSEs create profitable lending spreads to finance assets retained in their lending portfolios (on-balance sheet) and the conforming mortgages held in the MBS trusts (off-balance sheet). The GSEs issue to investors debt securities, referred to as unsecured *debentures*, with shorter maturities relative to the longer-term assets retained in portfolio. By borrowing via successive sequences of lower-rate debentures, the GSEs create portfolio lending spreads. In addition, the off-balance sheet MBS trusts are funded with the GSEs' issuances of MBSs in the *to-be-announced (TBA)* market.²² Mortgage borrowers in the primary market pay the longer-term rates, consisting of the MBS coupons *prior to any subtraction of fees*. The GSEs subsequently pass along to investors the shorter rates—the successive sequences of MBS coupons *net of fees*—compensating them for providing the principal funds for the mortgages and retaining only the prepayment risk. The difference between the longer-term and shorter-term rates (minus loan servicing and other ancillary fees) are the GSEs' compensation for retaining only the credit risks of the original mortgages held in trust, essentially making them monoline bond insurers.²³ These concepts, which are key to understanding the GSEs' securitization activities, are described in further detail in the sections below.

Single-Family MBS, January 2019, <http://www.fanniemae.com/resources/file/mbs/pdf/basics-sf-mbs.pdf>.

²¹ For example, if the average interest rate of the underlying pool of mortgages is 4% or 400 basis points, a GSE may retain an average of 56 basis points and pass the remaining 344 basis points to the MBS holders after subtracting additional basis points for mortgage servicers (typically 25 basis points) and paying for other costs to originate the loan. See FHFA, “FHFA Issues 2017 Report to Congress on Guarantee Fees,” news release, December, 10, 2018, <https://www.fhfa.gov/Media/PublicAffairs/Pages/FHFA-Issues-2017-Report-to-Congress-on-Guarantee-Fees.aspx>.

²² Ginnie Mae facilitates MBSs that it issues in the TBA market. Ginnie Mae transfers prepayment risk in a similar manner as the GSEs, but it does not retain default risk. The default risk is retained by the federal agencies—FHA, VA, and USDA—that provide mortgage insurance.

²³ See FHFA, “Enterprise Capital Requirements,” 83 *Federal Register* 137, July 17, 2018. Bond insurers guarantee (for a fee) that the interest payment streams generated from a bond (or loan) will be made on time and, if a default occurs, the initial principal investment will be returned to investors. Likewise, the GSEs facilitate the equivalent transaction on a larger scale via a process referred to as *securitization*.

Retention of Mortgage Credit Risk, Transfer of Prepayment Risk

A GSE is compensated for retaining *credit risk*, the risk that borrowers might default or fail to repay their mortgage loan obligations, by charging a *guarantee fee* (or “*g-fee*”). A *g-fee* is deducted from the streams of principal and interest payments before an MBS investor receives a coupon payment. Although the *g-fee* is typically charged to loan originators (and frequently passed onto borrowers), the benefit of the mortgage guarantee accrues to MBS investors.²⁴ Should a delinquency or default occur, the GSEs guarantee timely payment of the coupon (net of fees) to MBS investors.²⁵ After a borrower defaults, the applicable GSE purchases the defaulted mortgage (for the amount of the remaining balance owed) out of the MBS trust. The purchase effectively reimburses the associated MBS trust and, therefore, prevents MBS investors from losing their initial principal investments. The MBS coupon is subsequently adjusted for the reduced stream of interest payments, thus making it appear to investors that mortgage obligations have been repaid ahead of schedule (rather than defaulted).

The other key mortgage risk, *prepayment risk*, is transferred from the GSEs to MBS investors. Prepayment risk is the risk that borrowers will repay their mortgages ahead of schedule, resulting in lenders earning less *interest* revenue than initially anticipated. For example, if mortgage rates decline, some borrowers may repay their existing mortgages early by refinancing (replacing) them into new mortgages with lower rates. Borrowers also prepay their mortgages when they move. In this case, the GSEs pass on the repayment of principal but reduce the investors’ MBS coupons by the amount of interest forgone.²⁶

In sum, the GSEs’ securitization process entails detaching two mortgage risks into separate components.²⁷ The GSEs retain the default risk component and charges *g-fees*, but they transfer the prepayment risk component to MBS investors. For this reason, MBSs can be considered derivative securities because they contain only one of the risks linked to the original underlying mortgages held in the MBS trusts.²⁸

Liquidity Risk in the Markets for MBSs

Many types of bonds and other securities trade directly (via broker-dealers) between two parties in what are referred to as *over-the-counter* (OTC) market transactions.²⁹ Bonds generally trade infrequently, and the trade sizes vary, which may cause valuation (pricing) challenges—sometimes leading investors and market-makers to perceive that the bonds may be *illiquid*.³⁰

²⁴ In 2017, the average single-family guarantee fee was 56 basis points. See FHFA, “FHFA Issues 2017 Report to Congress on Guarantee Fees.”

²⁵ The GSEs define default as 120 days late.

²⁶ The process when borrowers prepay mortgages that underlie Ginnie Mae MBSs is similar.

²⁷ For more on default and prepayment risk, see CRS In Focus IF10993, *Consumer Credit Markets and Loan Pricing: The Basics*, by Darryl E. Getter.

²⁸ The Commodities Futures Trading Commission and the Securities and Exchange Commission generally do not regulate derivatives agreements, contracts, or transactions linked to underlying mortgage assets as they do for other types of derivatives. For more information on derivatives generally, see CRS In Focus IF10117, *Introduction to Financial Services: Derivatives*, by Rena S. Miller.

²⁹ See Financial Industry Regulatory Authority, “Unraveling the Mystery of Over-the-Counter Trading,” *The Alert Investor*, January 4, 2016, <https://www.finra.org/investors/unraveling-mystery-over-counter-trading>.

³⁰ The increase in electronic trading has increased price transparency in many OTC markets. See Randall Dodd, *Markets: Exchange or Over-the-Counter*, International Monetary Fund, <https://www.imf.org/external/pubs/ft/fandd/basics/markets.htm>.

Illiquid securities cannot easily be converted into cash or traded within a reasonable time—that is, without affecting their quoted prices. Investors arguably might offer (bid) “too much” to buy or sell (ask) for a price “too low” when trading illiquid securities. Consequently, investors require additional compensation, referred to as a *liquidity premium*, to buy or sell illiquid securities.³¹ Widening bid-ask spreads might signal the emergence of a liquidity premium being incorporated in securities prices.³²

The TBA market is a *forward* market, meaning a swap agreement to simultaneously sell a pool of mortgages to one of the GSEs and purchase MBSs linked to the underlying pool occurs in advance of the securities’ delivery and settlement date. Interest rates and, therefore, bid-ask spread movements may occur over the gap period between entering and settlement of a swap agreement.³³ Investors wanting to hedge against adverse bid-ask movements prior to delivery of their MBS purchases may require higher compensation (e.g., hedging fees, premiums) to cover the possibility of adverse price movements that could cause the securities to become less liquid prior to the settlement date. These costs may be passed to homeowners, particularly those willing to lock in their mortgage rates over the period of time until their closing settlement dates. Following TBA market issuance, the GSEs’ MBSs subsequently trade in the OTC market, where liquidity premiums can also emerge. Persistent liquidity premiums may result in higher mortgage rates for future homeowners if investors demand higher yields (i.e., higher coupons) to offset the risk that future sales of their MBSs would occur at prices considered “too low” due to market illiquidity.³⁴

Despite intermittent episodes of budding liquidity premiums, MBSs issued by the GSEs are considered to be almost as liquid as U.S. Treasury bonds.³⁵ Prior to conservatorship, the GSEs could actively trade their own MBSs in the OTC market to facilitate liquidity.³⁶ By conducting OTC market trades when the bid-ask spreads for MBS widened, the GSEs could abate rising liquidity premiums and reduce mortgage costs for borrowers.³⁷ Hence, high-volume trading by the GSEs facilitated narrower bid-ask MBS spreads and hedging fees in both the OTC and TBA

³¹ See Douglas J. Elliott, *Market Liquidity: A Primer*, Brookings Institution, June 2015, <https://www.brookings.edu/wp-content/uploads/2016/07/Market-Liquidity.pdf>.

³² See Rich Podjasek et al., *Has MBS Market Liquidity Deteriorated?*, Federal Reserve Bank of New York, February 8, 2016, <https://libertystreeteconomics.newyorkfed.org/2016/02/has-mbs-market-liquidity-deteriorated.html>.

³³ For example, following a decline in mortgage rates during the COVID-19 pandemic, mortgage pools scheduled for delivery experienced an increase in prepayment risk, thereby reducing their liquidity. The liquidity loss was reflected by a widening gap between the present value of the mortgage pool and the future MBS prices at settlement. See Jiakai Chen et al., *Dealers and the Dealer of Last Resort: Evidence from the MBS Markets in the COVID-19 Crisis*, Federal Reserve Bank of New York, July 2020, https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr933.pdf.

³⁴ Whether investors found MBSs attractive due to their lack of credit risk or their OTC market liquidity is subject to debate. See James Vickery and Joshua Wright, *TBA Trading and Liquidity in the Agency MBS Market*, Federal Reserve Bank of New York, May 2013, <http://www.newyorkfed.org/research/epr/2013/1212vick.pdf>.

³⁵ See Karan Kaul and Laurie Goodman, *Declining Agency MBS Liquidity Is Not All about Financial Regulation*, Urban Institute, November 2015, <https://www.urban.org/sites/default/files/publication/72621/2000503-Declining-Agency-MBS-Liquidity-Is-Not-All-about-Financial-Regulation.pdf>.

³⁶ See Scott Richardson and Diogo Palhares, “(Il)liquidity Premium in Credit Markets: A Myth?,” *Journal of Fixed Income*, vol. 28, no. 3 (Winter 2019), pp. 3-21.

³⁷ See Congressional Budget Office, *Fannie Mae, Freddie Mac, and the Federal Role in the Secondary Mortgage Market*, December 2010, <https://www.cbo.gov/sites/default/files/111th-congress-2009-2010/reports/12-23-fanniefreddie.pdf>.

markets, respectively.³⁸ (The GSEs held their own MBSs to show incentive alignment with investors, meaning the GSEs were willing to hold the same risks that they were selling.³⁹)

The current \$250 billion cap on the GSEs' asset portfolios (resulting from the PSPAs) may limit their ability to buy and sell MBSs at the volumes necessary to influence market pricing. Although the Federal Reserve has purchased large amounts of the GSEs' MBS while carrying out its lender-of-last-resort responsibilities, it has largely retained them in its asset portfolio rather than actively trading them.⁴⁰ Hence, less active trading of MBSs by the GSEs and more holding (rather than actively trading) of MBSs by the Federal Reserve might explain declines in market liquidity observed prior to the Coronavirus Disease 2019 (COVID-19) pandemic.⁴¹

FHFA's Conservatorship Priorities for the GSEs

Since conservatorship, FHFA has released various versions of strategic plans and performance goals.⁴² FHFA has focused primarily on (1) reducing the credit risks (which pose a direct risk to U.S. taxpayers) retained by the GSEs and (2) increasing the liquidity of their MBS issuances. The directives that focus on those risks are highlighted in this section.

Directives to Reduce the GSEs' Credit Risks

As mentioned, the PSPAs require the GSEs to pay dividends to the U.S. Treasury in exchange for its financial support while they are under conservatorship. The PSPAs also require the GSEs to reduce taxpayers' credit risk. The various programs to facilitate the GSEs' credit risks are discussed in this section.

Loan-to-Value Ratios and Mortgage Reinsurance Transactions

By statute, additional credit risk reduction measures are required if the GSEs purchase mortgages with loan-to-value ratios (LTVs) above 80%, meaning that the mortgage balance exceeds 80% of the residential property value.⁴³ If a borrower defaults, the GSE generally recovers losses by foreclosing (repossessing) and then liquidating (selling) the property. If a repossessed property sells for at least 80% of its original value, then the 80% LTV requirement increases the likelihood that a GSE would recover enough proceeds to cover the remaining mortgage balance.⁴⁴

³⁸ See Karan Kaul, *The Past, Present and Future of Agency MBS Liquidity*, prepared for Ginnie Mae by State Street Global Advisors and the Urban Institute's Housing Finance Policy Center, October 2016, https://www.ginniemae.gov/newsroom/publications/Documents/agency_mbs_liquidity.pdf.

³⁹ See Robert Van Order, "Government-Sponsored Enterprises and Resource Allocation: Some Implications for Urban Economics," in *Brookings-Wharton Papers on Urban Affairs*, ed. Gary Burtless and Janet Rothenberg Pack (Washington, DC: Brookings Institution, 2007), pp. 151-203.

⁴⁰ See Board of Governors of the Federal Reserve System, "Authority to Lend to Fannie Mae and Freddie Mac," press release, July 13, 2008, <http://www.federalreserve.gov/newsevents/press/other/20080713a.htm>.

⁴¹ Kaul and Goodman, *Declining Agency MBS Liquidity Is Not All about Financial Regulation*.

⁴² FHFA issues annual *scorecards*, which communicate the annual priorities and expectations that it sets for the GSEs with respect to both of their single-family and multifamily mortgage businesses while under conservatorship. See FHFA, "Conservatorship."

⁴³ 12 U.S.C. §1717.

⁴⁴ The property value would have been determined by an appraisal when the mortgage was originated. Property values, however, are not constant and might increase or decrease by the time a borrower officially defaults. The GSEs' definition of *default* is 120 days delinquent. A loss mitigation or workout option may be able to resolve a default if the property's value exceeds the outstanding mortgage balance. If the property value falls below the outstanding mortgage

Mortgage insurance is typically used when a borrower lacks the funds to make a down payment that would bring the LTV to 80% or lower.⁴⁵ A borrower can purchase private mortgage insurance, which would assume the first 20% (or more in some cases) of losses associated with a mortgage default.⁴⁶

The GSEs introduced additional methods to facilitate the transfer of credit risk stemming from low-down-payment borrowers referred to as *mortgage reinsurance transactions*. In their pilot programs, the GSEs initially pay the mortgage insurance premiums upfront and are reimbursed later by borrowers via interest rate adjustments on their loans, thus streamlining the origination process for some borrowers who would need to obtain some form of private mortgage insurance. Fannie Mae calls its program the Enterprise-Paid Mortgage Insurance Option, and Freddie Mac calls its program Integrated Mortgage Insurance.⁴⁷

Guarantee Fees

The GSEs can generate revenues to cover potential credit losses by increasing g-fees, thus mitigating losses to taxpayers. The GSEs have two types of g-fees. First, the upfront g-fee is determined by the borrower's risk characteristics (e.g., credit score, LTV). Second, the ongoing g-fee, which is collected each month over the life of the loan, is determined by the product type (e.g., fixed rate, adjustable). In December 2011, Congress directed FHFA to increase the ongoing g-fees for all loans by 10 basis points (or 0.1% given that a single basis point is equal to 1/100 of a percent; 100 basis points is 1%).⁴⁸ The increase took effect on December 1, 2012, for loans exchanged for MBSs.⁴⁹ FHFA also increased g-fees in 2013.⁵⁰ In 2019, FHFA reported an average g-fee of 56 basis points for all loans. The upfront portion of the g-fee (based on the credit risk attributes of borrowers) averaged 13 basis points, while the ongoing portion—based upon the type (e.g., fixed rate or adjustable rate) and loan terms—averaged 43 basis points. The average g-fee in 2019 for the 30-year fixed rate and 15-year fixed rate mortgages averaged 58 and 36 basis points, respectively.⁵¹

balance, the likelihood that a loss mitigation option will succeed diminishes.

⁴⁵ Certain borrowers may also qualify to obtain federal mortgage insurance from the FHA, VA, or USDA. Because federally insured mortgages are backed by the full faith and credit of the U.S. government, the GSEs face no counterparty credit risk when borrowers choose this option. Another option for borrowers may be to obtain a junior (second) loan for some or all of the 20% down payment requirement. After the property is liquidated in a foreclosure sale, the recovered proceeds would be distributed first to the GSE. The junior lender would receive any proceeds leftover to cover the unpaid portion of the junior loan. Given that foreclosure costs can be substantial, the mortgage insurer or second lender faces a greater possibility of a small or no recoupment of loan proceeds.

⁴⁶ According to FHFA, mortgage insurers represent the largest counterparty exposure for the GSEs. See FHFA, Office of Inspector General, *Enterprise Counterparties: Mortgage Insurers*, February 16, 2018, <https://www.fhfaoig.gov/Content/Files/WPR-2018-002.pdf>.

⁴⁷ See FHFA, Office of Inspector General, *Freddie Mac's IMAGIN Pilot*, September 12, 2018, <https://www.fhfaoig.gov/sites/default/files/WPR-2018-005.pdf>; and Rob Schaefer, "Fannie Mae's Enterprise-Paid Mortgage Insurance Option," Fannie Mae, July 10, 2018, <http://www.fanniema.com/portal/research-insights/perspectives/enterprise-paid-mortgage-insurance-schaefer-071018.html>.

⁴⁸ Temporary Payroll Tax Cut Continuation Act of 2011 (P.L. 112-78).

⁴⁹ See FHFA, "FHFA Announces Increase in Guarantee Fees," press release, August 31, 2012, <https://www.fhfa.gov/Media/PublicAffairs/Pages/FHFA-Announces-Increase-in-Guarantee-Fees.aspx>.

⁵⁰ See FHFA, *Fannie Mae and Freddie Mac Single-Family Guarantee Fees in 2017*, December 10, 2018, <https://www.fhfa.gov/AboutUs/Reports/Pages/Fannie-Mae-and-Freddie-Mac-Single-Family-Guarantee-Fees-in-2017.aspx>.

⁵¹ The average upfront component was 15 basis points, and the average ongoing component was 41 basis points. See FHFA, *Fannie Mae and Freddie Mac Single-Family Guarantee Fees in 2019*, December 2020, <https://www.fhfa.gov/>

Credit Risk Transfer Programs

In July 2013, the GSEs initiated new credit risk transfer (CRT) programs to share a portion of the credit risk linked to their guaranteed single-family mortgages with the private sector.⁵² Both GSEs now offer a set of CRT financial instruments that are linked only to the *credit risk* of the single-family mortgages held in the MBS trusts.⁵³ Investors preferring exposure only to mortgage *prepayment risk* may continue to purchase MBSs, but the private sector may now purchase CRT issuances to earn revenue in exchange for assuming exposure to the credit risk.

Fannie Mae's CRT instruments are known as Connecticut Avenue Securities (CAS); Freddie Mac's CRT instruments are known as Structural Agency Credit Risk (STACR). The GSEs transfer to investors the credit risk linked to mortgages with LTVs *greater* than 60% (or borrowers with 40% or less in accumulated home equity, making them more vulnerable to the possibility of owing more than the initial value of their homes if housing market prices were to fall).⁵⁴ After defaults occur, the GSEs write down the coupons paid to CRT investors (similar to writing down the coupons on MBSs after prepayments occur). The GSEs retain the credit risk for mortgages with *lower* LTVs (or borrowers with 41% or more in accumulated home equity such that their outstanding balances are significantly below the value of their residential properties), which are less likely to default.⁵⁵

About Us/Reports/ReportDocuments/GFee-Report-2019.pdf.

⁵² Prior to conservatorship, the GSEs had existing programs that transferred the credit risk linked to their multifamily programs. For more information, see the section of this report entitled "The GSEs' Multifamily Business Models."

⁵³ See FHFA, *Overview of Fannie Mae and Freddie Mac Credit Risk Transfer Transactions*, August 2015, <https://www.fhfa.gov/aboutus/reports/reportdocuments/crt-overview-8-21-2015.pdf>.

⁵⁴ See FHFA, *Performance and Accountability Report: FY2018*, <https://www.fhfa.gov/AboutUs/Reports/ReportDocuments/FHFA-2018-PAR.pdf>.

⁵⁵ The GSEs may also transfer the credit risk of mortgages retained in their portfolios (typically because they lack the standardized features that would make them eligible for placement into an MBS trust for securitization).

CAS and STACR Risk-Tiering Structures

The CAS and STACR issuances are structured in a tiered system consisting of tranches: a first-loss tranche, two mezzanine tranches, and a senior tranche. The first-loss tranche is the first to receive reduced payments in the event of losses. Once the credit losses exceed those contractually agreed to by the first-loss tranche investors, then the two sets of mezzanine tranche investors absorb the losses up to their maximum thresholds, followed by the senior-tranche investors. The GSEs retain 5% of the issuances associated with each tranche (also referred to as a 5% vertical slice), signaling to investors their willingness to hold the same risks that they sell at each tranche, as they do by holding their own MBSs. The GSEs transfer *expected* and *unexpected* credit risks but retain *catastrophic* credit risk.

- FHFA defines *expected* credit risk as credit losses likely to occur during periods of stable housing market conditions when some borrowers fail to repay their mortgages, perhaps due to unforeseen life circumstances (e.g., job loss, disability, divorce). The first-loss tranche purchases the GSEs' instruments to assume expected credit risks. The first-loss tranche assumes the initial 5% of credit risk losses linked to mortgages held in MBS trusts. Transferring credit risk via these issuances reduces counterparty risk—that is, the risk that the insurer fails to reimburse the GSE after a default. The GSEs adjust the coupons on these issuances or retain the investors' initial principal.
- FHFA defines *unexpected* credit risk as credit losses that exceed expected credit losses and result from macroeconomic events, such as a recession. The mezzanine tranches begin to absorb mortgage credit risk after 5% and up to 45% of losses. For the mezzanine tranches, the credit risk is distributed as follows.⁵⁶ As mentioned, the GSEs hold 5% of mezzanine risk. The private sector assumes 60% of mezzanine risk via purchasing credit-linked instruments issued by the GSEs. For the remaining 35% of mezzanine risk, the GSEs rely upon another set of CRT risk-sharing programs in which they directly obtain insurance or reinsurance.⁵⁷ Just as the GSEs charge g-fees to assume credit risk, they pay credit insurance premiums to insurance and reinsurance firms to assume a predetermined dollar amount of the credit risk.⁵⁸ Fannie Mae's program is known as Credit Insurance Risk Transfer; Freddie Mac's corresponding program is known as Agency Credit Insurance Structure. Participating institutions, primarily insurers and reinsurers, may use proceeds from these programs to diversify their portfolios if they have assets that are not highly correlated to U.S. residential mortgage credit risk.
- The GSEs retain all of the senior-tranche risk, which contains *catastrophic* risk. Catastrophic credit risk refers to potential losses (exceeding unexpected losses) that can be highly unlikely to occur. The senior tranche absorbs credit losses after the mezzanine and first-loss tranches have absorbed the initial 45% of the mortgage credit risk.⁵⁹ Because the probability of a catastrophic event is historically low, the potential costs borne by U.S. taxpayers are minimized if the GSEs retain catastrophic risk.⁶⁰ If a catastrophic risk event does occur, taxpayers ultimately incur large costs.

Sharing risk at both the front end (before the mortgages are purchased) via the mortgage insurance programs and the back end (after the mortgages are purchased) via the CRT programs has reduced the federal government's exposure to mortgage credit risk.⁶¹ The CRT programs have grown rapidly, arguably filling the gap left by the private-label MBS market that existed prior to 2008.⁶² Nevertheless, the Congressional Budget Office reports that the GSEs' CRT transactions

⁵⁶ See FHFA, *Performance and Accountability Report: FY2018*.

⁵⁷ See David Finkelstein, Andreas Strzodka, and James Vickery, *Credit Risk Transfer and De Facto GSE Reform*, Federal Reserve Bank of New York, February 2018, https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr838.pdf; and FHFA, *Performance and Accountability Report: FY2018*.

⁵⁸ The term *reinsurance* may be used because the credit risk is insured twice: once by the GSEs and a second time by another insurance company.

⁵⁹ FHFA acknowledges that a bright line distinction between unexpected and catastrophic loss risk has yet to be defined. The distinction between risk types, however, may not be pertinent because credit risk is measured in basis points and the total amounts transferred to the private sector occur after certain basis point thresholds.

⁶⁰ See Joshua D. Coval, Jakub W. Jurek, and Erik Stafford, "Economic Catastrophic Bonds," *American Economic Review*, vol. 99, no. 3 (June 2009), pp. 628-666.

⁶¹ See Finkelstein, Strzodka, and Vickery, "Credit Risk Transfer and De Facto GSE Reform."

⁶² See Laurie Goodman, *Credit Risk Transfer: A Fork in the Road*, Urban Institute, June 2018, <https://www.urban.org/>

have not necessarily reduced taxpayers' costs.⁶³ The GSEs pay more to the private sector to assume credit risk relative to what they collect in g-fees from borrowers, and the g-fees have not been raised to cover the additional costs.⁶⁴

Standardization Initiatives to Foster MBS Liquidity

FHFA has introduced initiatives to standardize many aspects of the GSEs' operations, which include their mortgage data collection processes, securitization processes, mortgage servicing policies (e.g., resolving delinquencies), and MBS issuances. Greater uniformity is expected to provide greater data integrity for appraisers, servicers, and secondary-market investors. Such standardization arguably increases transparency, reduces the length of the single-family mortgage origination and securitization processes, and ultimately increases the uniform pricing and liquidity of the GSEs' MBS and CRT issuances.⁶⁵

Mortgage Data Standardization

FHFA's mortgage data standardization initiative requires the GSEs to support standardizing the single-family mortgage data information used by the industry. Data collected on loan applications, property appraisals, loan closings, and disclosures are the focus of the standardization efforts.

- Mortgage originators prepare more standardized and streamlined loan packages that can be sent to either GSE to reduce duplication, paperwork, and the length of time to close loans.⁶⁶ Standardization can translate into a faster mortgage origination process for borrowers and better disclosures for MBS investors.
- The GSEs' automated underwriting processes are enhanced, making it easier to assess risk and use compensating factors. In addition, standardization reduces *put-back risk*, the risk that loan originators must repurchase loans the GSEs determine are unacceptable.⁶⁷ Both GSEs use a delegated underwriting process,

sites/default/files/publication/98578/credit_risk_transfer_a_fork_in_the_road_0.pdf. For more information about private-label MBS markets from 2001 through 2015, see Laurie Goodman, *The Rebirth of Securitization: Where Is the Private-Label Mortgage Market?*, Urban Institute, September 2015, <https://www.urban.org/sites/default/files/publication/65901/2000375-The-Rebirth-of-Securitization.pdf>.

⁶³ See Congressional Budget Office, *Transitioning to Alternative Structures for Housing Finance: An Update*, August 2018, p. 9, <https://www.cbo.gov/system/files/2018-08/54218-GSEupdate.pdf>.

⁶⁴ The higher costs to transfer credit risk to the private sector may be another reason that retaining the senior tranche risk is more economical for the GSEs. See FHFA, *Overview of Fannie Mae and Freddie Mac Credit Risk Transfer Transactions*.

⁶⁵ For more information on the mortgage servicing and loss mitigation initiatives, see FHFA, "Mortgage Servicing," <https://www.fhfa.gov/PolicyProgramsResearch/Policy/Pages/Mortgage-Servicing.aspx>; and Karan Kaul et al., *The Case for Uniform Mortgage Servicing Data Standards*, Urban Institute, November 2018, https://www.urban.org/sites/default/files/publication/99317/uniform_mortgage_servicing_data_standards_0.pdf. The standardization of servicing may enhance the attractiveness of CRT investments by clarifying the procedures for handling nonperforming mortgages, thus clarifying how losses will be distributed among the various tranche classes. For more information, see Basel Committee on Banking Supervision: The Joint Forum, *Report on Asset Securitisation Incentives*, July 2011, <https://www.bis.org/publ/joint26.pdf>; and Patricia A. McCoy, *Barriers to Federal Home Mortgage Modification Efforts During the Financial Crisis*, Harvard University Joint Center for Housing Studies, August 2010, <https://www.jchs.harvard.edu/sites/default/files/mf10-6.pdf>.

⁶⁶ FHFA, "Standardizing Mortgage Data through the Uniform Mortgage Data Program," press release, October 10, 2017, <https://www.fhfa.gov/Media/Blog/Pages/standardizing-mortgage-data-through-the-UMDP.aspx>.

⁶⁷ See FHFA, "FHFA, Fannie Mae and Freddie Mac Launch New Representation and Warranty Framework," press

meaning they rely on the sellers (loan originators) of conventional single-family mortgages to provide information about the mortgage and underwriting standards.⁶⁸ Fraudulent information about the borrower, underlying property, or loans could be provided by the borrower, property seller, title agent, or servicer and result in significant financial losses. Rather than independently verify the information, the GSEs review samples of their loans to see what percentage meets the contractual standards. For this reason, the GSEs purchase most loans using *representations and warranties*, contracts that require loan originators to repurchase mortgages that fail to meet contractual standards.

- Standardizing data reporting would enhance FHFA’s ability to standardize and modify underwriting guidelines, not only for the GSEs but also for any private-sector guarantors that enter this industry.⁶⁹
- The broader financial industry, including the mortgage industry, is focusing on data standardization and further automation.⁷⁰ Standardizing data increases the speed with which irregularities can be identified, making it possible to mitigate credit and operational risks that arise from fraud.⁷¹

The Common Securitization Platform

In 2012, FHFA determined that both technology platforms the GSEs used to securitize (the process of transferring the underlying mortgage payments into MBSs) were “antiquated and inflexible.”⁷² Rather than update two separate systems, FHFA required the GSEs to jointly develop a platform to facilitate various tasks associated with their securitization processes.⁷³ The GSEs entered into a joint venture, the Common Securitization Solutions (CSS),⁷⁴ which acts as a

release, September 11, 2012, <https://www.fhfa.gov/Media/PublicAffairs/Pages/FHFA-Fannie-Mae-and-Freddie-Mac-Launch-New-Representation-and-Warranty-Framework.aspx>; and Laurie Goodman, Ellen Seidman, and Jun Zhu, *Sunset Provisions on Reps and Warrants: Can They Be More Flexible While Still Protecting the GSEs?*, Urban Institute, November 27, 2013, <https://www.urban.org/research/publication/sunset-provisions-reps-and-warrants-can-they-be-more-flexible-while-still-protecting-gses>.

⁶⁸ See Freddie Mac, *U.S. Securities and Exchange Commission Form 10-K*, December 31, 2018, p. 186, http://www.freddiemac.com/investors/financials/pdf/10k_021419.pdf; and Fannie Mae, *U.S. Securities and Exchange Commission Form 10-K*, December 31, 2018, p. 33, <http://www.fanniemae.com/resources/file/ir/pdf/quarterly-annual-results/2018/q42018.pdf>.

⁶⁹ See written testimony of Edward J. DeMarco, president, Housing Policy Council, in U.S. Congress, Senate Committee on Banking, Housing, and Urban Affairs, *Chairman’s Housing Reform Outline*, 116th Cong., 1st sess., March 26, 2019.

⁷⁰ See Experian, “Data Standardization,” <http://www.experian.com/data-quality/data-standardization.html>; and Electronics Payment Association, “API Standardization Industry Group Release White Paper Outlining Group’s Approach, Progress and Future Efforts Toward Advancing API Standardization Across the Financial Services Ecosystem,” <https://www.nacha.org/news/api-standardization-industry-group-releases-white-paper-outlining-groups-approach-progress-and>.

⁷¹ See J. P. Morgan Chase and Co., *Data Standardization: A Call to Action*, May 2018, <https://www.jpmorganchase.com/corporate/news/document/call-to-action.pdf>; and Basel Committee on Banking Supervision, Bank for International Settlements, *Principles for the Sound Management of Operational Risk*, June 2011, <https://www.bis.org/publ/bcbs195.pdf>.

⁷² FHFA, *Building a New Infrastructure for the Secondary Mortgage Market*, October 4, 2012, p. 4, <https://www.fhfa.gov/PolicyProgramsResearch/Research/Pages/Building-a-New-Infrastructure-for-the-Secondary-Mortgage-Market.aspx>.

⁷³ See FHFA, *2015 Scorecard Progress Report*, March 2016, p. 24, <http://www.fhfa.gov/AboutUs/Reports/ReportDocuments/Progress-Report-2015-Scorecard.pdf>.

⁷⁴ Both GSEs appointed two of their employees to CSS’s board of managers and jointly announced a CEO. See FHFA

technology service provider for the GSEs.⁷⁵ The GSEs continue to purchase mortgages from originators, establish separate loss-mitigation practices for delinquent and defaulted mortgages for their mortgage servicers to follow, choose the underlying mortgages for placement in each MBS trust, and guarantee the credit risk linked to the MBS trusts they individually create. The CSS operates the Common Securitization Platform (CSP), which issues and services the MBSs.⁷⁶

Common Securitization Platform Services

The CSP provides the following specific services for the GSEs:⁷⁷

- The CSP facilitates the initial issuance of MBSs to investors. After receiving a securitization request from a GSE, the CSP validates the details related to the MBS trust and linked MBSs that will be issued to investors (e.g., confirming the mortgages held in a MBS trust, confirming the average principal and interest payment amounts as well as the maturity on the linked MBSs, and confirming the identification code on the security used to facilitate clearing and settlement of trades). The CSS notifies the GSEs of any data inconsistencies.⁷⁸
- The CSP releases required disclosures for MBS investors.⁷⁹ Data about MBSs is sent to the Federal Reserve Bank of New York or the Depository Trust and Clearing Corporation—typically two days before issuance, allowing information about MBSs to be disclosed to market participants—which facilitate the transfer of MBSs to investors in exchange for cash. The CSP confirms issuance and payment information back to the issuing GSE.
- The CSP provides ongoing administration of MBSs for investors. For example, the CSP calculates repayments of principal and interest to MBS holders for tax reporting purposes. The CSP provides monthly updates about the prepayment status of the underlying collateral to ensure investors have current disclosures about information relevant to the linked MBS's performance.

and HUD, Office of Federal Housing Enterprise Oversight, “Enterprise Capital Requirements,” 83 *Federal Register* 33312-33430, July 17, 2018.

⁷⁵ In a similar manner, banks and credit unions rely upon third-party service providers to develop the software and customer interfaces for customer account and payment services as well as to maintain the digital technology. For more information, see CRS In Focus IF10935, *Technology Service Providers for Banks*, by Darryl E. Getter. The CSP would arguably reduce the fixed start-up costs for private guarantors (should they be approved) because they will not have to invest in the technology to perform CSP functions. See written testimony of Mark Zandi, chief economist, Moody's Analytics, U.S. Congress, Senate Committee on Banking, Housing, and Urban Affairs, *Chairman's Housing Reform Outline*, 116th Cong., 1st sess., March 26, 2019.

⁷⁶ Fannie Mae, “CEO, Board Members Named at Common Securitization Solutions, LLC,” press release, November 3, 2014, <http://www.fanniemae.com/portal/about-us/media/corporate-news/2014/6187.html>. The GSE employees who initially began working at CSS to develop the CSP were converted to permanent CSS employees, and CSS is its own corporate entity. See Common Securitization Solutions at <http://www.commonsecuritization.com/>.

⁷⁷ See FHFA, *Building a New Infrastructure for the Secondary Mortgage Market*, p. 5; and FHFA, *An Update on the Common Securitization Platform*, September 15, 2015, pp. 10-12, <http://www.fhfa.gov/AboutUs/Reports/ReportDocuments/CSP-Update-Final-9-15-2015.pdf>.

⁷⁸ The Mortgage Electronic Registration Systems is the electronic system that tracks the ownership of mortgages in the United States and the servicing rights. It uses the mortgage identification number as the unique loan identifier for the CSP. See Bill Beckman, president and CEO of MERS CORP Holdings, letter to FHFA, Office of Strategic Initiatives, June 28, 2013, https://www.fhfa.gov/PolicyProgramsResearch/Policy/Documents/Securitization-Infrastructure/6.28.2013.MERS_Response_to_FHFA_re_CSI.pdf; Fannie Mae, *Selling Guide*, July 3, 2019, [https://www.sec.gov/Archives/edgar/data/310522/000031052216000453/fanniemae201510k.htm](https://www.fanniemae.com/content/guide/selling/b8/7/01.html#Naming.20MERS.20as.20the.20Nominee.20for.20the.20Beneficiary.20in.20the.20Security.20Instrument; and Fannie Mae, U.S. Securities Form 10-K, December 31, 2015, <a href=).

⁷⁹ The GSEs are exempt from required SEC disclosures.

The Uniform MBS Single Security Initiative

In the TBA market, a loan originator selling mortgages to the GSEs contracts to deliver mortgages in exchange for an MBS at a specified future date. Specifically, the MBS buyer (loan originator) and MBS seller (one of the GSEs) negotiates in advance for future delivery and settlement date for the trade. The buyer and seller agree on six general *features* that the MBS should have: the issuer, maturity, coupon rate, sale price, approximate face value, and settlement date.⁸⁰ The exact features of the securities to be delivered are disclosed to the participants two days prior to delivery and settlement.

MBSs that meet the required criteria can be delivered so long as the underlying MBS pools are *fungible*—that is, sufficiently interchangeable with other MBSs. Because the MBS issuer is one of the trading features, MBSs have generally been fungible only with other MBSs issued by the same GSE. Fannie Mae–issued MBSs and Freddie Mac–issued MBSs have not previously been interchangeable, and their MBSs do not trade at identical prices despite the fact that the GSEs have essentially the same federal charters and business (securitization) models.⁸¹

Prior to the single security initiative, Freddie Mac’s MBSs frequently traded at lower prices than Fannie Mae’s.⁸² Following declines in mortgage rates that prompt borrowers to refinance, the mortgage pools underlying Freddie Mac’s MBSs historically had faster prepayment rates (relative to Fannie Mae’s MBSs). Faster prepayment translates into higher prepayment risk for Freddie Mac MBS investors, which would explain trading at lower prices. Furthermore, a large mortgage originator could subsequently enter into a swap agreement with Fannie Mae to acquire a higher-priced MBS (compared to Freddie Mac) and immediately resell it in the OTC market. Freddie Mac could respond by lowering its g-fees, thereby slightly increasing its MBS coupons relative to Fannie Mae’s MBS coupons to remain somewhat competitive. Nevertheless, Freddie Mac’s MBS issuances were approximately 70% of Fannie Mae’s MBS issuances, and Freddie Mac’s MBSs accounted for 9% of total trading activity in 2014.⁸³ Hence, the pricing differential between the GSEs’ MBSs provided Fannie Mae a competitive advantage in the secondary market over Freddie Mac as well as other prospective private-sector securitizers.⁸⁴

Under the single security initiative, FHFA has directed the GSEs to align their key contractual and business practices by acquiring mortgages with similar prepayment speeds along with other features.⁸⁵ The GSEs may continue to separately purchase conforming mortgages and guarantee the credit risks linked to the MBS trusts they create. Nevertheless, harmonizing the financial characteristics of their mortgage purchases would allow the GSEs’ MBS trusts to generate similar cash-flow predictability and prepayment speeds, thus facilitating the creation of uniform and fungible securities when issued through the CSP. The GSEs would be required to align their

⁸⁰ See Vickery and Wright, *TBA Trading and Liquidity in the Agency MBS Market*.

⁸¹ An economic theory known as “the law of one price” states that identical securities should sell for identical prices. See Owen A. Lamont and Richard H. Thaler, “The Law of One Price in Financial Markets,” *Journal of Economic Perspectives*, vol. 17, no. 4 (Fall 2003), pp. 191-202.

⁸² Laurie Goodman, *The \$400 Million Case for a Single GSE Security*, Urban Institute, September 5, 2014, <http://www.urban.org/urban-wire/400-million-case-single-gse-security>.

⁸³ Goodman, *The \$400 Million Case for a Single GSE Security*.

⁸⁴ Laurie Goodman and Jim Parrott, *A Progress Report on Fannie Mae and Freddie Mac’s Move to a Single Security*, Urban Institute, August 2018, https://www.urban.org/sites/default/files/publication/98872/single_security_0.pdf.

⁸⁵ See FHFA, “Uniform Mortgage-Backed Security,” 84 *Federal Register* 7793-7801, March 5, 2019.

prepayment speeds such that they do not constitute a material misalignment or a divergence by more than 2% over a three-month interval.⁸⁶

Rather than separate MBS issuances (i.e., Fannie Mae’s mortgage-backed security and Freddie Mac’s participation certificates), FHFA has directed the GSEs (via the CSP) to issue one common security, the uniform mortgage-backed security (UMBSs). (Private-sector guarantors would also be able to use the CSP to issue fungible UMBSs.) FHFA argues that a combined market for the GSEs’ UMBSs would enhance market liquidity and mitigate the rise of market liquidity premiums. The pricing differential would also be eliminated.⁸⁷ FHFA is to monitor both GSEs to avoid material misalignment that compromises UMBS fungibility.⁸⁸ UMBS issuances began on June 3, 2019.⁸⁹

Potential Post-Conservatorship Issues for the GSEs

After exiting conservatorship, providing support for broader access to mortgage credit may be challenging. Although the GSEs are likely to have the caps on their lending portfolios removed (assuming termination of the PSPAs with Treasury), they will have capital requirements and additional restrictions that might potentially limit their activities. Furthermore, the GSEs must still achieve their statutory single- and multifamily goals among other requirements to promote affordable housing. Specifically, the requirements can be summarized in the following categories:

- The GSEs must satisfy *affordable housing goals* that require them to purchase certain percentages of mortgages for families with very low incomes (at or below 50% of area median family income) and extremely low incomes (at or below 30% of area median family income).⁹⁰
- HERA created a *duty to serve* for three underserved markets—manufactured housing, rural housing, and affordable housing preservation. FHFA requires the GSEs to develop their own duty-to-serve plans to encourage lenders to increase their lending in these areas.
- HERA requires the GSEs to make *cash contributions* to the Housing Trust Fund (HTF) and the Capital Magnet Fund (CMF). The HTF funds states and state-

⁸⁶ See FHFA, “Uniform Mortgage-Backed Security,” 84 *Federal Register* 7793-7801, March 5, 2019.

⁸⁷ FHFA, *An Update on the Structure of the Single Security*, May 15, 2015, p. 4, <https://www.fhfa.gov/AboutUs/Reports/ReportDocuments/Single%20Security%20Update%20final.pdf>. For a discussion on the effects of standardization in the mortgage and MBS markets, see Adam J. Levitin and Susan M. Wachter, “Explaining the Housing Bubble,” *Georgetown Law Journal*, vol. 100, no. 4 (April 12, 2012), pp. 1177-1258.

⁸⁸ The Securities Industry and Financial Markets Association (SIFMA)—a trade association for broker-dealers, investment banks, and asset managers operating in the United States and global capital markets—advocates for legislative, regulatory, and business policies on behalf of their members. SIFMA sets the TBA trading conventions, which includes the TBA settlement guidelines known as the Uniform Practices for the Clearance and Settlement of Mortgage-Backed Securities and Other Related Securities. SIFMA recommends that FHFA, while regulating the mortgage purchasing and trust structuring activities, ensure that the GSEs do not deviate from the requirements to securitize mortgage originations with standardized borrower characteristics.

⁸⁹ See FHFA, “Statement of FHFA Deputy Director Robert Fishman on the Launch of the New Uniform Mortgage-Backed Security (UMBS),” press release, June 3, 2019, <https://www.fhfa.gov/Media/PublicAffairs/Pages/Statement-of-FHFA-Deputy-Director-Robert-Fishman-on-the-launch-of-the-new-Uniform-Mortgage-Backed-Security.aspx>.

⁹⁰ Given the uncertainty associated with the COVID-19 pandemic, FHFA set the GSEs’ purchase goals only for 2021 and left them unchanged from 2020. See FHFA, “FHFA Announces 2021 Affordable Housing Goals for Fannie Mae and Freddie Mac,” press release, December 16, 2020, <https://www.fhfa.gov/Media/PublicAffairs/Pages/FHFA-Announces-2021-Affordable-Housing-Goals-for-Fannie-Mae-and-Freddie-Mac.aspx>.

designated entities for eligible activities that primarily support affordable rental housing for low-income families, including homeless families.⁹¹ The CMF awards competitive grants to financial institutions designated as Community Development Financial Institutions and qualified nonprofit housing organizations for which the development or management of affordable housing is one of their principal purposes.⁹² The GSEs must set aside 4.2 basis points (0.042%) of the unpaid principal balance of mortgages purchased in a year for these funds.⁹³

This section discusses some regulatory requirements likely to affect the GSEs' operations after they exit conservatorship.

Heightened Capital Buffer Requirements: The 2020 Capital Rule

Although the precise definitions of *capital* for financial firms is typically determined by laws and regulations, it generally refers to common or preferred equity shareholders (as a percentage of assets) and retained earnings, which can absorb financial losses. For the GSEs, the statutory minimum leverage (unweighted) capital requirement, specified in the Federal Housing Enterprises Safety and Soundness Act of 1992 (P.L. 102-550), is equal to 2.5% of on-balance sheet (portfolio) assets and 0.45% of off-balance sheet (MBS trust) obligations.⁹⁴ HERA gave FHFA the authority to increase capital standards above the statutory minimum as necessary.

FHFA suspended the GSEs' capital requirements during conservatorship, as initially required by the PSPAs with Treasury. On September 30, 2019, Treasury announced modifications to the PSPAs to allow the GSEs to retain their earnings and accumulate capital reserves.⁹⁵ Fannie Mae and Freddie Mac were allowed to accumulate \$25 billion and \$20 billion, respectively. On October 28, 2019, FHFA announced a strategic plan to prepare Fannie Mae and Freddie Mac for their eventual exit from conservatorship.⁹⁶ In December 2020, FHFA finalized a rule establishing risk-based and leverage capital requirements for Fannie Mae and Freddie Mac effective on February 16, 2021.⁹⁷ The capitalization requirements, which would be in place following the GSEs' exits from conservatorship, are designed to increase their resiliency to a severe financial downturn.⁹⁸

⁹¹ After estimating the median family income for designated counties and metropolitan areas, HUD provides annual definitions for *extremely low-income family* and *very low-income family*, which are used to determine eligibility for various programs. For more information on the HTF, see HUD, "Housing Trust Fund," <https://www.hudexchange.info/programs/htf/>.

⁹² See U.S. Department of Treasury, Community Development Financial Institutions Fund, "Capital Magnet Fund," <https://www.cdfifund.gov/programs-training/Programs/cmf/Pages/default.aspx>; and Department of the Treasury Community Development Financial Institutions Fund, "Funding Opportunities: Capital Magnet Fund; 2018 Funding Round," 83 *Federal Register*, 34685-34698, July 20, 2018.

⁹³ FHFA suspended the requirement that the GSEs make contributions to the HTF and the CMF between 2008 and 2014 when they first entered into conservatorship. These requirements were reinstated in 2015.

⁹⁴ P.L. 102-550 created OFHEO and set the current leverage capital requirements in statute.

⁹⁵ See U.S. Department of Treasury, "Treasury Department and FHFA Modify Terms of Preferred Stock Purchase Agreements for Fannie Mae and Freddie Mac," press release, September 30, 2019, <https://home.treasury.gov/news/press-releases/sm786>.

⁹⁶ See FHFA, "FHFA Releases New Strategic Plan and Scorecard for Fannie Mae and Freddie Mac."

⁹⁷ See FHFA, "Enterprise Regulatory Capital Framework," 85 *Federal Register*, 243, December 17, 2020.

⁹⁸ If, for example, a sudden and significantly sharp decline in house prices generated widespread *underwater* mortgages (held in MBS trusts and in their portfolios), the GSEs' capital buffers could be insufficient to allow them to continue safe and sound operations. A mortgage is underwater when the home value declines far below the amount of the

Highlights of the Regulatory Capital Ratio Requirements

The final capital regulatory rule adopts terminology and definitions used in the banking capital regulatory framework to prescribe the supplemental capital requirements. The use of consistent terminology and definitions that are generally understood by many financial stakeholders facilitates not only greater transparency but also the ability to compare the prudential capital buffers maintained across other classes of financial institutions.⁹⁹ The supplemental capital requirements pertain to both an increase in the quantity of capital (from the statutory P.L. 102-550 requirements) and the composition of the capital. The statutory and supplemental capital definitions constitute the capital regulatory framework with the following broad requirements.

- An unweighted total leverage requirement of 4% can be computed as the sum of a 2.5% *statutory leverage ratio requirement* and a 1.5% *prescribed leverage buffer amount*.
- A risk-weighted *adjusted total capital ratio* of not less than 8% can be computed in what can be described as a three-step process. First, the asset (the loan) is multiplied by a risk weight that is designed to capture the riskiness of the borrower. FHFA provides the risk weights for the single-family and multifamily mortgage exposures depending upon various financial factors (e.g., current LTV, loan purpose, property type, fixed or floating interest rate).¹⁰⁰ Second, the risk-weighted asset (i.e., the product of the original asset multiplied by the risk weight) is multiplied by 8%. Typically, the entire asset side of the balance sheet is risk weighted, and then the risk-weighted assets are summed prior to applying the 8% capital charge. Third, the *prescribed capital conservation buffer amount (PCCBA)* requirements are applied to the total capital ratio and, instead of adding more layers of capital, modify the total capital ratio's composition to achieve the adjusted total capital ratio.

The GSEs must comply with these broadly defined and further (more detailed) capital ratio requirements to avoid limits on capital distributions and discretionary bonus payments.

Generally speaking, the GSEs have both unweighted and weighted capital requirements. The unweighted (risk-insensitive) adjusted total leverage requirement (UNWLR) is based upon the *size* of a financial firm's balance sheet and represents the maximum loss that can be absorbed by its equity.¹⁰¹ By contrast, the risk-weighted adjusted total capital ratio (RWCR) is designed to align proportionately with a financial firm's gradations of credit risk exposure, presuming accuracy of the risk-weighting system.¹⁰² The RWCR incorporates a minimum common equity ratio requirement to ensure that it consists predominantly of common equity and retained earnings that have greater loss-absorbing capacity.

The size of the UNWLR relative to the RWCR has implications for a financial firm's risk-taking behavior. When the UNWLR is *lower* relative to the RWCR, a financial firm has a greater incentive to vary the level (rather than the composition) of its risk exposure in proportion to its available capital.¹⁰³ In other words, the GSEs are more likely to react to risk exposure by raising

outstanding loan balance, providing the borrower with the financial incentive to default. See Neil Bhutta, Jane Dokko, and Hui Shan, *The Depth of Negative Equity and Mortgage Default Decisions*, Board of Governors of the Federal Reserve System, May 2010, <http://www.federalreserve.gov/pubs/feds/2010/201035/201035pap.pdf>.

⁹⁹ See Financial Stability Oversight Council, *2018 Annual Report*, June 20, 2019, <https://home.treasury.gov/system/files/261/FSOC2018AnnualReport.pdf>.

¹⁰⁰ The risk weights will be determined using two approaches—a standardized approach and an advanced approach. The standardized approach utilizes FHFA-prescribed lookup grids and risk multipliers. The advanced approach will rely upon each of the GSEs' internal models. The approach generating the higher risk-weighting will be used when determining risk-based capital requirements.

¹⁰¹ Leverage ratios are designed to become more binding when the economy is growing and less binding when the economy contracts. See Michael Brei and Leonardo Gambacorta, *The Leverage Ratio Over the Cycle*, Bank for International Settlements, November 2014, <http://www.bis.org/publ/work471.pdf>.

¹⁰² The reliability of risk-weighted capital ratios depends upon the accuracy of the risk-weighting system, which typically assigns lower weights to assets (e.g., cash, U.S. Treasury securities) deemed to have little or no credit risk and higher weights to assets (e.g., mortgages) and financial exposures (e.g., credit risk linked to underlying mortgage assets) deemed to have greater amounts of credit risk.

¹⁰³ The lower UNWLR would function more as a backstop should the assigned risk-weights used to calculate the

or lowering their scales of operation without significantly altering business strategies. However, such mortgage purchase variations are likely to occur under changing macroeconomic circumstances, because the final rule links the GSEs' capital requirements to house prices and business cycle fluctuations. If, for example, a recession prompts some common equity holders to liquidate their shares (in anticipation of greater mortgage delinquencies and defaults), the GSEs may react in accord by reducing loan purchases. Hence, the GSEs' ability to function as a countercyclical macroeconomic buffer would be compromised if they were to provide less liquidity to the mortgage market during recessionary periods.¹⁰⁴

Alternatively, when the UNWLR equals or exceeds the RWCR, a financial firm has an incentive to alter the composition of its risk exposure (via changing business strategies) particularly when its capital is comprised primarily of shareholders monitoring its return on equity (ROE). The ROE measures the financial return for shareholders, computed with net income as its numerator and the total amount of common shareholder equity as its denominator. If a firm's net income fails to keep pace with common equity requirements, the ROE may decrease and become less financially attractive for shareholders. A financial firm is likely to respond by increasing its risk exposure, customer fees, or both to boost the numerator and ultimately sustain more attractive ROE levels. Hence, if UNWLR exceeds RWCR, the GSEs could respond by retaining more credit risk (e.g., reducing junior and mezzanine CRT issuances), increasing g-fees on mortgage borrowers, or both. The ability to simultaneously compensate the private sector to assume credit risks (via CRT) and maintain acceptable ROEs for shareholders may prove challenging without raising g-fees, which are typically paid by borrowers.¹⁰⁵

In the proposed and final rules, FHFA illustrates the combined calculations of UNWLR and RWCR for Fannie Mae and Freddie Mac. The proposed rule provides an example in which the combined UNWLR would exceed the combined RWCR.¹⁰⁶ The final rule provides an example in which the combined UNWLR would exceed the combined RWCR. Hence, predicting the GSEs' responses under the heightened capital regulatory framework upon their exits from conservatorship is challenging, especially without prior observations of UNWLR and RWCR movements under different interest rate, housing market, and business cycle environments.

The GSEs' Multifamily Business Models

Multifamily mortgages are loans secured by a residential dwelling, such as an apartment building, with at least five or more separate units. Multifamily real estate frequently refers to properties used as residential dwellings, including traditional apartment buildings, subsidized housing, housing for seniors (age-restricted, independent, and assisted living), and housing for students (dormitories).¹⁰⁷ In the multifamily mortgage market, Fannie Mae and Freddie Mac purchase

RWCR underestimate the firm's credit risk exposure. See Paul Glasserman and Wanmo Kang, *Design of Risk Weights*, Office of Financial Research, August 19, 2014, <https://www.financialresearch.gov/working-papers/2014/08/19/design-of-risk-weights/>.

¹⁰⁴ See Edward Golding, Laurie Goodman, and Jun Zhu, *Analysis of the Proposed 2020 FHFA Rule on Enterprise Capital*, Urban Institute, August 2020, https://www.urban.org/sites/default/files/publication/102779/analysis-of-the-proposed-2020-rule-on-enterprise-capital_2.pdf.

¹⁰⁵ See FHFA, *Freddie Mac: Comments on Proposed Enterprise Regulatory Capital Framework*, August 28, 2020, <https://www.fhfa.gov/SupervisionRegulation/Rules/Pages/Comment-Detail.aspx?CommentId=15606>.

¹⁰⁶ See FHFA, "Enterprise Regulatory Capital Framework," 85 *Federal Register* 39274-39406, June 30, 2020.

¹⁰⁷ For more information on multifamily mortgage finance, see CRS Report R46480, *Multifamily Housing Finance and Selected Policy Issues*, by Darryl E. Getter.

mortgages and transfer a portion (or share) of the default risks to the private sector, although they have different underwriting and risk-sharing business models.

Summary of Fannie Mae and Freddie Mac Multifamily Business Models

The multifamily programs adopted by Fannie Mae and Freddie Mac share or redistribute the credit risk linked to multifamily mortgages.

- Fannie Mae primarily relies on its Delegated Underwriting and Servicing (DUS) business model when purchasing multifamily mortgages.¹⁰⁸ Under the DUS process, Fannie delegates to its pre-approved group of lenders (that sell multifamily mortgages to Fannie Mae) the responsibility of assessing borrowers' creditworthiness (i.e., the likelihood of loan delinquency or default). The lenders, following Fannie Mae's standardized underwriting and servicing guidelines, close and service the approved loans on Fannie Mae's behalf. The lenders are also required to enter into mortgage default loss sharing agreements with Fannie Mae, which fosters alignment of their incentives to perform prudential underwriting. Fannie Mae offers two types of loss sharing agreements. A *pro rata* loss sharing agreement requires the lender to assume one-third of the losses and Fannie Mae assumes the remaining two-thirds.¹⁰⁹ A *tiered-basis* loss sharing agreement requires lenders to bear the initial 5% of the unpaid principal balance and then share any remaining losses up to a prescribed limit.¹¹⁰ On October 24, 2019, Fannie Mae introduced *Multifamily Connecticut Avenue Securities*, a multifamily credit risk transfer program with similarities to Freddie Mac's multifamily risk-sharing approach.¹¹¹
- Freddie Mac relies on its pre-approval business model that consists of its own team of in-house underwriters.¹¹² Freddie Mac internally re-underwrites and approves multifamily mortgages prior to purchasing them from lenders. Freddie Mac subsequently issues and sells certificates referred to as *K-Certificates* (or *K-Deals*), thus offloading various amounts of default loss risk to private-sector investors (e.g., real estate investment trusts, pension funds, hedge funds).¹¹³ Freddie Mac's K-Deals have similarities to Fannie Mae's Multifamily Connecticut Avenue Securities.

FHFA has issued various directives for the GSEs' multifamily programs. In 2013, FHFA reduced the GSEs' new multifamily purchase volumes by 10% from the 2012 caps to shrink their multifamily operations and risks to taxpayers.¹¹⁴ FHFA subsequently directed the GSEs to limit

¹⁰⁸ See Fannie Mae, *Delegated Underwriting and Servicing (DUS)*, Fourth Quarter 2011, https://multifamily.fanniemae.com/sites/g/files/koqyhd161/files/migrated-files/content/fact_sheet/wprskret.pdf.

¹⁰⁹ In some isolated cases, Fannie Mae has purchased non-DUS mortgages (e.g., small balance loans or pools of seasoned loans) from lenders without a loss sharing agreement to meet various objectives and in situations where it may not have a long-term relationship with the lender.

¹¹⁰ See Fannie Mae, *Form 10-K, For the Fiscal Year Ended December 31, 2018*, December 31, 2018, p. 100, <https://www.fanniemae.com/sites/g/files/koqyhd191/files/migrated-files/resources/file/ir/pdf/quarterly-annual-results/2018/q42018.pdf>.

¹¹¹ See Fannie Mae, "Fannie Mae Price Inaugural Multifamily Connecticut Avenue Securities Deal: Landmark \$472.7 Million Transaction Complements Fannie Mae's Multifamily Credit Insurance Risk Transfer and Delegated Underwriting and Servicing Loss-Sharing Programs," October 24, 2019, <https://www.fanniemae.com/portal/media/financial-news/2019/multifamily-connecticut-avenue-securities-6947.html>.

¹¹² See Freddie Mac, *Multifamily Securitization Overview*, June 30, 2019, https://mf.freddie.com/docs/mf_securitization_investor-presentation.pdf.

¹¹³ See Freddie Mac, *Multifamily Securities*, <https://mf.freddie.com/investors/securities.html>. In addition to K-Deals, Freddie Mac offers a variety of certificates that back the performance of specific types of multifamily structures to appeal to investors with varying appetites for risk. Freddie Mac may retain in its portfolio some of the multifamily default risk, such as any losses resulting from extremely unfavorable macroeconomic conditions, which is referred to as *catastrophic risk*. See CRS Report R44525, *Fannie Mae and Freddie Mac in Conservatorship: Frequently Asked Questions*, by Darryl E. Getter.

¹¹⁴ See FHFA, "FHFA Seeks Public Input on Reducing Fannie Mae and Freddie Mac Multifamily Businesses," press release, August 9, 2013, <https://www.fhfa.gov/Media/PublicAffairs/PublicAffairsDocuments/MultifamilyInput080913Final.pdf>; and FHFA, *Conservatorship Strategic Plan: Performance Goals for 2013*, https://www.fhfa.gov/AboutUs/Reports/ReportDocuments/2013EnterpriseScorecard_508.pdf.

their 2014 multifamily purchase volumes at or below the 2013 caps.¹¹⁵ In 2014, FHFA excluded several business activities from counting toward the cap, which might make it possible for the GSEs to provide greater support in the affordable housing and underserved market segments before reaching the cap.¹¹⁶ In 2016, FHFA also excluded loans that would finance certain energy and water efficiency (i.e., green loans) from the multifamily purchase caps.

On September 13, 2019, FHFA revised its directive regarding the multifamily purchase caps, increasing them from the 2018 caps of \$35 billion each to \$100 billion each for Fannie Mae and Freddie Mac.¹¹⁷ Moreover, 37.5% of the GSEs' loan purchases must be mission driven. By purchasing mission-driven multifamily mortgages that support affordable rental housing, the GSEs are less likely to *crowd out* (impede) private-sector lender participation by offering cheaper borrowing rates for multifamily loans.¹¹⁸ All multifamily mortgage purchases will count toward the cap—no exemptions or exclusions.¹¹⁹ In short, FHFA's revised policy is designed to prevent the GSEs' multifamily programs from growing without a more explicit link to affordable rental units for low- and moderate-income and other historically underserved renters—while making a *reasonable* economic return—rather than crowd out private-sector lending activities in market segments with less apparent credit gaps.¹²⁰ FHFA also provided an updated comprehensive definition of *mission-driven multifamily purchases*.¹²¹

The GSEs must still satisfy their annual mission-driven goals.¹²² FHFA established three multifamily housing mission-driven goals for the GSEs for 2021 purchases:¹²³

¹¹⁵ The 2013 volume that became the 2014 cap for Fannie Mae was \$30 billion. The 2013 volume that became the 2014 cap for Freddie Mac was \$26 billion. See Karan Kaul, *The GSEs' Shrinking Role in the Multifamily Market*, Urban Institute, April 2015, <https://www.urban.org/sites/default/files/publication/48986/2000174-The-GSEs-Shrinking-Role-in-the-Multifamily-Market.pdf>.

¹¹⁶ See FHFA, “Fact Sheet: New Multifamily Caps for Fannie Mae and Freddie Mac,” press release, <https://www.fhfa.gov/Media/PublicAffairs/PublicAffairsDocuments/newmultifamilycaps-9132019.pdf>.

¹¹⁷ See FHFA, “FHFA Revises Multifamily Loan Purchase Caps for Fannie Mae and Freddie Mac,” press release, September 13, 2019, <https://www.fhfa.gov/Media/PublicAffairs/Pages/FHFA-Revises-Multifamily-Loan-Purchase-Caps-for-Fannie-Mae-and-Freddie-Mac.aspx>.

¹¹⁸ See FHFA, “Fannie Mae and Freddie Mac Multifamily Businesses,” <https://www.fhfa.gov/PolicyProgramsResearch/Policy/Pages/Reducing-Fannie-Mae—Freddie-Mac-Multifamily-Businesses.aspx>.

¹¹⁹ For example, exemptions for multifamily loans used to finance energy and water improvements would still count toward the cap. See Kathleen Howley, “FHFA Moves to Curb Fannie Mae, Freddie Mac Green Loans for Multifamily: Regulator Raises Lending Caps for GSEs but Ends the Energy-Efficiency Carve-Out,” *Housingwire*, September 13, 2019, <https://www.housingwire.com/articles/50147-fhfa-moves-to-curb-fannie-mae-freddie-mac-green-loans-for-multifamily/>.

¹²⁰ The GSEs' statutory public purpose includes an “affirmative obligation to facilitate the financing of affordable housing for low- and moderate-income families in a manner consistent with their overall public purposes, while maintaining a strong financial condition and a reasonable economic return.” See 12 U.S.C. §4501(7). Both GSE charters authorize them to perform “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.” See 12 U.S.C. §§1451, 1716 note.

¹²¹ FHFA, “FHFA Revises Multifamily Loan Purchase Caps for Fannie Mae and Freddie Mac—Appendix A: Multifamily Definitions,” press release, September 9, 2019, <https://www.fhfa.gov/Conservatorship/Documents/AppendixA-Revisions-to-2019-FHFA-Conservatorship-Scorecard.pdf>.

¹²² The GSEs' primary regulator is required by the Federal Housing Enterprises Financial Safety and Soundness Act of 1992 (P.L. 102-550, Title XIII, §1302, 106 Stat. 3941) to establish annual housing goals for mortgages purchased by the GSEs. See FHFA, “Federal Housing Finance Agency Charter: Federal Housing Enterprises Financial Safety and Soundness Act of 1992,” <https://www.fhfa.gov/Government/Documents/Federal-Housing-Enterprises-Financial-Safety-and-Soundness-Act.pdf>.

¹²³ See FHFA, “2021 Enterprise Housing Goals,” 85 *Federal Register* 82881-82896, December 21, 2020.

-
1. The annual benchmark level for the low-income multifamily housing goal was set at 315,000 units for Fannie Mae and for Freddie Mac. A *low-income family* is defined as having an income of less than or equal to 80% of area median income (AMI).¹²⁴
 2. The annual benchmark level for the very low-income multifamily housing goal was set at 60,000 units for Fannie Mae and for Freddie Mac. A *very low-income family* is defined as having an income of no greater than 50% of AMI.
 3. The annual benchmark level for the small multifamily property goal was set at 10,000 units for Fannie Mae and for Freddie Mac. A *small multifamily property* is defined as a property with five units to 50 units.

Prior to conservatorship, the GSEs' multifamily business activities were arguably diversified such that cash flows from some lending activities could offset cash flow disruptions stemming from other lending activities. Because low- and moderate-income tenants have greater difficulty paying market-level rents, mortgages used to finance these multifamily structures may experience greater cash flow disruptions. If FHFA's requirements pertaining to multifamily caps were to remain intact upon exit from conservatorship, the GSEs' multifamily portfolios may exhibit greater cash flow volatility if a larger share of their multifamily lending activities are heavily concentrated in certain mission-related activities.¹²⁵ In other words, reducing the GSEs' involvement in activities that would crowd out private-sector lenders may present a challenge for them to make an economic return that shareholders would also find reasonable.

Duty to Serve: Manufactured Housing Chattel Loans

As mentioned, GSEs have a duty to serve three underserved markets—manufactured housing, rural housing, and affordable housing preservation.

The GSEs face several challenges to provide support for manufactured housing, which involves *chattel* lending versus real property lending. A manufactured home is a factory-built home that is transportable in one or more sections; has been constructed after June 15, 1976; and is built on a permanent metal chassis and must meet the safety standards set by the U.S. Department of Housing and Urban Development.¹²⁶ Mortgage loans can be used to finance homes that are permanently attached to real property.¹²⁷ By contrast, manufactured home *chattel loans* are used

¹²⁴ FHFA uses HUD-published AMIs to determine affordability for the GSEs' single-family and multifamily mortgage acquisitions. AMI is a measure of median family income derived from the Census Bureau's American Community Survey.

¹²⁵ Multifamily mortgages are underwritten based on the current and anticipated cash flows—predominantly in the form of rental income—generated by the properties. If the tenants in multifamily properties are cost-burdened, meaning that their monthly housing (rent) costs exceeds 30% of their income, then the rental income streams necessary to repay loans may exhibit greater volatility, thus increasing the GSEs' cash flow volatilities and loss risks. For more information, see CRS Report R46480, *Multifamily Housing Finance and Selected Policy Issues*, by Darryl E. Getter.

¹²⁶ By contrast, a manufactured home built before June 15, 1976, that does not meet HUD standards is referred to as a mobile home. Few lenders are willing to provide loans to finance mobile homes. In contrast to mobile and manufactured homes, a modular home is constructed to the same state, local, or regional building codes as site-built homes. See HUD, "Frequently Asked Questions for On-Site Completion of Construction of Manufactured Homes," https://www.hud.gov/program_offices/housing/rmra/mhs/faqs. Moving a manufactured home from a permanent site to another one may interfere with its loan financing. Thus, modular homes may be considered better investments. See American Financing, "What Is a Chattel Mortgage," <https://www.americanfinancing.net/mortgage-basics/chattel-mortgage>.

¹²⁷ See Fannie Mae, "Key Legal Distinctions Between Manufactured Home Chattel Lending and Real Property Lending," June 29, 2018, <https://www.fanniemae.com/media/28481/display>.

to finance personal property (chattel) that is not permanently attached to land. Because the cost to purchase a manufactured home is typically far below the cost to purchase a site-built home, a manufactured home may be a viable affordable housing option for low-income borrowers.¹²⁸ By facilitating liquidity to the chattel market, the GSEs can make progress toward achieving all three duty-to-serve goals, because manufactured homes are disproportionately located in non-metropolitan areas occupied by residents with lower incomes or net worth.¹²⁹ The GSEs have noted, however, that pursuit of their duty-to-serve obligations contains substantial risks that may adversely affect their financial results and conditions.¹³⁰ Providing support for chattel loans includes the following challenges:

- Lenders generally show more willingness to provide loans for manufactured homes titled as real property. For one reason, recovering losses if a borrower defaults on a chattel loan is more difficult. Suppose, for example, a borrower leases rather than purchases the land beneath the manufactured home titled as personal property, which may be an affordable option for a low- or extremely low-income household. If a borrower defaults on a chattel loan, then the lender can repossess the property peaceably as a repossession or through a replevin lawsuit.¹³¹ If, however, the borrower is also delinquent on the land lease, then re-marketing a repossessed manufactured home—either on its current site or if it must be moved to another site—adds more legal complications and expenses likely to further reduce the amount of losses that may be recovered.¹³²
- Manufactured home owners typically pay higher annual percentage rates (APRs)—the total cost of a loan (both the interest rates and transaction fees)—for their loans in comparison to site builders.¹³³ The GSEs have adopted policies prohibiting purchases of high-cost loans that are consistent with their missions to facilitate affordable housing. Certain consumer protections that exist when dwellings are attached to land, however, do not apply to chattel loans. For example, the integrated disclosures requiring lenders, mortgage brokers, or servicers of home loans to disclose loan pricing information to borrowers do not apply when the dwelling is not attached to land.¹³⁴ Fewer disclosures may lead to greater uncertainty about the extent that borrowers could have received cheaper financing or were aware of less costly financing alternatives.

¹²⁸ See FHFA, “Fannie Mae and Freddie Mac Support for Chattel Financing of Manufactured Homes Request for Input,” January 2017, <https://www.fhfa.gov/Media/PublicAffairs/PublicAffairsDocuments/Chattel-Pilot-RFI.pdf>.

¹²⁹ See Consumer Financial Protection Bureau (CFPB), “Manufactured-Housing Consumer Finance in the United States,” September 2014, https://files.consumerfinance.gov/f/201409_cfpb_report_manufactured-housing.pdf.

¹³⁰ See Fannie Mae, *Form 10-K, For the Fiscal Year Ended December 31, 2019*, December 31, 2019, p. 31, <https://www.fanniemae.com/resources/file/ir/pdf/quarterly-annual-results/2019/q42019.pdf>; and Freddie Mac, *Form 10-K, For the Fiscal Year Ended December 31, 2019*, December 31, 2019, p. 152, http://www.freddie.com/investors/financials/pdf/10k_021320.pdf.

¹³¹ See Justia, “Foreclosures of Manufactured Homes,” <https://www.justia.com/foreclosure/foreclosures-of-manufactured-homes/>.

¹³² See Fannie Mae, “Key Legal Distinctions between Manufactured Home Chattel Lending and Real Property Lending.”

¹³³ According to the CFPB, chattel loans may be priced between 50 and 500 basis points higher than a mortgage loan for a manufactured home secured by real property. See CFPB, “Manufactured-Housing Consumer Finance in the United States.”

¹³⁴ See CFPB, “CFPB Consumer Laws and Regulations: Regulation X Real Estate Settlement Procedures Act,” https://files.consumerfinance.gov/f/201503_cfpb_regulation-x-real-estate-settlement-procedures-act.pdf.

- Securitizing chattel loans is challenging. Chattel loans cannot be placed in the same pools with other mortgages linked to UMBS issuances, which have strict prepayment speed requirements and homogenous credit risks. Secondary market security issuances linked to chattel loans must be structured from pools consisting only of chattel loans—more likely to have homogeneous financial risks—to enhance investors’ understanding of the likely performance of their investments. Because chattel securities have not been introduced to the capital market since the mid-2000s, Fannie Mae reports “a lack of chattel performance data for investors to understand the prepayment and default risk in chattel loans; therefore, the investor appetite for a chattel security is unknown.”¹³⁵

Fannie Mae and Freddie Mac are developing plans to provide liquidity for manufactured housing titled as chattel through securitization channels.¹³⁶ FHFA has given the GSEs permission to implement their chattel financing initiatives as pilot programs.¹³⁷ Despite having experience with securitizing manufactured homes titled as real property, Freddie Mac is still gathering data and conducting research to support the future securitization of loans backed by chattel properties.¹³⁸

The Federal Home Loan Bank System and Chattel Loans

The Federal Home Loan Bank (FHLB) System, which is a housing GSE with an affordable housing mission and supervised by FHFA, has addressed issues pertaining to the higher levels of default risk associated with chattel loans.¹³⁹ Lenders may face limitations obtaining advances (short-term loans) from some of the FHLBs using chattel loans as collateral, as different FHLBs may have separate policies.¹⁴⁰ FHFA, however, allows the FHLBs to purchase chattel loans under their Acquired Member Assets programs although they have made few if any such purchases from member financial institutions.¹⁴¹

FHFA also considers manufactured housing to contain higher credit and liquidity risks. In the final rule establishing the GSEs’ heightened capital requirements, the manufactured home loan category is assigned one of the higher risk weights relative to other types of mortgages. If the

¹³⁵ See Fannie Mae, “Duty to Serve Underserved Markets Plan for the Manufactured Housing Market,” effective January 1, 2021, p. 35, https://www.fhfa.gov/PolicyProgramsResearch/Programs/Documents/FannieMaeDTSPlan_2018-2021.pdf.

¹³⁶ See Fannie Mae, “Duty to Serve Underserved Markets Plan for the Manufactured Housing Market;” and Freddie Mac, “Duty to Serve Underserved Markets Plan For 2018-2021,” https://www.fhfa.gov/PolicyProgramsResearch/Programs/Documents/FreddieMacDTSPlan_2018-2021.pdf.

¹³⁷ See FHFA, “Duty to Serve: FHFA Presents Snapshots from Freddie Mac’s and Fannie Mae’s Duty to Serve Underserved Markets Plans for Chattel,” <https://www.fhfa.gov/PolicyProgramsResearch/Programs/Documents/DTS-Manufactured-Housing-Chattel.pdf>.

¹³⁸ See Freddie Mac, “Duty to Serve Underserved Markets Plan for 2018-2021,” https://www.fhfa.gov/PolicyProgramsResearch/Programs/Documents/FreddieMacDTSPlan_2018-2021.pdf. Freddie Mac securitizes its manufacturing housing loans as a *multifamily* K-Deals products that have only *default risk* (and no prepayment risk), similar to the credit risk transfers.

¹³⁹ See CRS Report R46499, *The Federal Home Loan Bank (FHLB) System and Selected Policy Issues*, by Darryl E. Getter.

¹⁴⁰ The FHLBs may require manufactured homes to be converted from personal property to real property before any loan used to secure the property can be used as collateral for a loan to its member lending institutions. For example, see FHLB of Atlanta, FHLBank Atlanta: Loan Collateral Resource Guide, <http://corp.fhlbatl.com/files/documents/loan-collateral-resource-guide.pdf>.

¹⁴¹ See FHFA, “Federal Home Loan Bank Housing Goals Amendments Final Rule,” June 25, 2020, <https://www.fhfa.gov/SupervisionRegulation/Rules/Pages/Federal-Home-Loan-Bank-Housing-Goals-Amendments-Final-Rule.aspx>. The Mortgage Purchase Program and the Mortgage Partnership Finance Program are two types of Acquired Member Assets programs. For more information, see FHFA, “Fact Sheet: Final Rule on Federal Home Loan Bank Housing Goals,” <https://www.fhfa.gov/Media/PublicAffairs/PublicAffairsDocuments/FHLBank-Housing-Goals-Fact-Sheet-Final-rule.pdf>.

GSEs enter into the chattel lending markets, FHFA might introduce a separate risk weight that could be higher than the current risk weight for manufactured homes titled as real property.

Author Information

Darryl E. Getter
Specialist in Financial Economics

Disclaimer

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS's institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.