



# Access and Affordability in the New Housing Finance System

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One of the measures by which any proposed housing finance system must be judged is how well it would serve low- and moderate-income (LMI) households. In this analysis, we assess how well the multi-guarantor system proposed in the draft under discussion in the Senate Banking Committee would serve these households, concluding that they would do considerably better than they do under the system we have today. The bottom line is that the proposed system provides considerably more and better-targeted support to assist LMI households.

Assuming that the mortgage access fee proposed in the system is set at a level of 10 basis points, and that all LMI borrowers who qualify for a loan would get financial support, the average LMI borrower in this channel would receive approximately \$4,500 in support over the duration of their loan, or \$6,000 if the support is limited to those purchasing a home. For borrowers, this support will come in the form of a lower mortgage rate, a lower down payment, or other assistance. For virtually all who receive support it would mean an easier path to sustainable homeownership than they have today.

## Current system

In the current housing finance system, the most significant support provided by Fannie Mae and Freddie Mac—the government-sponsored enterprises—to underserved borrowers is through cross-subsidization of mortgage rates. The GSEs do this through level pricing their risk coverage, charging lower-risk borrowers a greater guarantee fee than needed to achieve their targeted return so that they are able to charge higher-risk borrowers less than needed to achieve that return.

The GSEs provide this cross-subsidy in part to meet their statutory affordable housing goals and duty-to-serve requirements. The affordable goals require that a specified percentage of the loans purchased by the GSEs go to LMI households and communities. And their duty to serve requires them to increase liquidity for mortgages for very low-, low-, and moderate-income families in three markets deemed underserved by Congress: manufactured housing, affordable housing preservation, and rural markets.

The GSEs also support housing affordability through a one-time fee of 4.2 basis points levied on each single-family loan purchased by the GSEs. The sums generated by this fee go into the Housing Trust Fund

and Capital Magnet Fund, which fund the construction of affordable rental housing for very low-income households and the lending activities of community development financial institutions, respectively.

The total value of the subsidy in the current GSE system is estimated to be \$4.1 billion annually, of which close to \$3.8 billion occurs through the cross-subsidy of the guarantee fee and \$300 million from the affordable housing fee.<sup>1</sup>

## Future system

In the multi-guarantor system being discussed, the primary source of cross-subsidy will shift from modifying the pricing of the guarantee fee to a market access fee (MAF) designed explicitly to fund assistance for borrowers who need the support. Private guarantors will be permitted to risk-base price at a loan level, with pricing driven by the required amount and cost of capital in the new system. The guarantors will be required to fund themselves with enough capital to withstand a severely adverse economic scenario and to satisfy a minimum leverage ratio, with the cost of this layer of capital passed along to borrowers largely according to the individual default risks they pose.<sup>2</sup> In order to protect taxpayers should a guarantor fail, each guarantor will also be required to purchase insurance from the government to cover the catastrophic risk of their loans, which will

1 This estimate is based on an analysis of information provided in the FHFA's 2014 request for input on the GSEs' guarantee fees. For context, pre-financial crisis, the GSEs provided a cross-subsidy of approximately \$4 billion annually through the level pricing of their guarantee pricing across all borrowers.

2 Mortgage interest rates will further vary with the cost of debt more broadly in the economy, just as is the case today—when the Fed raises or lowers interest rates, or when market participants require higher or lower yields on long-term bonds such as Treasury securities, mortgage interest rates will change as well. Indeed, the changes arising from Fed monetary policy decisions over time will be considerably larger than the impact of the capital requirement.

## Access and Affordability in the New Housing Finance System

go into a mortgage insurance fund (MIF) similar to that maintained by the FDIC for the nation's depository institutions. The MIF would be tapped only if and as a guarantor fails and used to protect taxpayers—not to bail out the guarantors. The cost of this insurance will be level priced across all borrowers.

The MAF will be levied on the outstanding balance of all single- and multifamily loans insured by the guarantors. This money would go toward funding the Housing Trust Fund and Capital Magnet Fund, and to lower the cost of a mortgage for all qualified borrowers who fall below 80% of area median income (AMI) or first-time homebuyers who fall below 100% AMI. There is also a modest cross-subsidy in the proposed system through level pricing for the fee to finance the MIF, with higher-risk borrowers paying the same fee on their loans as do low-risk borrowers even though the latter pose less risk.

Assuming a 10-basis point MAF assessment and 10-basis point MIF fee, the total value of the cross-subsidy in the future system is estimated to be \$5.5 billion annually, with \$5.1 billion generated from the MAF and approximately \$400 million from the flat MIF fee.

### How the subsidy is allocated

Cross-subsidy in the new system will not just be generated differently than it is today; it will also be allocated differently. Resources will be more clearly targeted to those who most need the support and provided in ways that more effectively address their needs.

In the current system, while some of the cross-subsidy is targeted to LMI borrowers through the duty-to-serve and affordable goals regimes, not all of it is. Some of the cross-subsidy goes to those who simply pose a higher than average risk for a GSE borrower, irrespective of their income. By applying a flat guarantee fee, the GSEs are charging those who pose lower than average risk to the GSEs more than their risk would dictate in order to allow those who pose greater than average risk to pay less. Thus, LMI borrowers who pose lower risk are subsidizing the loans of higher-income borrowers who pose higher risk. A low- or moderate-income family with strong credit that puts down 20% to buy a home is subsidizing a higher-income family with weaker credit that chooses to put down 5%. We estimate that approximately 23% of those receiving a subsidy under the current system are not LMI households.

In the proposed new system, the cross-subsidy would go only to LMI borrowers, and it would go to them irrespective of the level of risk they pose to the guarantors so long as they qualify for a loan in this channel. Any borrower who qualifies for a loan in this channel who makes less than 80% AMI, or is a first-time homeowner who makes less than 100% AMI, will receive support. The upshot of this is that we will see a shift in cross-subsidy away from higher-income borrowers who pose greater risk to LMI borrowers who pose less risk.

On average, LMI borrowers will receive \$4,500 in assistance over the duration of their loans in the proposed system.<sup>3</sup> Expressed solely

<sup>3</sup> This is based on \$4.1 billion in annual MAF funds used for the direct cross-subsidy (10 basis points on \$5.1 trillion in single and multifamily GSE loans outstanding less \$1 billion for the Housing Trust Fund and Capital Magnet Fund), 6.3 million qualifying LMI borrowers, and an average mortgage duration of 7 years.

in terms of mortgage rates, this would mean a savings of 29 basis points in their interest rate relative to the system we have today.<sup>4</sup> These figures would be greater still should policymakers choose to target support more narrowly. For instance, if they limited support to purchase mortgages only—excluding borrowers that refinance—each qualifying LMI borrower would receive an average \$6,000 in subsidy over the duration of the loan.

The support provided to LMI borrowers in the system proposed will not be limited to lowering mortgage payments, because price is not always the primary impediment to affordability for LMI borrowers. For some it is a lack of savings for down payment, a lack of savings to cover expenses once the home is purchased, or even just a lack of awareness of the best available options. In the new system, then, LMI borrowers will have a range of options for support from which to choose, so that they are able to apply the subsidy in a way that most effectively addresses their individual affordability challenges.

### Guarantors' market share

The guarantors in the future system will maintain approximately the same share of the mortgage market as the GSEs do in the current system. Mortgage rates for higher credit quality borrowers currently served by the GSEs will be only a few basis points lower than in the future system. Mortgage rates for LMI borrowers currently in the GSE system will be meaningfully lower in the future system, but not sufficiently so for the guarantors to take much share from the government-guaranteed system, which includes the Federal Housing Administration, Veterans Affairs, and U.S. Department of Agriculture. That system currently has a pricing advantage for borrowers with relatively high credit scores and low down payments (for example, over 740 score and over 80% loan-to-value ratio), which would not change appreciably in the future system under current FHA pricing.

If the MAF is higher than the 10 basis points assumed here, the future guarantors' credit box would shift down the borrower credit distribution, ceding market share to portfolio lenders but taking share from the FHA system. Raising the MAF to 15 basis points, for example, would likely reduce the FHA system's share from its current near 25% of the mortgage market to closer to 20% and increase that of portfolio lenders from its current share of 30% to 35%. The guarantors' share would remain unchanged at close to 45%.

Raising capital requirements would also impact the guarantors' share of the market, pushing some loans into more economic executions onto banks' portfolios or into private label securitization or FHA.

### Critical assumptions

In order to show how we have arrived at these conclusions, we attach a spreadsheet that compares cross-subsidization in the current and proposed systems in terms of mortgage rates and summarize below the

<sup>4</sup> This understates the reduction in mortgage rate. Given the complexity involved, this analysis does not maximize the cross-subsidy across qualifying LMI borrowers.

critical assumptions underlying the analysis. It is important to note that we have erred on the conservative side in many of these assumptions, meaning that we likely understate the comparative advantages of the new system. To see how the assumptions affect the conclusions, one can adjust the numbers for the assumptions in the spreadsheet.

1. **Baseline.** These calculations take the housing finance system as it is currently constructed as their baseline, not a projection of what it might look like in the future absent legislation. It would be difficult to project the features of the current system into the future given the significant variability of possible outcomes. The GSEs' guarantee fees are thus assumed to remain the same as they are today.

This is a particularly conservative assumption, given the commonly held view among conservatives that higher guarantee fees should be used as a policy tool to reduce the share of mortgages covered by a government guarantee. The next Federal Housing Finance Agency director is likely not only to require the GSEs to raise the overall fees they charge for their guarantee, but also to shift some of that fee away from flat-priced guarantee fees and toward greater risk-based, loan-level price adjustments, so that pricing overall is more risk-based and less cross-subsidized. The amount of cross-subsidy in the current system would thus fall significantly relative to today, making the proposed system look markedly better than we show in this analysis.

2. **Capitalization of the future system.** For the purposes of this analysis, we assume that the guarantors in the new system proposed are required to fund themselves with equity capital of 3%. This is approximately equal to the current implicit capitalization of the GSEs. It is also more than the losses experienced by the GSEs under the FHFA's most recent stress test, although the guarantors in the proposed system will be required to fund themselves with additional capital to both remain as going concerns in a stressed environment and maintain a countercyclical capital buffer.<sup>5</sup> Guarantors in the system proposed are also assumed to have debt equal to 150 basis points of their guarantee book. The proceeds of this debt will be used to purchase distressed loans out of the mortgage pools backing the guarantors' mortgage-backed securities and for general corporate activities.<sup>6</sup> The capitalization necessary for the MIF to cover the catastrophic risk on their loans is assumed to be set at 300 basis points.

Altogether, then, we assume 750 basis points in total protection for taxpayers in the proposed system: 300 basis points in equity for the guarantors' non-catastrophic risk, 150 basis points in debt, and 300 basis points in the MIF for catastrophic risk. This does not include the future guarantee fees that sur-

viving guarantors following a crisis would collect even in a stressed environment, which will provide additional resources to pay claims before taxpayers suffer any loss.

It is worth noting that if these capital levels protect taxpayers against all but the most remote risk, then adding incremental capital would not be expensive—because covering only the remotest of risk is not expensive. Indeed, if additional capital were to have a meaningful impact on mortgage interest rates, then it would suggest that the capital level was not adequate to cover this very remote risk. Wherever policymakers set capital requirements, they should balance the access and stability provided by the government's support of the market with the risk to the taxpayer of providing that support.

3. **After-tax cost of capital.** Private guarantors are assumed to target an after-tax return on equity of just over 10%. This is greater than the 9% after-tax return on equity currently enjoyed by commercial banks with more than \$250 billion in assets. And while it is less than the 14% return private mortgage insurers are currently earning, this is appropriate given that MIs assume all the risk on the riskiest segment of credit risk for the riskiest group of borrowers, requiring them to target a substantially higher return. It is important to note that if the future system is assumed to be capitalized at a higher level, then this should reduce the guarantors' required after-tax return on equity, potentially offsetting a significant portion of the associated increased cost of capital. In other words, the assumptions here will overstate the impact of adding more capital on mortgage interest rates.

4. **Reduction in taxes.** For the sake of maintaining a consistent comparison, we assume that both the future system and the current system benefit from the recent reduction in the corporate tax rate from 35% to 21% and the expiration in 2023 of the payroll tax fee.<sup>7</sup>

5. **Full faith and credit benefit.** The government's full faith and credit guarantee on the mortgage-backed securities of guarantors in the future system is assumed to reduce the yield on their MBS by 20 basis points compared with the yield on GSE securities in the current system (while this results in concomitant risk for taxpayers, it is partly compensated for by the MIF fee). This is based on the average difference in yield on current Ginnie Mae securities that have the government's full backing and Fannie Mae securities that have the backing of Preferred Stock Purchase Agreements but not the full faith and credit of the government. As many factors impact the estimated yield benefit of the government's guarantee, including the Federal Reserve's quantitative easing, that figure could easily be 5 basis points higher or lower.

6. **Through the business cycle.** The analysis is based on the assumption that the future system is operating in a typical

<sup>5</sup> The 2017 FHFA stress test of the guarantors is based on the severely adverse scenario that the Federal Reserve and other regulators use to stress test the nation's large financial institutions. The GSEs suffer losses of between 0.8% and 2.2% depending on various assumptions, most important being the treatment of the GSEs' deferred tax assets.

<sup>6</sup> This debt effectively protects taxpayers, because the secondary government guarantee covers only mortgages bundled into MBS and not guarantors' interest payments.

<sup>7</sup> It is important to note that the recent change to the corporate income tax system reduces the tax penalty on equity financing relative to debt financing.

economic and housing market environment consistent with average conditions through the business cycle. This is particularly important for the assumed long-term Treasury yield, the cost of the guarantors' debt, the yield on investments made by the guarantors with the capital they raise, and the guarantors' return on equity.

The 10-year Treasury yield is assumed to be 3.7%, consistent with the Congressional Budget Office's expectations over the next decade. Guarantors' debt costs are assumed to be 300 basis points over Treasuries, consistent with borrowing costs for single A rated corporate borrowers. They are assumed to earn only 100 basis points over Treasury yields, as they will have restrictions on what financial securities they are able to invest in. And their after-tax return on equity is assumed to be just over 1,000 basis points, or close to 650 basis points more than Treasuries.

It is challenging to estimate how mortgage rates in the future system would compare to those in the current system in extreme economic conditions, either during times of stress or significant bubbles. In more stressed environments, for instance, guarantors' capital and funding costs would increase but Treasury yields would likely fall, creating cross-currents that make it difficult to project precisely how rates will be affected. As was the case during the financial crisis, the Federal Reserve could undertake policy actions such as quantitative easing to bring down the cost of mortgage financing.

That said, overall mortgage rates in the proposed system are likely to be more sensitive to economic conditions given the increased role of private capital taking credit risk. This is arguably a virtue of the system rather than a flaw, as it will provide a stronger countercyclical check on lending than we have had in the current system, which was notably insensitive to warning signs in the runup to the financial crisis.

- 7. Definition of underserved.** The underserved borrower group is defined to include borrowers with incomes of less than 80% AMI for the area in which their property is located, or a first-time homebuyer with income that is less than 100% of AMI for the area in which the property is located. Under the current GSE borrower mix, this group accounts for almost 23% of all GSE borrowers, which is the figure we use in the calculations.<sup>8</sup> Policymakers may seek to target a smaller group of LMI borrowers, which would increase the amount of support each receives. They might reasonably decide to exclude those who refinance their loans, or just those who take cash out in refinancing, in order to focus more relief on those attempting to purchase a home.

To make the analysis more tractable, we have assumed that everyone who qualifies for assistance gets the same amount. In practice this would create a significant cliff effect in the al-

location of subsidies, with those falling just below the relevant income limit getting thousands of dollars in assistance where those who earn slightly more get none. To address this, the FHFA would presumably create a sliding scale of subsidy, with those barely below the income limits getting smaller subsidies than those earning much less. This approach has the added benefit of getting still more support into the hands of those who need it most.

- 8. Market access fee.** The MAF is assumed to be 10 basis points on the outstanding balance of all single- and multifamily mortgages insured by the guarantors. All borrowers pay the MAF, but LMI borrowers are assumed to receive all of the benefit of the MAF funds. LMI borrowers thus effectively pay a negative MAF. Of the \$5.1 billion in annual MAF funds, approximately \$4.1 billion is assumed to go to funding the direct cross-subsidy in the system.
- 9. Mortgage insurance fund.** The MIF fee in the future system is assumed to be 10 basis points. As this fee should be close to the cost of this insurance on a Fair Credit Reporting Act accounting basis, it should have no budgetary impact.<sup>9</sup> However, this fee will likely not be sufficient to fully fund the assumed MIF of 3% unless the MIF is seeded with some funds at the launch of the future system. However, if the MIF is not pre-funded, even with a 20-basis point MIF fee it would take approximately 25 years to fully fund the 3% MIF.
- 10. Private mortgage insurance.** The cost of private mortgage insurance for high LTV borrowers is assumed to be the same in the future system as in the current system. While upcoming changes to the capital standards for private MIs arising from the implementation of PMIERS 2.0, the private mortgage insurance eligibility requirements, are likely to increase the cost to MIs of providing insurance, competitive pressures and the recently reduced corporate tax rate together should contain any impact on pricing.
- 11. Credit risk transfer.** The guarantors in the system proposed are assumed to be able to transfer credit risk to capital markets and other institution-based sources of capital at the same cost as their own. It could be that investors in risk transfer securities have a lower cost of financing than the guarantors, as capital market investors may finance a portion of their risk transfer investments using tax-advantaged debt, in which case capital market credit risk transfer transactions could contribute to a lower cost of capital and mortgage interest rates than assumed here. But conversely, adding to the cost of using credit risk transfers in the proposed system is that investors may require some compensation for the counterparty risk posed by private guarantors that they do not currently face with the GSEs in conservatorship and backed by the federal government.

<sup>8</sup> For context, the GSEs are currently providing a cross-subsidy to just over 30% of their borrowers.

<sup>9</sup> The CBO might see the MIF fee as not enough to offset its fair value estimate of the risk taken on by the government in providing the catastrophic guarantee.

**12. Refinance share.** It is assumed that 25% of the mortgages insured by the guarantors in the system proposed have been refinanced. This is down from an average of close to 65% over the past decade. The lower expected refinance share is due to the fact that mortgage rates for the typical borrower in the future will be close to 6%, well above the 4% average coupon on existing GSE mortgages, making refinancing

uneconomical for many borrowers. This is in contrast to the steadily declining mortgage rates of the past thirty five years which prompted a number of large refinancing waves. That said, if the refinancing share remains more consistent with the past decade, then targeting purchase only borrowers would lead to a per borrower subsidy much greater than we have determined here.

# Access and Affordability in the New Housing Finance System

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## About the Authors

**Jim Parrott** is a nonresident fellow at the Urban Institute and owner of Falling Creek Advisors, which provides financial institutions with strategic advice on housing finance issues. Jim spent several years in the White House as a senior advisor on the National Economic Council, where he led the team of advisors charged with counseling the cabinet and president on housing issues. He was on point for developing the administration's major housing policy positions; articulating and defending those positions with Congress, the press and public; and counseling White House leadership on related communications and legislative strategy. Prior to his time in the White House, Jim was counsel to Secretary Shaun Donovan at the Department of Housing and Urban Development.

Prior to his life in public policy, Jim was a litigator, first in New York with Sullivan and Cromwell, and later in North Carolina with Smith Anderson. He has a JD from Columbia University School of Law, an MA from the University of Washington, and a BA from the University of North Carolina. Jim also served in Sri Lanka with the Peace Corps.

**Michael Stegman** is a senior fellow at the Milken Institute Center for Financial Markets, where he focuses on housing finance reform and affordable housing. He is a widely sought after expert and frequent public speaker on housing finance and has also written extensively on housing and urban policy, community development, access to credit, and asset development policies.

From 2015 to 2016, Dr. Stegman served as senior policy advisor for housing on the staff at the National Economic Council, following three and a half years as the counselor to the secretary of the Treasury for housing finance policy. As a senior policy advisor during the Obama administration, Dr. Stegman's policy responsibilities ranged from housing finance reform to access to credit to other housing-related issues.

Previously, Dr. Stegman served as a fellow at the Bipartisan Policy Center, and as director of policy and housing for the program on human and community development at the John D. and Catherine T. MacArthur Foundation for six years. Dr. Stegman is also a distinguished professor emeritus at the University of North Carolina at Chapel Hill, where he taught and conducted research on affordable housing policy as chair of the Department of City and Regional Planning and was founding chair of the Department of Public Policy. From 1993 to 1997, Dr. Stegman served as assistant secretary for policy development and research at the U.S. Department of Housing and Urban Development. During this time, Dr. Stegman was named by the National Journal as one of Washington's 100 most influential decision makers.

Dr. Stegman holds a bachelor's degree from Brooklyn College, City University of New York, and a master's degree and Ph.D. in city planning from the University of Pennsylvania.

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**Mark M. Zandi** is chief economist of Moody's Analytics, where he directs economic research. Moody's Analytics, a subsidiary of Moody's Corp., is a leading provider of economic research, data and analytical tools. Dr. Zandi is a cofounder of Economy.com, which Moody's purchased in 2005. Dr. Zandi conducts regular briefings on the economy for corporate boards, trade associations and policymakers at all levels. He is on the board of directors of MGIC, the nation's largest private mortgage insurance company, and The Reinvestment Fund, a large CDFI that makes investments in disadvantaged neighborhoods. He is often quoted in national and global publications and interviewed by major news media outlets, and is a frequent guest on CNBC, NPR, Meet the Press, CNN, and various other national networks and news programs. Dr. Zandi is the author of *Paying the Price: Ending the Great Recession and Beginning a New American Century*, which provides an assessment of the monetary and fiscal policy response to the Great Recession. His other book, *Financial Shock: A 360° Look at the Subprime Mortgage Implosion, and How to Avoid the Next Financial Crisis*, is described by the New York Times as the "clearest guide" to the financial crisis. Dr. Zandi earned his BS from the Wharton School at the University of Pennsylvania and his PhD at the University of Pennsylvania. He lives with his wife and three children in the suburbs of Philadelphia.