



# UNITED STATES

## SELECTED ISSUES

July 2015

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## SELECTED ISSUES

June 17, 2015

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**Western Hemisphere  
Department**

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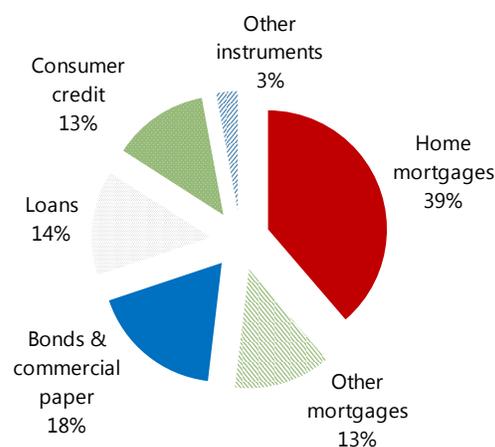
## HOUSING FINANCE

While a number of important steps have been taken to address the structural weaknesses exposed by the crisis in mortgage markets, comprehensive housing finance reform remains the largest piece of unfinished business. In particular, it is not clear when Fannie Mae and Freddie Mac will exit conservatorship and what an end point for a reformed housing finance system will look like. This creates not only fiscal but also financial risks: moral hazard from coverage of credit losses by the government or the government-sponsored enterprises, a distorted competitive landscape due to the dominant footprint of Fannie Mae and Freddie Mac, and large subsidies for homeownership that create incentives to take on excessive levels of household debt.

### A. The Current State of Housing Finance

**1. Mortgage markets are integral to the overall stability of the U.S. financial system, and were the epicenter of the 2008–09 crisis.** Home mortgages, at some \$10 trillion, are the largest component on nonfinancial private sector debt (chart 1). Securitization is the dominant funding source for mortgages in the United States, generating strong interconnections not only with the rest of the U.S. financial system but also with the rest of the world.<sup>1</sup> Securitization allows lenders to transfer interest rate risk and provides a mechanism (especially for small depository institutions) to gain access to liquidity and to avoid over-exposure to regional housing markets. In the United States, public guarantees—directly from the federal government or through Fannie Mae and Freddie Mac<sup>2</sup>—play an important role in the securitization process,

1. Private Nonfinancial Sector Debt, 2014Q4



Sources: Flow of Funds; staff calculations.

<sup>1</sup> United States is an outlier in the use of securitization in housing finance. Deposit funding dominates mortgage lending in most countries (Lea et al., 2010).

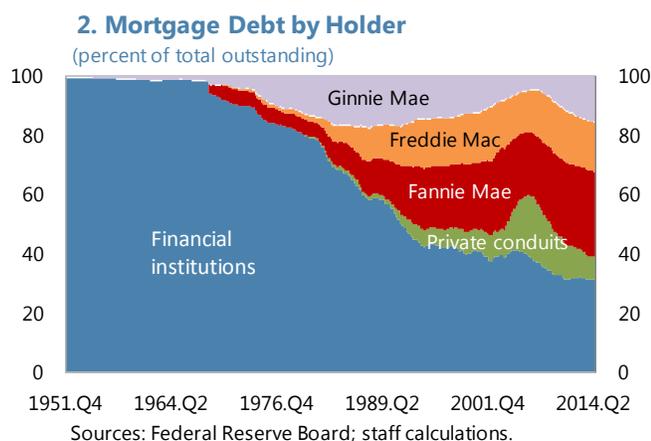
<sup>2</sup> Fannie Mae and Freddie Mac—along with Farmer Mac, the Federal Home Loan Bank System, the Farm Credit System, the Financing Corporation, and the Resolution Funding Corporation—are government-sponsored enterprises (GSEs). The Omnibus Reconciliation Act of 1990 defined a GSE as a corporate entity created by a law of the United States that has a federal charter, is privately owned, and has the power to make loans or loan guarantees for limited purposes such as to provide credit for specific borrowers or one sector and to raise funds by borrowing. While the Act explicitly states that debt issued by a GSE does not carry the full faith and credit of the federal government, it has long been argued that a GSE “benefits from an implicit federal guarantee to enhance its ability to borrow money” (Moe and Stanton, 1989). Hence, guarantees provided by Fannie Mae and Freddie Mac are effectively back-stopped by the federal government. Note that, for the remainder of this paper and with a slight abuse of the term, the word GSEs is used to refer to Fannie Mae and Freddie Mac.

especially in transferring and managing the risks of longer-term loans.<sup>3</sup> This subsidized system features a product that is unusual by comparison with other countries: namely, the 30-year fixed-rate mortgage with no prepayment penalty—which puts interest rate and prepayment risks squarely on the lender—although the vast majority of borrowers sell their homes and pay the mortgage or refinance in less than 10 years.<sup>4,5</sup>

## 2. Mortgage markets, even eight years after the start of the crisis, continue to function with extensive government support.

The federal government dominates the market, standing behind more than 60 percent of the stock of loans and backing almost 80 percent of new single-family loan originations through Federal Housing Administration (FHA) insurance, U.S. Department of Veterans Affairs (VA) guarantees, and the activities of Fannie

Mae, Freddie Mac, and Ginnie Mae (chart 2). Private-label securitization (PLS) has largely disappeared (chart 3). The factors behind the disappearance of PLS are multi-faceted and include both cyclical (e.g., legacy issues from the crisis) and structural forces (e.g., new regulations, regulatory and legal uncertainty, or changed investor preferences and demand). Insurance and guarantees provided or back-stopped by the government are at times priced based on social policy objectives—rather than risk or long-term cost recovery—and the high loan limits for qualifying mortgages mean that government cover is available to most new loans. All of these factors create disincentives for the private sector to enter the market and leaves the government with significant fiscal risk. Moreover, given the exposure to agency- and GSE-backed securities elsewhere in the



<sup>3</sup> The guarantees transfer credit risk from loan originators to the government, allowing investors to manage and trade interest rate risk (the risk that the value of the mortgage will change as interest rates rise or fall) and prepayment risk (the risk that principal will be returned to the investor ahead of schedule) without simultaneously managing credit risk.

<sup>4</sup> The prevalence of fixed-rate mortgages has other macroeconomic implications. Fixed-rate mortgages allow better predictability of disposable income and protect borrowers against fluctuations in real interest rates, but leave them exposed to inflation shocks (Campbell and Cocco, 2003). Fixed-rate mortgage defaults increase when interest rates and inflation are low and are more likely to happen in “waves” because wealth motives are relatively more important than income shocks for the default decision (Campbell and Cocco, 2011). Adjustable-rate mortgages allow faster transmission of monetary policy via mortgage interest rates (Calza, Monacelli, and Stracca, 2013). By contrast, when interest rates fall in conjunction with a rapid and steep decline in house prices, fixed-rate mortgage holders that are under water find it difficult to refinance at the lower prevailing rates—Home Affordable Refinancing Program (HARP) was initiated to address this problem.

<sup>5</sup> For instance, more than 80 percent of 30-year fixed-rate mortgages originated prior to 2009 were prepaid by 2013, based on a sample of loans purchased by Freddie Mac. This statistic is not very sensitive to the period in question (that is, if interest rates are low or not), the average expected life of a 30-year fixed-rate mortgage has hovered around 6–7 years, reflecting the mobility characteristics of the U.S. population.

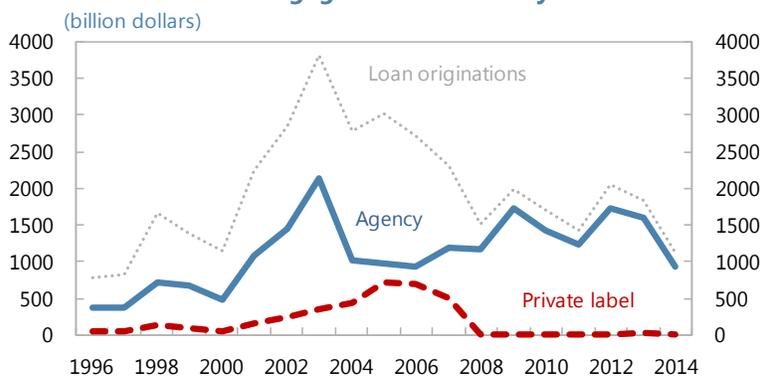
domestic and international system, this constitutes a point of vulnerability both for the U.S. and the global financial system.

**3. The current system hampers the functioning of mortgage markets.** There is rather broad agreement that a housing finance system should aim to foster a stable and competitive mortgage market where (i) risks are priced appropriately, (ii) incentives are set to mitigate moral hazard from all financial intermediaries involved in the housing finance

chain (originator, servicer, insurer, securitizer, guarantor, etc.), and (iii) the involvement of public monies and the risks being borne by the public balance sheet are minimized and properly accounted for (see, for instance, Ellen et al., 2010; Acharya et al., 2011; GAO, 2014). At the same time, there is a political support for the system to meet social objectives linked to broad homeownership and access to affordable housing (see, for example, various Congressional hearings). There is an economic argument for, and some evidence of positive externalities from, homeownership and affordable housing (see, among others, Rossi-Hansberg, 2010; Coulson and Li, 2013; Bratt, 2002) and, hence, additional justification for the government to pursue these social goals. However, the current system falls short in achieving these objectives and, in doing so, creates unwelcome side effects.

- *Competitive landscape and pricing.* While there is rather robust competition in mortgage origination, the “special status” of the GSEs has hindered effective competition in the secondary mortgage market. Financial markets always anticipated that there were implicit government guarantees on any debt issued by Fannie Mae and Freddie Mac—and these expectations were confirmed during the crisis.<sup>6</sup> In addition to being able to borrow at cheaper rates because of this guarantee, the GSEs faced lower capital requirements for holding similar risks as many of their private counterparts and are exempt from state and local taxes (opening the door for regulatory capital arbitrage and giving them a favored competitive position).<sup>7</sup> On a fair-value basis, federal subsidies for the new loan guarantees by Fannie Mae and Freddie Mac—covering the period from 2015 to 2024—are estimated to be \$19 billion dollars (CBO, 2014a). Post-crisis, the

### 3. Residential Mortgage-Backed Security Issuance



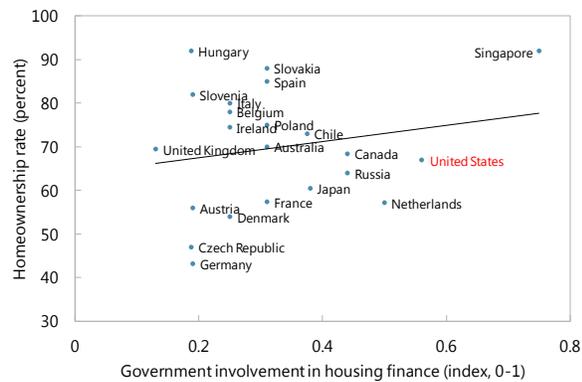
<sup>6</sup> In the run-up to the crisis, private-label mortgage-backed securities (MBS) did grow rapidly—in part driven by strong capital inflows and financial deregulation—but did so by moving down the credit curve (where the GSEs’ loan standards would not allow them to venture). This generated a race to the bottom where the GSEs—driven by their responsibilities to private shareholders—responded by loosening their underwriting standards, expanding their MBS guarantee business to riskier loans, and increasing their securities purchases.

<sup>7</sup> Capital requirements for Fannie Mae and Freddie Mac have been suspended under the conservatorship.

dominance of the GSEs continues to demonstrate the difficulty for private institutions to effectively compete against them. Similarly, insurance provided by the FHA is priced largely on the basis of social goals rather than the underlying risk of the loans. Such pricing practices create a challenge for private mortgage insurers to break into some segments of the market.

- Moral hazard.* With investors believing that they have the federal government standing behind GSE liabilities and taxpayers providing insurance or guarantees on a large set of mortgage loans, moral hazard is inevitable. Prior to the crisis, the GSEs had leverage ratios of the order of 25 to 1, and their incentives for excessive risk taking likely contribute to moral hazard elsewhere in the system. This may manifest as less incentive to properly screen borrowers by loan originators or lack of due diligence by the final investors themselves (Berndt and Gupta, 2009; Keys et al., 2010; Ashcraft and Schuermann, 2008). Of course, frictions in securitization are also important, but the structure of the GSEs compounds the problem. Perhaps more strikingly, the GSEs have tremendous power in dictating evolving industry standards given their near-monopoly of the automated underwriting systems (Bubb and Kaufman, 2014)—which could actually be leveraged to set standards for prudential purposes.<sup>8</sup>
- Risks to public balance sheet.* The crisis starkly demonstrated that the implicit guarantee on the GSE liabilities carried a big risk to the public balance sheet. Although positive net worth from the GSEs is now accruing to the Treasury through senior preferred stock dividends, the current structure of housing finance continues to create significant contingent liabilities for the taxpayer that are potentially larger than the flow of profits that Fannie Mae and Freddie Mac generate.
- Costs of achieving social goals.* Housing affordability and homeownership rates in the U.S. are broadly in line with other OECD countries, but are achieved at a significantly higher cost in terms of implicit public subsidies (including through mortgage interest deductions in the personal income tax and the quasi-fiscal costs borne by the GSEs, chart 4).

4. Government Involvement and Homeownership



Source: Chapter 3 in April 2011 Global Financial Stability Report.

<sup>8</sup> In the aftermath of the crisis, risk-taking incentives are being contained through a range of constraints on loan quality, the tangible risk that loan originators will be forced to take back nonperforming loans onto their balance sheet (“put-back risk”), and possible reputation and litigation risks. However, this is not an efficient solution to the problem and has created a myriad of uncertainties and, consequently, a very limited availability of mortgage credit to borrowers without pristine credit history. Several steps taken in the past few years—finalization and harmonization of QM and QRM rules (see below), efforts to provide clarity of rules for agency loans, enhanced disclosure requirements, and new CFPB and FHFA rules for servicers and private mortgage insurers—aim to solve these issues in a more effective manner. But some have not been implemented and more remains to be done (including a new single GSE security).

Also, the benefits of these implicit fiscal costs for the most part accrue to the upper-income households (Poterba, 1992; Poterba and Sinai, 2008; Fischer and Huang, 2013; Hilber and Turner, 2014). From a financial stability perspective, social goals often get conflated with prudential goals and the subsidized pricing of risks leads to distorted incentives and increased risk taking. Availability of the 30-year fixed-rate mortgage loan with no prepayment penalty is often championed as a social goal, but there is little economic rationale for such a goal. Moreover, the prepayment risk is priced into the mortgage rate, making this product more costly for borrowers than alternatives, and MBS investors will not bear that risk without proper compensation.

**4. Reform of the GSEs, which remain in conservatorship, has stalled—generating uncertainty and complicating other policy initiatives.** Several legislative proposals have been introduced in Congress (Table 1), but momentum appears to have been lost amidst political disagreements on the details. In the meantime, the status of the GSEs creates uncertainties. For instance, the GSE-patch—which exempts loans purchased by the GSEs from the QM rule until January 10, 2021 or the end of conservatorship (whichever happens first)—affects how binding and effective QM will be. Another risk is that the move to a single security and common securitization platform in an environment of GSE dominance could increase the obstacles to restarting PLS by concentrating the standard-setting power Fannie Mae and Freddie Mac enjoy.

**5. However, there has been progress in building other components for a well-functioning housing finance system.** Spearheaded by Title XIV (Mortgage Reform and Anti-Predatory Lending) of the Dodd-Frank Act with an important role for the newly-established CFPB, this progress has involved actions by the FHFA and other agencies:

- *Ability to repay and QM:* The CFPB requires lenders to make a reasonable and good-faith determination, based on documented and verified information specified in the regulation, that the borrower can meet her payment obligations in connection with consumer credit transactions secured by a dwelling. In addition, a loan that meets certain criteria is deemed to be a Qualified Mortgage (QM) and enjoys special protections—a safe harbor for loans that are not higher-priced mortgages—from legal liability. These rules went into effect in January 2014.
- *Consumer protection:* A series of rules to curb abusive practices have been issued by the CFPB. These include loan originator compensation requirements, high-cost mortgage provisions (effective January 2014), and integration of mortgage disclosure requirements under RESPA and TILA (effective August 2015).
- *National mortgage servicing standards:* The CFPB servicing rules govern how servicers are to process payments, notify borrowers of interest rate changes, resolve errors, and provide monthly statements, among other servicing functions. It also establishes a highly detailed timeline for communicating with delinquent borrowers and processing loss mitigation applications.

Table 1. Legislative GSE Reform Proposals

	H.R. 2767 Protecting American Taxpayers and Homeowners Act of 2013 (PATH Act)	S. 1217 Housing Finance Reform and Taxpayer Protection Act of 2014 (Corker-Warner Bill, amended as Johnson-Crapo Bill)
Overall objective	End federal control of and privatize the housing finance system	A reduced, explicit role for federal government paid for by mortgage borrowers
Ultimate GSE footprint	Full phase-out of the GSEs within five years	Complete wind-down over five years
Path for GSE portfolio	GSEs put into receivership and their assets sold off	Cease issuance of new guarantees and other new business within five years after enactment, reduce portfolio at a rate of 15 percent per year in the interim
Risk sharing	Private sector bears full risk	Government backstop for catastrophic losses for MBS that meet statutory qualifications to be provided by a new entity—Federal Mortgage Insurance Corporation (FMIC), first-loss position no less than 10 percent
Infrastructure and role for a public utility	FHFA to establish and supervise the National Mortgage Market Utility—a nongovernment, nonprofit entity that develops standards for servicing, pooling, and securitizing and operates a securitization platform	FMIC to develop risk sharing mechanisms, oversee and supervise the Common Securitization Platform, and set standards for approved market participants
Rules on private sector activity	Establish rules and regulations for a covered bond market place, risk retention rules repealed, increased disclosure to investors, improved processes for investors to establish the right to act on a security, gradually reduced conforming loan limits, requirements for approved issuers, aggregators, and servicers	Specified criteria for "covered securities" and "eligible mortgages", conforming loan limits remain the same (FMIC has no power on these limits), requirements for approved guarantors, issuers, aggregators, servicers, and insurers, FMIC to establish and capitalize a mutually-owned company to facilitate access to secondary market by smaller lenders
Social goals	Limited to FHA and VA/RHS loans, FHA guarantee subject to tighter rules	Housing Trust Fund, Capital Magnet Fund, and Market Access Fund supported by fees on outstanding securities (average 10 basis points), FMIC to support the primary markets to ensure access to mortgage credit
Other government role (e.g., liquidity safety net)	FHLBs' mandate for community investment eliminated	FHLB supervision transferred from FHFA to FMIC

These have increased the emphasis on compliance in the servicing business. In addition, certain provisions create new borrower rights that are enforceable through a private right of action. These rules went into effect in January 2014.

- *Risk retention and QRM*: Regulators finalized the risk retention rule in October 2014 to implement Title IX of the Dodd-Frank Act, which also includes definition of a Qualified Residential Mortgage (QRM). The final rule exempts a covered transaction that is backed by pools consisting only of QRM loans from the 5-percent risk retention requirement (included in the Dodd-Frank Act for other securitization products). The QRM definition was aligned with the QM standard implemented earlier in 2014<sup>9</sup> and will be reviewed four years after it becomes effective (December 2015), and then every five years thereafter.
- *Credit rating agency reform*: CRAs play a crucial role in the securitization process by doing the due diligence and evaluating the quality of underlying assets in a pool of loans or securities. The crisis revealed deficiencies in CRA business models and their inherent conflicts of interest. The SEC issued new rules, as part of implementation of Title IX of the Dodd-Frank Act, in August 2014 to boost ratings quality and increase CRA accountability. The rules spell out what credit rating agencies should do to contain conflicts of interest including erecting strict boundaries between sales staff and employees that determine the ratings, having procedures to conduct look-back reviews, reviewing annually their internal controls and disclosing credit rating performance statistics. The rules became effective in late 2014 and January 2015.
- *FHFA actions*: Under the conservatorship, the agency has strengthened the regulatory oversight of GSEs, reduced their retained portfolio, promoted credit-risk sharing transactions (“Connecticut Avenue Securities” issued by Fannie Mae and the “Structured Agency Credit Risk” from Freddie Mac), provided clarity on reps and warrants, issued private mortgage insurance eligibility requirements, and has been working on a single security and common securitization platform.

## B. The Road Ahead

**6. A desirable end-point would be a hybrid public-private market.**<sup>10</sup> This option would balance the advantage of reducing costs and risks to the taxpayers with the desire to maintain a certain level of credit access and circumscribed government involvement. The components of such a system would include:

<sup>9</sup> Originally proposed QRM rules imposed a down payment requirement but this was dropped in the final version based on the determination that the benefits of aligning the rule with QM would outweigh the incremental benefit (e.g., in lowering default rates) of including an LTV in the rule.

<sup>10</sup> The 2010 U.S. FSAP called for a move toward a public-private model, in which the GSEs’ retained portfolios would be privatized and their social objectives and guarantee functions would be re-assigned to an explicitly public utility. Acharya et al (2011) conclude that neither a fully private nor a fully public model is preferable to a hybrid one. More details on the merits of alternative mortgage market structures including the hybrid model and transition issues related to different models are discussed in CBO (2010) and CBO (2014b).

- A public utility that builds on the existing infrastructure put together in the GSEs and the work already done by the FHFA during the conservatorship. Such a utility would leverage the government's role in the market (including via the GSEs) to support standardization and computerization of mortgage data and enforcement of prudential standards.
- Transformation of Fannie Mae and Freddie Mac into an entity with a smaller footprint by reducing the scope of loans eligible for GSE securitization, shifting risk to private investors, and undertaking their remaining operations on a level playing field with other large, interconnected financial institutions. To move to this downsized role, the current investment portfolio would need to be sold off gradually.<sup>11</sup>
- A sizeable first-loss risk that is borne by private capital. This would require implementation and diligent enforcement of sound, clear rules for all participants in the mortgage business, from origination to credit enhancement to servicing.
- An explicit government backstop—funded by risk-based guarantee fees and strictly limited to catastrophic events—so as to support the system and maintain access to credit during times of crisis. This provision is included on the basis that, pragmatically, refusing any public backstop in a crisis would not be credible.<sup>12</sup> Making the backstop explicit would at least allow pricing of this insurance and appropriate accounting in the public balance sheet.
- Social housing goals (linked to homeownership rates and access to credit by low-income and low-net-worth families) separated from public interventions that are aimed at ensuring a liquid and well-functioning mortgage market. With an explicit and transparent accounting of the costs of pursuing those social objectives, policymakers could make a clear choice on the fiscal trade-offs in promoting homeownership and affordable housing.
- Reduced cross-subsidization through the proper pricing of and separate charging of the prepayment provision in fixed-rate mortgages.<sup>13</sup>

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<sup>11</sup> Note that selling off the investment portfolio is required under the Senior Preferred Stock Purchase Agreement with the Treasury and the GSEs' portfolios have been declining since 2009.

<sup>12</sup> This is perhaps particularly in the United States, where mortgage markets are deeply interconnected with the rest of the financial system. But lack of a credible commitment may apply more generally given the distinct features of housing and mortgage markets that generate strong macro-financial linkages and social perceptions attached to housing, in comparison to other asset markets and financial system activities.

<sup>13</sup> The GSEs tend to cross-subsidize higher-risk loans by charging higher guarantee fees on lower-risk loans. Specifically, high-risk mortgage pools that contain mortgages with longer maturity, no prepayment penalties, high loan-to-value ratios, and worse borrower credit scores get charged lower guarantee fees than they would otherwise pay based solely on the pool's risk profile.

**7. While there is a legitimate reason for wanting to preserve the to-be-announced (TBA) market, the need for a 30-year pre-payable FRM is less clear-cut.**<sup>14</sup> There is little evidence that the 30-year FRM raises the utility of households or insulates them from interest rate volatility. In fact, the average household holds their 30-year mortgage for only about 6–7 years and pays a duration premium in doing so (relative to obtaining a 15-year FRM or an ARM). Although uncertain, analysis suggests that this mortgage product could survive, albeit possibly with a higher cost, even in the absence of a public subsidy (Fuster and Vickery, 2012). Serious consideration should be given to ending cross-subsidization and making the pricing of the fixed-rate prepayment option explicit to the borrower.

**8. Further actions are needed in some areas to address the weaknesses revealed during the crisis.** PLS needs to be revived if securitization is to remain the main funding source and taxpayer support is to be reduced. Adjustment to new regulations and rebuilding of confidence in the market will inevitably take some time but there are steps that can be taken to expedite the return of PLS:

- *Dealing with legacies.* While foreclosures and delinquencies have decreased significantly, there are still some legacy loans. For instance, Bank of America still has assets from its 2008 acquisition of Countrywide Financial and estimates that it will get back to a “normal level of delinquent loans” only by 2016. The process of moving these loans through the pipeline (through sale, restructuring, or foreclosure) has been slow. Reducing litigation risks (e.g., by expediting remaining PLS cases and settlements through the courts) and expediting loan workouts would help.
- *Put-back risk* has been a widely-quoted reason for banks’ reluctance to get back in the mortgage origination and securitization business. Lack of transparency on repurchase exposure and liability has led to stringent credit overlays. The FHFA has taken several steps since 2012 to provide clarity and relief by offering sunsets (Table 2). While lenders continued to express concern after the early attempts, there is some nascent evidence that the most recent clarifications may be helping. Other possible actions may include a shortening of the current three-year sunset period (most underwriting errors will be detected soon after origination) and

<sup>14</sup> More than 90 percent of agency MBS trading volume occurs in the forward market, which is known as the TBA (to-be-announced) market. In a TBA trade, the seller of MBS agrees to a sale price, but does not specify which particular securities will be delivered to the buyer on settlement day. Instead, only a few basic characteristics of the securities are agreed upon, such as the coupon rate, the issuer, and the approximate face value of the bonds to be delivered. The TBA market improves market functioning by providing liquidity and helps lenders manage risk by allowing them to lock in sale prices for new loans as, or even before, these loans are originated (Vickery and Wright, 2013). Benefits of the TBA market are higher for smaller lenders and disruptions to this market may lead to further concentration in the mortgage market. There is no obvious reason to think that a liquid TBA market is not compatible with a reformed housing finance system with a smaller GSE footprint. Actually, the TBA market is predicated on the pools of mortgages delivered being fungible—which may require a government guarantee—but it cannot accommodate multi-class MBS well—which limits the types of risk transfers that the FHFA can implement. Transition issues would involve standardization of documentation, underwriting, and structuring (and, if private sector involvement is desired, an amendment to securities law—exemption to disclosure rules would be necessary for private actors to be able to participate and enhance competition).

providing alternative dispute resolution processes and cure mechanisms for non-material mistakes and lower-severity defects that do not directly affect mortgage default probability (FHFA is already considering such options).

Relief Criteria	September 2012	May 2014	November 2014
Effective for mortgages sold...	On and after January 1, 2013 and before July 1, 2014	On and after July 1, 2014	Life-of-loan exclusion changes retroactive to those sold on or after January 1, 2013
Number of required consecutive monthly payments after the Enterprise settlement date	36	36	36
Number of delinquencies permitted	0 a/	2 b/	2 b/
Eligible for relief after quality control review passed?	No	Yes	Yes
Automatic repurchases for PMI rescissions	Yes	No	No
Life-of-loan exclusions	Yes	Yes	Clearly defined c/
a/ Opportunity to re-establish acceptable history as of the 60th payment, provided that there were no more than 2 delinquencies of 30 days or less in the first 36 months and the 60th payment is not delinquent.			
b/ Delinquencies have to be for 30 days or less and the 36th payment cannot be delinquent.			
c/ Exclusions fall into six categories (misrepresentations, misstatements, and omissions; data inaccuracies; charter compliance issues; first-lien priority and title matters; legal compliance violations; unacceptable mortgage products). Also established is a minimum number of loans that must be identified with misrepresentations and data inaccuracies to trigger the exclusion.			

**9. While legislative action to establish such a system is being contemplated, a great deal can be achieved through administrative actions.** These actions—some of which FHFA has started to implement—include:

- Undertaking a more significant shift of credit risk to private investors through an expansion of credit-risk sharing transactions and implementing up-front risk sharing operations as well as back-end risk sharing transactions;<sup>15</sup>
- Ensuring the guarantees provided by the government are appropriately priced and aligned with the underlying risk;<sup>16</sup>
- Reducing the conforming loan limits so as to encourage banks to hold more assets on balance sheets or to tap into private forms of securitization;

<sup>15</sup> The current FHFA strategic plan calls for risk sharing transactions where private capital enters the picture after the loans are sold to the GSEs (“back-end risk sharing”). Allowing credit risk sharing transactions to take place before the loans are sold would create another (possibly wider) door for private capital to get into the secondary market. These transactions may also create incentives for lenders to look for credit enhancement before the loans are brought to the GSEs and for private mortgage insurers to compete for this business.

<sup>16</sup> In 2014, the FHFA issued a request for comments on how the guarantee fees should be determined. The calculations crucially depend on the treatment of capital, necessitating consideration of capital requirements to be imposed on the GSEs. Based on the comments received, adjustments to guarantee fees were announced in April 2015 but these were minimal and slightly lowered the fees for riskier borrowers.

- Bringing the prudential standards for the (smaller) GSEs closer to that for other large, interconnected financial institutions;<sup>17</sup>
- Moving toward a common securitization platform and data infrastructure for standardization of loan application and closing processes;<sup>18</sup>
- Setting clear and common underwriting, credit-risk mitigation, and servicing standards (based on the QM and QRM rules and the work done on private mortgage insurer eligibility requirements and regulatory guidelines for servicers);
- Explicitly account for and provide direct subsidies to support access to affordable housing (including rentals).<sup>19</sup>

### C. Financial Stability Considerations

#### 10. Emerging risks—including those from unpredictable reactions to a changing regulatory environment—should be monitored carefully. In particular:

- *The interaction of new regulations has been changing the mortgage business and new safeguards may be needed with respect to nonbank originators or specialized mortgage servicers.* For instance, there has been a notable increase in nonbanks' share of mortgage originations as banks have moved away from certain mortgage market segments. Similarly, the increased regulatory burden and legal liabilities associated with the CFPB's new servicing rules, combined with Basel III's capital treatment of mortgage servicing assets, appears to be resulting in consolidation in the servicing industry and a shift of assets to nonbank servicers. As a result, more banks now elect to sell mortgages into the secondary market "servicing released" or to divest their servicing portfolios. Still other servicers opt to employ sub-servicers or component servicers to improve the economic value of their servicing rights. These developments will need to be monitored closely to ensure that risks remain contained. The FHFA has started work on revision and alignment of servicer eligibility requirements. Actions by other agencies may be necessary given the complexity of the regulation of nonbank entities. As such, coordination across multiple regulators and agencies will be crucial. In this regard, regular stress testing of the

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<sup>17</sup> Tax treatment of the GSEs should also be changed to remove their advantages but this would require legislative action by Congress.

<sup>18</sup> This also involves operationally aligning Fannie Mae and Freddie Mac, ultimately creating a single security and improving liquidity. In August 2014, the FHFA issued a proposal for a single security structure. Together with the ongoing work on the CSP, the aim should be maintaining a well-functioning TBA market, realizing efficiency gains from the consolidation of Fannie Mae and Freddie Mac systems, and preparing the infrastructure for private issuer use at a later stage.

<sup>19</sup> More fundamentally, it is important to remove the range of incentives embedded in the tax system for debt-financed homeownership but this would also require legislative action.

GSEs, with the results publicly disseminated, may prove a valuable exercise in understanding and mitigating potential emerging risks.<sup>20</sup>

- *Greater clarity is needed in the mortgage insurance market.* The role to be played by private mortgage insurers in a reformed system requires them to hold sufficient capital and liquid assets to meet obligations under a stress scenario. Currently, there is very limited capacity in private mortgage insurers: only 3 percent of the entire insurance industry is for mortgage guarantees (7 companies). While the capital requirement for mortgage insurers is a risk-in-force-to-capital ratio of not more than 25 to 1, the industry is under pressure from various directions, including ratings agencies and potential new regulations. FHFA has just issued revised private mortgage insurer eligibility requirements: they will come into effect on December 31, 2015 and insurers will face the prospects of raising capital reserves to meet the new requirements ahead of a March 1, 2016 deadline to certify their compliance. NAIC formed a working group to introduce risk-based capital requirements for mortgage insurers.<sup>21</sup> Effects of these new and upcoming regulations need to be monitored carefully, given that the complex system is prone to regulatory arbitrage, and stress tests should be conducted to ensure that the insurers remain well capitalized as the market conditions evolve.
- *Regular revisiting of the QM and QRM rules.* Finalization of QM and QRM rules is welcome and has helped move the industry away from the certain risky practices of the past (e.g., low-doc loans). However, these restrictions are untested and a regular reassessment of the design of these rules should take into account evolving standards and practices in underwriting and securitization. There is an important role for the FSOC to play here analyzing the possible use of QM and QRM for macroprudential purposes across a range of agencies. Some thought should also be given to whether other tools, such as LTV requirements, may be useful and (if so) how they would be operationalized.

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<sup>20</sup> These tests are required under the Dodd-Frank Act and the results are published annually.

<sup>21</sup> The limited ability of private mortgage insurers to meet any increase in demand also raises concern that the increased demand may be channeled to the reinsurance industry.

## References

- Acharya, Viral, Matthew Richardson, Stijn Van Nieuwerburgh, and Lawrence White, 2011, *Guaranteed to Fail: Fannie Mae, Freddie Mac, and the Debacle of Mortgage Finance*, Princeton University Press.
- Ashcraft, Adam B. and Til Schuermann, 2008, "Understanding the Securitization of Subprime Mortgage Credit," Federal Reserve Bank of New York Staff Report No. 318.
- Bai, Bing and Laurie Goodman, 2014, "The Re-Emerging Dominance of Private Mortgage Insurers," Urban Institute MetroTrends Blog, March 18.
- Berndt, Antje and Anurag Gupta, 2009, "Moral Hazard and Adverse Selection in the Originate-to-Distribute Model of Bank Credit," *Journal of Monetary Economics*, 56 (5) 725–743.
- Bratt, Rachel, 2002, "Housing and Family Wellbeing," *Housing Studies*, 17 (1), 13–26.
- Bubb, Ryan and Alex Kaufman, 2014, "Securitization and Moral Hazard: Evidence from Credit Score Cutoff Rules," *Journal of Monetary Economics*, 63 (April), 1–18.
- Calza, A., T. Monacelli, and L. Stracca, 2013, "Housing Finance and Monetary Policy," *Journal of the European Economic Association*, 11, 101–122.
- Campbell, John Y. and Joao F. Cocco, 2003, "Household Risk Management and Optimal Mortgage Choice," *Quarterly Journal of Economics*, 118, 1449–1494.
- Campbell, John Y. and Joao F. Cocco, 2011, "A Model of Mortgage Default," NBER Working Paper No. 17516.
- CBO, 2010, "Fannie Mae, Freddie Mac, and the Federal Role in the Secondary Mortgage Market," Publication # 4021.
- CBO, 2014a, "Federal Programs that Guarantee Mortgages," Publication # 43882.
- CBO, 2014b, "Transitioning to Alternative Structures for Housing Finance," Publication # 49765.
- Congressional Hearing on "Housing Finance—What Should the New System be able to Do?" before the House Committee on Financial Services, March 23, 2010.  
<http://financialservices.house.gov/Media/file/hearings/111/Printed%20Hearings/111-115.pdf>
- Congressional Hearing on "Public Proposals for the Future of the Housing Finance System" before the Senate Banking Committee, March 29, 2011.  
[http://banking.senate.gov/public/index.cfm?FuseAction=Hearings.Hearing&Hearing\\_ID=2b23a783-35ff-43f3-8b43-ad4b16e1b3cc](http://banking.senate.gov/public/index.cfm?FuseAction=Hearings.Hearing&Hearing_ID=2b23a783-35ff-43f3-8b43-ad4b16e1b3cc)

- Coulson, Edward and Herman Li, 2013, "Measuring the External Benefits of Homeownership," *Journal of Urban Economics*, 77 (September), 57–67.
- Ellen, Ingrid Gould, John Napier Tye, and Mark A. Willis, 2010, "Improving U.S. Housing Finance through Reform of Fannie Mae and Freddie Mac: Assessing the Options," NYU Furman Center for Real Estate and Urban Policy, May.
- Fischer, Will and Chye-Ching Huang, 2013, "Mortgage Interest Deduction is Ripe for Reform," CBPP blog, June 25.
- Fuster, Andreas and James Vickery, 2012, "Securitization and the Fixed-Rate Mortgage," Federal Reserve Bank of New York Staff Report No. 594.
- Fuster, Andreas, Laurie Goodman, David Lucca, Laurel Madar, Linsey Molloy, and Paul Willen, 2013, "The Rising Gap Between Primary and Secondary Mortgage Rates," Federal Reserve Bank of New York *Economic Policy Review*, December, 17–39.
- GAO, 2014, "Housing Finance System: A Framework for Assessing Potential Changes," Report No. 15-131.
- Harney, Kenneth, 2014, "Easing Credit-Score Rules Might be a Low-Risk Way to Expand the Pool of Home Buyers," *Washington Post*, May 10.
- Hilber, Christian and Tracy Turner, 2014, "The Mortgage Interest Deduction and its Impact on Homeownership Decisions," *Review of Economics and Statistics*, 96 (4), 618–637.
- Keys, Benjamin, Tanmoy Mukherjee, Amit Seru, and Vikrant Vig, 2010, "Did Securitization Lead to Lax Screening? Evidence from Subprime Loans," *Quarterly Journal of Economics*, 125 (1), 307–362.
- Moe, Ronald C. and Thomas H. Stanton, "Government-Sponsored Enterprises as Federal Instrumentalities: Reconciling Private Management with Public Accountability," *Public Administration Review*, vol. 49, July/August 1989, p. 321.
- Poterba, James, 1992, "Taxation and Housing: Old Questions, New Answers," *American Economic Review*, 82 (May), 237–242.
- Poterba, James and Todd Sinai, 2008, "Tax Expenditures for Owner-Occupied Housing: Deductions for Property Taxes and Mortgage Interest and the Exclusion of Imputed Rental Income," *American Economic Review*, 98 (2), 84–89.
- Vickery, James and Joshua Wright, 2013, "TBA Trading and Liquidity in the Agency MBS Market," Federal Reserve Bank of New York *Economic Policy Review*, May, 1–18.