HOUSING FINANCE REFORM

These abstracts were adapted from chapters of an upcoming book edited by Susan Wachter and Joseph Tracy, **Housing Finance Reform: Principles of Stability,** (anticipated publication date: Spring 2016). The chapters lay out a roadmap for reforms to achieve the goals of liquidity, stability, access and sustainability. They represent some of the best thinking by policy researchers and economic experts to the challenges that lie ahead for the rebuilding of this key sector of our nation's economy. For more information visit www.upenn.edu/pennpress/series/C21.html.

Legislative Approaches to Housing Finance Reform

David Scharfstein and Phillip Swagel

By the standards of the contemporary American political system, proposals to reform the U.S. housing finance system moved relatively far through the legislative process in 2013 and 2014. Prospects for housing finance reform faded in 2015, with Fannie Mae and Freddie Mac—the two firms that purchase mortgages and bundle them into securities with a guarantee—now likely to remain in government control with an explicit government backstop into the foreseeable future. Nonetheless, the debate over the proposals considered in 2013 and 2014 and changes in the two firms since the crisis will inform future reform efforts.

All reform proposals included some government guarantee on mortgages, though with considerable variation in the scope of the government backing and the extent to which private capital would be exposed to housing credit losses. One approach from Representative Jeb Hensarling (R-Texas) of the House Financial Services Committee limited government guarantees to low income families and first time home buyers in normal market conditions, while allowing greater government involvement in a financial disruption. An alternative approach, which was embodied in bipartisan legislation proposed by Senators Bob Corker (R-Tennessee) and Mark Warner (D-Virginia) and a subsequent bill proposed by Senators Tim Johnson (D-South Dakota) and Mike Crapo (R-Idaho), made taxpayer-backed mortgages more widely available, while requiring private investors to bear a specified share of credit losses ahead of a secondary government guarantee. A motivating factor for this type of proposal was the belief that policymakers would intervene in a future crisis, and that a proposal that claimed to abolish government support for housing would instead inadvertently recreate the implicit guarantee. A further motivation for providing a government guarantee at all times was the belief that this was necessary to maintain liquidity in the market for mortgage backed securities, and that such liquidity would ultimately benefit borrowers. Whether such a broad guarantee is necessary for a well-functioning housing finance market remains a topic of some debate, even though it is a likely outcome of future reform efforts.

This paper focuses on analyzing key features of the Johnson-Crapo legislation, which was voted out of the Senate Banking Committee but not brought to the floor of the Senate for further consideration. The legislation allowed entry of multiple firms who would provide 10 percent first-loss private capital ahead of government guarantee, although this capital requirement could be reduced in periods of stress to the financial system. The authors discuss the economic considerations in determining these features of the legislation — the extent of competition, the sizing of the private capital buffer, the pricing of the government guarantee, and the role of countercyclical capital buffers. The most contentious design issue was the magnitude of first loss private capital level, which centered on the question of how much capital is needed to protect taxpayers and whether a robust private capital buffer would make mortgages excessively costly even with a government guarantee for the tail risk. Competing proposals thus sought to reduce the magnitude of the private capital buffer. Ultimately, legislative proposals considered in 2013 and 2014 did not move forward to enactment, in large part because of a gulf between the competing goals of ensuring broad mortgage access and limiting government involvement in mortgage markets.

Although legislative reform efforts remain at a standstill and the housing finance system remains dominated by the government, the housing finance system is evolving. Fannie Mae and Freddie Mac are selling off some of their credit risk to private investors through so-called "risk transfer transactions." Moreover, a common securitization platform being developed by the two firms under government direction has the potential to increase competition and thus liquidity for mortgage-backed securities. The housing finance system could evolve further with such changes, possibly in directions that are acceptable to both sides of the debate, even while the prospects for comprehensive housing finance reform legislation remain challenging.

The Capital and Governance of a Mortgage Securitization Utility

PATRICIA C. MOSSER, JOSEPH TRACY, AND JOSHUA WRIGHT

The authors examine the capital structure, governance and regulation of a mortgage-insuring securitization utility with government reinsurance for systemic risk. The proposed utility would adopt a lender-owned cooperative model with a vintage-based capital structure for the government guarantee, as well as separate handling of affordable housing programs. This model preserves the liquidity benefits of the TBA market and the cost efficiencies from standardization. The paper addresses these issues and incorporates other elements of the housing finance reform debate in four sections: Systemic Risk and Government Reinsurance, Vintage-Based Capital Structure, Pricing the Guarantee Fee and Building Capital, and Ownership and Governance.

Systemic Risk and Government Reinsurance

The authors review three broad options outlined in a Department of Housing and Urban Development and Department of Treasury white paper for the future of the mortgage market—privatization, a counter-cyclical government backstop, and government reinsurance for systemic risk—and dismiss the first, which entails the government pledging not to intervene in the housing market, as not credible, arguing instead for an explicit priced government backstop with clear terms for intervention. They also argue that the risks to taxpayers may be much higher from an unpriced implicit backstop rather than a well-designed, explicit and priced government tail-risk guarantee for private lending.

Vintage-Based Capital Structure

The authors outline advantages of a vintage-based capital structure as 1) triggering only in systemic housing events; 2) preserving the capacity to continue credit supply after a systemic shock; and 3) offering a clear plan for government exit. Losses would be covered by same-year fees, and the government would pay reinsurance only if systemic losses exhaust the mutualized pool for the given vintage. The paper lays out the many nuances of the vintage-based capital system, such as minimum loss-absorption capital and seeding of new vintages.

Pricing the Guarantee Fee and Building Capital

Pricing the reinsurance and identifying an appropriate attachment point that balances tail risk and credibility as an insurance program is a challenge. The authors illustrate the relationships among capital and other factors related to the utility's g-fees and the government's reinsurance fee, and suggest that the utility restrict its lending to prime borrowers and that the utility's maximum combined LTV be enforced by the lender by restricting the allowed leverage by second liens. The authors present a table with several scenarios and associated g-fees, conduct a sensitivity analysis to illustrate the dynamic nature of the required capital and expected return, and conclude that the structure would be unlikely to result in significantly higher mortgage rates.

TABLE 2.1: SCENARIO ANALYSIS

Assumptions					
	No Reinsur.	**3% Capital**	4% Capital	15% ROE	50 Years
Total loss in tail event	6%	**6%**	6%	6%	6%
Required private capital	6%	**3%**	4%	3%	3%
Expected return on capital	10%	**10%**	10%	15%	10%
Period between tail events	30 years	**30 years**	30 years	30 years	50 years
After-tax interest income	2%				
Tax rate	35%				

Fee Breakdown (basis points / year)					
	No Reinsur.	3% Capital	4% Capital	15% ROE	50 Years
Expected Losses	10				
Admin. Cost	10				
Reinsurance Fee	0	10	6	10	6
Net Income	75	37	50	60	37
Guarantee Fee	**94**	**67**	**76**	**90**	**63**

Ownership and Governance

The mutualization of ownership and risk is a key aspect of the plan. The authors review other examples of cooperatives, clearinghouses, and central counterparties to underscore the benefits of such a model in mutualizing mortgage securitization. One principal advantage is the vertical integration that aligns incentives of lenders and the securitization entity, which would mitigate the "race to the bottom" dynamic where underwriting standards are lowered during boom times. Others include the weaker profit motive and the lower risk profile associated with a narrow mission.

Macroprudential Mortgage-Backed Securitization: Can It Work?

Diana Hancock and Wayne Passmore

This paper considers the feasibility of structuring hybrid mortgage securitizations—where private capital would typically bear mortgage default losses and the government would only provide catastrophic reinsurance—with macro-prudential features that would vary over the real estate cycle. The authors note that over 90 percent of residential mortgage backed security issuance is currently government-backed, and examine the feasibility of structuring hybrid mortgage securitizations with macro-prudential features that would vary over the real estate cycle. The three principal questions from a financial stability perspective: how to set the guarantee fee when the private sector holds the first-loss position with a government backstop; how much mortgage credit risk the private sector should bear before the government guarantee; and under what conditions hybrid securitization is financially viable. Using data collected over the recent U.S. residential real estate boom and bust, the authors show that hybrid securitizations with actuarially-priced government-backed catastrophic insurance and first-loss capital requirements born by the private-sector would likely not have mitigated the effects of losses on mortgage loans during the recent financial crisis. If policymakers want to both retain the ubiquity of the 30-year fixed-rate mortgage in the U.S. and build a sufficiently large private-sector insurance fund to ensure that the government is only "on the hook" for mortgage losses when there is a catastrophic outcome, then the government may need to require that all mortgages, whether securitized privately or through a government-backed program, be insured against catastrophic risk.

Preserving the TBA Market

Akash Kanojia and Meghan Grant

The vast majority of MBS trading volume takes place in what is known as the "to-be-announced," or TBA, market. The advantages that the TBA market brings to the market include the liquidity provided by the second-largest (by volume of trades) market in the U.S. after Treasuries. Due to this market, lenders are able to hedge the interest rate risk that they are exposed to during the warehousing period at low cost and not shift this risk to borrowers, who otherwise would not know the cost of their mortgage until the day of closing. Most importantly, the TBA market allows "rate" investors who are best able to manage interest rate risk to take on this function while only requiring them to estimate prepayment risk and not credit risk. Any credit risk at all would make such investments more costly from the perspective of investors and therefore to borrowers as well. Moreover, even the provision of guarantees by the federal government does not in itself deliver the liquidity which drives low costs for the borrower rate lock option, and low interest rate risk management costs. In its current form, the TBA market's liquidity and depth rest on a combination of the risk-free nature of Agency MBS and the concept of the cheapest-to-deliver security, the cheapest security that can be delivered to satisfy the contract specifications. Effectively, the CTD and the government guarantee together turn a credit market into a rates market similar to U.S. Treasuries.

Going forward there is a proposal to create a new single-security TBA contract into which Fannie and Freddie MBS can be delivered. Under the current proposal, the FHFA aims to harmonize the characteristics of the two GSE mortgage-backed securities in a way that would make investors economically indifferent between the two. Since both Fannie and Freddie securities would be deliverable into an single security TBA trade, this would likely lead to compression in the Fannie Mae/Freddie Mac price spread unless significant prepayment differences materialize between the two agencies' mortgage collateral. Further, the GSEs plan to create re-securitization programs that would allow an investor to take a Freddie Mac bond and have it re-wrapped into a Fannie Mae security, or vice-versa. This option would allow investors to choose which GSE they wish to face from a credit protection standpoint.

Ultimately, any reform effort that seeks to replace the Fannie Mae-Freddie Mac duopoly with a new set of mortgage guarantors will also need to consider the underlying characteristics of the securities produced by these guarantors. If policymakers envision the future state of secondary market trading as revolving around a single TBA contract, each guarantor's TBA-eligible securities will need to have similar designs in order to avoid fragmentation of the cheapest-to-deliver cohort. In a multiple-guarantor world, some overarching entity would need to ensure that each guarantor's security design does not meaningfully differ from its peers.

The Once and Future Federal Housing Administration

Kevin A. Park and Roberto G. Quercia

The Federal Housing Administration (FHA) was created in 1934 to insure mortgage lenders against credit losses. In the 20th century, FHA was instrumental in popularizing the long-term, fixed-rate, self-amortizing home mortgage that continues to dominate the American housing finance system. In doing so, FHA contributed to making homeownership an achievable part of the American Dream for the middle class. But by the turn of the millennium, FHA was seen as a vestigial part of the American housing finance system—a relic of the New Deal that had helped fight the Great Depression but was antiquated in the modern era. FHA was relegated to a niche market of under served borrowers, primarily first-time home buyers and minority households with limited wealth for a down payment.

The financial turmoil of the Great Recession demonstrated the value of an explicit government guarantee and thrust FHA back into prominence in the mortgage market. Without FHA insurance, the downturn in the housing market would have been deeper and recovery weaker. However, the Mutual Mortgage Insurance Fund that finances FHA's mortgage insurance program incurred substantial losses from this counter-cyclical function. In September 2013, the Federal Housing Administration was forced to draw on the U.S. Treasury to cover credit losses on its single-family mortgage insurance program for the first time in its history.

FHA faces a difficult task of safeguarding the financial soundness of the Mutual Mortgage Insurance Fund with the public purpose of ensuring access to mortgage credit. In recent years, FHA has adopted several policy changes aimed at shoring up its capital resources, including raising premiums and tightening underwriting standards. These reforms have substantially increased the credit quality of recent books of business, leading to lower claims and greater economic value but have possibly contributed to the weakness in the housing recovery.

Opinions on the proper role of government in the housing market are manifested in debates over how FHA should price its mortgage insurance premiums and how the net present value of future revenues and losses should be estimated. FHA's appropriate level of risk and capital is debatable, but given its current average risk pricing structure, premiums set too high will lead to adverse selection, leaving FHA with an insurance pool of disproportionately higher risk borrowers. Critics that want to "crowd in" private capital see this as a feature designed to return FHA to the niche market it served a decade ago.

Yet much of the growth in demand for mortgage credit is projected to come from market segments disproportionately served by FHA. The Baby Boom generation can use FHA's reverse mortgage program to unlock home equity for retirement. Meanwhile, racial and ethnic minorities that have traditionally relied on FHA insurance are projected to account for the majority of household formation and future home buyers.

Reforms for a System That Works: Multifamily Housing Finance

Mark A. Willis and John Griffith

In this paper, the authors examine the important role multifamily housing plays in ensuring a healthy rental market and explain the many sources of capital and liquidity in the multifamily market today. The paper focuses primarily on the roles played by Fannie Mae and Freddie Mac (collectively the Enterprises) in the multifamily housing finance system, including: 1) providing countercyclical support to the rental market by funding new mortgages throughout the business cycle; 2) offering longer term mortgages than generally available from banks; and 3) ensuring that the vast majority of the mortgages they fund offer rents affordable to low and moderate income households. The Enterprises currently own or guarantee almost one-third of roughly $1 trillion in residential multifamily mortgage debt outstanding in the U.S.

The authors offer an approach to improving the multifamily system as part of a broader housing finance reform effort, based on lessons learned from the most recent housing crisis and analysis of the challenges posed by the government's involvement in the financing of multifamily mortgages. These challenges include: 1) the risk of moral hazard, 2) crowding out private capital; and 3) political pressure to lower underwriting standards. The authors argue that, despite problems in the single-family market during the crisis, the multifamily housing finance system worked relatively well in providing liquidity and stability without generating costs to taxpayers. Given that fact, the primary goal in multifamily reform must be to "do no harm" while improving the system's shortcomings.

In order to strengthen the multifamily housing finance system, the authors offer three recommendations for reform. First, the government guarantee should be made explicit, priced, separated from the Enterprises, and more widely available to other entities that may want to enter the market. Second, the current multifamily businesses at the Enterprises should be spun off into independent entities, allowing them to continue to serve the market while promoting more competition in the market. Third, any entity with access to the government guarantee should have minimum requirements to fund affordable housing projects, with a focus on segments of the market that tend to be ignored or under served by private capital. In addition to such a requirement, a portion of the entity's profits from access to low-cost capital could be directed to programs dedicated to expanding access to affordable rental housing, such as the National Housing Trust Fund and the Capital Magnet Fund.

Finally, the authors argue that any further steps to meaningfully reform the multifamily finance system should be tested carefully before they are carried out at scale. The authors propose a way to test only a small subset of the market at a time by increasing the guarantee fee on, for example, mortgages for properties that serve higher-income households, to see how high the price will have to go before the private market is ready to replace the role played by the Enterprises. In this way policymakers can assess what the impact would be on both the price and the product mix if the Enterprises were simply to stop serving that submarket.

The Federal Home Loan Bank System and U.S. Housing Finance

W. Scott Frame

The Federal Home Loan Bank (FHLB) System is a government-sponsored enterprise (GSE) comprised of 12 regional wholesale FHLBs and an Office of Finance that acts as their portal to the capital markets. Each of the 12 FHLBs is cooperatively owned and together they have over 7,500 member financial institutions, about two-thirds of which are commercial banks.

The mission of the FHLB System is to provide member financial institutions with financial products and services that assist and enhance the financing of housing and community lending. Since its creation in 1932, the principal way in which FHLBs achieved this mission was by making collateralized loans, known as "advances," that are secured by members' residential mortgage loans and securities. Advances, in turn, are largely funded by consolidated debt obligations that benefit from a market perception of an implied federal guarantee owing to the FHLB System's GSE status.

Despite its name, size, and principal activities, the FHLB System today actually provides little targeted support to the U.S. housing finance system. For more than 50 years, the FHLB membership was limited to mortgage-focused institutions, particularly thrifts and insurance companies. By limiting FHLB membership and acceptable collateral, the Congress was largely able to direct FHLB System benefits to the housing finance sector. But following the 1980s thrift crisis, Congress expanded FHLB membership to include more diversified depository institutions (commercial banks and credit unions). Such institutions can pledge eligible mortgage-related collateral to obtain an advance that, in turn, may fund virtually any type of financial asset. Hence, FHLB membership liberalization broke the relatively tight link between FHLB advances and member collateral that historically ensured that much of the GSE benefits flowed, as intended, to support residential mortgage finance. This paper summarizes research that is consistent with the FHLB System acting as a general source of liquidity to commercial banks of all sizes – most notably during the recent financial crisis.

FHLB System investment in mortgage-backed securities and whole mortgages are directly tied to housing finance. However, most of these assets are widely traded in global capital markets and the FHLBs are no more special investors than their large commercial bank members or the other two housing GSEs (Fannie Mae and Freddie Mac). Put differently, if FHLB investment portfolios did not exist, there would not likely be a noticeable impact on residential mortgage markets. Moreover, these investment portfolios have also caused material risk management problems at some FHLBs over the past decade. The FHLBs are required to operate affordable housing programs, which do provide targeted support for housing. However, this funding is very modest relative to the size of the FHLB System.

Today, the FHLB System acts as a subsidized source of wholesale liquidity for members. While Congress has expressly authorized such activity for "community financial institutions," the reality is that the vast majority of FHLB lending (and associated benefits) flows to the very largest U.S. banking organizations. Such institutions do not need FHLB access as they can issue in public debt markets and, in times of turmoil, borrow from the Federal Reserve's Discount Window.

The Significance and Design of a National Residential Mortgage Note Registry

STEPHANIE HELLER AND DALE WHITMAN

The right to enforce a residential mortgage note and the related mortgage is critical to the proper functioning of the mortgage market. Holders of such a note must have recourse to foreclose on the property in the event of default. Without this right, there would be no residential mortgage market; residential mortgage debt would be indistinguishable from other consumer debt, which would be far more expensive to the borrower and would not allow for the affordable financing of home ownership.

Prior to the crisis in the residential mortgage industry it would have been uncommon to see significant debate in the legal community as to "who is entitled to enforce a residential mortgage note?" and even more surprising to see debate as to whether the party initiating a foreclosure had the right to do so.

No one really worried about whether residential mortgage notes or mortgages themselves were "enforceable" or whether the holder of such notes had the special status of a "holder in due course." However, since the beginning of the financial crisis, these questions have been routinely litigated, and weaknesses in the legal framework supporting the current paper-based legal infrastructure governing residential mortgage notes have become visible everywhere. This paper briefly surveys the ways in which the antiquated paper-based legal infrastructure governing residential mortgages contributed to the crisis in the residential mortgage market.

The legal formalities of current law render the transfer of ownership of mortgage notes and their enforcement burdensome, prone to error, and productive of costly litigation. Adding to the current legal complexity is the fact that there are several different laws that all could apply to questions concerning enforcement of a mortgage note and the related mortgage and that at times may be somewhat in tension.

The authors suggest legislation establishing an electronic national residential mortgage note registry, analogous to the national securities repository system, as a means of addressing these shortcomings. This proposed national residential mortgage note registry would transform the paper-based mortgage note transfer system into an electronic system where paper mortgage notes are converted to digital form and transferred in the secondary market through electronic entries on the registry. The authors believe that such a system could make secondary market transfers more efficient for buyers and sellers and more transparent to consumers. The authors discuss how to best design such legislation to respond to the lessons of the recent crisis and to minimize interference with local commercial and real estate law and practice.

Informed Securitization

SUSAN WACHTER

The placement in conservatorship of Fannie Mae and Freddie Mac on September 6, 2008, in the aftermath of the Global Financial Crisis has created a de facto government-funded housing finance system in the United States. More than seven years since the federal government placed these institutions in conservatorship, they continue to remain in that status with no established exit plans. As of 2015, Fannie Mae, Freddie Mac and Ginnie Mae are virtually the only issuers of mortgage backed securities. The public actions taken to support Fannie Mae and Freddie Mac were successful in their short-term aims of supporting the housing market and removing the two firms as an immediate source of systemic risk to the financial system. The conservatorship, however, does not achieve the goal of reforming securitization markets. In the current situation, the U.S. housing finance system is one in which the risks of mortgage backed securities are borne by the public sector.

The Achilles heel of the pre-crisis securitization market, inherent in its structure, was the potential for systemic instability due to credit, or default risk that was not discovered nor properly priced. As lending standards declined and credit risk grew, surging housing prices limited current defaults, thus veiling the growing threat. Data about the overall level of leverage in the mortgage market and institutions' exposure to housing markets were not readily available. Securitization markets shrouded rather than revealed information on the mounting risk and the focus was on interest rate risk rather than credit risk.

This paper presents principles for more stable securitization, focusing on the role of market information, and the potential for securitization to inform and complete rather than destabilize markets. The incomplete nature of real estate markets, due to high transaction costs and lack of short selling mechanisms, is well established. This paper focuses on possible solutions to information issues that otherwise make it difficult for market actors and regulators to properly assess and monitor risk.

With the demise of private label residential securitization and the conservatorships of Fannie Mae and Freddie Mac, there is both an opportunity and a necessity to rethink principles of securitization to promote systemic stability. Establishing a means to monitor and limit credit risk is critical to the restructuring of securitization markets and the return of private capital. The paper identifies features of the U.S. mortgage market that accentuate the information barriers across financial intermediaries, investors and regulators, reinforcing the potential for underpricing risk and regulatory failures. Expanded HMDA disclosure requirements set to go into effect in January of 2018 and the new National Mortgage Database will increase transparency. Nonetheless full resolution of these issues requires attention to the structure and regulatory framework of the U.S. housing finance system.

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