

Taking the Government Out of Housing Finance: *Principles for Reforming the Housing Finance Market*

An American Enterprise Institute
Policy White Paper

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Executive Summary

We recommend that the US housing finance market of the future should be governed by four basic principles:

Principle I: The housing finance market can and should principally function without any direct government financial support.

Principle II: Ensuring mortgage quality and fostering the accumulation of adequate capital behind housing risk can create a robust housing investment market without a government guarantee.

Principle III: All programs for assisting low-income families to become homeowners should be on-budget and should limit risks to both homeowners and taxpayers.

Principle IV: Fannie Mae and Freddie Mac should be eliminated as government-sponsored enterprises (GSEs) over time.

With the release of the Obama administration's thoughtful report¹ on housing finance reform (February 2011), which was broadly consistent with these ideas, a bipartisan agreement on the future of housing finance has become possible.

The administration's paper outlines three options, the first of which is a largely private market. By including this idea as a key option for a Democratic administration, the report was a game changer: whether most housing in the United States should be financed in a private market is now open for consideration. In its paper, the administration raised some reasonable concerns about this option and suggested two alternatives. We address these concerns and show how to produce a robust, stable private system for originating and financing mortgages, while protecting the taxpayers.

There are two theories about the financial crisis of 2007–2008. One holds that it was caused largely by a lack of effective government regulation;² the other that government housing policy was primarily at fault.³ Whether one looks at this debacle as a failure of regulation or a failure of housing policy, it is undeniable that large parts of the previous US housing finance system were guided and guaranteed by the government and that once again the taxpayers will bear the immense costs of government failure.

Many of the proposals for reforming the US housing finance market reflect the belief that institutional investors will buy securities backed by US mortgages (MBS) only if they are somehow guaranteed by the US government. To the contrary, we propose a superior alternative

¹ Department of the Treasury and Department of Housing and Urban Development (HUD), *Reforming America's Housing Finance Market: A Report to Congress* (Washington, DC, February 11, 2011).

² Financial Crisis Inquiry Commission, *Financial Crisis Report* (Washington, DC, January 2011).

³ Peter J. Wallison, *Dissent from the Report of the Financial Crisis Inquiry Commission*, (Washington, DC: American Enterprise Institute, January 2011), www.aei.org/paper/100190.

to government guarantees—remembering that such government market interventions have led to large-scale taxpayer bailouts twice in the last generation.

Our alternative is to ensure that only prime-quality mortgages, which comprise the vast majority of US mortgages, are allowed into the securitization system. The very low delinquency and default rates on prime mortgages will be attractive investments for institutional investors and will enable the housing finance secondary market to function effectively with no government support. This will eliminate the potential for additional taxpayer losses in the future; reduce the likelihood and severity of housing price booms, busts, and attendant bubbles; and allow the eventual elimination of the GSE charters of Fannie Mae and Freddie Mac.

The four basic principles we recommend (initially outlined in an earlier draft of this paper issued in January 2011) line up remarkably well with Option 1 in the report issued by the administration. This provides an opportunity to replace Fannie Mae and Freddie Mac and adopt other housing finance reforms that will protect the taxpayers against further losses and significantly reduce the chances of another financial crisis.

The following explanations summarize our four central principles:

I. The housing finance market—like other US industries and housing finance systems in most other developed countries—can and should principally function without any direct government financial support.

Under this principle, we note that the huge losses associated with the savings and loan (S&L) debacle of the 1980s and Fannie and Freddie today did not come about *in spite of* government support for housing finance but *because of* that government backing. Government involvement not only creates moral hazard but also sets in motion political pressures for increasingly risky lending such as “affordable loans” to constituent groups.

Although many schemes for government guarantees of housing finance in various forms have been circulating in Washington since last year, they are not fundamentally different from the policies that caused the failures of the past. The fundamental flaw in all these ideas is the notion that the government can successfully establish an accurate risk-based price or other compensatory fee for its guarantees. Many examples show that this is beyond the capacity of government and is in any case politically infeasible. The problem is not solved by limiting the government’s risks to MBS, as in some proposals. The government’s guarantee eliminates an essential element of market discipline—the risk aversion of investors—so the outcome will be the same: underwriting standards will deteriorate, regulation of issuers will fail, and taxpayers will take losses once again.

II. Ensuring mortgage quality, and fostering the accumulation of adequate capital behind housing risk, can create a robust housing investment market without a government guarantee.

This principle is based on the fact that high-quality mortgages are good investments and have a long history of minimal losses. Instead of relying on a government guarantee to reassure investors in MBS, we should simply ensure that the mortgages originated and distributed are predominantly of prime quality. We know the characteristics of a prime mortgage, which are

defined later in this white paper. They do not have to be invented; they are well known from many decades of experience.

Experience has also shown that some regulation of credit quality can prevent the deterioration in underwriting standards, although in the last cycle regulation promoted lower credit standards. The natural human tendency to believe that good times will continue—and that “this time is different”—will continue to create price booms in housing, as in other assets. Housing bubbles in turn—by suppressing delinquencies and defaults—spawn subprime and other risky lending; investors see high yields and few defaults, while other market participants come to believe that housing prices will continue to rise, making good loans out of weak ones. Future bubbles and the losses suffered when they deflate can be minimized by interrupting this process—by focusing regulation on the maintenance of high credit quality.

III. All programs for assisting low-income families to become homeowners should be on-budget and should limit risks to both homeowners and taxpayers.

The third principle recognizes that there is an important place for social policies that assist low-income families to become homeowners, but these policies must balance the interest in low-income lending against the risks to the borrowers and the interests of the taxpayers. In the past, “affordable housing” and similar policies have sought to produce certain outcomes—such as an increase in homeownership—which turned out to escalate the risks for both borrowers and taxpayers. The quality of the mortgages made in pursuance of social policies can be lower than prime quality—taxpayers may be willing to take risks to attain some social goods—but there must be quality and budgetary limits placed on riskier lending to keep taxpayer losses within known and reasonable bounds.

IV. Fannie Mae and Freddie Mac should be eliminated as government-sponsored enterprises (GSEs) over time.

Finally, Fannie and Freddie should be eliminated as GSEs and privatized—but gradually, so the private sector can take on more of the secondary market as the GSEs withdraw. The progressive withdrawal of the GSEs from the housing finance market should be accomplished in several ways, leading to the sunset of the GSE charters at the end of the transition. One way would be successive reductions in the GSEs’ conforming loan limits by 20 percent of the previous year’s limits each year. These reductions would apply to conforming loan limits for both regular and high-cost areas. This should be done according to a published schedule so the private sector can plan for the investment of the necessary capital and create the necessary operational capacity. The private mortgage market would include banks, S&Ls, insurance companies, pension funds, other portfolio lenders and investors, mortgage bankers, mortgage insurance (MI) companies, and private securitization. Congress should make sure that it facilitates opportunities for additional financing alternatives, such as covered bonds.

Introduction

On February 11, 2011, the Departments of Treasury and Housing and Urban Development released the administration's report to Congress, titled *Reforming America's Housing Finance Market*. The paper outlined three options: a largely private system with government support only for low- and moderate-income housing (Option 1); a government-backed standby system, necessary only in the event of a housing market crash (Option 2); and a system for government backing of MBS issued by specially chartered companies (Option 3). No preference was expressed among them, and the report suggested deficiencies in all of them. However, the areas of agreement between the administration's approach and our initial white paper draft suggest that housing finance reform based largely on private-market principles is possible. For example, the administration's report accepts as a viable option:

- A privatized housing finance market as the primary source of mortgage credit, with private capital playing the predominant role in housing finance;
- Robust oversight in support of strict underwriting standards;
- Government assistance to low-income borrowers as a limited adjunct to a largely private financing system; and
- The need to wind down and privatize or eliminate Fannie Mae and Freddie Mac.

In effect, then, there is a rough agreement between our four principles and the administration's Option 1.

The administration recognizes the following advantages in a financing system that relies primarily on private financing:

The strength of this option is that it would minimize distortions in capital allocation across sectors, reduce moral hazard in mortgage lending and drastically reduce direct taxpayer exposure to private lenders' losses. With less incentive to invest in housing, more capital will flow into other areas of the economy, potentially leading to more long-run economic growth and reducing the inflationary pressure on housing assets. Risk throughout the system may also be reduced, as private actors will not be as inclined to take on excessive risk without the assurance of a government guarantee behind them. And finally, direct taxpayer risk exposure to private losses in the mortgage market would be limited to the loans guaranteed by FHA [Federal Housing Administration] and other narrowly targeted government loan programs: no longer would taxpayers be at direct risk for guarantees covering most of the nation's mortgages.⁴

We share these conclusions. However, the administration sees the following deficiencies in a private-sector system:

Though these are indeed significant benefits, this option has particularly acute costs in its potential impact on access to credit for many Americans. While FHA would continue to provide access to mortgage credit for low- and moderate-income Americans, the cost of mortgage credit for those who do not qualify for an FHA-insured loan—the majority of

⁴ Departments of Treasury and HUD, *Reforming America's Housing Finance Market*, 27.

borrowers—would likely increase. While mortgage rates are likely to rise somewhat under any responsible reform proposal, including the three outlined here, the effect could be larger under this option. In particular, it may be more difficult for many Americans to afford the traditional pre-payable, 30-year fixed-rate mortgage. Additionally, smaller lenders and community banks could have a difficult time competing for business outside of the FHA segment of the market, which may in turn impact access in the communities they have traditionally served more effectively than larger institutions.⁵

In testimony before the House Financial Services Committee, Treasury Secretary Timothy Geithner added that, if not addressed, Option 1 might result in mortgage-credit risk shifting from taxpayer liability under the GSE structure to taxpayer liability under the banking system, where some of the largest banks might be seen as too big to fail.

We believe there are sound responses that address the administration's concerns; we address them below in discussing our four principles.

⁵ Ibid., 27–28.

I. The housing finance market—like other US industries and housing finance systems in most other developed countries—can and should principally function without any government financial support.

Our Principle I (combined with Principle III below) is virtually identical to the administration’s Option 1, which proposes a “[p]rivatized system of housing finance with the government insurance role limited to FHA, USDA [US Department of Agriculture] and Department of Veterans’ Affairs’ [VA] assistance for narrowly targeted groups of borrowers.” As noted above, the administration’s support for a private system is based on the view that it eliminates taxpayer risk, reduces moral hazard and related risks throughout the housing finance system, and results in better allocation of resources by reducing overinvestment in housing. These are also the major reasons why we believe that substituting a private mortgage finance system for a government-backed system would be good policy.

Given the spectacular failures of US housing finance and the enormous cost to taxpayers of two massive bailouts in twenty years, the housing industry should be required to show why it needs government support again.⁶ No other developed country provides anything that approaches the support for housing provided by the US government, and—as shown below—many of these other systems produce higher homeownership rates,⁷ lower mortgage-interest rates (see table 1), and fewer losses when defaults occur (see table 2).

In the last twenty years, US taxpayers have had to pay for bailouts of two major elements of the housing finance system: the S&Ls in the late 1980s and early 1990s and the GSEs Fannie Mae and Freddie Mac beginning in 2008.⁸ As two commentators described it, the S&L crisis of the 1980s and early 1990s “produced the greatest collapse of US financial institutions since the Great Depression. Over the 1986–1995 period, 1,043 thrifts with total assets of over \$500 billion failed. The large number of failures overwhelmed the resources of the Federal Savings and Loan Insurance Corporation (FSLIC), so US taxpayers were required to back up the commitment extended to insured depositors of the failed institutions. As of December 31, 1999, the thrift crisis had cost taxpayers approximately \$124 billion and the thrift industry another \$29 billion, for an estimated total loss of approximately \$153 billion.”⁹

Today, taxpayers face even larger losses arising from the insolvency of Fannie Mae and Freddie Mac, both of which are now operating in conservatorships controlled by the government. Thus far, the Treasury has contributed approximately \$150 billion to keep the two GSEs solvent, but the Federal Housing Finance Agency (FHFA), the GSEs’ regulator, has estimated that their losses will fall between \$221 billion and \$363 billion. If housing prices continue to fall, many observers believe the total losses of the GSEs will eventually exceed \$400 billion.

⁶ In Principle III, we discuss how the government should proceed with respect to providing financial support for social policy purposes.

⁷ *Testimony of Alex J. Pollock, Subcommittee on Security and International Trade and Finance, US Senate Committee on Banking, Housing, and Urban Affairs, 111th Cong. (September 29, 2010).*

⁸ A government-induced overreliance on the freely prepayable thirty-year fixed-rate loan was instrumental in both bailouts.

⁹ Timothy Curry and Lynn Shibut, “The Cost of the Savings and Loan Crisis: Truth and Consequences,” *FDIC Banking Review*, December 2000, http://fcx.fdic.gov/bank/analytical/banking/2000dec/brv13n2_2.pdf (accessed January 14, 2011).

The taxpayer losses in both the S&L and GSE debacles are related; as we will show, they are the inevitable result of extending government guarantees or subsidies to the housing finance industry. Before Congress considers any action on the future of housing finance, it should ask those who are pressing for government backing to explain why the taxpayers should be put at risk again.

Recent research by Dwight Jaffee, set out in table 1, documents that, notwithstanding the absence of government guarantees in most cases, many housing finance markets have achieved better outcomes than the US market along a number of critical dimensions.¹⁰ For example, as table 1 shows, the United States has one of the highest mortgage debt levels (column 1) and among the highest mortgage interest rates (column 5) and spreads (column 6), yet is only average in owner occupancy rates (column 2). This is not an enviable record, and certainly not what American taxpayers deserve for all the losses they have covered to support the housing industry.

Table 1: The Performance of European Mortgage Markets in Comparison with the US Markets*

(Statistical measures computed with annual data by country for 1998–2008)

| | (1) | (2) | (3) | (4) | (5) | (6) |
|-----------------------|---------------------------|-----------------------------|---|---|--|---|
| | Mortgage to GDP Ratio (%) | Rate of Owner Occupancy (%) | Coefficient of Covariation Housing Starts (%) | Standard Deviation of House Price Inflation (%) | Mortgage Interest Rate Average Level (%) | Mortgage Interest Rate Average Spread** (%) |
| | 2008 | 2008 | | | | |
| Western Europe | | | | | | |
| Austria | 25.3 | 57.0 | 8.3 | 2.6 | 5.12 | 0.66 |
| Belgium | 39.8 | 78.0 | 16.3 | 4.0 | 5.87 | 1.37 |
| Denmark | 95.3 | 54.0 | 40.8 | 6.1 | 5.96 | 1.41 |
| Finland | 47.5 | 59.0 | 11.0 | 3.4 | 4.50 | 0.05 |
| France | 35.9 | 57.4 | 16.4 | 5.5 | 4.93 | 0.53 |
| Germany | 46.1 | 43.2 | 30.1 | 0.8 | 5.27 | 0.97 |
| Iceland | 129.0 | 82.5 | 56.3 | 9.8 | 5.01 | 0.64 |
| Ireland | 80.0 | 74.5 | 35.8 | 11.5 | 4.69 | 0.22 |
| Italy | 19.8 | 80.0 | 47.0 | 3.1 | 5.25 | 0.64 |
| Luxembourg | 43.5 | 75.0 | 19.2 | 4.3 | 4.33 | -0.16 |
| Netherlands | 99.1 | 57.0 | 10.2 | 5.5 | 5.17 | 0.77 |
| Norway | 55.7 | 77.0 | 21.1 | 5.0 | 6.54 | 1.61 |
| Portugal | 63.3 | 76.0 | 31.5 | 5.4 | 5.15 | 0.61 |
| Spain | 62.0 | 84.5 | 32.5 | 2.5 | 4.38 | -0.09 |
| Sweden | 60.6 | 52.0 | 53.9 | 5.1 | 4.05 | -0.49 |
| UK | 80.5 | 59.0 | 10.5 | 5.0 | 5.32 | 0.42 |
| Euro Average | 61.5 | 66.6 | 27.6 | 5.0 | 5.10 | 0.57 |

¹⁰ Dwight M. Jaffee, “Reforming the US Mortgage Market through Private Market Incentives” (presentation, Federal Reserve Bank of St. Louis, November 17, 2010), <http://research.stlouisfed.org/conferences/gse/Jaffee.pdf> (accessed January 14, 2011).

| | | | | | | |
|------------------------|-------------|-------------|-------------|------------|-------------|-----------------------|
| US Average | 83.6 | 67.8 | 24.9 | 5.5 | 6.57 | 1.82 |
| US Rank (of 17) | 4th | 9th | 9th | 4th | 1st | 1st |

Notes:

* Unless noted otherwise, the data are all from *European Mortgage Federation* (2008), an annual fact book that contains comprehensive mortgage and housing market data for 1998 to 2008 for the sixteen Western European countries and the United States.

** The mortgage interest rate spread equals the mortgage interest rate (column 5) relative to the government bond rate of each country derived from the International Financial Statistics of the International Monetary Fund.

Moreover, Jaffee’s research also shows that when recent bubbles deflated in these other countries, the number of delinquencies and foreclosures was much lower than in the United States. All the countries in table 2 below had housing bubbles during the 2000s, some of them even larger than the one in the United States, but the outcomes in these countries were far better.

Table 2: Troubled Mortgages: Western Europe and the United States

| | \geq Three-Month Arrears (%) | Impaired or Doubtful (%) | Foreclosures (%) | Year |
|---------------------|--------------------------------|--------------------------|------------------|------|
| Belgium | 0.46 | | | 2009 |
| Denmark | 0.53 | | | 2009 |
| France | | 0.93 | | 2008 |
| Ireland | 3.32 | | | 2009 |
| Italy | | 3.00 | | 2008 |
| Portugal | 1.17 | | | 2009 |
| Spain | | 3.04 | 0.24 | 2009 |
| Sweden | | 1.00 | | 2009 |
| UK | 2.44 | | 0.19 | 2009 |
| US All Loans | | | | |
| US All Loans | 9.47 | | 4.58 | 2009 |
| US Prime | 6.73 | | 3.31 | 2009 |
| US Subprime | 25.26 | | 15.58 | 2009 |

Source: European Mortgage Federation (2010) and Mortgage Bankers Association for US Data.

With this background, it is time to examine why the US housing finance system fails so consistently, even though since the 1930s it has been supported or backed by a growing phalanx of government agencies and enterprises (Federal Housing Administration, Fannie, Freddie, FSLIC, Federal Home Loan Banks or FHLBs, Ginnie Mae, VA, and the USDA). The reason, we believe, is that the US system fails *because of* its connection to the government. Government guarantees create moral hazard on two levels. First, by assuring the housing industry of a steady supply of underpriced funds, government support encourages overbuilding and speculation. The administration’s report, as noted above, also cites the overinvestment in housing—calling it “distortions in capital allocation”—that results from government backing. In other industries, variations in the availability of funding suppress risk taking. In addition, by relieving investors of risk through a guarantee, government support makes it possible for mortgage originators to offer liberal lending terms such as zero or low down payment loans, loans without documentation, and

loans to credit-impaired borrowers.¹¹ As the administration noted in its report, a private mortgage finance system reduces risk. “Risk throughout the system may also be reduced,” simply because of the fact that it is private: “private actors will not be as inclined to take on excessive risk without the assurance of a government guarantee behind them.”¹²

However, the result of a government-backed system is not the stability the industry is seeking but a repetitive volatility—the growth and deflation of housing bubbles leading to credit crises such as (but smaller than) the one that occurred in 2008. It is because of excessive government intervention in the housing market that we now have both historically high borrower leverage (homeowner mortgage debt in relation to housing values) and a clearly inadequate amount of capital backing a debt market consisting of \$10.6 trillion in first and second mortgages.¹³

Accordingly, for the six reasons outlined below, our first principle is that the housing finance market should be free of any government assistance in the future, other than for social policy reasons through FHA and other explicit and on-budget government programs.

1. The government cannot successfully price for risk. Many of the plans currently making the rounds in Washington depend on government backing at some level—usually as a guarantor of MBS issued by a financial intermediary. Two of the three options set out in the administration’s report depend on government backing:

- Option 2: A largely privatized system of housing finance, with assistance for targeted groups of low-income borrowers from FHA and other government agencies and a guarantee mechanism to scale up government support during times of crisis in housing finance; and
- Option 3: A system of government reinsurance behind private issuers of MBS, coupled with FHA and other government assistance to low-income borrowers.

These plans are based on a fundamental error: that the government can act like an insurance company and set a correct price for the risk it is taking. The administration itself recognizes this problem:

While the government can charge market participants an insurance premium for accepting that risk, pricing the risk can be difficult. If the government does not charge a fair price, it may encourage excessive risk-taking and increase the likelihood that the taxpayer will be forced to bear the cost of the government’s losses. Political pressure to

¹¹ Additional commonly used provisions include negatively amortizing loans (option ARMs), ARMs as an affordability aid, liberal terms for cashing out equity, minimal right to recourse or enforcement of same, second mortgages (sometimes hidden), and loans to investors or speculators masquerading as prospective homeowners.

¹² Departments of Treasury and HUD, *Reforming America’s Housing Finance Market*, 27.

¹³ See Board of Governors of the Federal Reserve System, “Flow of Funds Accounts of the United States: Flows and Outstandings, Fourth Quarter 2010,” March 10, 2011, www.federalreserve.gov/releases/z1/current/z1.pdf (accessed March 18, 2011). Fannie and Freddie, with no capital of their own, guarantee about 45 percent of all outstanding mortgages. The FHA, with about \$5 billion in regulatory capital, guarantees another 10 percent, and commercial and savings banks own another 25 percent, which on a mark-to-market basis are substantially underwater. Most of the remainder is in the form of private MBS, also substantially underwater.

lower the price of government support increases the odds that the government will misprice risk and put taxpayers at risk.¹⁴

Expanding on this summary, we see three reasons why the government cannot successfully price risks:

(i) Unlike an insurance company, the government has no profit incentive to price for risk, and because risk pricing can seem arbitrary and unrelated to current conditions, the government has many incentives to avoid the political controversy that risk pricing entails;

(ii) If the government actually attempted to set a price based on risk associated with any particular mortgage, it would be discriminating among its citizens, since some present greater risks than others; this would inevitably bring the risk-pricing project to a halt; and

(iii) Successful insurance systems require the buildup of substantial reserves during good times to pay claims during the inevitable bad times, but the government lacks the discipline and incentives to follow through. During the good times, the government comes under political pressure not to increase a reserve fund by continuing to collect fees or premiums.

The administration's report notes this tendency. "Political pressure to lower the price of government support increases the odds that the taxpayer will be forced to bear the cost of the government losses."¹⁵ The argument is made that times are different, that the fund is large enough, or even that the industry is strapped for investment capital. These pressures cause the government to let it ride, to refrain from collecting the necessary fees or premiums. This has occurred with the National Flood Insurance Program,¹⁶ the Pension Benefit Guaranty Corporation,¹⁷ the FHA,¹⁸ and the Federal Deposit Insurance Corporation (FDIC).

Recent FDIC experience is symptomatic of government's tendency to avoid collecting the necessary premiums. When the deposit-insurance system was reformed in 1991 in response to the failure of the FSLIC, Congress placed a limit on the size of the deposit-insurance fund that the FDIC could accumulate to meet the demands of a future crisis. Since 1996, the FDIC has been prohibited by law from charging premiums to well-capitalized and stable institutions. As a result, between 1996 and 2006, institutions representing 98 percent of deposits paid no deposit-insurance premiums. In 2009, FDIC chair Sheila Bair observed: "An important lesson going

¹⁴ Departments of Treasury and HUD, *Reforming America's Housing Finance Market*, 26.

¹⁵ *Ibid.*, 26.

¹⁶ "FEMA Administrator Craig Fugate says the debt results partly from Congress restraining insurance rates to encourage the purchase of coverage, which is required for property owners with a federally backed mortgage. . . . 'It is not run as a business,' Fugate said. Congress' Government Accountability Office said in April that the program is 'by design, not actuarially sound' because it has no cash reserves to pay for catastrophes such as Katrina and sets rates that 'do not reflect actual flood risk.' Raising insurance rates or limiting coverage is hard. 'The board of directors of this program is Congress,' Fugate said. 'They are very responsive to individuals who are being adversely affected.'" (Thomas Fink, "Huge Losses Put Federal Flood Insurance Plan in the Red," *USA Today*, August 26, 2010.)

¹⁷ As of the end of FY2010, the Pension Benefit Guaranty Corporation (PBGC) reported a deficit of \$23 billion. "In part, it is a result of the fact that the premiums PBGC charges are insufficient to pay for all the benefits that PBGC insures, and other factors." Pension Benefit Guaranty Corporation, "2010 PBGC Annual Report," www.pbgc.gov/about/ar2010.html (accessed January 14, 2011).

¹⁸ Barclays Capital estimates that the FHA has drastically underpriced the risk of its guarantees and could face losses of up to \$128 billion. Barclays, "US Housing Finance: No Silver Bullet," December 13, 2010.

forward is we need to be building up these funds in good times so you can draw down upon them in bad times.”¹⁹ Instead, once the bad times hit, the FDIC was forced to raise its premiums at the worst possible moment, thereby reinforcing the impact of the down cycle.

Principle II will discuss in greater detail the necessity for entities taking broad mortgage credit risk to build up thick contingency reserves through countercyclical reserving policies.

2. A government guarantee of MBS alone will have the same effect in creating taxpayer losses as any other guarantee. Several ideas recently advanced for government backing of the housing market, including the administration’s Option 3, have suggested that the government’s guarantee would extend only to MBS and not to the issuers of these securities. These plans would obligate the government to pick up losses only after the capital of an MBS issuer has been exhausted and would require the issuer to pay a fee to the government to cover the government’s risks. This idea is presented as though it will prevent losses similar to those that have resulted from the operations of Fannie and Freddie—that the government’s risks will be reduced and the likelihood of taxpayer losses will be minimized.

This is an illusion. As noted above, the fee to cover the taxpayers’ risks cannot be effectively set by the government. Even if government had the incentives and capabilities to assess a proper fee, the assessment would be seen and attacked as an unfair tax on those who are using the government’s services. For example, when the Office of Management and Budget suggested near the end of the Clinton administration that Fannie and Freddie pay a fee for the government’s risk on its implicit backing of their obligations, the idea was immediately derided as a tax on homeownership, the administration was inundated with protests from the housing industry, and the proposal was promptly abandoned. Apart from whether a fee can be credibly established, it is fanciful to believe that any government will have the political fortitude to impose a fee that burdens homeowners or the housing industry because of the risks they pose to taxpayers.

Nor is the problem solved—as many of the supporters of these guarantee plans suggest—if the government is liable for losses on guaranteed MBS only after the issuer of the MBS has absorbed the first losses and exhausted its capital. It is true that in this case issuers will have an incentive to be cautious about risk taking, but the government guarantee eliminates an important element of market discipline—the risk aversion of investors. These securities will undoubtedly be sold worldwide as US government credit. The existence of a government guarantee will mean that no MBS buyer needs to be concerned about the quality of the underlying loans or the financial stability of the issuer. This is exactly analogous to the effect of deposit insurance on risk taking by banks. As is well known, deposit insurance permits bank depositors to ignore the risks a bank is taking—the principal reason that so many banks fail. As in the case of deposit insurance, government backing of MBS will eliminate investor concerns about both the financial stability of the issuer and the quality of the mortgages underlying the MBS. This will introduce destructive moral hazard into the housing finance market, allowing the expansion of risks through the securitization of very low-quality mortgages.

¹⁹ Center on Federal Financial Institutions, “Federal Deposit Insurance Corporation,” August 10, 2005, www.coffi.org/pubs/Summaries/FDIC%20Summary.pdf (accessed January 14, 2011). See also Congressional Budget Office, “Modifying Federal Deposit Insurance,” May 9, 2005, “Currently, 93 percent of FDIC-insured institutions, which hold 98 percent of insured deposits, pay nothing for deposit insurance.”

A companion risk will also spontaneously arise: these entities, chartered and regulated by the government, and carrying out a government mission, will inevitably be seen as functioning under government sponsorship. As such, they will be imbued with an implicit guarantee and might even be expected to perform other governmental functions such as supporting affordable housing. As we saw with Fannie and Freddie, both elements almost always accompany the performance of a government mission.

The protection of the government and the taxpayers in these cases will then supposedly come through regulation—another prescription of the advocates of government backing for MBS. They argue that regulation of the issuer is necessary to ensure that it has sufficient capital to cover the risks it is taking and thus to protect the government and the taxpayers from loss. But experience with bank regulation has shown that it does not prevent excessive risk taking and does not ensure sufficient capital to cover risks. Moreover, regulators are frequently unable to determine the financial condition of a regulated entity until it is too late. In these cases, the taxpayers will once again end up holding the bag.

3. Government backing distorts prices, resource allocation, and competition. The fact that the government cannot price for risk should be an important clue about the distorting effect its guarantee will have on competition. For the reasons outlined above, the government's charge for supporting one sector of the housing market will be lower than what the actual risk would demand, so its backing will operate as a subsidy for the sector of the housing market it is actually covering. For an equivalent risk, all other things being equal, the government-guaranteed mortgage will always be cheaper than the privately backed mortgage. This simply means that the taxpayers are providing a benefit to the borrower and the lender. The real costs to society appear later. As we will see, however, with appropriate reforms, it is possible that private-sector mortgage costs will reach the same level as those with government backing, while still protecting the taxpayers against loss.

In the housing finance system as it exists today, however, private competitors will be driven out of any sector of the market where the government guarantee is offered. Moreover, political pressures will make it attractive to extend the benefits of the lower-cost government-backed mortgage to more constituents, expanding the size of the sector that will be covered by the guarantee, and thus gradually extending the government's obligations to cover a larger sector of the market.

We have seen this before. With Fannie and Freddie able to borrow at much lower rates than others because of their implicit government backing, they drove all potential private competition out of the secondary market for fixed-rate prime loans at or below the conforming loan limit, and most mortgage originators preferred to direct their production to Fannie and Freddie, which could offer them the best pricing. Political pressure—to allow more members of the public to get the benefits of the taxpayer subsidy—also extended the subsidized market into an area that had previously been reserved for private activity. Thus, when Congress enacted the Housing and Economic Recovery Act of 2008,²⁰ it raised the conforming loan limit for Fannie and Freddie so buyers of million-dollar homes would have access to the benefits of the taxpayer subsidy provided free to Fannie and Freddie. In 1992, Congress pushed the subsidy in the other direction, requiring Fannie and Freddie to make what were called “affordable housing” loans to

²⁰ Housing and Economic Recovery Act of 2008 (HERA), Pub. L. No. 110-289 (July 30, 2008).

borrowers at or below the median income in the areas where they lived. Accordingly, if a government guarantee is again introduced into the housing sector, it will gradually grow to squeeze out private nongovernmental financing of mortgages. In other words, it is unlikely that Congress, once it allows any portion of the housing market to be covered by a government guarantee, will be able to place any effective limits on the extent of the taxpayers' risks.

4. It is a myth that only a government guarantee can make a thirty-year fixed-rate mortgage available. The administration's report suggests that without a government role in the housing market the thirty-year fixed-rate mortgage will not be available to American homebuyers. On its face, this is not true, since anyone can go to the Internet and find lenders offering jumbo fixed-rate thirty-year loans—which, by definition, have no government backing. It is true that, at this point, a thirty-year fixed-rate mortgage is somewhat more expensive than a government-backed thirty-year fixed-rate mortgage, since the lender is taking a longer-term risk on interest rates, but the lower cost of the government mortgage simply means that the taxpayers—as well as all other mortgage borrowers who are not taking thirty-year fixed-rate mortgages—are providing a subsidy to the person who wants a government-backed mortgage with these terms.

History has shown—and simple economics would anticipate—that a government subsidy for a thirty-year fixed-rate mortgage is not good policy. The subsidy causes most borrowers to choose the thirty-year loan, since in general it offers a fixed, low monthly payment with a government-subsidized “free” prepayment option. Supporters, including the administration in its Option 3, point to the apparent stability it provides to borrowers. This “stability,” however, carries with it several serious deficiencies. A thirty-year loan amortizes slowly, keeping the homeowner's equity low and debt level high for a good portion of the loan period. If the home is sold after seven years (the average duration of occupancy), the homeowner has not accumulated much equity.²¹ In addition, the “free” prepayment option encourages equity withdrawal through serial refinancing.

For these reasons, it is peculiar that the proponents of government backing are never asked to explain why the taxpayers and other mortgage borrowers should be subsidizing a thirty-year fixed-rate mortgage. This is not to say that this mortgage should not be available, but only that homeowners who want such a loan should not expect the taxpayers to subsidize its availability. In today's market, it is available at a slightly higher cost without a taxpayer subsidy.

There is an additional benefit to a market without government guarantees. Borrowers would have a variety of solidly underwritten loan choices.²² What the interest rates would actually be depends, of course, on monetary and fiscal policy in the United States. As an example of what the loan menu might look like, we take a historically typical spread of about 2 percent over the ten-year Treasury rate for a thirty-year fixed-rate jumbo loan and assume a 4 percent yield on the ten-year Treasury note. (From 2002 to 2008, the average spread on a thirty-year fixed-rate jumbo loan was a little under 2 percent, and the average ten-year Treasury yield was about 4 percent.) This gives a base price of 6 percent for a thirty-year, fixed-rate, freely

²¹ See, for example, Peter J. Wallison, “What's So Special about the 30-Year Mortgage?” *Wall Street Journal*, February 1, 2011, www.aei.org/article/103092.

²² Loan-performance data demonstrate that loans with a fixed-rate period of seven years, ten years, and thirty years (all with a thirty-year amortization) have similar default experiences.

prepayable jumbo mortgage. A loan with the same structure, but guaranteed by Fannie or Freddie, would be slightly less costly because of the government subsidy. A 2005 study estimates the differential at about thirty basis points;²³ a Federal Reserve study in 2005, however, estimates the differential at seven basis points.²⁴ Whichever is correct, the benefit associated with the government subsidy is far outweighed by the detriments a government role carries with it.

In the list below, we use the 6 percent jumbo fixed-rate mortgage as a benchmark to estimate the range of probable rates for a series of mortgages with different characteristics that would be available in a nongovernment market. In this market, we would expect some borrowers to select a thirty-year fixed-rate freely prepayable loan at an interest rate of 6 percent with others selecting a different option based on their needs and cost. These options offer a lower rate for a shorter maturity and/or a lower rate if borrowers choose a loan with a prepayment fee:

| | |
|--------|--|
| 6.00% | thirty-year fixed-rate term with no prepayment fee |
| 5.625% | thirty-year fixed-rate term with a 3-2-1 prepayment fee ²⁵ |
| 5.375% | thirty-year amortization with fifteen-year fixed-rate term and a 3-2-1 prepayment fee |
| 5.375% | fifteen-year fixed-rate term with no prepayment fee |
| 5.125% | fifteen-year fixed-rate term with a 3-2-1 prepayment fee |
| 5.00% | seven-year adjustable-rate mortgage (ARM) with thirty-year amortization underwritten at fully indexed seven-year rate with no prepayment fee |
| 4.75% | seven-year ARM with thirty-year amortization underwritten at fully indexed seven-year rate with a 3-2-1 prepayment fee |

5. Should the government guarantee a steady flow of credit for housing? One of the key arguments for government support in housing finance is that only with such support can a steady flow of credit to the housing market be assured. Originally, this argument was based on past experience, which is no longer relevant. Government regulation of interest rates, specifically the old Regulation Q deposit-rate ceilings, caused frequent periods when banks and S&Ls could not offer competitive rates for savings. The result was that mortgage lending, housing construction, and home sales were severely impaired. After Regulation Q was eliminated, this ceased to be a problem.

Now the argument has changed; in the event of a financial crisis, it is said, the government should make sure housing gets credit and funding in preference to manufacturing, commerce, consumer credit, or anything else. As the administration noted in its report, this effect

²³ Anthony B. Sanders, "Measuring the Benefits of Fannie Mae and Freddie Mac to Consumers: Between De Minimis and Small?" July 2005, <http://fic.wharton.upenn.edu/fic/papers/05/0536.pdf> (accessed January 14, 2011).

²⁴ Wayne Passmore, Shane M. Sherlund, and Gillian Burgess, "The Effect of the Housing Government Sponsored Enterprises on Mortgage Rates," Federal Reserve Board Finance and Economics Discussion Series, January 2005, www.federalreserve.gov/pubs/feds/2005/200506/200506abs.html (accessed March 18, 2011).

²⁵ A prepayment fee of 3 percent in year one, 2 percent in year two, 1 percent in year three, and zero percent thereafter.

is not good policy: “The increased flow of capital into the mortgage market [encouraged by a government guarantee] could draw capital away from potentially more productive sectors of the economy and could artificially inflate the value of housing assets.”²⁶ It is hard to defend this preference for housing on economic grounds. Indeed, most of the time, the involvement of the government in housing finance creates the danger of excess supply of credit to housing relative to all other sectors. The administration again sees the issue the same way: “With less incentive to invest in housing, more capital will flow into other areas of the economy, potentially leading to more long-run economic growth and reducing inflationary pressure on housing assets.”²⁷

Government involvement helps encourage homebuilders to overbuild, lenders to overlend, and borrowers to overborrow. In other words, it is a source of moral hazard. If participants in the housing market are insulated from changes in the market, they will take more risks and be less prudent in their investment decisions. The possibility that financing for housing could be subject to disruption or financing restrictions is, of course, one of the risks the housing industry fears, but that fear will reduce the overbuilding and excessive leverage that have caused volatility and repeated housing bubbles in the past. Other industries, of course, manage perfectly well to survive fluctuations in the availability or cost of funding. This issue will be discussed further under Principle II.

A related and frequently cited reason for a government role in housing finance is what is known as TBA—or “To Be Announced” funding. TBA permits homebuyers to “lock in” an interest rate with a bank or other financing source when they agree to purchase a home. This can be replicated in a fully private market if the originating or funding bank uses a hedging strategy to ensure that when the funds are called on, it will be able to supply them at the interest rate originally agreed with the homebuyer, even if market rates have changed. The bank’s hedging strategy has a cost, and it will be included in the rate that the bank quotes for the loan. The additional hedging cost is not a major factor in the interest rate, so there is no reason for the government to be involved in this or for the taxpayers to support a whole system of government enterprises to make sure it is available.²⁸ Under Principle II, we outline why we expect this activity to reemerge in a private MBS market without the taxpayer risks associated with a government guarantee.

6. Is a government guarantee necessary to sell MBS to institutional investors and others? Finally, there is the argument—sometimes explicit and otherwise implicit—that institutional investors will only buy US mortgages, or MBS backed by US mortgages, if they are supported by a government guarantee. This is probably the key reason that government backing of housing finance continues to enjoy support in Washington. It would certainly be a weighty argument if the quality of the mortgages were generally low; in that case, delinquency rates and defaults would be high, and the risks of investment in mortgages or MBS could well be unacceptable for institutional investors such as insurance companies, pension funds, mutual funds, and others. Even in that case, it is questionable whether the taxpayers should support a housing market in which mortgage quality was generally low. But as discussed below, there is no

²⁶ Departments of Treasury and HUD, *Reforming America’s Housing Finance Market*, 30.

²⁷ *Ibid.*, 27.

²⁸ See Kevin Villani, “The Future of US Housing Finance: Why a Competitive Market Oriented Housing Finance System Is Still Best,” November, 2010, <http://chicagoboyz.net/blogfiles/TheFutureVIL.pdf> (accessed January 14, 2011).

reason why mortgages have to be low quality, especially the mortgages allowed into the securitization market.

Until the introduction of the affordable-housing requirements for Fannie and Freddie, the GSEs maintained high underwriting standards and never suffered substantial losses on the mortgages they held or guaranteed. Indeed, their charter required them to purchase only prime loans. Section 1719 of Fannie’s charter stated: “[T]he operations of the corporation . . . shall be confined . . . to mortgages which are deemed by the corporation to be of such quality, type, and class as to meet, generally, the *purchase standards imposed by private institutional mortgage investors.*”²⁹

Even in the current crisis, the GSEs’ delinquency rates among *prime* mortgages have been less than 3 percent, while their delinquency rates on the subprime and Alt-A loans they acquired largely because of the affordable-housing goals have ranged from 13.3 to 17.3 percent.³⁰ Accordingly, the key to a successful mortgage market is not a government guarantee—which will inevitably cause serious losses to the taxpayers—but ensuring that the mortgages that are sent into the securitization market are of prime quality.

Under Principle II, we will show that by implementing policies that ensure good-quality mortgages, it is possible to create a stable housing finance system that attracts institutional investors without the need for any government involvement.

²⁹ Cornell University Law School, “US Code: § 1719. Secondary Market Operations,” www.law.cornell.edu/uscode/html/uscode12/usc_sec_12_00001719----000-.html (accessed March 18, 2011). Emphasis added.

³⁰ Edward J. Pinto, “Government Housing Policies in the Lead-Up to the Financial Crisis: A Forensic Study,” November 4, 2010, chart 53, www.aei.org/docLib/Government-Housing-Policies-Financial-Crisis-Pinto-102110.pdf.

II. Ensuring mortgage quality and fostering the accumulation of adequate capital behind housing risk can create a robust housing investment market without a government guarantee.

Many observers have noted that when Congress adopted the Dodd-Frank Act (DFA) it failed to address the real causes of the financial crisis—the government housing policies that enhanced the size and duration of the housing bubble and encouraged the creation of 27 million subprime and Alt-A loans. These weak loans fed the growth of an unprecedented housing bubble, and as the bubble grew it suppressed the delinquencies and defaults that usually signal to investors that acquiring low-quality mortgages entails substantial risks. When the bubble finally began to deflate, these weak and high-risk loans began to default at unprecedented rates, weakening financial institutions in the United States and around the world that were holding either these mortgages or the MBS they backed. If Congress had properly diagnosed the causes of the financial crisis before it began drafting the enormously complicated and unnecessary DFA, it would instead have enacted legislation to correct the deficiencies in government policy and the mortgage market that were the source of the bubble, the unprecedented number of weak and high-risk mortgages in the US financial system, the financial crisis of 2008, and the serious recession that followed.

Generally, economic theory suggests that regulation is only appropriate when there is a market failure. The development of housing bubbles, and their tendency to suppress the normal signals associated with risk, demonstrates that conventional market-control mechanisms—key elements such as market discipline—are not capable of preventing the downward slide in mortgage underwriting standards as a bubble develops. This is exactly what happened before the onset of the financial crisis. By the early 2000s, government investment in subprime and other low-quality mortgages had built a bubble that was almost five years old and still growing.³¹ With delinquencies and defaults suppressed, subprime lending seemed highly profitable. By 2002, potential investors around the world could see that high yields were available on MBS based on pools of subprime loans with relatively few losses. In other words, these securities appeared to have high risk-adjusted returns. This accounts for the extraordinary growth of the private subprime MBS market—a market that had never existed before—beginning in 2002 and extending until the collapse of the bubble in 2007.

It is typical to see increasing leverage (and expanding demand) during the growth portion of the cycle. Homeowners seek mortgages that will enable them to buy larger homes with nearly the same monthly payment. Increased borrower leverage results from reduced down-payment and debt-to-income requirements, increased reliance on so-called affordability products such as adjustable-rate and interest-only loans, and extended eligibility for loans among borrowers with impaired credit. As prices outpace incomes, nontraditional lending expands to meet the new or greater affordability gap. Lenders accede to these requests because they have become excessively optimistic and believe that rising home prices will continue to rise and limit their risk

³¹ Josh Rosner, “Housing in the New Millennium: A Home without Equity Is Just a Rental with Debt” (presentation, 2002 Mid-Year Meeting, American Real Estate and Urban Economics Association, National Association of Home Builders, Washington, DC, May 28–29, 2002), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1162456 (accessed March 18, 2011). Rosner noted that government efforts to reduce down payments and promote housing targeted to low-income borrowers had already been a major catalyst to the nineties housing boom.

of loss. Indeed, increasing home prices have suppressed the delinquencies and defaults that typically signal to lenders and investors that the risks are rising. This may keep the “up” portion of the cycle growing, but it weakens the underlying stability of the market, adding particular vulnerability for the most recent borrowers. We have enough experience with housing bubbles now to realize that they are artifacts of human nature and will occur to some extent no matter what we do. However, we can reduce their frequency and the damage when they deflate by ensuring the maintenance of sound credit standards.

One of the characteristics of bubbles is that they are difficult to recognize while you are inside, but very easy to recognize in hindsight. Also, the fact that they occur in many assets other than mortgages suggests that they reflect the human tendency to explain away unusual circumstances on the ground as “this time it’s different.” However, real estate bubbles have been particularly harmful to the US economy when they collapse; the prescriptions in this paper—while they will not entirely prevent bubbles—will go a long way toward making them less likely, less widespread, and smaller.

Since the 1920s, there have been at least four real estate booms followed by two serious corrections and two busts.³² The boom periods were the 1920s (17 percent real home-price increase), the late 1970s (16 percent real home-price increase), the late 1980s (20 percent real home-price increase), and 1997–2006 (85 percent real home-price increase).

Figure 1 shows the trend of real home prices since 1890. The real-price trend clearly shows the recent bubbles in 1979, 1989, and 1997–2006.

Figure 1: Real Home Prices, 1890–2010³³



There are common elements in these episodes: government support for increasing homeownership, widespread use of second mortgages to reduce down payments, excessive

³² The real-price boom that occurred over 1942–1955 (72 percent real-price growth) is excluded given the unusual circumstances relating to World War II and the postwar baby boom. By 1955, real prices had recovered to their late 1890s to early 1900s trend line.

³³ Compiled from Robert Shiller’s updated historical housing market data used in his book, *Irrational Exuberance* (Princeton University Press, 2000; Broadway Books, 2001; 2nd edition, 2005). Data available at www.econ.yale.edu/~shiller/data.htm.

leverage, reliance on adjustable-rate and negatively amortizing loans, higher debt-to-income ratios, and extensive use of low- and no-doc loans. This suggests that with limited regulatory intervention, particularly by ensuring mortgage quality, the effects of bubbles in the United States can be mitigated. That is, bubbles will occur, in housing as in other fields, but when they deflate, they will not be as destructive as in the past. If we can address these common elements through regulation focused on credit quality, we can accomplish what the DFA will fail to do: prevent another financial crisis arising from a proliferation of weak mortgages.

Accordingly, beyond removing government subsidies and guarantees from housing finance, much can be accomplished simply by adopting seven policies for the regulation of housing finance in the future:

1. Ensure that a high preponderance of loans are prime. We should adopt policies to ensure that a high preponderance of all mortgages in the future will be of prime or high quality. This should not be difficult, nor will it unreasonably limit the availability of mortgages. According to a Federal Reserve study, over 70 percent of all individuals with credit records in the United States (not just all homeowners with credit records) have FICO credit scores that are 660 or above—the foundation for a prime loan. Well over a majority (58 percent) have credit scores above 700.³⁴ In both 1989³⁵ and 2010,³⁶ 87 percent of borrowers taking out a mortgage loan had a FICO score of 660 or greater. In 1991, the great majority of conventional loans (defined as being Fannie eligible, other than by loan size) had the following characteristics:

- 98 percent were loans on properties occupied as a primary or secondary residence.³⁷
- 94 percent were loans with a loan-to-value ratio (LTV) of 90 percent or less.³⁸
- 98 percent were to borrowers with one or no mortgage late payments at origination and 85 percent had two or fewer nonmortgage late payments at origination.³⁹
- 90 percent were loans with housing and total debt-to-income ratios of less than 33 percent and 38 percent, respectively.⁴⁰
- All loans had to be underwritten based upon verified income, assets, and credit.⁴¹

Nevertheless, to ensure the continuing quality of mortgage loans, it will be necessary to define the characteristics of loans with relatively low default rates. The characteristics of a prime loan do not generally change over time, an experience confirmed over long periods in the United

³⁴ Board of Governors of the Federal Reserve System, “Report to Congress on Credit Scoring and Its Effects on the Availability and Affordability of Credit,” August 2007, www.federalreserve.gov/boarddocs/rptcongress/creditscore/creditscore.pdf (accessed March 18, 2011).

³⁵ Letter in author’s file dated October 30, 1989, to Ed Pinto from Equifax enclosing odds charts for new real estate accounts developed by Fair, Isaac Company (FICO).

³⁶ FICO presentation at American Securitization Forum 2011, “Consumer Metrics and Evaluation,” February 6, 2011.

³⁷ Data from Fannie Mae’s random-sample review covering single-family acquisitions for the period October 1988–January 1992, dated March 10, 1992. Document contained in the authors’ files.

³⁸ Ibid.

³⁹ Ibid.

⁴⁰ Ibid.

⁴¹ Fannie stopped acquiring low-doc or no-doc loans in 1990. Freddie followed suit in 1991. See “Haste Makes . . . Quick Home Loans Have Quickly Become Another Banking Mess,” *Wall Street Journal*, July 5, 1991.

States and other developed countries. Historically, prime fixed-rate loans had a default rate of less than one in one hundred loans,⁴² prime loans with an LTV of 81–90 percent have had a default rate of about 2.5 in one hundred loans, and loans with private MI (both fixed rate and ARMs and LTVs up to 97 percent) have experienced a default rate of about five in one hundred loans.⁴³ Loans with FHA insurance have experienced a default rate in excess of ten in one hundred loans.⁴⁴ In appendix 1, we provide the details for defining a prime loan.

2. Correspondingly, nonprime loans should be a relatively small percentage of all loans. Given that the market share of nonprime loans tends to grow as a boom develops, these loans—characterized by low or no down payments, increased debt ratios, impaired credit, reduced loan amortization, loans to investors or speculators, and other underwriting standards not present in prime loans—must be limited to a relatively small percentage of all mortgage loans. It is the accumulation of these loans that first buoy, then capsizes, a regional or national housing market. Nonprime loans are unsuitable to serve as collateral for private MBS and covered bonds.⁴⁵

3. Allow securitization only for prime loans. The DFA proposes a cumbersome and possibly unworkable system of risk retentions in cases where loan securitizations do not involve a Qualified Residential Mortgage (QRM), which is to be defined by regulation. In light of the earlier discussion of bubbles—in which we described the relationship between declining underwriting standards and the growth of bubbles—it makes more sense simply to require that the securitization market be used only for prime loans. That would do away with retentions and the need for a QRM. Nonprime loans could then be held in the portfolios of banks, insurance companies, pension funds, and other financial institutions, but only if the market transparency described in number six below allows investors, rating agencies, and others to understand how many of these nonprime loans are outstanding.

4. A potentially valuable structure would require MI for securitized loans with LTV ratios higher than 60 percent. Despite their underlying quality, prime mortgages with LTVs higher than 60 percent require some form of credit enhancement to be attractive to investors. Below is a Fannie Mae table showing the loan-level pricing adjustment (LLPA) fees that Fannie now adds to the mortgages it acquires.⁴⁶ These are a form of self-insurance; the table shows fees applied in varying amounts to virtually all loans with LTVs greater than 60 percent, but not to loans with LTVs below that level. The table also shows that as FICO scores rise, loan-level fees decline for loans with equivalent LTVs.⁴⁷

⁴² Derived from Freddie Mac data.

⁴³ Standard & Poor's Ratings Direct Report, December 27, 2008.

⁴⁴ FHA's 2010 and 2003 Actuarial Studies.

⁴⁵ Ginnie Mae securities backed by government agency loans would be exempt.

⁴⁶ There are some miscellaneous loan-level fees not shown on this chart, virtually all of which are applied to loans with an LTV greater than 60 percent.

⁴⁷ See Fannie Mae, "Loan-Level Price Adjustment (LLPA) Matrix and Adverse Market Delivery Charge (AMDC) Information," December 23, 2010, <https://www.efanniemae.com/sf/refmaterials/llpa/pdf/llpamatrix.pdf> (accessed March 18, 2010). LLPAs take into account specific credit risks associated with down payment size and credit score. These types of risks may be determined on an actuarial basis and are generally uncorrelated.

| Table 2: All Eligible Mortgages (Excluding MCM): LLPA by Credit Score/LTV | | | | | | | | | |
|---|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----|
| PRODUCT FEATURE | LLPAs by LTV Range | | | | | | | | SFC |
| | ≤ 60.00% | 60.01 – 70.00% | 70.01 – 75.00% | 75.01 – 80.00% | 80.01 – 85.00% | 85.01 – 90.00% | 90.01 – 95.00% | 95.01 – 97.00% | |
| Representative Credit Score | Applicable for all mortgages with greater than 15-year terms For whole loans purchased on or after April 1, 2011, and loans delivered into MBS with issue dates on or after April 1, 2011. (LLPA changes highlighted in bold) | | | | | | | | |
| ≥ 740 | -0.250% | 0.000% | 0.000% | 0.250% | 0.250% | 0.250% | 0.250% | 0.250% | N/A |
| 720 – 739 | -0.250% | 0.000% | 0.250% | 0.500% | 0.500% | 0.500% | 0.500% | 0.500% | N/A |
| 700 – 719 | -0.250% | 0.500% | 0.750% | 1.000% | 1.000% | 1.000% | 1.000% | 1.000% | N/A |
| 680 – 699 | 0.000% | 0.500% | 1.250% | 1.750% | 1.500% | 1.250% | 1.250% | 1.000% | N/A |
| 660 – 679 | 0.000% | 1.000% | 2.000% | 2.500% | 2.750% | 2.250% | 2.250% | 1.750% | N/A |

These are the requirements for what one would call “normal loss experience” on prime mortgages. Additional MI or other credit enhancement would be necessary to address catastrophic conditions, such as a housing price decline of as much as 35 percent. Fitch Ratings, for example, proposed in a recent report that each loan have sufficient loss protection to experience a severe stress event as represented by a 35 percent price decline, again focusing on the risks associated with loans with an LTV above 60 percent.⁴⁸

Today, Fannie and Freddie are required by statute to have MI coverage (or other third-party credit enhancement) for all loans where the LTV is higher than 80 percent. As noted above, since 2008, Fannie Mae and Freddie Mac have been applying LLPAs to most mortgages with LTVs above 60 percent to cover their additional risks beyond the required insurance coverage. Because of their implicit government backing, they can avoid any further credit enhancement in order to sell their MBS.

The private securitizations that we envision could use other forms of credit enhancement—a combination of subordinated tranches and private MI—to achieve an AAA rating for the MBS. In the traditional private securitization, the AAA-rated securities are credit enhanced largely by subordination; the lower tranches in a securitized pool (say, BBB-rated) are generally not entitled to any payment until the AAA tranches have been paid in full. The size or thickness of the subordinated tranches provides the assurance that investors in AAA-rated securities need; the riskier the pool, the larger the subordinated tranches have to be. In other words, the existence of a thick subordinated layer can make the pool a reliable counterparty for an institutional investor.

However, a thick subordinated layer also adds to the cost of credit enhancement. In addition, the lower tranches in a securitized pool of mortgages are only available to support the AAA securities based on that pool. By adding private MI, we can lower the cost of credit enhancement. This is because the companies that issue MI coverage are required by insurance regulators to establish capital reserves that are available to cover losses on all covered mortgages

⁴⁸ Fitch Ratings, “US Prime RMBS Loan Loss Model Criteria: Exposure Draft,” February 1, 2011. A severe stress event is usually associated with an economic downturn such as a deep recession with its attendant increased unemployment, which puts stress on incomes, employment, and home prices. This type of risk may not be actuarially determined; instead stress tests are based on worst-case depression scenarios. While these risks result in losses that are generally correlated; the impact can be kept manageable with sound underwriting and the accumulation of substantial reserves able to withstand such a level of stress.

in multiple pools and book years. MI is thus a more efficient—and less costly—form of credit enhancement than added thickness to the subordinated layers.

MI also has important advantages for the coverage of losses that occur in catastrophic conditions. Under current insurance regulation, 50 percent of premium revenues must be transferred to required reserves, and they are intended to be used only for catastrophic conditions. Normal claim payouts along with normal expenses have to be handled out of the remaining 50 percent. This reserve level has been in force since the establishment of the modern MI business in 1957, following the industry's collapse during the Great Depression and its reorganization according to new principles.⁴⁹ These principles, including the establishment of required reserves, enabled virtually the entire MI industry to survive the recent financial crisis while meeting its coverage obligations. Over time, the buildup of these required reserves will fully protect the holders of privately issued MBS against the possibility of another financial crisis.

The specific elements of the MI coverage and insurer standards that we envision are outlined in appendix 1 but may be summarized as follows. The MI firms will issue coverage only for prime loans as defined in appendix 1. They will be state-regulated monoline companies—operating independently of originators, issuers, or others; maintaining minimum risk-to-capital ratios;⁵⁰ and allocating 50 percent of gross premiums to catastrophic contingency reserves (required by state insurance regulations to be held for ten years). Over time, these reserves will likely lead to even lower risk-to-capital ratios.

Accordingly, under our proposed private financing system, prime mortgages with LTVs higher than 60 percent would be credit enhanced with MI down to the 60 percent level. This would apply to any loan with a term of sixteen to thirty years and an LTV greater than 60 percent. Fully amortizing loans with a term of fifteen years or less perform markedly better than loans with longer terms; therefore, these loans will require MI only if they have an LTV greater than 80 percent, and then only down to 70 percent.

⁴⁹ Thomas Herzog, "History of Mortgage Finance With an Emphasis on Mortgage Insurance", 2009, <http://www.soa.org/library/monographs/finance/housing-wealth/2009/september/mono-2009-mfi09-herzog-history.pdf>

⁵⁰ Current regulations require an MI company to maintain a twenty-five-to-one risk-to-capital ratio, regardless of risk profile. The industry entered the crisis with a much lower risk-to-capital ratio of 13.9 to 1, due to the accumulation of statutorily required catastrophic reserves. When the housing crisis hit in late 2007, 64 percent of MI companies' primary risk in force had an LTV of greater than 90 percent and 96 percent had an LTV of greater than 85 percent. It is now estimated that the industry will suffer a projected conditional claim rate of 17 percent. This severe claims experience represented a loss event at the ninety-sixth percentile, meaning that out of all possible loss scenarios, this event was worse than 95 percent of them. An MI rated AA is expected to survive 99.5 percent of all such loss scenarios. This explains why MI companies have been able to pay virtually all eligible claims, with only the smallest MI company with about an 7 percent share being in run-off and still likely to pay an estimated 70 percent of its claims. We propose that MI companies be restricted to prime loans only, as defined in appendix 1. After the anticipated five-year GSE wind-down period, it is expected that 80 percent of the new risk in force will have an LTV of 80 percent or less. With initial risk-to-capital ratios ranging from thirteen to one for prime 90 percent LTV loans to forty-one to one for prime 65 percent LTV loans, these initial capital levels are sufficient to cover a stress event well beyond the severity of the one we have just experienced. For comparison purposes, Fannie had an overall risk-to-capital ratio requirement of 220 to 1 for its MBS guaranty business, with much of its capital invested in mortgages and housing tax credits.

The catastrophic reserve is designed to build up over a ten-year cycle. Before that buildup, we believe that the risk-to-capital ratios we recommend will be more than sufficient to withstand the level of stress experienced during the recent financial crisis. This will make the MI industry a reliable counterparty for institutional investors. At the same time, the use of risk-adjusted risk-to-capital ratios will have countercyclical effects; an upward trend in high LTV lending will require larger amounts of capital. After about eight years, the combination of normal capital along with the accumulated catastrophic reserve should be adequate to allow an MI company's risk-to-capital ratio to meet the AAA standard. This higher level of capital will allow for the continued extension of credit on a prudent basis during times of stress.

We have consulted with members of the MI industry and have been advised that if the mortgages they insure are prime mortgages as defined in appendix 1, they can maintain the risk-to-capital ratio scale noted in appendix 1, allocate 50 percent of their premium revenue to reserves as required, and still operate profitably. Accordingly, once it becomes clear that the MI industry will be participating in the private securitization process we envision, the industry should have no trouble recapitalizing itself to achieve an AA rating. Indeed, new companies are already entering the MI industry—most recently Essent US Holdings, a venture of Goldman Sachs, JP Morgan Chase, and two reinsurers, among others, with initial capitalization of \$500 million.⁵¹

In our consultation with members of the MI and securitization industry, we were advised that the combined cost of MI for the coverages specified above, along with required subordinated (risk-bearing) tranches, would initially permit private MBS to fund a freely prepayable thirty-year fixed-rate prime loan with an all-in annual cost about twenty-five to forty basis points higher than Fannie's current cost for the same instrument. In this connection, we note that the program outlined by the Center for American Progress, which requires an explicit federal guarantee, would nevertheless result in a rate increase of about forty basis points.⁵² If the administration's proposal to increase Fannie and Freddie's guarantee fees resulted, as expected, in a fifteen-basis-point higher fee, the indicated rate under the nongovernment MBS program would likely be only ten to twenty-five basis points higher than Fannie's new rate. Over time, one might expect the spread between the private MBS execution and a Fannie execution to narrow as the MI industry's catastrophic reserves build and demand increases for these securities.

MI companies reserve the right to rescind coverage on a finding of fraud. During the recent financial crisis period, when a growing bubble and declining underwriting, led to rampant mortgage fraud, misrepresentation, and appraisal errors,⁵³ the MI industry rescinded large

⁵¹ James McGee, "Essent CEO Says Time Is Very Good to Start a Mortgage Insurer," Bloomberg.com, February 18, 2011, www.bloomberg.com/apps/news?pid=newsarchive&sid=axq7O3CVgCxs (accessed March 22, 2011).

⁵² Mortgage Finance Working Group, *A Responsible Market for Housing Finance* (Washington, DC: Center for American Progress, January 27, 2011), www.americanprogress.org/issues/2011/01/responsible_market.html (accessed March 22, 2011).

⁵³ See Financial Crisis Inquiry Commission, *Financial Crisis Report*, xxii. "For example, our examination found, according to one measure, that the percentage of borrowers who defaulted on their mortgages within just a matter of months after taking a loan nearly doubled from the summer of 2006 to late 2007. This data indicates they likely took out mortgages that they never had the capacity or intention to pay. You will read about mortgage brokers who were paid 'yield spread premiums' by lenders to put borrowers into higher-cost loans so they would get bigger fees, often never disclosed to borrowers. The report catalogues the rising incidence of mortgage fraud, which flourished in an

numbers of claims with such errors. MGIC, the largest MI company with a market share of 20–25 percent, reports that it paid 72 percent of claims presented.⁵⁴ This claims payment percentage seems roughly in line with the rate of mortgage fraud that was said to have occurred during the bubble period.

5. Require a one-page mortgage-information disclosure form. This form would present clear, straightforward key information that allows borrowers to answer the question, “Can I afford this loan now and in the future?” See appendix 3 for an example of what this form should contain.

6. Counter government policies that promote bubbles. For many years, especially through the affordable-housing requirements imposed on Fannie and Freddie, government policies have focused on expanding homeownership by reducing the cost of credit while at the same time promoting looser credit standards. This resulted in increased demand, higher debt levels, leverage, and inflation in adjusted and real home prices. These policy choices reinforced the tendency of the market to rely increasingly on nonprime loans as a boom progresses and the bubble grows. Regulation is necessary, then, to counter the propensity of the government to enact only expansionary policies and limit the incentives government creates for the private sector to originate nonprime mortgages.

The loan standards and accumulation of capital described above are countercyclical. They will promote steady growth and work against credit-induced housing booms and bubble formation. The following counterexpansionary and countercyclical policies, which automatically apply the brakes as risk levels rise, would provide additional protection.

- **Countercyclical leverage requirements for high LTV or Combined Loan-to-Value (CLTV) loans.** Homeowner and investor leverage tend to grow as housing prices rise; lenders respond to homebuyer demands for loans that will allow them to buy a more expensive house while keeping low monthly payments. Not only are down payments reduced, but LTVs are also increased by combining first and second mortgages to create high combined LTVs. A well-designed countercyclical policy would require, for example, that LTVs and CLTVs be automatically reduced (that is, down payments would be increased) when housing prices have risen by a given percentage in a local area. This would slow housing-price growth by directly reducing the leverage that homeowners can use to increase the price they will pay for homes. As housing prices return to normal levels, LTVs and CLTVs would do the same. In addition, second mortgages or other junior lien mortgages should only be permitted where the first mortgage holder has given its consent.

environment of collapsing lending standards and lax regulation. The number of suspicious activity reports—reports of possible financial crimes filed by depository banks and their affiliates—related to mortgage fraud grew 20-fold between 1996 and 2005 and then more than doubled again between 2005 and 2009. One study places the losses resulting from fraud on mortgage loans made between 2005 and 2007 at \$112 billion.”

⁵⁴ 2008–2010: \$5 billion of claims paid
 \$2 billion of loss mitigation as a result of rescissions
 71.5 percent of claims paid

At year-end 2010, MGIC had \$5.9 billion in reserves. Derived from MGIC Investment Corporation, “10-K,” March 1, 2011, 158 and 44, <http://phx.corporate-ir.net/phoenix.zhtml?c=117240&p=irol-sec> (accessed March 22, 2011).

- **Countercyclical loan-loss banking reserves.** Under current accounting standards, loan-loss reserves for banks and others are set based on recent delinquency and loss rates. However, bad loans are made in good times, when they seem good. The lean years inevitably follow the fat years, but under current reserve practices reserves are at their lowest levels at the beginning of a bust. Reserves should be built during good times, not bad.
- **Better appraisal practices.** Appraisers should report an estimated value using both the principle of substitution based upon comparable sales⁵⁵ and the principle of income capitalization based upon investment value as a rental.⁵⁶ Additionally, appraisals have long suffered from a lack of transparency in the selection of comparables.⁵⁷ This process would be remedied by identifying all appropriate comparables and using statistical techniques to help the appraiser select and reconcile all appropriate comparables. Transparency would allow the reader to validate and re-create the appraiser's comparable selection process. These provisions would be applicable to all federally related mortgages⁵⁸ and mortgages serving as collateral for private MBS and covered bonds.

7. Align economic interests and provide market transparency so investors, rating agencies, and guarantors are able to determine the number and quality of mortgages outstanding both at the point of origination and over time. Mortgage markets work best when aggregate risk levels are low and stable and when the economic interests of the various parties are aligned. It is now well understood that second mortgages do not meet this test; on the contrary, the interests of the parties are actually in conflict. The interests of credit enhancers such as MI companies are generally aligned with investors' interests. Since MI generally attaches at loan origination, MI companies can take on the role of "cop on the beat"⁵⁹ because they could perform underwriting reviews prior to loan closing and conduct random sample reviews on a postclosing basis. Once these reviews are completed to the MI company's satisfaction, it might indicate that after a period of timely payments (say, twenty-four to thirty-six months), a loan will be presumed to be properly underwritten unless there are material shortcomings such as fraud, misrepresentation, or a significant property value discrepancy. To avoid adverse selection, this must rightly remain the responsibility of the originator. To reduce conflicts, the MI policy should provide for binding arbitration if a claim is denied.

Additionally, market participants must understand the true conditions in the market so they can properly assess the risk of investment. Nonprime loans increased rapidly over the period 1991–2007. This is best demonstrated by the rapid growth of home-purchase loans with little or no down payment. In 1990, one in two hundred home-purchase loans had a down payment of 3 percent or less; by 1999, it was one in ten; 2003, one in seven; and 2007, one in two and a half.

⁵⁵ The cost of acquiring a comparable property fixes the upper limit of valuation. This is accomplished by identifying and evaluating suitable comparable properties that recently sold.

⁵⁶ The capitalization of expected income (rents) fixes an upper limit of valuation.

⁵⁷ Edward Pinto, unpublished study, 1991.

⁵⁸ Generally, loans originated by institutions regulated by banking regulators or purchased or guaranteed by a federal agency or sponsored enterprise.

⁵⁹ This role was historically played by MIs however the advent of Fannie and Freddie's automated underwriting systems in the late-1990s largely displaced the MIs from being involved in the loan approval process.

The extraordinary level of nonprime lending created a fragile market that adversely affected homeowners, mortgage insurers, and mortgage investors. It is not clear that anyone in the market or in government in 2007 and 2008 understood the dimensions of the nonprime mortgage problem. Fannie and Freddie did not disclose the number of subprime and other nonprime mortgages they were buying, holding, and securitizing, and thus even close students of the mortgage markets did not know what they did not know. Accordingly, the first line of defense is to make sure that the mortgage finance market has the information necessary to understand the amount of nonprime lending that is occurring.

It is important to reduce the tendency of homebuyers, lenders, and investors to believe that just because housing prices are rising, it is sensible or prudent to originate or buy a mortgage loan that will be repaid only if housing prices *keep* rising. This could be achieved in part by better disclosure of the characteristics and delinquency rates of mortgages originated, sold, and held by investors, and postlending due diligence by the lending and securitization industry to confirm that originated loans are as described—particularly with respect to owner occupancy and the presence of second mortgages. The results of this due diligence would be disclosed.

Response to the Administration's and Others' Concerns

In its report, while seeing advantages in a private housing finance system, the administration also identifies drawbacks. We will address those below and show that none of them is an obstacle to the implementation of a stable mortgage market.

An increase in mortgage rates. Although the administration recognizes that any changes in the current system—including the reforms the administration itself is recommending—are likely to moderately increase mortgage loan rates and that this in itself has policy advantages, it did not specify the amount by which mortgage rates might increase. As noted above, it is likely that the private housing finance system we propose will be able to deliver mortgages at costs that are a modest ten to twenty-five basis points higher than a GSE loan after taking into account the higher GSE capital requirement that the administration has recommended. We also believe that even this spread will narrow as more liquidity comes into a growing and competitive securitization market in the future.

The thirty-year fixed-rate mortgage. We have already noted that thirty-year fixed-rate mortgages are readily available in the jumbo market, without any government backing, and pointed out that as a matter of public policy there is no reason for the taxpayers to subsidize these loans.

Access to capital in a crisis. The administration's report expresses concern about whether—in a fully private market—there will be sufficient access to mortgage credit during a crisis. The administration argues, “absent sufficient government support to mitigate a credit crisis, there would be greater risk of a more severe downturn, and thus the risk of greater cost to the taxpayer.”⁶⁰ This idea gave rise to the administration's Option 2, which is a private market with a government backstop that would be invoked only in the event of a financial crisis that makes credit unavailable for housing. Government involvement in this case is said to be necessary because in the event of a crisis its guarantee will reassure investors and keep money flowing to housing. Earlier, we discussed the moral-hazard element of this and its tendency to cause overbuilding and harmful bubbles, while never adequately compensating the taxpayers for the risks they are underwriting.

If one assumes that some backstop is necessary, however, we point out that the Federal Reserve and the Treasury Department will still be there and have demonstrated their capacity for crisis intervention. Any intervention would be made easier by the fact that the outstanding mortgages would be largely of prime quality and could be backed by MI. As noted above, MI has the capacity to accumulate the reserves that would supply capital to back the mortgages in a fully private-sector market that has suffered a catastrophic decline. We do not believe it would be good policy to set up a government backstop for crisis conditions, since the tendency will be to use it even when there is no legitimate crisis. Instead, in a market where there are MI-backed prime mortgages insured down to 60 percent LTV, the Fed should be able to step in without significant credit risk to provide liquidity assistance in crisis conditions.

Shifting mortgage risk to too-big-to-fail (TBTF) institutions. In congressional testimony after release of the administration's report, Secretary Geithner observed that simply

⁶⁰ Departments of Treasury and HUD, *Reforming America's Housing Finance Market*, 28.

eliminating Fannie and Freddie and substituting a private financing system might amount to shifting mortgage risk from the GSEs to the major banks. If these banks are, as many believe, too big to fail (TBTF), then, he suggests, we have done nothing to relieve the taxpayers of potential liability. This is an important point, but there are a number of responses.

1. Banks have substantially larger capital requirements than did Fannie and Freddie and are far more diversified. They are able to bear greater losses without becoming insolvent. Moreover, to the extent that banks are holding mortgages or MBS, those loans are likely to be prime mortgages or MBS based on prime mortgages, not the subprime mortgages that caused the GSEs' insolvency.
2. Our proposal envisions a larger role in the mortgage system for securitization— involving only prime mortgages—than for banks. The major banks will of course be originators of a large percentage of the mortgages that will be made in the future, but most of these will be securitized and sold to institutional investors. In a securitization, the losses, if any, are taken by the subordinate tranches, not by the entity that structures the securitization or originated the loans. Thus, even assuming that the major banks are also the principal securitizers of the mortgages they originate, they will not be bearing the credit or interest-rate risk for these loans.⁶¹
3. To the extent that banks hold the loans they originate, or MBS backed by these loans, the credit risks they bear will likely be small, since the loans themselves will likely be prime quality and the MBS will be backed by prime loans with some form of credit enhancement.
4. Finally, we expect that banks and other institutional investors will be able, if they choose, to originate and hold whole mortgages that will not be of prime quality. Under our plan, these mortgages cannot be securitized and will expose the banks holding these loans to more credit risk than exposure to prime loans. For this reason, we propose that banks be assessed a higher capital charge for holding nonprime mortgages.

All of these elements, we believe, substantially reduce the likelihood that TBTF banks might impose losses on the taxpayers.

Preserving the “to be announced” (TBA) market. The TBA market depends on hedging to protect forward sellers of mortgages against interest rate and basis risk. As noted earlier, the benefits of TBA can be obtained at relatively small cost through hedging by the originating banks. This cost can be reduced further if the quality of the mortgages to be originated and sold in the future is clearly understood in advance. The GSEs were able to sell their mortgages for future delivery (the essence of the TBA system) because they were generally providing mortgages of uniform quality with narrow coupon spreads. Investors understood, before committing to purchase, what they would be getting in the future sale. This system was strengthened by the industry application of “good delivery” rules that substantially eliminated cherry-picking. We believe that the approach we have outlined in this white paper—because it

⁶¹ Originators would presumably remain responsible for representations and warranties relating to compliance with loan origination standards.

creates prime mortgages of generally uniform quality—will allow a TBA market for private MBS to develop without subsidies or government guarantees. As the GSEs are wound down over a five-year period, the GSE TBA market will continue to be available for use as a hedging vehicle. As the private MBS market becomes larger and more liquid, a non-GSE TBA market for these securities will develop.

Preserving access to mortgage credit for credit-worthy American families. The administration’s report notes that a fully private system “has particularly acute costs in its potential impact on access to credit for many Americans. While FHA would continue to provide access to mortgage credit for low-and-moderate income Americans, the cost of credit for those who do not qualify for an FHA-insured loan—the majority of borrowers—would likely increase.” We addressed above the issue of increased cost for mortgage credit. What about the issue of access? As we noted earlier, according to a Federal Reserve study, over 70 percent of all individuals with credit records in the United States (not just all homeowners with credit records) have FICO credit scores that are 660 or above—the foundation for a prime loan. Well over a majority (58 percent) have credit scores above 700.⁶² In both 1989⁶³ and 2010,⁶⁴ 87 percent of borrowers taking out a mortgage loan had a FICO of 660 or greater. In other words, these numbers show that the vast majority of potential homebuyers already have the basic requirement for a prime mortgage—a FICO credit score of at least 660. Further, the private approach we suggest preserves down payments as low as 10 percent on conventional prime loans for home purchase.

In this white paper, we are proposing to substitute prime mortgages for government backing as the foundation of a stable and robust housing finance system, primarily because government programs that have attempted to assist home construction or homeownership in the past have eventually become huge losses for taxpayers. Homeownership has long been a goal of US government policy, but the recent financial crisis shows that the government goes too far when it tries to make mortgage credit available to large numbers of borrowers who do not have the resources to sustain homeownership. The result was massive losses for Fannie and Freddie, which taxpayers will eventually have to pay, and a financial crisis and recession that are the worst since the Great Depression. If we must choose between government efforts to increase homeownership that result in huge costs for taxpayers, or a self-sustaining private system that provides stable financing for the vast majority of American families who are capable of sustaining homeownership—without any cost to taxpayers—the better choice is obviously private financing.

Small lenders and community banks could have difficulty competing. This is an important and legitimate issue, but it is based on mistaken facts and assumes incorrectly that the world will remain fundamentally the same after a private financing system is adopted. The government’s involvement in the housing finance market through Fannie and Freddie distorted

⁶² Board of Governors of the Federal Reserve System, “Report to Congress on Credit Scoring and Its Effects on the Availability and Affordability of Credit,” August 2007, www.federalreserve.gov/boarddocs/rptcongress/creditscore/creditscore.pdf (accessed March 18, 2011).

⁶³ Letter in author’s file dated October 30, 1989, to Ed Pinto from Equifax enclosing odds charts for new real estate accounts developed by Fair, Isaac Company (FICO).

⁶⁴ FICO presentation as American Securitization Forum 2011, “Consumer Metrics and Evaluation,” February 6, 2011.

the market's structure. Because the GSEs were able to bid more for mortgages than any competitors, they drove competitors from the secondary mortgage market and created a duopsony (a market with only two buyers). They were then able to discriminate among their suppliers, providing better returns to those, such as Countrywide,⁶⁵ who provided the mortgages that they wanted, and penalizing those—primarily the small banks and S&Ls—that were unable to compete in the volume they could supply. In reality, then, although the GSEs bought many of their best loans from the small banks, community banks were victims, rather than beneficiaries, of the GSEs.

The private market that will develop if our proposal is enacted will be entirely different. Most mortgages will be prime loans—the kinds of loans that the small and community banks usually originate. These loans will be highly sought after because they will not only be good investments, but also the only type of mortgages that could be securitized. Since most mortgages will have the same prime characteristics, the key function in this new market will be aggregating the mortgages into pools for securitization. This is a role that can be performed by the small and community banks, capturing the profits that they previously had to give up to Fannie and Freddie. All that is necessary is regulatory approval to set up one or more joint ventures that will aggregate the mortgages produced by the members and prepare them for sale through underwriters, or to institutional buyers who want to hold whole mortgages. The more competitors in this field, the more innovation there will be and the lower they will push mortgage rates. This will be possible because the approach we have described relies on prime loans, a core competency of community banks and risk-based pricing.

⁶⁵ “Mortgage Bankers Association chief economist Jay Brinkmann said the pricing strategies that Fannie and Freddie pursued contributed to the concentration of mortgage lending within the largest banks. The GSEs offered reduced ‘guarantee fees’ for their largest customers, which placed smaller lenders at a competitive ‘disadvantage,’ he told the NABE annual conference.” See “NY Fed Thinks Megabanks May Be the New GSEs,” *National Mortgage News*, March 16, 2011.

III. All programs for assisting low-income families to become homeowners should be on budget and should limit risks to both homeowners and taxpayers.

There are good policy reasons for government to assist low-income families to become homeowners, but the value of this policy has to be weighed against the failure rate imposed on those ostensibly being helped and the cost to the taxpayers. Referring to the affordable-housing requirements imposed on Fannie and Freddie, even former House Financial Services Committee chair Barney Frank (D-MA) has noted that “it was a great mistake to push lower-income people into housing they couldn’t afford and couldn’t really handle once they had it.”⁶⁶ Moreover, any program of this kind must be on budget and contain mortgage-quality standards that do not create market conditions similar to those that brought on the financial crisis. Finally, after all the years of trying and failing to increase homeownership without adding risk to the markets, perhaps it is time for Congress to rethink whether homeownership really should be given so many advantages over renting. With a more even-handed policy, rental properties would offer improved housing for people who are unable to—or should not be required to—take on the obligations of homeownership.

One of the ways to do this is to rein in FHA by limiting the scope of its lending, making sure its losses are sustainable over the long term, and putting it on budget through a mechanism more effective in identifying risks and losses than the Federal Credit Reform Act. Most of the administration’s discussion of FHA in its report suggests that the administration shares these objectives, although at some points there is vague and troubling language suggesting that it has not yet learned the lesson of the Fannie and Freddie’s financial collapse. “We will consider measures to make sure that secondary market participants are providing capital to all communities in ways that reflect activity in primary markets, consistent with their obligations of safety and soundness.”⁶⁷ This is almost word for word what HUD was saying as it was deliberately undermining the safety and soundness of Fannie and Freddie and other market participants. At this point, everyone should understand that HUD’s affordable-housing policies were directly responsible for the losses of Fannie and Freddie that the taxpayers will have to bear.

What is particularly pernicious about both the affordable-housing requirements and the rules concerning lending by insured depository institutions under the Community Reinvestment Act (CRA) is that they attempt to carry out government social policies by imposing requirements on private-sector entities. There are no controls on such a system. The private-sector entities are required to make loans they might not otherwise make, and the losses are passed along to the unwitting consumers of their services. The government has no incentive to reduce its pressures—as we saw, these pressures eventually drove Fannie and Freddie into insolvency—and the private-sector entities have no way to avoid the costs. The administration’s report does not explicitly say that it will abandon these policies, but it does not say the opposite either. The political pressures to retain the CRA will be enormous, but the administration’s arguments in

⁶⁶ Larry Kudlow, “Barney Frank Comes Home to the Facts,” GOPUSA, August 23, 2010, www.gopusa.com/commentary/2010/08/kudlow-barney-frank-comes-home-to-the-facts.php#ixzz0zdCrWpCY (accessed September 20, 2010).

⁶⁷ Departments of Treasury and HUD, *Reforming America’s Housing Finance Market*, 21.

favor of a private housing finance market and government agencies as the sources of support for low-income borrowers would seem to be inconsistent with making private-sector corporations the instruments for government social policies.

Much of the support for a government role in mortgage finance comes from groups that see housing finance as an opportunity to advance a social policy that expands homeownership. This is a worthwhile goal, but it must be carefully controlled if we are to avoid the problems that eventually forced Fannie and Freddie into insolvency. During much of their history, Fannie and Freddie safely and successfully facilitated the development of a liquid secondary market in middle-class mortgages. In 1992, however, they were given an affordable-housing mission, which eventually required them to take on the credit risk of almost \$2 trillion in subprime and other weak mortgages.

What set US losses apart from those in other countries was the fact that—before the financial crisis began—about half of all mortgages in the United States, 27 million loans, were weak and liable to default when the housing bubble deflated. Of the 27 million high-risk mortgages, 19 million were on the books of Fannie and Freddie, FHA, insured banks and S&Ls under the CRA, and other lenders under additional government programs. All of these programs were intended to increase homeownership by low-income families, but they were instituted and operated without any controls over the risks that were being taken under government mandates. Eventually, their high rates of default drove down housing prices nationally and crippled the financial system.

Government assistance to low-income families must not be undertaken without quality standards that limit the risks to homeowners, the government, and taxpayers. By prescribing an outcome without limiting the means, the government encouraged loans and underwriting standards that were “flexible and innovative.” This inevitably led to greater lending with minimal down payments along with lending to borrowers with impaired credit and higher debt ratios.

These policies assumed that borrowers who benefited from these flexibilities would be nearly as safe as borrowers with good or unimpaired credit. However, the risks that resulted from these underwriting concessions were well documented. A 1996 Fed study titled “Credit Risk, Credit Scoring, and the Performance of Home Mortgages”⁶⁸ pulls together unequivocal evidence from multiple sources on the high risks posed by “innovative or flexible” loan features such as low down payments and impaired credit/low FICO scores. This clearly shows the link between the government’s insistence on loosened and flexible lending and the certainty of heightened mortgage default risk. See appendix 5.

Thus, if Congress wants to encourage homeownership for low-income families, then the mortgages intended to implement this social policy must be subject to a defined set of quality standards—not standards as high as those for prime mortgages, but standards that will ensure that losses do not get out of hand or, as they did with Fannie and Freddie and the FHA, cause substantial burdens for taxpayers. The nation’s experience with the FHA demonstrates not only

⁶⁸ Federal Reserve, Division of Research and Statistics, “Credit Risk, Credit Scoring, and the Performance of Home Mortgages,” *Federal Reserve Bulletin*, July 1996, www.federalreserve.gov/pubs/bulletin/1996/796lead.pdf (accessed January 14, 2011).

that standards are essential, but also that Congress has to avoid the political and other pressures that tend to erode the standards over time. See appendix 6.

Any social policy intended to increase homeownership, including the FHA, should be operated to achieve Congress's social policy goals while limiting homeowners' and taxpayers' risks. This can be achieved through the following steps.

1. On budget. Necessary subsidies must be on budget, so they are visible to members of Congress and voters. In the past, through Fannie and Freddie and the CRA, the subsidies have been hidden in the financial statements of GSEs and private-sector entities, which were required to make subsidized loans and pay for them with more expensive loans to prime borrowers. This, of course, is unfair to prime borrowers, who are being forced to pay for a social policy the cost of which should be borne by all taxpayers. But perhaps even more important, hiding the cost of the subsidies in private and GSE balance sheets obscures the cost to society. There are very good policy reasons for supporting low-income housing subsidies, but those costs should be made clear.

2. A sustainable loss rate. Although the FHA contends that it covers its losses adequately with fees, there are many who disagree with this view. A recent Barclays study concluded: “[W]e project cumulative default rates in the 20% area on average, with loss given default rates of 60%. This represents average losses of about 12pts, of which 8.5pts could flow back to taxpayers. On an original balance of \$1.4trn, this translates to \$130bn.”⁶⁹ The administration seems to agree here, too, noting in its report that it will take steps to strengthen FHA's capital position and that it had already announced an insurance-premium increase.

3. Assist low-income borrowers without competing with private-sector lending. Lending to low-income borrowers increases the opportunity for families that cannot meet prime lending standards to gain the benefits of homeownership. Since it is done for social policy reasons—increasing homeownership among low-income families—taxpayers should take some risk. This risk, however, must be subject to some limits. The following low-income mortgage lending standards would provide credit for families that cannot meet prime loan standards but would still enable low-income families to become homeowners without exposing them or taxpayers to excessive foreclosure risk.

4. Limit to low-income borrowers. The FHA's benefits should be limited to low-income borrowers who are demonstrably unable to meet prime lending standards. This is important to ensure that the FHA is fulfilling its social policy purposes and not becoming a backdoor way for people who could otherwise meet prime lending standards to obtain mortgages at government-backed rates. Accordingly, the mortgage limit should be capped at 100 percent of median house values measured on the local level, the income limit should be capped at 80 percent of the area median income, and loans should be limited to home purchases and fixed-rate and term refinances. Although the administration was not as specific, it seems to be seeking to achieve the same goals. This would be accomplished in part by a series of reductions in FHA's mortgage limits, by allowing the temporary increase in loan limits to expire as scheduled on October 1, 2011. It also called for targeting FHA to creditworthy borrowers that have incomes up to the median level for their area and for reducing its risk exposure. All these policies are consistent

⁶⁹ Barclays, “US Housing Finance: No Silver Bullet,” 6.

with our view that a private housing finance system is compatible with assistance to low-income home buyers as long as the taxpayers' liability for FHA's losses is clear and limited.

5. A sustainable lending underwriting standard. As outlined in appendix 6, the FHA seems to believe that a 10 percent average claim rate is acceptable. It is disappointing that, year in and year out, 10 percent of homeowners with an FHA loan should fail in the average year. Congress should establish a sustainable loan-underwriting standard that achieves an expected cumulative risk of default not to exceed 4 percent during good times and 9–10 percent during bad times.⁷⁰ This would result in an average expected claim rate of about 5 percent. The standards needed to achieve this claims level include the accumulation of adequate borrower equity by way of a reasonable down payment from the borrower's own funds, scheduled amortization during the first five years of the loan, evidence of a willingness to pay, and debt-to-income ratios that do not leave borrowers burdened with excessive debt right from the start. This supports a major goal of single-family affordable housing programs—wealth building through increased equity in a home.

6. Transition. Because the FHA currently has such a large portion of the home-lending market, transitioning to a sustainable lending standard will take a few years. Table 3 presents a possible path to achieve this result.

Table 3: FHA Transition to Sustainable Lending Standards
(FHA has already proposed or suggested changes with respect to the highlighted headings)

| | LTV | Maximum seller concession | Maximum total debt ratio | Purpose | Mortgage limit (high/normal) | Income | Credit |
|------|-----------------------|---------------------------|---------------------------|---|--|----------------------------------|----------------------------|
| 2010 | 96.5% (current level) | 6% | >45% for 37% of borrowers | Home purchase and refinance | \$729,750/ \$271,050 | No limit | Current |
| 2011 | 96% | 3% | 45% | Home purchase and rate and term refinance | \$250,000 or area median home price if above \$250,000 | 100% of area median | 620–660 FICO ⁷¹ |
| 2012 | 95.5% | 3% | 43% | Home purchase and rate and term refinance | \$200,000 or area median home price if above \$200,000 | 80% of area median ⁷² | 620–660 FICO |
| 2013 | 95% | 3% | 41% | Home purchase and rate | \$150,000 or area median home price if | 80% of area median | 620–660 FICO |

⁷⁰ During the boom years of 1995–2003, the FHA's cumulative claim rate averaged nearly 8 percent. During the bust periods (1980–1985 and 2005–2008), it averaged 18 percent. See the FHA's 2010 Actuarial Study.

⁷¹ As noted previously, the FHA's serious delinquency rate on loans with a FICO score of 580–619 is 19.6 percent.

⁷² The goal is to reduce the FHA's dollar limit back to a level commensurate with its low- and moderate-income housing mission. The FHA should serve homebuyers with an income less than or equal to 80 percent of the median. While regional adjustments would be appropriate, nationally, for a family of four, this equates to an income of \$54,000 and below. A household with an income of \$54,000 getting a 6 percent fixed-rate thirty-year mortgage could afford the median-priced house in the United States—about \$175,000.

| | | | | | | | |
|------|---|----|-----|---|---|-----------------------|-----------------|
| | | | | and term refinance | above \$150,000 | | |
| 2014 | 95% for a twenty- five-year term* 90% for a thirty-year term* | 3% | 41% | Home purchase and rate and term refinance | 100% of median home price by area | 80% of area median | 620–660 FICO |

* By setting a twenty-five-year loan term on 95 percent LTV loans and a thirty-year loan term on 90 percent LTV loans (both at an interest rate of 5 percent), each borrower would have about 16–17 percent equity (based on original sales price) after five years. This compares to about 11 percent equity (based on original sales price) for an FHA borrower with a 96.5 percent LTV loan with a thirty-year loan term. This last borrower barely has enough equity to cover the selling expenses in the event of a sale.

7. Down payments and savings. The FHA provides its benefits through the traditional means used in the United States—by subsidizing the cost of a mortgage loan. However, that is not the only way—and possibly not the most effective way—to achieve its purposes. Studies by the US Census Bureau have shown that the greatest obstacle to homeownership among low-income families is not the monthly cost of the mortgage but the savings necessary for a down payment.⁷³ Accordingly, one of the ways for Congress to assist homeownership among low-income families within the lending standards we suggest would be to establish a program for providing down payment assistance to these families. Such a program should be designed to promote real savings by the potential homebuyer. For example, Congress could set up a tax-preferred savings plan to which the government contributes an amount each year that matches a family’s savings. The funds would accumulate in an FDIC insured account and could be used only as a down payment for a home.

⁷³ Howard A. Savage, *Who Could Afford to Buy a House in 1995?* (Washington, DC: US Department of Commerce and US Census Bureau, August 1999).

IV. Fannie Mae and Freddie Mac should be eliminated as GSEs over time.

Fannie Mae and Freddie Mac violate every principle of sound and sustainable housing finance. The history of these two hybrid firms, and the immense costs they have imposed on taxpayers, provides the best argument for the principles we have outlined in this paper. Through Fannie and Freddie, government policies exponentially increased taxpayer risks, now realized as actual losses, by using the two firms to compete with the FHA in pursuing a political strategy of high-risk loans. Fannie was “privatized”—really, GSE-ized—in 1968 for the explicit purpose of keeping its costs out of the federal government’s budget. Congress then copied the model with Freddie. But the costs have returned to the budget with a vengeance. Fannie and Freddie distorted resource allocation, prices, and credit, and were leading contributors to inflating the disastrous housing bubble that collapsed in 2007. As a result, almost everyone now agrees, including almost everyone in Congress, that Fannie and Freddie’s GSE status should be eliminated.

This leaves two questions: What should replace the GSEs? How should the transition be structured? We conclude that the GSEs should be—and can be—replaced by a housing finance market that is for the most part free of government guarantees and the distortions they create.

In its report, the administration recognized that no private-sector market for financing mortgages will be able to develop fully until competition from Fannie and Freddie is first reduced and then eliminated. To this end, the administration’s report calls for a transition away from the dominance of Fannie and Freddie, thus allowing private financing mechanisms to grow. Accordingly, while we and the administration target the elimination of Fannie and Freddie as GSEs, we both propose a gradual wind down.

A key transition feature that now appears to be generally accepted calls for a gradual reduction in the conforming loan limit that sets the maximum size of the mortgages that Fannie and Freddie can purchase. As this limit is reduced, Fannie and Freddie will be taken out of the market for loans above the limit. This will enable the private market to expand its activity gradually. The administration proposes to start this process by recommending that the temporary increase in loan limits be allowed to expire as scheduled on October 1, 2011.

The elements of the transition away from GSE status should include:

- **Reduce conforming loan limits.** While the administration appears to agree that the loan limits must be reduced, its report makes no recommendation beyond the small initial step noted above. We believe it is critical for the private market to be provided a definite schedule of reductions for the next three years. This will allow the necessary investments to be planned and made. We recommend lowering the conforming loan limit by 20 percent of the previous year’s cap each year, starting with the current general limit for one-unit properties of \$417,000 and the high-cost area limit of \$729,750. These limits, for loans, mean house prices of over \$500,000 and over \$1,000, 000, respectively, are financed by the government. In contrast, according to the National Association of Realtors, the median US house price is \$171,300. The general limit for a one-unit property would decrease to \$334,000 in year one, \$267,000 in year two, \$214,000 in year three, \$171,000 in year four, and \$139,000 in year five. The high-cost area limit for a one-unit property would decrease to \$584,000 in year one, \$467,000 in year two,

\$374,000 in year three, \$296,000 in year four, and \$237,000 in year five. Final termination or “sunset” of GSE status would take place at the end of year five.

- **Wind down investment portfolios and limit nonmortgage investments.** While Treasury and HUD note that Fannie and Freddie were allowed to behave like government-backed hedge funds and therefore conclude that Fannie and Freddie’s investment portfolios should be wound down, the schedule is painfully slow. Under the current structure, which predates the administration’s decision to wind down Fannie and Freddie, this could take as long as twelve years and still leaves them with investments of up to \$500 billion in 2022.

Table 4: Limited Wind Down of GSEs’ Portfolios under Current Policy

| As of Dec. 31: | Fannie limit | Fannie actual | Freddie limit | Freddie actual |
|----------------|-----------------------------|---------------|----------------|----------------|
| 2009 | \$900 billion | \$773 billion | \$900 billion | \$755 billion |
| 2010 | \$810 billion | \$789 billion | \$810 billion | \$697 billion |
| 2011 | \$729 billion | * | \$729 billion | * |
| 2012 | \$656 billion | * | \$656 billion | * |
| 2013 | \$590 billion | * | \$590 billion | * |
| 2014 | \$531 billion | * | \$531 billion | * |
| 2015 | \$478 billion | * | \$478 billion | * |
| 2016 | \$430 billion | * | \$430 billion | * |
| 2017 | \$387 billion | * | \$387 billion | * |
| 2018 | \$349 billion | * | \$349 billion | * |
| 2019 | \$314 billion | * | \$314 billion | * |
| 2020 | \$282 billion | * | \$282 billion | * |
| 2021 | \$254 billion | * | \$254 billion | * |
| 2022 | \$250 billion ⁷⁴ | * | \$250 billion* | * |

Note: * = Unknown

Source: Derived from Fannie and Freddie 2010 10-Ks, December 2010 Monthly Reports, and “Second Amendment to Amended and Restated Senior Preferred Stock Purchase Agreement,” dated December 24, 2009, www.svb.com/pdfs/sam/fannie509amendment.pdf (accessed March 22, 2011).

A better approach and one consistent with the wind-down goal would prohibit Fannie and Freddie from adding existing or newly acquired single-family or multifamily loans or MBS to their portfolios, with exceptions only for newly acquired loans held for a short period before securitization and the purchase of delinquent or modified loans out of an existing MBS. With no additions allowed, natural runoff should substantially reduce their portfolios over time. Establishing a specific requirement for sales in any year could allow the government to be gamed or arbitrated. While hard to predict, these changes should reduce taxpayer portfolio exposure to a combined \$500 billion (a reduction of two-thirds) by 2016 compared to the current trajectory, and do so without putting pressure on housing or MBS prices. To the extent a GSE has portfolio assets remaining at the fifth-year sunset, these should be put in a liquidating trust and defeased or sold to other

⁷⁴ Once the portfolio limit is reduced to \$250 billion, no further decreases are required.

investors. During the wind-down period, Fannie and Freddie should be allowed to buy only prime loans as defined in appendix 1.

The administration recommended a move in this direction by calling for an increase in the GSEs minimum down payment requirement from 3 percent to 10 percent. We suggest doing this in phases: the FHFA director would direct the GSEs to set a maximum single-family CLTV limit of 95 percent in 2011. This CLTV ratio would decrease to a maximum of 92.5 percent on January 1, 2014, and would be applicable until the sunset of the GSE charters at the end of 2015.

Going forward, the GSEs' new nonmortgage investments should consist only of Treasury securities.

- **Raise the GSEs' capital requirements to equal those of national banks and rely more on private capital.** The administration also recommends this step. It would eliminate the unfair capital advantages that Fannie and Freddie did and do enjoy and reduce the gap between Fannie and Freddie's subsidized pricing and private-market rates. An increase in capital requirements would require the GSEs to raise their base guarantee fee by perhaps fifteen to twenty-five basis points (this fee currently averages twenty-five basis points), a step already taken by the administration and one that would result in a gradual reduction in the GSEs' pricing advantage over the private sector. As suggested by the administration, the FHFA director should explore various means of credit enhancement to reduce the liability of the GSEs for losses on mortgages, including the possibility of increased mortgage guaranty insurance.
- **Dividend on preferred stock held by Treasury.** The dividend should be set by statute to yield not less than 10 percent annually. Secretary Geithner expressed this policy at a March 1, 2011, hearing before the House Financial Services Committee.
- **Recoupment of costs of federal guarantee.** Beginning on January 1, 2014, the GSEs should be required to make quarterly payments to the Treasury equal to an annualized thirty basis points times the average aggregate outstanding credit risk of the GSE. This provision will enable the taxpayers to recoup the value of the government guarantee of the GSEs' mortgage portfolios and MBS.⁷⁵
- **Repeal affordable-housing goals and taxes.** Consistent with Principles I and III above, repeal the GSE (including the FHLB) affordable-housing goals and affordable-housing support fees.⁷⁶

⁷⁵ This level of guarantee fee is consistent with the CBO's budget estimates, which price the value of the government's backing of the GSEs at 4.4 percent in 2009, reducing to .20 percent (twenty basis points) in 2014 and thereafter. Thirty basis points seems a good middle point, consistent with the CBO study. See Congressional Budget Office, *CBO's Budgetary Treatment of Fannie Mae and Freddie Mac* (Washington, DC: January 2010), table 2, www.cbo.gov/ftpdocs/108xx/doc10878/01-13-FannieFreddie.pdf (accessed March 22, 2011).

⁷⁶ *Supra*. Housing and Economic Recovery Act of 2008 (HERA). HERA imposed a 4.2-basis-point fee on Fannie and Freddie's mortgage purchases (currently suspended by FHFA).

- **Privatization.** At the sunset date, the conservatorship will be converted to a receivership, the equity below the Treasury’s holdings will be wiped out, and the GSEs will be divided into good bank/bad bank structures. If there are buyers for the GSEs as going concerns (no longer in GSE form), or capital is available for their restructuring as fully private nongovernment entities, the good banks will be sold and the bad banks will be liquidated by creating a liquidating trust that contains all remaining mortgage assets, guaranty liabilities, and debt. The obligations of the trust will be defeased with the deposit of Treasury securities. As obligations arise that exceed the revenues of the trust (from mortgage payoffs or refinancing), the Treasury securities will be liquidated to meet the obligations. The GSE net worth shortfall will unjustly—but at this point unavoidably—be borne by taxpayers, including Treasury’s writing off its preferred stock.
- **Dispositions of properties other than through privatization.** If there are no buyers for the GSEs in the good bank/bad bank structure, all their intellectual property, systems, securitization platforms, goodwill, customer relationships, and organizational capital should be auctioned off. The proceeds would reduce the Treasury’s and taxpayers’ losses.

The reasons for winding down Fannie and Freddie imply other policy choices that should be considered as part of a thorough reform of the US housing finance system:

1. Coincident with the wind down of Fannie and Freddie, Congress should establish a legal structure that allows for a number of private financing options. Although we believe a combination of a market based on portfolio lending and securitization of loans would be the most effective immediate replacement for a government-backed housing finance market, there are many other alternatives. Covered bonds would make a sensible additional fixed-rate funding alternative for mortgages. With covered bonds, banks issue debt for which they remain liable (thus, having 100 percent “skin in the game”), secured by loans.

This could include incorporating some of the benefits of the Danish system, which divides the credit and interest-rate risks on mortgages, and the German system, which has strict mortgage credit standards. In the Danish system, the interest rate on mortgages is set by the market directly, and the credit risk is taken by specialized mortgage banks that also function much like mortgage guarantors. Throughout the more than two-hundred-year history of German covered bonds, there has never been a default of a German Pfandbrief or covered bond⁷⁷ or a default by a Danish mortgage bank. For such a system to work, there must be statutory (not just regulatory) protection of the right of the bondholders to the collateral in the event of the failure of the issuer, as well as a requirement that the mortgages covering the bonds be of prime quality. Thus, any framework that establishes requirements for mortgage quality should be compatible with a variety of mortgage financing structures, all of which should be able to operate simultaneously in the US market.

The political obstacle in the United States has been the objections of the FDIC, which fears that in the event of a failure, it will lose assets that would otherwise be part of a bank and

⁷⁷ Association of German Pfandbrief Banks, “The Pfandbrief—A Safe Investment,” [www.hypverband.de/cms/bcenter.nsf/docsbykey/65192645/\\$file/Flyer+EN_Pfandbrief_a+safe+investment.pdf?openelement](http://www.hypverband.de/cms/bcenter.nsf/docsbykey/65192645/$file/Flyer+EN_Pfandbrief_a+safe+investment.pdf?openelement) (accessed January 14, 2011).

thus increase its losses to its deposit-insurance scheme, like what happens with FHLB advances. This concern can be addressed by limiting the extent of collateralization of the covered bonds (for example, the percentage of overcollateralization might be limited to the capital ratio of a bank, so the excess collateral is in effect funded by capital, not deposits).

2. FHLBs: Reduce risks these GSEs present to taxpayers and focus their support on small- and medium-sized financial institutions. The administration noted that the FHLBs “developed significant weaknesses as the housing market evolved that should be addressed as part of housing finance reform.” Also noted was the need to address the FHLBs’ advance funding (lending secured by loans) to very large banks. The suggested reforms address fundamental banking principles that expose the taxpayers either directly (as a result of the FHLBs’ GSE status) or indirectly (as a result of the combination of the FHLBs’ implicit guarantee with the FDIC’s explicit guarantee). We agree and suggest the following:

- **Adopt a loan-to-one-borrower limit.** This universal financial concept applies to all other banks. The administration recommended limiting the level of advances to any given institution. Dodd-Frank limits maximum exposure to one borrower to 25 percent of capital, but FHLBs were excepted in the Senate negotiations. This should be reconsidered. Even limiting them to 50 percent of capital would be a major constraint on their use of the implied guarantee, since individual FHLBs lend multiples of their capital to certain borrowers. For example, FHLBs lent \$50 billion to Countrywide, \$90 billion to Citigroup, \$40 billion to WaMu, and \$10 billion to IndyMac.
- **Stop the double leveraging of the FHLBs through the banking system.** When banks buy stock in the FHLBs, they are allowed to create high leverage for this equity investment (sixty to one in risk-based terms—20 percent risk weighting). Instead, they should have to hold dollar-for-dollar equity of their own, or at least have a much higher capital requirement for FHLB stock investments. These equity investments are financed by deposits, and there is very little equity in the FHLB banking system viewed on a consolidated basis. The disaster of bank investments in Fannie- and Freddie-preferred stock demonstrated this problem, since numerous banks took large losses and some failed because of their highly leveraged investments in GSE equity.
- **Reducing portfolio investments.** Treasury/HUD noted that similar to Fannie and Freddie, several of the FHLBs had built up sizable investment portfolios. Using their GSE status, these banks were able to use their implicit guarantee to earn arbitrage profits. Treasury/HUD recommend that the size of these portfolios should be reduced and their compositions changed to better support legitimate liquidity needs and reduce credit exposure.
- **FHLBs take very large collateral haircuts to secure their advances.** In the event of bank failure, these haircuts cause losses to be passed on to the FDIC and—in the S&L bailout of 1989—to the taxpayers. For example, when the FHLB of San Francisco made advances to IndyMac secured by risky mortgage loans, it required 100 percent overcollateralization. To a large measure, this excess collateral was financed with FDIC-guaranteed deposits rather than bank capital and contributed to

the FDIC's estimated \$10 billion loss. This is the same problem the FDIC points out in its opposition to covered bonds. A limit on the extent of overcollateralization by FHLBs is appropriate.

3. The four principles outlined in this white paper are equally applicable to multifamily housing finance. The federal government has long supported the multifamily housing finance market. This support includes government insurance (FHA), MBS guarantees (Fannie, Freddie, and Ginnie), on-budget subsidies (HUD and USDA), off-budget mandates (Fannie and Freddie), off-budget subsidies (FHLBs), and low-income tax credits (before Fannie and Freddie's collapse, they were the largest purchasers). Before the GSEs' involvement, life-insurance companies, pension funds, and banks supported a robust conventional multifamily lending market.

In the late 1970s, HUD pushed Fannie and Freddie to undertake multifamily lending as part of its early efforts to enforce a GSE affordable-housing mission. These programs proved to be high risk, with Freddie completely exiting the multifamily business in the late 1980s after sustaining substantial losses.⁷⁸ By imposing affordable-housing requirements for multifamily as well as single-family mortgages, the 1992 act forced Freddie back into multifamily finance and both GSEs were required to greatly expand their programs. As was the case with single-family financing, the private sector had an ever more difficult time competing with the GSEs' charter advantages. Today Fannie and Freddie,⁷⁹ along with FHA, have now largely taken over the multifamily finance market.

Many of the proposals for reform of the housing finance market argue for continued federal government financial support for multifamily housing,⁸⁰ either through an explicit or

⁷⁸ Fannie also lost substantial sums on a \$5 billion portfolio of 6 percent multifamily loans it had acquired from HUD when long- and short-term interest rates topped 15 percent in the early 1980s.

⁷⁹ "In the current market, the GSEs hold 35 percent of total outstanding multifamily mortgage debt and are providing nearly 90 percent of all mortgage capital to the market." See Ingrid Gould Ellen, John Napier Tye, and Mark A. Willis, "Improving US Housing Finance through Reform of Fannie Mae and Freddie Mac: Assessing the Options," Furman Center for Real Estate & Urban Policy, Institute for Affordable Housing Policy, and What Works Collaborative, May 2010,

http://furmancenter.org/files/publications/Furman_Center_GSE_Reform_White_Paper_May_2010.pdf (accessed March 21, 2011).

⁸⁰ Ibid. See also "MBA's Recommendations for the Future Government Role in the Core Secondary Mortgage Market," Mortgage Bankers Association, August 2009, www.mbaa.org/files/News/InternalResource/70212_RecommendationsfortheFutureGovernmentRoleintheCoreSecondaryMortgageMarket.pdf (accessed March 21, 2011); *Housing Finance—What Should the New System Be Able to Do? Testimony Before the House Financial Services Committee*, 111th Cong. (April 14, 2010) (statement of Jack E. Hopkins, Independent Community Bankers Association), <http://financialservices.house.gov/Media/file/hearings/111/Printed%20Hearings/111-121.pdf> (accessed March 21, 2011); *The Future of Housing Finance—A Review of Proposals to Address Market Structure and Transition, Testimony Before the House Financial Services Committee*, 111th Cong. (September 29, 2010) (Michael J. Heid, Housing Policy Council), <http://financialservices.house.gov/Media/file/hearings/111/Heid092910.pdf> (accessed March 21, 2011); *Housing Finance—What Should the New System Be Able to Do? Testimony Before the House Financial Services Committee*, 111th Cong. (April 14, 2010) (statement of Sheila Crowley, National Low Income Housing Coalition), www.nlihc.org/doc/Testimony-of-Sheila-Crowley4-14-2010.pdf (accessed March 21, 2011); and Mortgage Finance Working Group, *A Responsible Market for Housing Finance*, (Washington, DC: Center for American Progress, December 2009), www.americanprogress.org/issues/2009/12/pdf/housing_finance.pdf (accessed March 21, 2011).

implicit government guarantee of agency or private MBS or the need for a GSE or other similar entity with substantial ongoing portfolio capacity. A detailed treatment of multifamily housing finance is beyond the scope of this white paper. However, the lessons from the single-family disaster have direct applicability to multifamily housing finance and the risks posed to taxpayers. While the multifamily lending business is less than \$1 trillion, or under 10 percent of the single-family finance market, it is even more complex and risky. Although the GSEs' recent multifamily lending efforts have resulted in low losses, there is a long history of costly multifamily failures at the GSEs and at FHA. It is also clear from the various industry proposals for future GSE participation in multifamily lending that there will be pressure to move the GSEs and FHA into riskier types of loans. Combine this with continued federalization of multifamily mortgage credit and the risks to taxpayers are substantial.

The four principles outlined in this white paper should be applied to multifamily housing finance. The inability to price risk, or create reserves for potential losses, and the moral hazard created by government financial support for the industry will have the same adverse effect in multifamily housing as it has had in the single-family market. Federal guarantees and mandates will distort the incentives and behavior of borrowers, lenders, and investors alike and prevent the multifamily market from developing normally with private-sector support. Good-quality mortgages backed by good-quality rent rolls can restore a private market in multifamily housing.

As is the case with single-family finance, a gradual removal of government support by the GSEs and FHA, and the resulting price advantage, will be necessary to give traditional financing sources time to re-enter the business. This will allow a private multifamily financing sector to develop based on solid underwriting and the use of financing mechanisms already available.

Appendix 1:

Definition of a Prime Loan

A prospective prime borrower needs to be qualified based on a demonstrated ability to repay the loan, a demonstrated willingness to meet his or her obligations, and sufficient equity to reduce the likelihood of default to a reasonable level.⁸¹

We define *prime first mortgage loans* as loans with the following characteristics:

- Conventional loans on properties occupied as a primary or secondary residence.⁸²
- Home purchase loans with an LTV of 90 percent or less commencing on January 1, 2016.⁸³ During the five-year GSE wind down and private-market transition period we recommend, an LTV limit of 95 percent would be permitted until December 31, 2012, and an LTV limit of 92.5 percent would be permitted until December 31, 2015.
- Rate and term refinances with an LTV of 80 percent or less with a maximum loan term of twenty-five years.⁸⁴
- Cash-out refinances with an LTV of 75 percent or less with a maximum loan term of twenty years.⁸⁵
- As noted, research shows that loans with an LTV of 60 percent or less sustain virtually no losses. Therefore, any loan with an LTV greater than 60 percent could be insured by mortgage guaranty insurance down to 60 percent; however, a fully amortizing loan with a term of fifteen years or less and an LTV greater than 80 percent could be insured by mortgage guaranty insurance down to 70 percent.
- Loans to borrowers with a demonstrated willingness to meet their obligations as represented by a FICO credit score of 660.⁸⁶ No second mortgage at loan origination and prohibited by the mortgage documents for a period of six months after origination. The mortgage documents also grant the mortgage holder and mortgage insurer (if any) the right of prior approval with respect to any second mortgage taken out after six months.
- The mortgage note and mortgage shall:
 - Require the borrower to declare his or her intent regarding owner occupancy;

⁸¹ These represent the traditional Three Cs of mortgage risk:

Credit or willingness to pay—generally represented by evaluation of a credit report.

Capacity or ability to pay—generally represented by evaluation of income and liability information measured against housing and other debt ratios.

Collateral underlying the mortgage—generally represented by evaluation of amount and source of down payment information and an appraisal to determine the value of a property for lending purposes.

⁸² In 1991, over 98 percent of Fannie’s loans met this standard. Data from Fannie Mae’s random sample review covering single-family acquisitions for the period October 1988–January 1992, dated March 10, 1992. Document contained in the authors’ files.

⁸³ Ibid. In 1991, over 91 percent of Fannie’s home-purchase loans had LTVs of 90 percent or lower.

⁸⁴ Ibid. In 1991, over 93 percent of Fannie’s loans had LTVs of 80% or lower.

⁸⁵ Ibid. In 1991, over 92 percent of Fannie’s loans had LTVs of 75% or lower.

⁸⁶ Ibid. In 1991, over 98 percent of Fannie’s loans had one or no mortgage late payments at origination and 85 percent had two or fewer nonmortgage late payments at origination.

- Require the borrower to acknowledge that if the intent to occupy changes within twelve months of the date of the loan, the borrower has an affirmative obligation to notify the lender;
 - Advise the borrower that upon receipt of such notice, the lender has the right to increase the interest rate on the loan by a stipulated percentage; and
 - Provide that if the borrower fails to notify the lender, the lender may call the loan and require its immediate repayment, and such loan, if not already recourse to the borrower, becomes recourse and not dischargeable in bankruptcy.
- Housing and total debt-to-income ratios of less than 33 percent and 38 percent, respectively⁸⁷ (28 percent and 33 percent on 95 percent and 92.5 percent loans during the five-year transition period).
 - Underwritten based upon verified income, assets, and credit.⁸⁸
 - If an adjustable-rate mortgage or balloon, an initial fixed rate for seven years or more, with the borrower qualified at the maximum rate permitted during the first seven years.
 - If a prepayment fee is charged, it may not provide for a fee in excess of 3 percent of principal for the first year, 2 percent for the second, and 1 percent for the third, and the originating lender must offer the applicant the option of a similar loan with no prepayment fee.

The following are the standards that federal regulation should require of mortgage insurers for prime loans:

- Maintain minimum risk-to-capital ratios by amortized LTV based on the lesser of sales price (if applicable) or original appraised value, as set forth below:

| Amortized LTV (%) | Suggested risk-to-capital ratio for thirty-year fixed-rate loans ⁸⁹ | Current risk-to-capital ratio |
|-------------------|--|-------------------------------|
| 92.51–95.00 | 8 to 1 | 25 to 1 |
| 90.01–92.50 | 10 to 1 | 25 to 1 |
| 85.01–90.00 | 13 to 1 | 25 to 1 |
| 80.01–85.00 | 16 to 1 | 25 to 1 |
| 75.01–80.00 | 29 to 1 | 25 to 1 |
| 70.01–75.00 | 31 to 1 | 25 to 1 |
| 65.01–70.00 | 38 to 1 | 25 to 1 |
| 60.01–65.00 | 41 to 1 | 25 to 1 |

⁸⁷ Ibid. In 1991, over 90 percent of Fannie’s loans met this standard.

⁸⁸ Fannie stopped acquiring low-doc or no-doc loans in 1990. Freddie followed in 1991. See “Haste Makes . . . Quick Home Loans Have Quickly Become Another Banking Mess,” *Wall Street Journal*, July 5, 1991.

⁸⁹ Fixed-rate loans with shorter amortization periods pose a lower risk of default due to faster buildup of borrower equity and therefore would have somewhat higher risk-to-capital requirements (requires that less capital be held). For example, fifteen-year term loans at an 80 percent LTV might have a thirty-eight-to-one risk-to-capital ratio, the same as for a 70 percent LTV loan with a thirty-year term.

- As noted, MI is required on all loans with an LTV above 60 percent up to the prime loan LTV limit of 90 percent (except as provided for the five-year period during which the GSEs are wound down. This coverage is required down to 60 percent.⁹⁰ For example, on a 90 percent LTV loan, MI would provide 34 percent coverage, which would insure down to 59.4 percent. Under the above risk-to-capital requirement, MI would be required to maintain a minimum equal to 7.7 percent (the inverse of the thirteen-to-one risk-to-capital ratio) times coverage of 34 percent or 2.62 percent against this prime-loan risk. This compares to 4 percent (the inverse of the twenty-five-to-one risk-to-capital requirement) times coverage of 25 percent or 1 percent against loans that in the last decade consisted of many nonprime loans.
- Fifty percent of gross premiums required to be placed in statutory premium reserve (same as current requirement) for a fixed period (current period is ten years) and may only be used to pay nonnormal or catastrophic stress-based losses due to periodic but unpredictable general economic risks as described earlier. The other 50 percent of premium revenue is required to support normal claims related to specific or actuarially based credit losses, general and administrative expenses, taxes, other expenses, dividends, and profits.
- Monoline (same as current). A monoline insurer's business is limited to one line of insurance, in this case mortgage guaranty insurance on prime single-family first mortgages.
- Coverage is loan based with a maximum coverage of 35 percent after 2015 and a maximum coverage of 38 percent during the five-year transition period (current practice). No pool coverage or guaranty of securities (new provision). MI companies are limited to covering individual loans rather than pools of loans.
- No originator, aggregator, conduit, or issuer (or affiliates or parents) may own or operate a private mortgage insurer (new provision). The Alger report noted a need to avoid conflicts of interest between originators and credit enhancers.⁹¹
- Restricted to prime loans (new provision). This limits MI companies to prime loans, which have more predictable and lower default rates than nonprime loans. No sharing of premiums with lenders or investors (a new provision designed to prohibit captive subsidiaries) and any discounts must be risk based, not volume based (current practice). A captive subsidiary is an MI reinsurer controlled by the loan originator. Countrywide was an early and large participant in the practice. Its prohibition helps eliminate conflicts of interest. In terms of pricing, Fannie and Freddie offered large volume-based discounts, whereby lenders such as Countrywide were charged a guaranty fee of about ten basis points, while community banks were charged twenty basis points or more.

⁹⁰ Coverage must be maintained until the original loan balance amortizes to 60 percent based on the lesser of original sales price (if applicable) or original appraised value.

⁹¹ Report to the governor of New York by Commissioner George Alger (Alger Report) regarding the operation, conduct, and management of mortgage guaranty corporations dated October 5, 1934. Document contained in the authors' files.

Appendix 2:

Nonprime Loans

As noted under Principle II, nonprime loans are inappropriate for inclusion in private MBS or covered bonds. This means that nonprime loans will have to be held in the portfolio of a bank or other entity.

Additionally, nonprime loans contained in the portfolios of leveraged entities such as depository institutions should be subject to a variable capital requirement that adjusts as the share of nonprime loans in the origination market changes.⁹² This would be accomplished by setting capital requirements that automatically adjust as nonprime loans' share of all originations changes. Implementing this requirement necessitates tracking the quality characteristics of all mortgage loans. This allows for a determination of the percentage of prime and nonprime loan originations entering the market on a quarterly basis.

Loans held in portfolio need to be backed by capital to address three risks: normal credit risk, interest-rate risk, and catastrophic risk.

- Prime fixed-rate loans would be subject to a 1 percent capital requirement for credit risk, 3 percent for interest-rate risk, and zero percent for catastrophic risk. Different capital requirements would be applicable to ARM loans.
- Nonprime fixed-rate loans would be subject to a 5 percent capital requirement for credit risk, 3 percent for interest-rate risk, and a range from zero percent to 6 percent for catastrophic risk. A different capital requirement would be applicable to ARM loans. The catastrophic risk capital component for fixed-rate loans would be determined based on the following:

| Nonprime percentage of loan originations for a quarter (%) | Catastrophic risk capital requirement applicable to all nonprime loans held in a bank's portfolio (%) |
|--|---|
| 0–20 | 0 |
| 20.01–25 | 1 |
| 25.01–30 | 2 |
| 30.01–40 | 4 |
| 40.01–50 | 6 |
| >50 | 8 |

⁹² FHA and other social policy loans would be included in this calculation.

This countercyclical policy yields two results: increased capital as a cushion against loan losses and/or reduced originations of higher-risk nonprime loans to fuel an unsustainable boom.

Appendix 3:

THE BASIC FACTS ABOUT YOUR MORTGAGE LOAN

Borrower: _____ Property address: _____

Lender: _____

Amount of loan: \$ _____, which is _____ % of the property's appraised value.
Your loan is for _____ years.
The type of loan you have: _____

Your beginning interest rate is _____%. This rate is good for _____ months/years. The rate and your payment can go higher by up to _____% on _____ and each _____ months after that.

One estimate of what your future rate could be, called the fully indexed rate, is _____%.
The maximum possible rate on your loan is _____%. You were qualified for approval using a rate of _____%.

THIS LOAN IS BASED ON YOUR MONTHLY INCOME OF \$ _____.

Your beginning rate = a monthly loan payment of \$ _____ = _____ % of your income.
-including taxes and insurance this is about \$ _____ = _____ % of your income.

The fully-indexed rate = a loan payment of \$ _____ = _____ % of your income.
-including taxes and insurance this is about \$ _____ = _____ % of your income.*

*This is called your fully indexed housing expense ratio.

Special factors you must be aware of:

- A prepayment fee of _____ must be paid if _____.
- A "balloon payment" of \$ _____ to pay off your loan will be due on _____.
- You do/do not have a loan with possible "negative amortization". If you do, make sure you really understand what this means. Start with the definition on p. 3.

Total "points" plus estimated other costs and fees due at closing are \$ _____.

FOR QUESTIONS CONTACT: Name: _____

Phone: _____ e-mail: _____

**See definitions of underlined terms and guidelines on pages 2-3.
DO NOT SIGN THIS IF YOU DON'T UNDERSTAND IT!**

| | | | |
|-----------------------------|----------|----------|------|
| _____ | | _____ | |
| | Borrower | | Date |
| _____ | | _____ | |
| Authorized Signer of Lender | Date | Borrower | Date |

The Basic Facts about Your Mortgage Loan

This form gives you the basic facts, but some mortgage forms may use terms not listed here. For a good, borrower-friendly information source, try the Mortgage Professor online (www.mtgprofessor.com), which includes detailed explanations of the technical mortgage terms in its glossary and much other helpful information.

Definitions and Guidelines Used in This Form

The *appraised value* is what a professional appraisal estimates the house could be sold for in today's market.

The *type of loan* determines whether and by how much your interest rate can increase. If it can, your monthly payments will also increase—sometimes by a lot. For example, in a thirty-year fixed rate loan, the interest rate is always the same. In a one-year ARM, it will change every year. Other kinds of loans have various patterns, but the interest rate may go up a lot. Make sure you understand what type of loan you're getting.

The *beginning interest rate* is the interest you are paying at the beginning of the loan. It is the rate which you will hear the most about from ads and salespeople. But how long is it good for and when will rates increase? In many types of loans, the rate can go up by a lot. You need to know.

The *fully-indexed rate* is one indicator of what can happen to your interest rate and your monthly payments. It is calculated by taking a defined "index rate" and adding a certain number of percentage points, called the "margin." For example, if the rate formula on your loan is the one-year Treasury rate plus 3 percent, and today the one-year Treasury rate is 5 percent, your fully-indexed rate is $5\% + 3\% = 8\%$. This will almost always be higher than your beginning rate.

The index rates are public, published rates, so you can study their history to see how much they change over time. If the index rate stays the same as today, the rate on your loan will automatically rise to the fully-indexed rate over time. Since the index rate

itself can go up and down, you cannot be sure what the future adjustable rate will be. In any case, you must *make sure you can afford the fully-indexed rate*, not just the beginning rate, which is often called a "teaser rate" for good reason.

The *maximum possible rate* is the highest your interest rate can go. Most loans with adjustable rates have a defined maximum rate or "lifetime cap." You need to think about what it would take to make your interest rate go this high. How likely do you think that is?

Your *monthly income* means your gross, pre-tax income per month for your household. This should be an amount which you can most probably sustain over many years. Make sure the monthly income shown on this form is correct!

Your *monthly payment including taxes and insurance* is the amount you must pay every month for interest, repayment of loan principal, house insurance premiums, and property taxes. Expressed as a percent of your monthly income, this is called your housing expense ratio. Over time, in addition to any possible increases in your interest rate and how fast you must repay principal, your insurance premiums and property taxes will tend to increase. Of course, your monthly income may also increase. How much do you expect it to?

Your *fully-indexed housing expense ratio* is a key measure of whether you can afford this loan. It is the percent of your monthly income it will take to pay interest at the fully-indexed rate, plus repayment of principal, house insurance, and property taxes. The time-tested market standard for this ratio is 28 percent; the greater your ratio is, the riskier the loan is for you.

A *prepayment fee* is an additional fee imposed by the lender if you pay your loan off early. Most mortgages in America have no prepayment fee. If yours does, make sure you understand how it would work before you sign this form.

A "*balloon payment*" means that a large repayment of loan principal is due at the end of the loan. For

example, a seven-year balloon means that the whole remaining loan principal, a very large amount, must be paid at the end of the seventh year. This almost always means that you have to get a new loan to make the balloon payment.

A “*loan with possible negative amortization*” means that in the years immediately after securing a mortgage loan, you can pay even less than the interest you are being charged. The unpaid interest is added to your loan, so the amount you owe gets bigger. The very low payments in early years create the risk of very large increases in your monthly payment later. Negative amortization loans are typically advertised using only the very low beginning or “teaser” required payment, which is less than the interest rate. You absolutely need to know four things: (1) How long is the beginning payment good for? (2) What happens then? (3) How much is added to my loan if I pay the minimum rate? 4) What is the fully-indexed rate?

“*Points*” are a fee the borrower pays the lender at closing, expressed as a percent of the loan. For example, two points mean you will pay an upfront

fee equal to 2 percent of the loan. In addition, mortgages usually involve a number of *other costs and fees* which must be paid at closing.

Closing is when the loan is actually made and all the documents are signed.

The *For Questions Contact* section gives you the name, phone number, and e-mail address of someone specifically assigned by your lender to answer your questions and explain the complications of mortgage loans. Don’t be shy: contact this person if you have any questions.

Finally, *do not sign this form if you do not understand it*. You are committing yourself to pay large amounts of money over years to come and pledging your house as collateral so the lender can take it if you don’t pay.

Ask questions until you are sure you know what your commitments really are and how they compare to your income. Until then, do not sign.

Appendix 4:

Historical Background on the Mortgage Insurance Industry: Lessons from the Great Depression

During the 1920s and early 1930s, a large volume of MBS (called mortgage certificates),⁹³ backed by mortgage guarantee companies, was sold to the public. By 1934, the mortgage certificates were in default and the guarantee companies had failed. The governor of New York (where most of the activity had taken place) appointed George Alger as commissioner to investigate the operation, conduct, and management of mortgage guarantee companies.⁹⁴ Commissioner Alger was specifically charged with “once again instilling public confidence in real estate as an investment.” This is not unlike the challenge we face today as we endeavor to reform our housing finance market and re-instill investor confidence.

Commissioner Alger’s report provides useful insights into both the causes of the most recent collapse and policy recommendations for avoiding a repeat occurrence. While it would be twenty-three years before any mortgage guaranty company would be formed in the United States,⁹⁵ Alger’s recommendations formed the backbone of the state-based regulatory structure governing the formation and operation of mortgage guaranty insurance companies. This structure largely remains in place today and, in substantial measure, explains why the US mortgage guaranty insurance industry has largely survived intact, still paying claims and writing new business,⁹⁶ while Fannie Mae and Freddie Mac—along with many bond insurers, securities issuers, lending institutions, and private MBS—failed.

A few quotes from the Alger report demonstrate its relevance:

“If . . . the sale of guaranteed mortgage certificates is again to be permitted, anything remotely resembling protection to the certificate holder must, I think, be based upon the doubly assured soundness of the guarantee itself. Our recent experience has shown us that this form of conducting the mortgage business is intrinsically hazardous and should not be permitted except upon the requirement of a ratio of capital funds to guaranties adequate to insure against another major depression, instead of the present complete absence of such requirement.

⁹³ For details on private-backed securities issuance volumes before World War II, see Kenneth A. Snowden, “The Anatomy of a Residential Mortgage Crisis: A Look Back at the 1930s” (National Bureau of Economic Research Working Paper 16244, Cambridge, MA, July 2010), www.nber.org/papers/w16244.pdf?new_window=1 (accessed March 22, 2011).

⁹⁴ Report to the governor of New York by Commissioner George Alger (Alger Report) regarding the operation, conduct, and management of mortgage guaranty corporations dated October 5, 1934. Document contained in the authors’ files.

⁹⁵ The Mortgage Guaranty Insurance Corporation (MGIC) was formed pursuant to Wisconsin insurance law in 1957 by Max Karl. It remains the largest mortgage guaranty company in the United States.

⁹⁶ Going into the mortgage crisis there were seven companies. Six continue today and are paying claims and writing new business. Traid, the smallest of the seven, has ceased writing new business and is in run-off. It is paying claims at a reduced percentage and a final result is unknown. A new company, Essent, has formed since the crisis, returning the industry to seven members.

The business of guaranteeing mortgages is not an ordinary banking function, and the public would have been better off if none of the companies had owned or been affiliated with banking institutions, or in turn had not been owned by them.”⁹⁷

Commissioner Alger concluded that the mortgage guaranty business was subject to periods of boom and bust and that the MI industry had to be required by statute to put away reserves sufficient to be prepared for that event. A significant portion of the premium paid by borrowers in the boom years had to be locked up in reserves to be available to provide coverage during the inevitable bust years. This reserving had no relationship to the level of claims; in fact, that was the point—to put aside reserves during the fat years to be prepared for the lean. Accumulate a large enough reserve and it would be truly countercyclical. That is, it will act as a drag on over exuberance in the good years and be available to pay claims and provide capital to fund new business in the lean years.

Commissioner Alger made a series of recommendations for the regulation of “mortgage guarantee companies.” These became the foundation of the modern mortgage guaranty industry established in 1957:⁹⁸

1. “No other business to be done except the sale of guaranteed mortgages and mortgage and real estate servicing.”
2. “No company, except with the consent of the superintendent of Banks, to invest in or own more than 10% of the stock of any company, or be itself more than 25% owned by any person, firm or corporation.”
3. “The total of outstanding guarantees computed by taking the aggregate of 10% of the face amount of all outstanding mortgages guaranteed as to principal . . . shall at no times exceed the aggregate of capital and surplus.”
4. “25% of capital and surplus to be set aside and earmarked as a guaranty fund, and invested and kept invested in bonds of the United States, or the state of New York, or other legal investments for trust funds (other than mortgages) approved by the Banking Department.”
5. “Guarantees to be of first mortgages only.”
6. “No mortgage to be guaranteed . . . which exceeds 2/3 of the appraised value of the real estate.”⁹⁹

He observed, “[u]nder no illusions of perfection, I entertain no faith that all risks of loss can be avoided in this field any more than any other field of investment. With adequate statutory safeguards, however, a fair approximation can at least be made to a system of general supervision over this basic form of investment.”¹⁰⁰

⁹⁷ Report to the governor of New York by Commissioner George Alger (Alger Report) regarding the operation, conduct, and management of mortgage guaranty corporations dated October 5, 1934. Document contained in the authors’ files.

⁹⁸ Within five years, a total of eleven private mortgage guaranty companies had been established under various state laws, all of which followed the Wisconsin regulatory structure.

⁹⁹ Report to the governor of New York by Commissioner George Alger (Alger Report) regarding the operation, conduct, and management of mortgage guaranty corporations dated October 5, 1934. Document contained in the authors’ files.

¹⁰⁰ Ibid.

How is this experience from the 1930s relevant today? Mortgage lending presents three risks, two normal and one extraordinary. First, specific credit risks associated with the borrowers and their individual loan characteristics. This type of risk may be determined on an actuarial basis. Loans with small down payments or low FICO scores are riskier than those with larger down payments and higher FICO scores. These types of risks are largely uncorrelated (unless rules against concentration of risk are violated). Second, general economic risks associated with substantially increased unemployment, recessions, and other events that put stress on incomes, employment, and home prices. This type of risk may not be actuarially determined; instead stress tests based on worst-case depression scenarios are used. While these risks result in losses that are generally correlated; the impact can be kept manageable with sound underwriting and the accumulation of substantial reserves. The third risk is extraordinary. If lending standards become greatly weakened resulting in extraordinary levels of nonprime loans, specific loan-level risks become correlated and lead to a general collapse in loan performance. As a result, poor loan performance begins before any general triggering economic event such as a recession. It was the 27 million weak nonprime loans described in the main text of this white paper that led to the extraordinary mortgage meltdown that began while unemployment was under 5 percent.¹⁰¹ This risk can be contained by setting a standard for a prime loan and measuring and limiting the accumulation of nonprime originations.

There are two risks that can be priced and reserved for:

- Actuarially determined risk-based pricing can price for known specific risks. For example, a 90 percent LTV loan is generally twice as risky as an 80 percent, an 80 percent twice as risky as a 70 percent, and a 70 percent twice as risky as a 60 percent. FICO score bands follow similar relationships.
- Sufficient reserves and capital to cover normal, general risks may be determined by stressing credit portfolios against the loan-default rates experienced during two extraordinary periods of risk (the Great Depression and the recent Great Recession). If structured properly, this counter-cyclical method of reserving has the potential to both reduce the size of the booms and busts and provide a source of capital needed to maintain prudent lending and liquidity during a crisis.

This approach has other salutary features relevant to the boom/bust nature of real estate lending. It is countercyclical since reserves are built during good times and available during times of stress. Further, by forcing industry participants to operate from 50 percent of their premium income, there is an even sharper focus on managing risk, keeping expense ratios low (including salaries), and paying sustainable dividend levels.

¹⁰¹ US Department of Labor, Bureau of Labor Statistics, “Databases, Tables & Calculations by Subject,” http://data.bls.gov/pdq/SurveyOutputServlet?data_tool=latest_numbers&series_id=LNS1400000 (accessed March 22, 2011).

Appendix 5:

Relative Foreclosure Rates

The following two tables set forth data from the 2005 Federal Reserve study. The first¹⁰² covers loans from 1994 and demonstrates that it was well documented in 1996 that as FICO scores go down and/or LTVs increase,¹⁰³ the risk of foreclosure rises dramatically.

Table A5.1: Relative Foreclosure Rates by Credit Score Range (FICO >660 and LTV<=80% indexed to 1)

| LTV | FICO <621 | FICO 621–660 | FICO >660 |
|-------|-----------|--------------|-----------|
| <=80% | 26.9 | 7.9 | 1.0 |
| >80% | 47.6 | 15.3 | 3.3 |

The second covers both conventional and government fixed-rate loans from 1990 to 1993 and demonstrates that in 1996 it was well documented that as FICO scores decline, the risk of foreclosure increases dramatically for both types of loans.¹⁰⁴ Common sense dictates that forcing conventional lenders and investors to emulate government (that is, FHA) lending could only lead to disaster.

Table A5.2: Relative Foreclosure Rates for Conventional and Government Loans by Credit Score Range (FICO >660 and conventional fixed rate indexed to 1)

| Loan type | FICO <621 | FICO 621–660 | FICO >660 |
|-------------------------|-----------|--------------|-----------|
| Conventional fixed rate | 28.5 | 7.3 | 1.0 |
| Government fixed rate | 45.0 | 12.8 | 3.0 |

These data date from the period before HUD began to increase affordable-housing requirements and encourage reductions in mortgage underwriting standards through the elimination of down payments, expansion of lending to credit-impaired borrowers, and other weakened lending standards. These efforts, taken pursuant to the Federal Housing Enterprises Financial Safety and Soundness Act of 1992 (GSE Act), forced the GSEs and the entire market to emulate the FHA's already high-risk lending, which got even riskier as the FHA further weakened its lending from the early 1990s onward.

¹⁰² Derived from Federal Reserve, Division of Research and Statistics, "Credit Risk, Credit Scoring, and the Performance of Home Mortgages," table 6. The index sets the average foreclosure rate equal to one for loans with a borrower FICO score of more than 660 and an LTV of <=80 percent. Data are from Freddie Mac over the period 1994–95.

¹⁰³ The relationship between high-LTV and lower-LTV loans is understated by these data. In 1994, almost all of Freddie's loans had an LTV of 90 percent or less, with a small percentage having LTVs of 91–95 percent. Virtually none had an LTV >95 percent. As a result of HUD's mandates, Freddie (and Fannie) began acquiring 97 percent LTV loans in 1994 and 100 percent LTV loans in 2000.

¹⁰⁴ Derived from Federal Reserve, Division of Research and Statistics, "Credit Risk, Credit Scoring, and the Performance of Home Mortgages," table 2. The index sets the average delinquency rate equal to one for conventional fixed-rate loans. Data are from the period 1990–93.

Appendix 6:

FHA lending

From its creation in 1934, the FHA has been one of Congress's main tools to support low- and moderate-income single-family housing. Since its establishment in 1934, the FHA has led the entire market to ever-higher LTVs and longer loan terms. The figures below¹⁰⁵ show LTV and mortgage term trends over the last sixty years:

Figure A6.1: Postwar Trends in New Home Mortgage Loan-to-Value Ratios, 1947–67

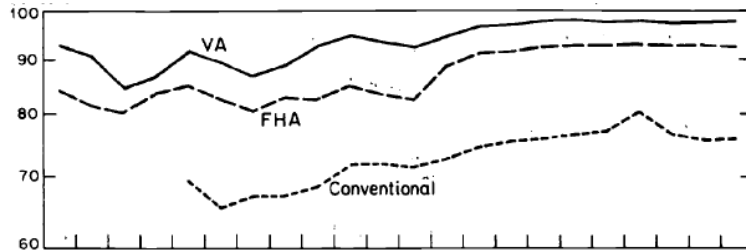


Figure A6.2: Postwar Trends in Existing Home Mortgage Loan-to-Value Ratios, 1947–67

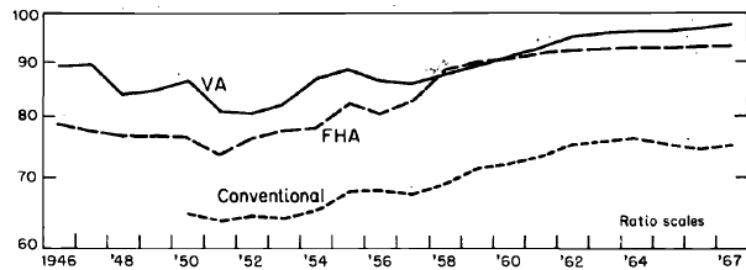
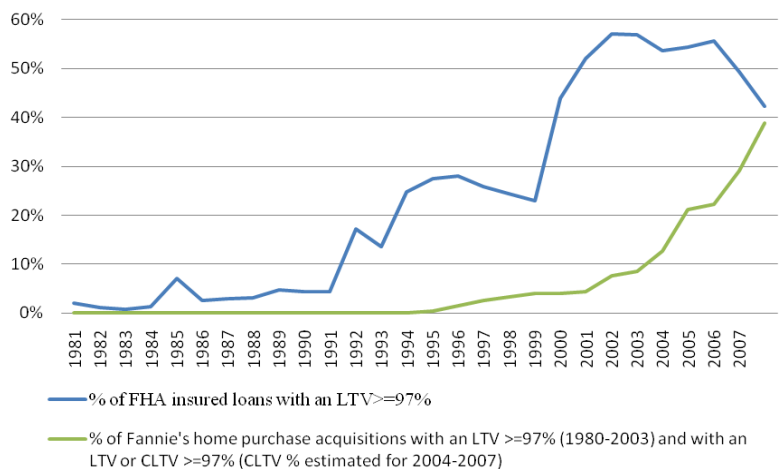


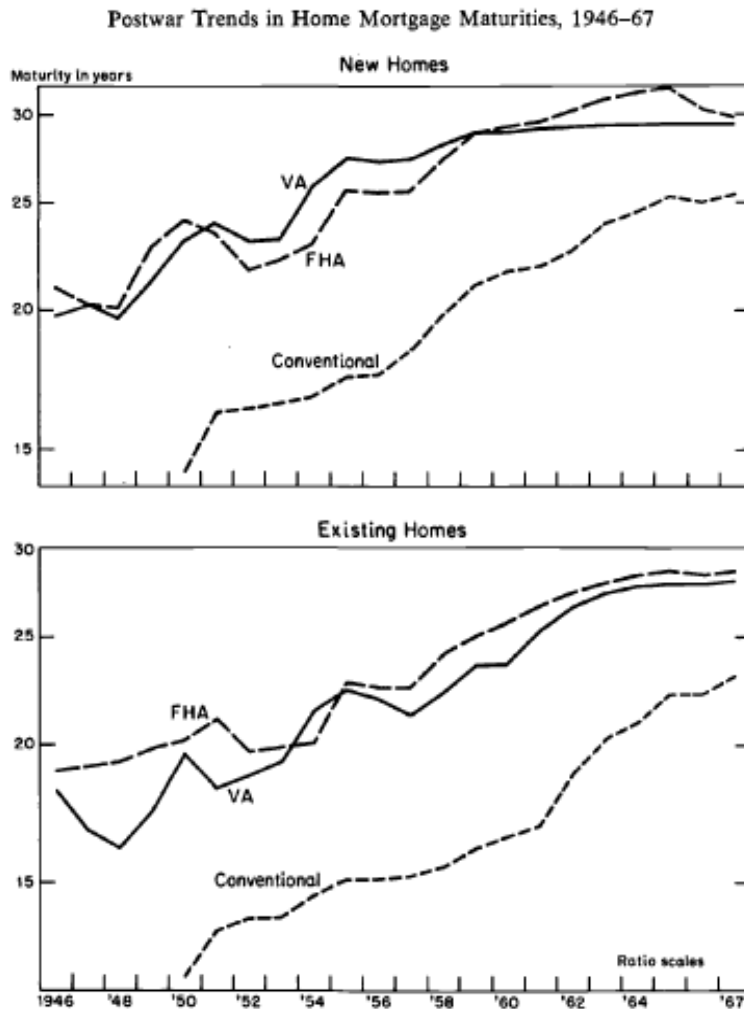
Figure A6.3: Trend of FHA and Fannie Loans with No Down Payments¹⁰⁶



¹⁰⁵ John P. Herzog and James S. Earley, *Home Mortgage Delinquency and Foreclosure* (Cambridge, MA: National Bureau of Economic Research, 1970), www.nber.org/books/herz70-1 (accessed March 21, 2011).

¹⁰⁶ Edward J. Pinto, "Government Housing Policies in the Lead-Up to the Financial Crisis: A Forensic Study," chart 15.

Figure A6.4: Postwar Trends in New and Existing Home Mortgage Maturities, 1947–67



Beginning its operations during the Great Depression, the FHA admirably performed its role through World War II and the postwar boom. As noted, Congress periodically increased the FHA’s LTV limit or extended its maximum loan term (or both). This was presumed to come at no cost and was likely justified on the basis of the FHA’s previous experience. From 1934 through 1954, the FHA insured 2.9 million mortgages. For this period, during which house prices increased by 57 percent, the FHA paid claims on 5,712 properties for a cumulative claims rate of 0.2 percent¹⁰⁷ and had revenue of \$494 million and expenses of \$246 million.¹⁰⁸ The FHA’s apparent success encouraged Congress to periodically loosen underwriting standards (see table A6.1).

¹⁰⁷ To put this in perspective, the FHA had twice this number of claims during the single month of October 2010. Federal Housing Administration, Department of Housing and Urban Development, “Monthly Report to the FHA Commissioner Department of Housing and Urban Development on FHA Business Activity,” October 2010, www.hud.gov/offices/hsg/rmra/oe/rpts/com/10oct.pdf (accessed January 14, 2011).

¹⁰⁸ John P. Herzog and James S. Earley, *Home Mortgage Delinquency and Foreclosure*.

Table A6.1: FHA's Transition to Unsustainable Lending

| Year | Maximum LTV limit | Maximum loan term | Monthly payment* | Homeowner equity after five years (with no increase in house prices) | Mortgage payment-to-income ratio | Income needed to buy median-priced home* |
|------|--------------------|-------------------------|------------------|--|----------------------------------|--|
| 1934 | 80% | 20 years | \$670 | 30% | Not available | Not available |
| 1938 | 90% ¹⁰⁹ | 25 years ¹¹⁰ | \$695 | 17% | Not available | Not available |
| 1948 | 90% | 30 years | \$660 | 14% | 17% (average) | \$26,600 income/ \$44,600 home ¹¹¹ |
| 1956 | 95% | 30 years | \$697 | 10% | Not available | Not available |
| 1984 | 97% | 30 years | \$712 | 8% | 38% (maximum) ¹¹² | \$23,000 income/ \$80,000 home ¹¹³ |

* For comparison, all examples are based on the purchase of a \$100,000 home at the maximum LTV and term with an interest rate of 8 percent, except for median-home-price calculation, which uses applicable median home price.

As seen from table A6.1, the FHA started out with both a substantial down payment (20 percent) and loan amortization, so by the end of the first five years of the loan, the homeowner had equity of 30 percent. Further, debt ratios were low. In the late 1940s, the FHA had an average mortgage-payment-to-income ratio of 17 percent.¹¹⁴ By the early 1980s, a buyer would only have equity of about 8 percent after five years, and mortgage payments had about doubled relative to income.¹¹⁵ Reliance on house-price inflation and lending to highly leveraged borrowers had become necessary parts of FHA's financing structure.

As figure A6.4 demonstrates, there was a cost. As FHA took on more risk, foreclosures increased.

¹⁰⁹ Ibid.

¹¹⁰ Ibid.

¹¹¹ Median price data for 1950. See US Census Bureau, "Census of Housing,"

www.census.gov/hhes/www/housing/census/historic/values.html (accessed January 14, 2011).

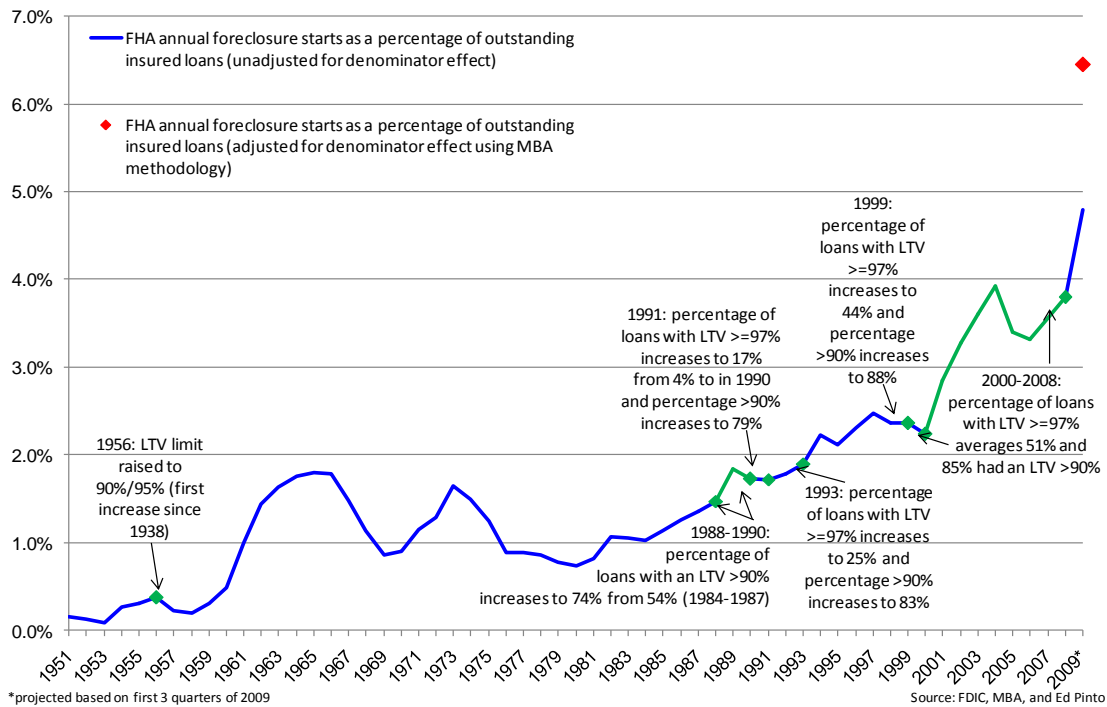
¹¹² Stephen Moore, "How Congress Can Diffuse the Federal Housing Time Bomb," Heritage Foundation, July 29, 1986, 7, www.policyarchive.org/handle/10207/bitstreams/9281.pdf (accessed January 14, 2011).

¹¹³ US Census Bureau, "Median and Average Sales Prices of New Homes Sold in United States," www.census.gov/const/uspriceann.pdf (accessed January 14, 2011).

¹¹⁴ John P. Herzog and James S. Earley, *Home Mortgage Delinquency and Foreclosure*.

¹¹⁵ Stephen Moore, "How Congress Can Diffuse the Federal Housing Time Bomb."

Figure A6.4: FHA’s Increasing LTVs on Annual Foreclosure Starts as a Percentage of Insured Loans



By 1961, the FHA was experiencing a foreclosure start rate of 1.00 percent per year—over six times the rate in 1951.¹¹⁶ Equally disconcerting was the fact that the private sector, in order to compete, followed the FHA’s lead by increasing LTV, loan-term, and debt ratios.

As a result of the FHA’s risky underwriting standards, its claim rate has been excessive for many decades. Over a thirty-five-year period (1975–2009), the FHA’s cumulative claim rate averaged 10.5 percent, and over 1992–2009 it averaged 10 percent. Even during the boom years of 1995–2003, the cumulative claim rate still averaged nearly 8 percent. During bust periods (1980–85 and 2005–2008), it averaged 18 percent—over two times the rate in good times. For 2010–17, the FHA has projected an 8 percent average claim rate even with an expected 33 percent increase in home prices over 2011–20.¹¹⁷ Relying on home-price inflation to attain a default rate of nearly one in ten is not sustainable lending.

¹¹⁶ This increase led *Time* magazine to observe: “Homeowners of a new and unattractive breed are plaguing the Federal Housing Administration these days. Known as ‘the walkaways,’ they are people who find themselves unable to meet their mortgage payments—and to solve the problem simply move out their belongings at night, drop their house key in the mailbox and disappear.” See “Credit: Beware of the Walkaways,” *Time*, July 27, 1962, www.time.com/time/magazine/article/0,9171,827500,00.html (accessed January 14, 2011).

¹¹⁷ FHA Actuarial Studies for 2010 and 2000.