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Land and the City

Edited by George W. McCarthy, Gregory K. Ingram, and Samuel A. Moody

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PREFACE

The majority of the world's population now lives in urban areas and depends on urban systems for housing and social and economic goods and services. This number will only increase as cities blossom and expand to accommodate new residents, particularly in developing nations. What remains unchanged, however, is the key role of cities as engines of economic growth, social activity, and cultural exchange. In an effort to support the success and sustainability of cities, this volume explores how policies regarding land use and taxation affect issues as diverse as the sustainability of local government revenues, the impacts of the foreclosure crisis, and urban resilience to climate change.

This collection, based on the Lincoln Institute of Land Policy's 2014 annual land policy conference, addresses the policies that underlie the organization, financing, and development of the world's cities. It is the final volume in the Institute's land policy conference series. Over the years, these meetings have addressed land policy as it relates to a range of topics, including local education, property rights, municipal revenues, climate change, and infrastructure.

We thank Armando Carbonell, Martim Smolka, and Joan Youngman for their advice on the selection of topics and on program design. The conference was organized by our exceptional event team, comprising Brooke Burgess, Sharon Novick, and Melissa Abraham. Our special thanks go to Emily McKeigue for her exemplary management of the production of this volume, to Peter Blaiwas for the cover design, to Nancy Benjamin for maintaining the publication schedule, and to Barbara Jatkola for her tireless and reliable copyediting.

George W. McCarthy
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Samuel A. Moody

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A Realistic Assessment of Housing Finance Reform

Laurie S. Goodman

It has been nearly six years since Fannie Mae and Freddie Mac went into conservatorship, a status from which the two entities were never expected to emerge. At that time (September 2008), legislators intended to replace the public-private partnership that characterized the government-sponsored enterprises (GSEs) with a new housing finance system, which placed private capital in the first-loss position.[1]

However, that task has proved to be very difficult, and it has been made more difficult by a deeply divided Congress. While in mid-2015 members of Congress generally agreed on the principles of a new system, they had yet to reach a consensus on the design of the system, leaving a legislative solution in the near term unlikely. Thus, the most important action on reform will take place within the

1. When the GSEs were placed into conservatorship, U.S. treasury secretary Henry Paulson stated: "Because the GSEs are Congressionally-chartered, only Congress can address the inherent conflict of attempting to serve both shareholders and a public mission. The new Congress and the next Administration must decide what role government in general, and these entities in particular, should play in the housing market. There is a consensus today that these enterprises pose a systemic risk and they cannot continue in their current form. Government support needs to be either explicit or non-existent, and structured to resolve the conflict between public and private purposes. And policymakers must address the issue of systemic risk. I recognize that there are strong differences of opinion over the role of government in supporting housing, but under any course policymakers choose, there are ways to structure these entities in order to address market stability in the transition and limit systemic risk and conflict of purposes for the long-term. We will make a grave error if we don't use this time out to permanently address the structural issues presented by the GSEs" (U.S. Department of the Treasury 2008).

Federal Housing Finance Agency (FHFA), the regulator of the GSEs, and, to a lesser degree, the Obama administration.

The first section of this chapter looks at the history and current status of the GSEs. The second section discusses the possible paths the legislation could have taken, the implications of each for mortgage rates and credit availability, and the slowly forming consensus view. The final section describes the administrative actions the FHFA has taken, as well as further actions the agency and the U.S. Department of the Treasury could take.

The History and Current Status of the GSEs

THE FIRST SIX DECADES

Before the Great Depression, mortgage finance in the United States was dominated by private entities. Mortgages were short-maturity instruments (10 years or less) with balloon payments at the end. The assumption was that borrowers would roll over the loans when they matured. The absence of a national housing finance market led to considerable geographic variation in the availability and pricing of credit, and high down payment requirements depressed widespread home ownership.[2]

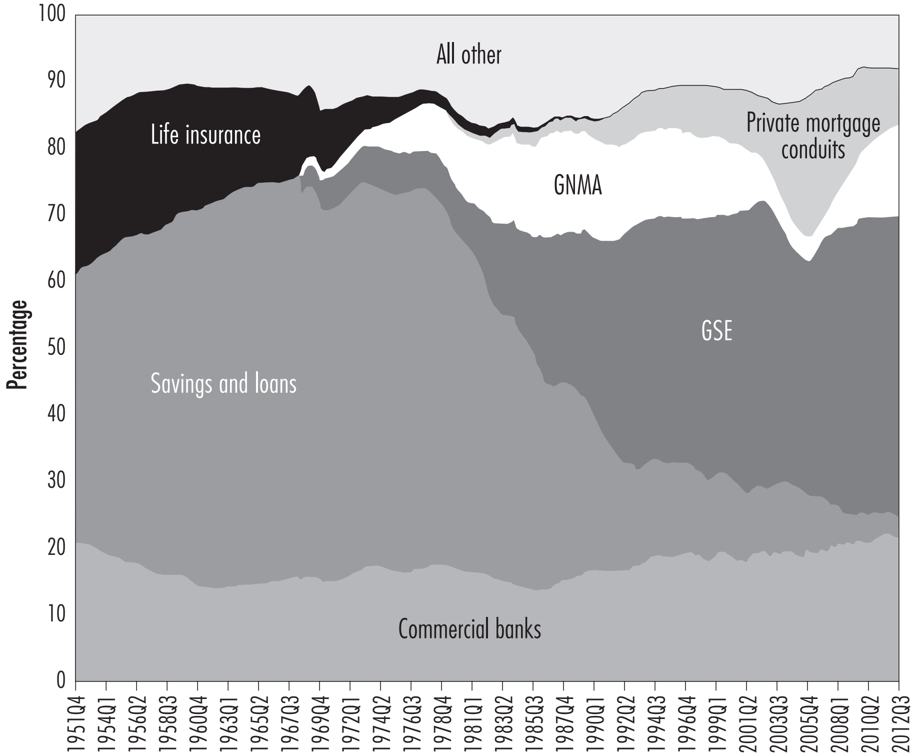
During the Great Depression, which generated widespread foreclosures (20–25 percent of the mortgage debt was in default) and falling home ownership rates, the government created the Federal Home Loan Bank (FHLBank) system in 1932. This organization was intended to provide member institutions with financial products and services, including on-demand low-cost funding to assist and enhance lending for home mortgages and small business, rural, agricultural, and economic development. The Federal Housing Administration (FHA) was created in 1934 to offer federally backed insurance for home mortgages made by FHA-approved lenders.

Originally a federal government agency, the Federal National Mortgage Association (Fannie Mae) was created in 1938 as a secondary market entity to purchase, hold, and sell FHA-insured loans. Fannie Mae was designed to provide liquidity to the mortgage market by buying loans from lenders and allowing them to make new loans with the cash. In 1954, Fannie was transformed into a public-private mixed-ownership corporation exempt from all state and local taxes (except those on real property). In 1968, it was turned into a for-profit shareholder-owned company and removed from the federal budget. In 1970, Fannie was permitted to buy and sell mortgages not insured by the federal government.

The Federal Home Loan Mortgage Corporation (FHLMC, or Freddie Mac) was established in 1970—capitalized and owned by the FHLBanks—to purchase long-term mortgages from thrift institutions, thereby providing the thrifts with

2. For more details on the early history of the GSEs, see FHFA OIG (n.d.) and DiVenti (2009).

Figure 8.1
The Distribution of Outstanding Single-Family Mortgages, 1951–2012 (%)



Note: GNMA = Government National Mortgage Association; GSE = government-sponsored enterprise.
Sources: Data from Federal Reserve Flow of Funds (various issues), compiled by Urban Institute.

liquidity. The thrifts could use the proceeds from the sales to make more mortgages. The GSEs began to grow rapidly during this period, as shown in figure 8.1. The GSE share of outstanding mortgages increased from 0 percent in early 1968 to 7.2 percent in 1980 and 27.4 percent in 1990.

In the 1970s and 1980s, Fannie Mae and Freddie Mac pursued different paths. On one hand, Fannie primarily retained mortgages on its own balance sheet, leaving its portfolio with a considerable amount of interest-rate risk. On the other hand, Freddie had a small balance sheet and transferred most of the interest-rate risk of the mortgages it held through securitizations, doing the first securitization in 1971. (By contrast, Fannie did not do its first securitization until a decade later.) Thus, the market turbulence in the late 1970s and early 1980s left Fannie, but not Freddie, exposed, with the former requiring government assistance through regulatory forbearance (capital requirements were relaxed) and tax relief.

In 1989, the FHLBank system was restructured. The FHLBank board was abolished, the Federal Housing Finance Board was created as a regulator, and membership in the FHLBanks was opened to depository institutions that had more than 10 percent of their portfolios in residential mortgage–related assets. Freddie Mac was reorganized into a corporate structure similar to that of Fannie Mae, a for-profit corporation owned by private shareholders rather than the FHLBanks.

In 1992, Congress passed the Federal Housing Enterprises Financial Safety and Soundness Act, which created the Office of Federal Housing Enterprise Oversight (OFHEO) within the Department of Housing and Urban Development (HUD) as an independent regulator of the GSEs. This act also gave the GSEs an "affirmative obligation to facilitate the financing of affordable housing for low- and moderate-income families."[3] Beginning in 1995, Fannie and Freddie were given explicit housing goals.

THE GSES AS BUSINESSES, 1990–2008

The GSEs' share of the outstanding mortgage market continued to increase rapidly, from 27.4 percent at the end of 1990, to 39.7 percent at the end of 2000, and then to 43.8 percent at the end of 2003. At the end of 2013, their share stood at 45.7 percent (see figure 8.1).

Fannie and Freddie were really in three businesses: (1) a large single-family insurance business; (2) a relatively small multifamily insurance business; and (3) the portfolio management business (the management of their retained portfolios). This third business was a key, if then underappreciated, contributor to their profitability. During the 1990s, the GSEs began to grow their retained portfolios very rapidly, even more rapidly than their insurance operations. Jaffe (2005, 4) points out that "in 1990 the Fannie and Freddie retained portfolios equaled 23 percent of their outstanding MBS [mortgage-backed securities], while by 2001, this ratio reached 80 percent." In absolute terms, their mortgage-related retained portfolios grew from $138 billion in 1990 to $1,570 billion in 2004. This portfolio growth fueled the organizations' profitability.

> The profit potential for the two F&F business lines is substantially different. Revenue on the F&F investor-held MBS line derives primarily from the annual fee received for guaranteeing the timely payment of interest and principal. The average guarantee fee for . . . 2003 was just over 20 ba-

3. Housing and Community Development Act of 1992, Section 1302(7). Also see U.S.C. Title 12, Ch. 46, Section 4501.

> sis points (bps) for the two firms. Revenue for the retained mortgage portfolios, in contrast, is based on the spread between the interest rate earned on the mortgage assets and the interest cost of the funding liabilities. For example, in 2003, the average spread was 172 bps for Fannie Mae and 186 bps for Freddie Mac. The relatively large size of this rate spread arises from the low interest cost of F&F debt (due to the implicit Treasury guarantee) and the compensation for accepting the interest-rate risk associated with the mortgage securities held in the portfolios. (Jaffe 2005, 123)

THE SEEDS OF THE GSES' DIFFICULTIES

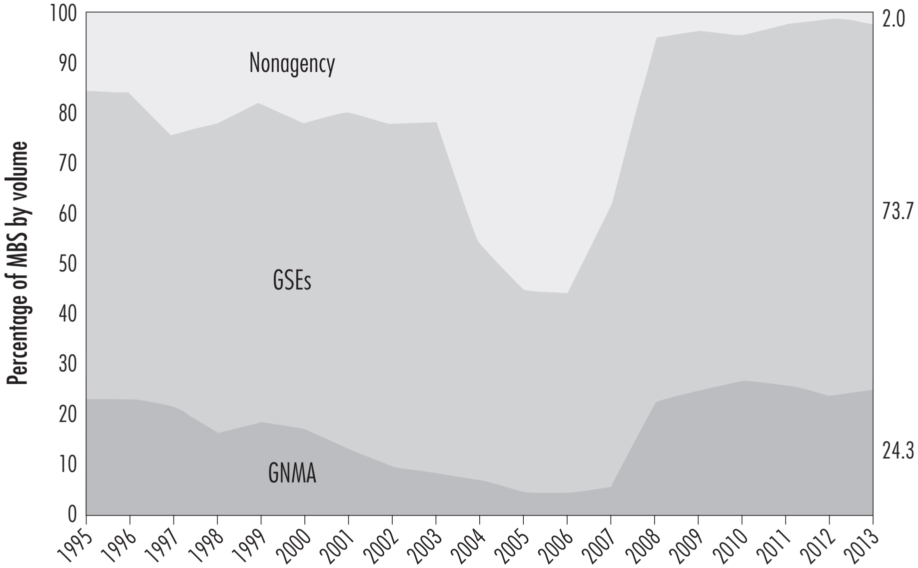
Both Fannie Mae and Freddie Mac had accounting difficulties in the early 2000s. In 2003, Freddie disclosed that it had used improper accounting practices. The new GSE supervisory authority, OFHEO, found that this error had resulted in a $5 billion misstatement for the years 2000–2003; Freddie was fined $175 million. OFHEO also investigated Fannie and found that it had used improper accounting to smooth earnings; Fannie paid a $400 million penalty. These episodes undermined the credibility of the GSEs.

It is important to realize that Fannie and Freddie have played a critical role in the housing finance market. They have reduced mortgage rates for borrowers by bringing transparency and standardization to the market. They were crucial to the securitization of conventional mortgages, which led to the development of the national mortgage market. And they made purposeful efforts to expand access to credit. Although Fannie and Freddie had affordable housing goals, as detailed in HUD (2009), the amount of their activity to underserved borrowers and markets often exceeded the requirements (Bolotnyy 2012; Weicher 2010).

The government share of total securitizations ranged between 75 and 85 percent from 1995 to 2004, with the GSEs accounting for the bulk of this activity. It dropped to 54 percent in 2004 and 44–45 percent in 2005 and 2006 (figure 8.2). The GSEs, alarmed at their slipping share, began to follow the private-label securities (PLS) market into nontraditional products. Despite claims to the contrary, their expansion into these products was aimed at correcting a declining market share, not meeting affordable housing goals. The GSEs relaxed their standards for origination, agreeing to provide insurance for more Alt-A loans, interest-only (IO) loans, adjustable rate mortgages, and borrowers with very low FICO scores. The Fannie Mae numbers are shown in table 8.1 (Freddie's numbers were similar). The share of Alt-A loans was 9.9 percent for 2004 and earlier production. It increased to 20.9 percent for 2005, 29.8 percent for 2006, and 20.0 percent for 2007, and then largely disappeared. Interest-only loans increased from 2.8 percent for 2004 and earlier production to 13.1 percent for 2005, 20.0 percent for 2006, and 18.1 percent for 2007, before declining sharply. Adjustable rate mortgages and loans to borrowers with FICO scores less than 620 exhibited a similar pattern.

Unfortunately for the GSEs, they jumped into the nontraditional lending market at the worst possible time. The PLS market was going after increasingly

Figure 8.2
Agency and Nonagency Shares of Residential Mortgage-Backed Securities (MBS) Issued, 1995–2013



Note: GSEs = government-sponsored enterprises; GNMA = Government National Mortgage Association; the agency share is the sum of the GSE and GNMA share.
Sources: Data from Inside Mortgage Finance and Urban Institute; Urban Institute Chartbook (May 2014).

Table 8.1
Risk Characteristics of Fannie Mae's Book of Business, 2004–2013

Vintage	Unpaid Principal Balance (billions of dollars)	FICO Score <620	Interest-Only Loans	Adjustable Rate Mortgages	Alt-A Loans
2004 and earlier	256.7	7.2%	2.8%	17.5%	9.9%
2005	99.6	6.5	13.1	29.7	20.9
2006	98.7	8.6	20.0	33.5	29.8
2007	137.2	10.8	18.1	32.3	20.0
2008	80.3	5.4	7.5	22.2	3.2
2009	209.0	0.7	1.0	2.8	0.5
2010	280.2	0.7	1.0	4.6	1.0
2011	320.8	0.7	0.6	5.5	1.8
2012	728.0	1.0	0.3	2.6	1.1
2013	609.9	1.5	0.2	2.4	1.3
Overall book	2,820.4	2.6	2.9	8.5	4.7

Source: Fannie Mae (2013).

risky loans to feed its voracious appetite for product. Anxious to maintain their market share, the GSEs relaxed their standards and chased the PLS market into what turned out to be treacherous terrain.

Yet the GSEs' difficulties did not stem solely from the move to nontraditional products. In the early 2000s, subprime MBS were the most profitable items to add to their retained portfolios. Adelino, Frame, and Gerardi (2014) note that Freddie and Fannie together purchased 3.8 percent of subprime issuance in 2001, 11.9 percent in 2002, 34.7 percent in 2003, 38.9 percent in 2004, and 28.9 percent in 2005, before tapering off to 23–25 percent in 2006 and 2007. In 2004, when Freddie and Fannie started reporting their public holdings, nonagency MBS made up 35 percent of Freddie's retained portfolio and 15 percent of Fannie's; that share remained constant through the end of 2006. These MBS were often backed by loans that the GSEs would not insure. However, they (like most other investors participating in the market at that time) believed that the product they were purchasing had adequate subordination, so they were not taking much risk. That is, the GSE purchased the most senior classes of the securitization, the subordinate securities were in a first-loss position, and the subordination amounts were much larger than the GSE's estimates of possible losses.

STALLING HOME PRICES AND THE GSES

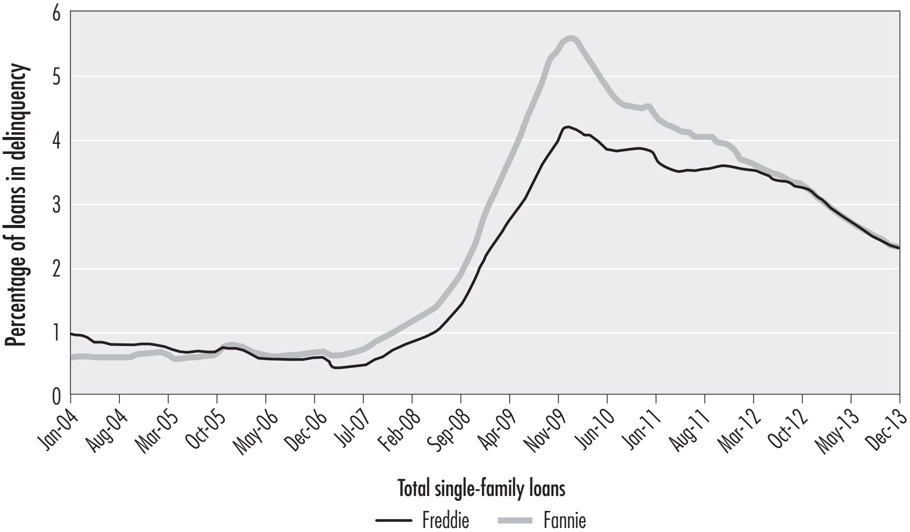
When home prices topped out and began to stall, the GSEs were vulnerable in two of their three businesses: their retained portfolio and single-family insurance operations. Their multifamily operations also experienced losses, but these losses were small, and the operations recovered quickly.

The problems were first evident on the portfolio side of the GSEs' business, as markets react in real time. Prices on the MBS began to fall substantially. Though not a perfect proxy for the subprime deals the GSEs had purchased, the ABX, an index of credit default swaps, is illustrative. The price of the ABX 06-2, tranches of AAA deals issued in the second half of 2006, plummeted from $100 in late 2006 to around $40 in late 2008 and $20 by March 2009.

By late 2007, the percentage of serious delinquencies in the Fannie and Freddie single-family guarantee businesses had begun to rise sharply, as shown in figure 8.3; this increase accelerated further in 2008. The increase in serious delinquencies reflected not only extremely poor performance on the part of the nontraditional products but also much higher than anticipated numbers of delinquencies and defaults on Fannie's and Freddie's traditional products.

The very high numbers of delinquencies and defaults on the nontraditional products, especially Alt-A loans, contributed disproportionately to the GSEs' losses. For example, Fannie reported that Alt-A loans were 4.7 percent of its total single-family guarantee business at the end of 2013 but that they had contributed 23.7 percent of its credit losses in 2012 and 26 percent in 2013. Interest-only loans were 2.9 percent of Fannie's total single-family guarantee business at the end of 2013 but had contributed 21.8 percent of its credit losses in 2012 and 18.7 percent in 2013.

Figure 8.3
GSE Loans in Serious Delinquency, 2004–2013



Notes: Data include only 30-year, fixed-rate, full-documentation amortizing loans. Default data were balance-weighted. "Serious delinquency" means loans were 90 days or more delinquent or in foreclosure.
Sources: Data from Fannie Mae (various years); Freddie Mac (various years).

The effect of the downturn in home prices on delinquencies and defaults on the GSEs' traditional books of business can best be seen by looking at data on Freddie's 30-year, fixed-rate, full-documentation amortizing products. These data do not include any of the nontraditional products (Alt-A, IO, or 40-year loans), nor do they include loans purchased under any of Freddie's affordability programs. See Freddie's 2001 and 2007 books of business in table 8.2. The left half of the table shows that for 30-year, fixed-rate, full-documentation amortizing product the composition (percent in each loan-to-value [LTV] and FICO score combinations) was very similar in 2001 and 2007. The right half shows that for every FICO-LTV combination, the default rate (loans six months delinquent or removed earlier than that because of a short sale, foreclosure sale, REO sale, or deed-in-lieu) was considerably higher for the 2007 book of business than for the 2001 book. For example, borrowers with a FICO score of 701–750 and an LTV of 70–80 had a 0.5 percent default rate for 2001 and an 11.1 percent default rate for 2007. The point: The credit performance of loans is determined not only by origination characteristics but also by the macroeconomic environment, particularly home prices. That is, the mix of origination characteristics is roughly the

Table 8.2
Freddie Mac Composition and Default Rates of Loans Originated in 2001, 2007, and 2012

Year of Origination	FICO Score/Loan-to-Value	Composition (% of balances)						Default Rate (% of balances)					
		≤60	60–70	70–80	80–90	>90	All	≤60	60–70	70–80	80–90	>90	All
2001	≤700	3.4	3.8	17.4	6.6	6.5	37.7	0.9	1.3	2.0	4.2	4.7	2.6
	701–750	4.0	3.7	15.5	3.9	3.5	30.6	0.2	0.3	0.5	1.2	1.5	0.6
	>750	7.3	4.9	14.9	2.6	2.1	31.7	0.1	0.1	0.2	0.6	0.7	0.2
	All	14.7	12.3	47.8	13.1	12.1	100.0	0.3	0.5	1.0	2.6	3.1	1.2
2007	≤700	5.2	4.9	15.6	5.1	5.5	36.3	9.2	16.8	17.8	22.2	24.1	18.1
	701–750	4.0	3.1	13.5	2.8	2.9	26.3	3.8	9.2	11.1	14.6	14.9	10.5
	>750	9.2	4.8	17.9	2.7	2.7	37.4	1.2	3.7	5.2	8.4	9.6	4.6
	All	18.5	12.8	47.0	10.7	11.0	100.0	3.8	9.7	10.9	16.7	18.1	10.9
2012	≤700	2.5	1.7	4.5	0.4	0.4	9.3	0.0	0.0	0.0	0.0	0.0	0.0
	701–750	4.6	3.3	12.8	1.7	1.3	23.8	0.0	0.0	0.0	0.0	0.0	0.0
	>750	17.5	10.1	33.2	3.8	2.2	66.9	0.0	0.0	0.0	0.0	0.0	0.0
	All	24.6	15.1	50.5	5.9	3.9	100.0	0.0	0.0	0.0	0.0	0.0	0.0

Notes: Data include only 30-year, fixed-rate, full-documentation amortizing loans. Composition and default data were balance-weighted.
Source: Urban Institute calculations based on data from Freddie Mac public loan-level credit database.

same in 2001 and 2007, but the credit performance is very different. The strength of the interaction between home prices and performance was underestimated, as was the magnitude of the feedback effects, as home prices continued to crash.

FLAWS IN FANNIE AND FREDDIE'S STRUCTURE

A number of structural flaws left the GSEs unable to sustain this increasing pressure. The Treasury Department and HUD did an excellent job of outlining those flaws in their February 2011 report to Congress (U.S. Department of the Treasury and HUD 2011, 8–9); we paraphrase and summarize this section, expanding on several points.

Fannie Mae and Freddie Mac's Profit-Maximizing Structure Undermined Their Mission The charters of the organizations required Fannie and Freddie to promote market stability and access to mortgage credit. "However, their private shareholder structure . . . encouraged management to take on excessive risk in order to retain market share and maximize profits, and leaving taxpayers to bear major losses" (U.S. Department of the Treasury and HUD 2011, 8). This led to the commonly heard refrain that the profits were privatized, while the losses were socialized.

Fannie Mae and Freddie Mac's Implicit Government Backing Conferred Unfair Advantages The entities benefited from preferential tax treatment and, more important, far lower funding costs than other regulated financial institutions because of the perceived government guarantee (the commonly held assumption that big losses would be borne by the taxpayers). This encouraged Fannie and Freddie to build large investment portfolios, carrying these securities at far wider margins than their competitors, and to take risks through the guarantee business that ultimately caused their failure.

Fannie Mae and Freddie Mac's Capital Standards Were Inadequate "Fannie Mae and Freddie Mac were required to hold less capital than other regulated private financial institutions" (U.S. Department of the Treasury and HUD 2011, 8): only 40 bps of capital for every $100 they insured. As a result, they could set their guarantee fees (G-fees) lower than those of comparable institutions. The lower amount of required capital also left the entities with an insufficient cushion to absorb losses. On the retained portfolio side, Fannie and Freddie were required to hold 2.5 percent capital, permitting them to leverage 40 to 1.

Fannie Mae and Freddie Mac's Regulator Was Structurally Weak and Ineffective OFHEO "did not have adequate enforcement mechanisms or authority to set capital standards to constrain risky behaviors" (U.S. Department of the Treasury and HUD 2011, 9). Nor were its stress tests meaningful. "Over the years, Fannie and Freddie's aggressive lobbying efforts had successfully defeated efforts to bring them under closer supervision" (9).

The Housing and Economic Recovery Act of 2008 (HERA) created a new regulator, the FHFA, to replace OFHEO. To be fair, OFHEO was not the sole regulator that failed to restrain risky behavior. The entire regulatory system failed to take action against the use of nontraditional products and notice the excessive amount of leverage in the system, which set the stage for the crisis.

Moreover, the consequences of the flaws inherent in the GSE structure were amplified because of the interactions among the elements. The incentives that encouraged the portfolios to add subprime securities and those that encouraged the GSEs to move into nontraditional products to maintain market share were magnified by inadequate capital standards.

THE BEGINNING OF CONSERVATORSHIP

By September 2008, the country was in the midst of a financial crisis, with many institutions teetering on the brink and Fannie and Freddie racking up large losses. On September 7, the FHFA placed the GSEs under conservatorship, and the Treasury Department entered into a Senior Preferred Stock Purchase Agreement with each GSE. Under the terms of the initial agreement, the Treasury would disburse funds to the GSEs if, at the end of any quarter, the FHFA determined that the liabilities of either exceeded its assets. The maximum amount available to each GSE was \$100 billion; this figure was raised to \$200 billion in May 2009. In exchange for this financial support, the Treasury received from each of Fannie Mae and Freddie Mac one million shares of nonvoting variable liquidation preference senior preferred stock with a liquidation preference value of \$1,000 per share, along with a nontransferable warrant with an expiration in 20 years, for the purchase of 79.9 percent of common stock at a nominal cost. This senior preferred stock would accrue dividends at 10 percent a year, payable quarterly. (The rate would increase to 12 percent if the dividends were not paid in cash.)

The preferred stock purchase agreements (PSPAs) were written in that form to avoid placing the assets and liabilities of the GSEs in the federal budget. If the U.S. government were to own more than 80 percent of either enterprise, there would be a sizable risk that the enterprises would be forced to consolidate onto the government's balance sheet.

These first PSPAs required Freddie and Fannie to wind down their investment portfolios at 10 percent a year until each reached \$250 billion. No restrictions were placed on either their single-family or multifamily guarantee books of business.

In December 2009, the Treasury amended the PSPAs to replace the \$200 billion cap with a formulaic cap for 2010–2012. The cap would adjust upward by the cumulative amount of any losses realized by the GSEs and downward by any gains (but not below \$200 billion per GSE); it would become fixed at the end of the three years. In plain English, this amendment essentially exempted losses incurred during 2010–2012 from the \$200 billion cap.

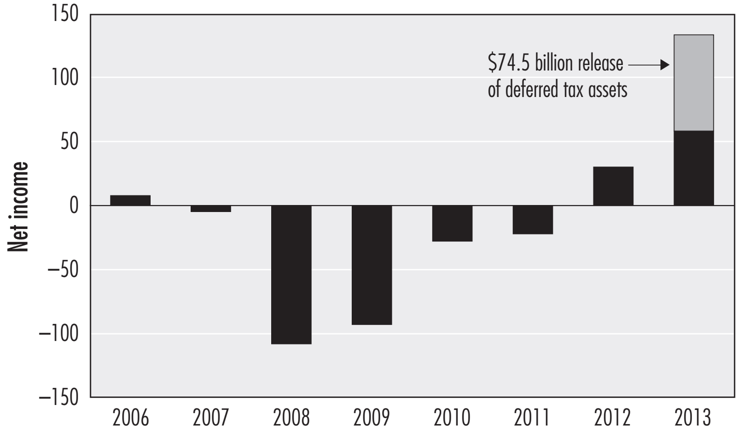
It is interesting that the PSPAs did not contain any mechanism for Fannie and Freddie, if and when they became profitable, to pay back their debt to the government. In fact, even if the GSEs were able to pay back the debt, they would not be permitted to do so under the terms of the PSPAs. This provides some indication of the thought process at the time: the GSEs were never provided with a mechanism to emerge from conservatorship because it was never expected they would do so. One might be able to argue that the Treasury was moving so quickly in 2008 that this possibility was overlooked, but it seems unlikely that it would have been overlooked in 2009 as well.

The PSPAs were amended for a third time on August 17, 2012. According to the news release, "This will help achieve several important objectives, including . . . acting upon the commitment made in the Administration's 2011 White Paper that the GSEs will be wound down and will not be allowed to retain profits, rebuild capital, and return to the market in their prior form" (U.S. Department of the Treasury 2012). Another objective was to provide greater market certainty regarding the financial strength of the GSEs. According to an FHFA statement at the time, "As Fannie Mae and Freddie Mac shrink, the continued payment of a fixed dividend could have called into question the adequacy of the financial commitment contained in the PSPAs" (FHFA 2012b). That is, some were concerned that Fannie and Freddie would have to continue to borrow from the Treasury to pay their 10 percent dividends. Once the credit lines were fixed in late 2012, the draws from the Treasury would begin to eat into that line. The fixing of the credit lines was necessary because the Treasury's Troubled Asset Relief Program authority was about to expire. By making the dividend variable with profits, the Treasury ensured that Fannie and Freddie would not have to draw any money from the Treasury unless they actually lost money.

This PSPA amendment contained three changes. The first and most dramatic was a full sweep of all Fannie Mae and Freddie Mac earnings, replacing the 10 percent dividend required by the first two PSPAs. The second change was that the portfolios were to be wound down at an annual rate of 15 percent, as opposed to the 10 percent required in the earlier agreements, until each portfolio reached its target of $250 billion. Finally, each GSE would be required to submit to the Treasury a plan to reduce taxpayer exposure to mortgage credit risk in both its guarantee book of business and its retained portfolio.

These changes, which took effect just as the housing market started to improve, proved to be very controversial. A number of hedge funds began to purchase Fannie's common and preferred stock as the outlook for housing improved, believing the GSEs would again become profitable. Meanwhile, Fannie took its last draw from the Treasury in the fourth quarter of 2011; Freddie drew a small amount in the first quarter of 2012. Both GSEs were solidly profitable in the second quarter of 2012; it is unclear whether the strength of these financial results was known when the sweep decision was made in August 2012. Moreover, many at that time questioned whether the housing recovery could be sustained. Market expectations were changing rapidly, and analysts went from expecting a run of bad quarters that would continue indefinitely to playing out the implications of the GSEs being profitable.

Figure 8.4
The GSEs' Net Income, 2006–2013 (billions of dollars)



Sources: Data from FHFA (2013a) and FHFA (2013c).

As a result, several shareholder lawsuits dispute the Treasury's assertion that the amendment was meant to provide the market with reassurance of the GSEs' financial stability. These investors argue that there was little to indicate the market needed reassurance, that the change was made just as Fannie and Freddie began to turn a profit, and that the profits were apt to continue in the improving housing market.

By the middle of 2014, Fannie and Freddie had returned to profitability and paid back more than they had borrowed from the government. Figure 8.4 shows Fannie and Freddie's net income since 2006 as calculated by the FHFA. The agency's first-quarter 2013 conservator's report states that as of the end of 2007, the GSEs had $71 billion of capital (FHFA 2013a). Their charges against capital totaled $266 billion for 2008–2011 (slightly more than their net income), requiring them to draw $187.5 billion from the Treasury during this period. Out of that amount, dividends accounted for $36 billion (Wall 2014), making the actual amount borrowed $151.5 billion. That amount was more than paid back by profits in 2012 and 2013, plus the $9.3 billion net income generated in the first quarter of 2014.

While most of the 2012–2014 profitability was generated by extraordinary items such as the release of the deferred tax asset (which accounted for $74.5 billion of the 2013 earnings), the release of loan loss reserves, and gains from legal settlements, the two GSEs were unquestionably profitable. Based on the size of their retained portfolios in 2014, on a steady-state basis they should generate about $31 billion in net income annually going forward, a figure that will decline to about $25 billion as they reduce their retained portfolios. This calculation assumes that they will generate 35 bps of net income on new production (after all expenses and losses and payment of the payroll tax surcharge) on a $4.2 trillion single-family guarantee business, or $14.7 billion of net income (35 bps × $4.2 trillion).[4] Add to that portfolio profits of $13.5 billion (assuming 150 bps on the joint $900 billion portfolio), which should decline rapidly to $7.5 billion on future portfolio holdings of $500 billion ($250 billion apiece), and multifamily profits of $2.5 billion. Thus, combined net income for the two companies is likely to be $14.7 billion from the single-family guarantee business, plus $13.5 billion (declining to $7.5 billion) on their retained portfolios, plus $2.5 billion on their multifamily insurance business, which equals $31 billion, declining to $25 billion. Each additional 10 bps increase in their G-fees would add $4.2 billion to this profitability, assuming no commensurate decline in guarantee volume.

THE GSES UNDER CONSERVATORSHIP

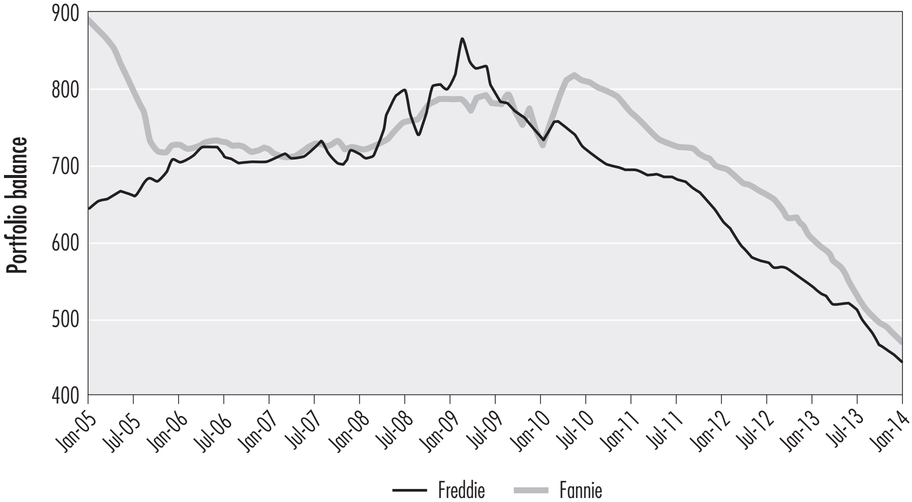
By January 2014, the GSEs' portfolios had declined from a peak of $1.65 trillion in 2008 to $900 billion (figure 8.5). Yet although they were winding down their portfolios, their role in the mortgage market was actually increasing.

Figure 8.6 shows the share of total new loans by type of lender for 2002–2013. This figure differs from figure 8.2 because it includes bank origination and excludes older loans that were securitized. By focusing on new loans, this figure clearly demonstrates the outsized role the GSEs have played. In 2002, loans originated for GSE securitization were 47 percent of the total, and FHA/VA (U.S. Department of Veterans Affairs) loans accounted for another 6 percent, for a 53 percent government share. PLS made up 13 percent of the total and bank loans another 34 percent. In 2006, the breakdown was GSE, 32 percent; FHA/VA, 3 percent; PLS, 43 percent; and bank, 22 percent. In 2007, as the PLS market shut down, banks allocated less of their portfolios to mortgage lending, and the government picked up the difference. From 2008 to 2013, the government was the major source of home credit and the only source of credit for less-than-pristine borrowers. During that time, the government share was in the range of 78–85 percent, with the GSEs making up 58–63 percent of the total and the Government National Mortgage Association (GNMA) accounting for 17–22 percent. The PLS market remained largely closed, making up less than 1 percent of the total.

Despite the increased government share in the post-crisis period, it is much more difficult for less-than-pristine borrowers to get credit during this period than was the case prior to the crisis. Freddie Mac's 30-year fixed-rate amortizing

4. Fannie Mae G-fees on new production are 63 bps; 10 bps to the Treasury for the payroll tax surcharge, 8 bps in administrative expenses, and 10 bps in losses suggests 35 bps of net income.

Figure 8.5
The GSEs' Portfolio Balance, 2005–2014 (billions of dollars)



Sources: Data from Fannie Mae (various years); Freddie Mac (various years).

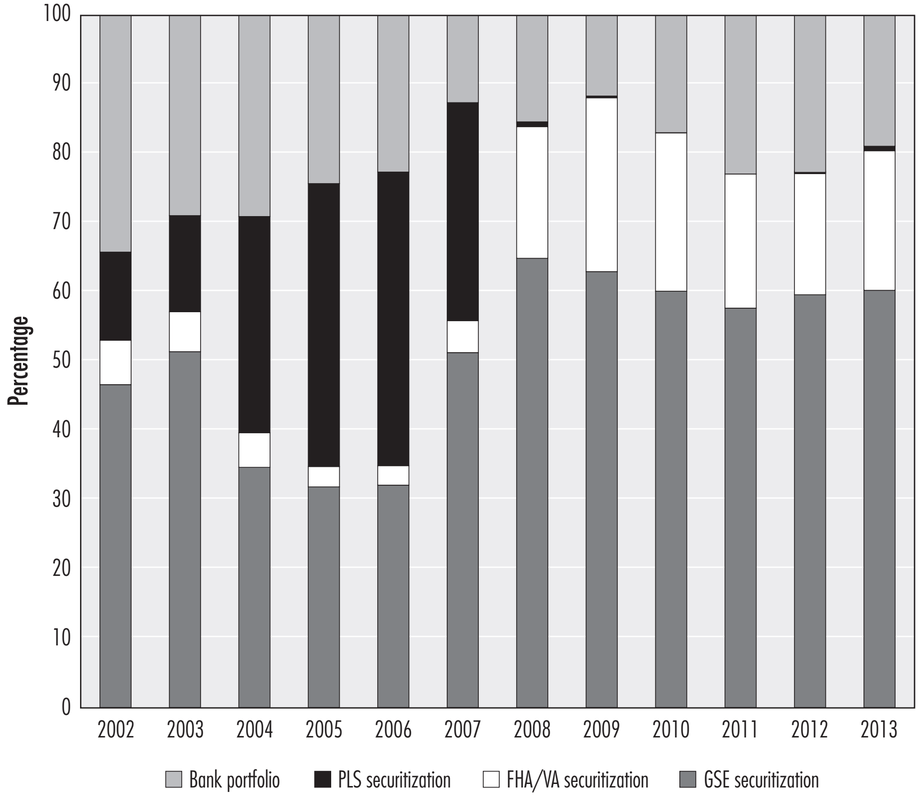
full-documentation book of business in 2012 included a much lower share of lower-FICO borrowers than in 2001 and 2007 (see table 8.2). This reflects the very tight access to credit that has prevailed since 2009.

The question is, what happens now? Fannie and Freddie continue to play an outsized role in the market, but they have been operating in a state of limbo for close to six years. GSE reform is imperative. It can happen through either legislative or administrative channels, or both.

Legislative Proposals for GSE Reform

Despite considerable frustration among critics that GSE reform was not addressed in the Dodd-Frank Act of 2010 and the Obama administration's effort to jump-start the discussion with its 2011 White Paper (U.S. Department of the Treasury and HUD 2011), Congress did not begin seriously considering the fate of the GSEs until 2013. By that time, policy makers and experts had reached something very close to a consensus that the 30-year, fixed-rate mortgage should be preserved as the instrument of choice and that a securitized mortgage market was needed to accommodate this product. Banks are unwilling to take large volumes of 30-year, fixed-rate mortgages onto their balance sheets because they have a hard time managing the interest-rate risk associated with such long-duration

Figure 8.6
First-Lien Origination Shares, 2002–2013



Note: PLS = private-label securities; FHA/VA = Federal Housing Administration/U.S. Department of Veterans Affairs; GSE = government-sponsored enterprise.
Sources: Data from Inside Mortgage Finance and Urban Institute (2014).

products. This means that widespread availability of this type of mortgage will depend on a deep and liquid securities market.

The question, then, is what role the government will need to play to create and sustain such a market. This section explains how a consensus has developed around the view that the government will have to take on the catastrophic risk of these loans in order to create the desired system and then addresses why, even with that consensus, it remains difficult to agree on the final design for such a system. The access and affordability issues are among the most difficult to resolve. Although substantial progress has been made, there is little hope that GSE reform will be accomplished in the near future, and further efforts to move GSE reform forward seem to have come to a standstill after mid-2014.

SYSTEMS WITH AND WITHOUT A CATASTROPHIC GOVERNMENT GUARANTEE

Experts and legislators have developed a significant number of proposals to replace the GSEs with a system in which private capital would take the first loss. The proposals take two basic forms: a system in which there is no government guarantee and a system in which there is a catastrophic government guarantee. After considerable debate, a consensus has slowly formed around the second form.

The "no government guarantee" proposals are well represented by the Protecting American Taxpayers and Homeowners (PATH) Act of 2013 (H.R. 2767), introduced by Representative Jeb Hensarling (R-TX) and passed by the House Committee on Financial Services, which voted along party lines. The bill was never brought before the full House of Representatives for a vote. This bill recommended winding down the GSEs within five years. A national mortgage market utility would be created to encourage standardization and continue the FHFA's mission of providing a common securitization platform for MBS. There would be no government guarantee. The bill contains no affordable housing provisions. It also reduces the role of the FHA to apply only to first-time home buyers and low- and moderate-income buyers.

The "catastrophic government guarantee" proposal is well represented by the Housing Finance Reform and Taxpayer Protection Act of 2014 (S. 1217), introduced by Senators Tim Johnson (D-SD) and Mike Crapo (R-ID). The Johnson-Crapo bill owes a heavy intellectual debt to Senators Bob Corker (R-TN) and Mark Warner (D-VA), who initially introduced the bill in 2013. Using the Corker-Warner version as a base, Senators Johnson and Crapo conducted hearings and meetings with market participants, then introduced a bill that passed the Senate Committee on Banking, Housing, and Urban Affairs (also known as the Senate Banking Committee) with bipartisan support. This bill was never introduced to the full Senate. The bill set up a new regulatory entity, the Federal Mortgage Insurance Corporation (FMIC), which would administer the securitization platform and provide a catastrophic government guarantee on mortgages that meet its rules. In front of the catastrophic insurance stands a minimum of 10 percent private credit enhancement, provided through either bond guarantors or the capital markets. The FHA's role would remain unchanged.

Other variants of the catastrophic government guarantee proposal included a bill floated by Representatives John K. Delaney (D-MD), John Carney (D-DE), and Jim Himes (D-CT) and a discussion draft floated by Representative Maxine Waters (D-CA). Since the Johnson-Crapo bill had garnered the most support, it is used here for exemplary purposes.

The PATH Act and the Johnson-Crapo/Corker-Warner bill have several similarities, as economics professor Lawrence J. White points out in Kravitt et al.

(2014). Both bills would wind down the GSEs within five years, although Johnson-Crapo has numerous protections to lengthen the transition if certain goals are not met. Both bills encouraged standardization in MBS and a common platform. The major differences are (1) the catastrophic government guarantee; and (2) affordable housing provisions (PATH has no such provisions; Johnson-Crapo does). In addition, PATH sought to limit the FHA's role, while Johnson-Crapo left the FHA unchanged. Table 8.3 compares the two plans.

Legislators have developed a consensus around the need for a catastrophic government guarantee, as that would be the only way to preserve the to-be-announced (TBA) mortgage market, in which large numbers of securities would trade with disclosure of the mortgage type and interest rate, but no disclosure of the properties of the underlying loan. Investors fear that under the PATH Act, there would be different amounts of credit risk in pools of loans enhanced by different entities. Therefore, even though the product would be standardized, the credit risk would not. The securities would thus be unlikely to trade interchangeably, making it very difficult to envision a TBA market.

The TBA market would benefit both investors and borrowers. By removing the credit risk, the government guarantee would ensure a large supply of a homogeneous product attracting a wide range of investors, who would create a very liquid market with narrow bid-ask spreads. The liquid market would ultimately benefit borrowers, because investors would demand less of a risk premium to hold these securities, resulting in lower mortgage rates. Moreover, the liquid market would allow mortgage originators to hedge the risk that mortgage rates will rise, enabling borrowers to lock in rates well before they close a loan with the originator. Without rate locks, borrowers would find out their mortgage rates at the time of closing.

In short, while it would be possible to offer a 30-year mortgage with a completely private market such as that proposed under PATH, this market would be inefficient, and mortgage rates would be quite high. Zandi and deRitis (2014) estimated the impact on mortgage rates under PATH and Johnson-Crapo for a typical GSE borrower (FICO score 750, LTV 80).[5] Their work is summarized in table 8.4, which shows that Johnson-Crapo would have raised rates by around 41 bps (based on some liberal assumptions about the form of capital), while PATH would have raised them by 174 bps.

It is worth going through Zandi and deRitis's calculations in some detail. Under the current system, as shown in table 8.4, as of March 2014, a pristine mortgage faced about 53 bps in G-fees, assuming 23 bps for the implied cost of capital + 10 bps for administrative costs + 10 bps of expected losses + 10 bps for

5. While this may be a typical GSE borrower today, this is not the typical first-time home buyer. Nor does this description capture coming changes in demographics, potentially increasing the number of African American and Hispanic borrowers, who have traditionally had lower credit scores and been able to provide smaller down payments.

Table 8.3
The Johnson-Crapo and PATH Reform Plans

	Johnson-Crapo Bill	PATH Act
Title	Housing Finance Reform and Taxpayer Protection Act of 2014.	Protecting American Taxpayers and Homeowners Act of 2013.
Summary	Private sector entities originate and service mortgages and issue MBS. Other private sector entities provide credit enhancement. The Federal Mortgage Insurance Corporation (FMIC), a public entity, is the guarantor of last resort and absorbs catastrophic risk. It also provides the securitization platform and regulatory oversight.	Eliminates the GSEs through receivership, eventually creating a fully private market (outside the Federal Housing Administration, or FHA, which has a restricted scope for low- and moderate-income and first-time buyers). Establishes a nonprofit utility that will develop best practices and standard agreements for the private market and operate a securitization utility.
Who issues qualifying MBS?	Private lenders.	Private lenders.
Who insures qualifying MBS?	Private enhancers.	Private enhancers.
Form of private capital	Private MBS insurance companies and capital markets.	Private insurance companies and capital markets.
Affordable housing goals/allocation	Yes. Average user fee of 10 basis points (bps) on all mortgages securitized by the FMIC. Money is split: 75% to the Housing Trust Fund (primarily low-income rentals), 15% to the Capital Magnet Fund (funds for community development financial institutions and nonprofits), and 10% to the Market Access Fund (responsible lending to underserved communities). Actual user fee for each guarantor/aggregator determined by how well the entity does in serving underserved markets.	No. Repeals GSE affordable housing goals. There is no responsibility to fund any affordable housing trust funds.
First loss	Borne by private capital, sized to 10% capital.	Borne by private capital.
Catastrophic guarantee/regulator	Federal Mortgage Insurance Corporation (FMIC).	—
Countercyclical provisions	If the Treasury Department and HUD secretaries and the Federal Reserve Board agree, the FMIC can lower capital requirements for six months and then for two additional nine-month periods within any three-year period.	The FHA's countercyclical role is preserved by allowing it to insure loans to any borrower during periods of significant credit contraction (as certified by an independent government credit availability metric).

(continued)

Table 8.3 *(continued)*

	Johnson-Crapo Bill	PATH Act
Multifamily?	Yes. Government would continue to function as an insurance provider for securities backed by multifamily properties.	FHA Multifamily only, which will be limited to housing for low- and moderate-income families. The private market that replaces the GSEs will not have a multifamily mandate.
Affordability requirement for multifamily?	Yes. Sixty percent of rental housing units financed would be available to families at or below 80% of the area median income at origination.	Yes.

Source: Urban Institute (2014).

the payroll tax surcharge. Under Johnson-Crapo, the G-fees would be 109 bps, including the same 10 bps for administrative costs and expected losses. The implied cost of capital, however, would be 69 bps (46 bps higher).[6] While there would be no payroll tax surcharge, the cost of the catastrophic government guarantee would come from 10 bps paid into the Mortgage Insurance Fund and an additional 10 bps paid into the Affordable Housing Trust Funds to support both rental and owner-occupied affordable housing. The costs under Johnson-Crapo would be partially offset by the fact that the securities would have a full-faith-and-credit government guarantee; hence they would trade better in the secondary market than securities with an implied guarantee. (As evidence, GNMA securities, which have a full government guarantee; trade better than Fannie and Freddie securities, which do not.) Assuming this differential was 15 bps, there would be a 41 bps increase in mortgage rates (109 bps guarantee fee under Johnson-Crapo – 15 bps due to full faith and credit guarantee – 53 bps guarantee fee under the current system).

Under the PATH Act, mortgage rates would rise much more. The guarantors would need a higher return on equity—say, 25 percent pretax; the securities would have both a risk premium and a liquidity premium; and the cost of funds would be higher. Zandi and deRitis estimated the cost of capital at 123 bps,

6. This was calculated assuming 10 percent capital, broken down as follows: 3 percent common equity (12 percent after-tax cost of this equity), 1 percent preferred equity (7 percent after-tax cost of preferred equity), 3 percent debt (300 bps over Treasuries), and 3 percent present value of G-fees.

Table 8.4
Mortgage Rates Under Different Housing Finance Systems (basis points)

	Current GSEs	Johnson-Crapo	PATH	Precrash GSEs
Total rate	453	494	627	420
Guarantee fees	53	109	142	20
Cost of capital	23	69	123	—
Administrative costs	10	10	10	—
Expected losses	10	10	9	—
Payroll tax surcharge	10	—	—	—
Mortgage Insurance Fund	—	10	—	—
Affordable Housing Trust Funds	—	10	—	—
Yield on mortgage-backed securities	350	335	435	350
Servicing and origination compensation	50	50	50	50
Rate difference between this and current GSEs	**—**	**41**	**174**	**–33**

Source: Zandi and deRitis (2014).

100 bps over the present system.[7] The administrative costs and expected losses would be approximately the same, but the 10 bps payroll tax surcharge would be eliminated. The main issue would be how much of a risk premium (due to financing and liquidity considerations) investors would require to hold PLS versus government-backed securities. Zandi and deRitis assumed that 85 bps would be required, which would result in mortgage rates 174 bps higher than current rates (100 bps higher capital charge + 85 bps higher investor rates – 10 bps payroll tax surcharge) and 133 bps higher than those under Johnson-Crapo. The numbers are sensitive to the assumptions, but the bottom line is that a system with no government guarantee would cause mortgage rates to rise significantly.

This finding has implications for the government share of mortgage lending. Under PATH, mortgage rates would rise sharply, and there would be no affordable housing goals. As Zandi and deRitis (2013) have pointed out, more mortgages would be held on bank balance sheets, most likely in the form of more-bank-friendly adjustable rate mortgages. With the projected rise in rates, the FHA would become the sole source of affordable lending, thus transferring the entire risk to the government. Under Johnson-Crapo, some of the highest-quality mortgages would be likely to end up on bank balance sheets. More mortgages to higher-LTV

7. This was calculated assuming 5 percent capital, all equity. Equity was assumed to require a 25 percent pretax return.

borrowers would be likely to end up with the FHA, but the effect would be much more muted.

THE CONSENSUS: WE NEED A CATASTROPHIC GOVERNMENT GUARANTEE

Given that the bills proposed by Johnson and Crapo/Corker and Warner; Delaney, Himes, and Carney; and Waters all include a catastrophic government guarantee, that is the type of bill referred to as the consensus framework in this chapter. Most, but certainly not all, congressional representatives are on board with this view. The same framework has been proposed by the Bipartisan Policy Center (Housing Commission 2013); Mortgage Finance Working Group (2011); Mosser, Tracy, and Wright (2013); and Seidman and colleagues (2013). Since the GSEs were taken into conservatorship, many other plans have been advanced as well. Griffith and the CAP Housing Team (2014) summarized 27 of those plans; their work makes the consensus even more apparent.

The consensus framework includes the following seven principles.

- The 30-year, fixed-rate mortgage must be preserved.
- Private capital must take the first loss.
- A catastrophic guarantee is necessary to preserve the TBA market.
- A catastrophic government guarantee is best done through a Federal Deposit Insurance Corporation–type fund.
- The liquidity of the TBA market is best served with a single platform or a single security.
- The platform/bond administration functions should be separated from the risk-taking activities.
- Some type of affordable housing features—ensuring access to credit for underserved borrowers and underserved communities—are necessary.

THE TOP TEN DESIGN ISSUES

Before GSE reform can move forward, legislators must reach a consensus on the following major design issues.[8] As the experience with Johnson-Crapo demonstrates, however, constructing a bill that compromises in the middle means losing both the right and the left.

- What form will the private capital that absorbs the first loss take: a single guarantor (a utility), multiple guarantors, or multiple guarantors along with capital markets execution? How much capital will be required?
- Who will play what role in the system? Will the same entity be permitted to be an originator, an aggregator, and a guarantor?

8. Many of these issues are discussed in Kravitt et al. (2014), specifically in the sections by Adam LaVier and the author of this chapter.

- How will the system ensure that historically underserved borrowers and communities are well served? To what extent will the pricing be cross-subsidized?
- Who will have access to the new government-backed system (i.e., will there be loan limits)? How big should the credit box be, and how does that box relate to the FHA?
- Will mortgage insurance be separate from the guarantor function? (It is separate under most of the proposals, but in reality both sets of institutions are guaranteeing credit risk. The separation is a relic of the present system, in which, by charter, the GSEs cannot take the first loss on any loan above 80 LTV. However, if the same entities could be both mortgage insurer and guarantor, capital requirements would have to be higher to adequately protect the government and, ultimately, the taxpayers.)
- How will small lenders access the system? (All of the proposals attempt to ensure access, some through an aggregator dedicated to smaller lenders—a role the FHLBanks could play.)
- What countercyclical features should be included? If the insurance costs provided by the guarantors are "too high," should the regulatory authority be able to adjust capital levels to bring down mortgage rates? Should the regulatory authority be able to step in as an insurance provider?
- Will multifamily finance be included? How will that system be designed? Will it be separate from the single-family business? (The multifamily features embedded in Johnson-Crapo had widespread bipartisan support, but if single-family only legislation is passed, it is unclear what would happen to the GSE multifamily programs, and the support for standalone multifamily legislation is unclear.)
- The regulatory structure for any new system will inevitably be quite complex. Who will charter new guarantors? What will the approval standards be? Who will do the stress tests? How will the new regulators interact with existing regulators? What enforcement authority will it have concerning equal access goals? What will be the extent of data collection and publication?
- What will the transition look like? How will the system move from a duopoly to more guarantors? Will Fannie and Freddie turn back to private entities and operate as guarantors alongside the new entrants? How will the new entities be seeded? What would be the "right" number of guarantors, and how would that number be achieved? How quickly would the catastrophic insurance fund build?

The following subsections discuss three questions in more depth: (1) what form of private capital will absorb the first loss; (2) who will play what role; and (3) how will the system serve historically underserved borrowers and communities?

What Form of Private Capital Will Absorb the First Loss? There have been proposals to provide for only one guarantor, a public utility (Mosser, Tracy, and

Wright 2013), multiple guarantors (Seidman et al. 2013), and multiple guarantors plus capital markets execution (Housing Commission 2013; Johnson-Crapo). No plan relies only on capital markets execution because of concerns about the volatility of mortgage rates. (The original Corker-Warner plan started with capital markets execution, but after concerns were raised, the plan was changed to allow both capital markets and guarantor channels.) A one-guarantor plan would not promote competition in pricing. The multiple-guarantor and multiple-guarantor-plus-capital-markets-execution plans seem to have the most traction. The initial version of Johnson-Crapo suggested both channels; the theory was that capital markets execution would attract additional capital, which would be reflected in lower interest rates. Dual execution would also avoid issues of market dominance by a few guarantors and the potential for "too big to fail" issues to emerge. However, it does have three very significant problems, as outlined in Goodman and Seidman (2014).

First, if capital markets execution were permitted, it would be in the form of either a senior/subordinated structure, in which investment-grade senior bonds would be supported by higher-risk subordinated bonds that would bear the first loss, or credit-linked notes, which would synthetically create the same effect. When changes in the financial landscape occur, prices on the subordinated tranches could change very quickly to the new level necessary to clear the market. When the price of insurance using capital markets execution becomes too high, the execution vehicle of choice would shift to the guarantors. We saw this in 2008, when the PLS market dried up completely and the mortgage market shifted almost entirely to government-chartered guarantors. The question about a new system will be, will the private guarantors have the excess capital on hand to step in quickly and provide for the lost market capacity, or will credit costs skyrocket on scarce supply, constricting credit in some environments? By allowing guarantor execution only, and allowing the guarantors to do their own capital markets transactions, as initially proposed by Seidman et al. (2013), volatility issues could be eliminated, and a wider range of capital markets providers could be attracted.

Second, bills that allow for both capital markets and guarantor execution envision that the amount of capital standing in front of the government's catastrophic guarantee would provide equal protection under both execution channels. It is unclear how one would even calibrate equal protection, making it hard to achieve in practice. Moreover, the two regulatory structures would differ, and the quality of the guarantor's capital would be higher.

Under capital markets execution, the FMIC (to use the Johnson-Crapo/Corker-Warner terminology) would act as a credit rating agency, evaluating thousands of separate transactions each year to make sure the quality of the loans over the course of the year was high enough and the amount of diversification sufficient to protect the government. And once the execution is set, there would be no mechanism to require additional capital. In a guarantor structure, the regulation would be at the entity level, as the guarantor would be on the hook to provide insurance until it becomes insolvent. The regulator in this case would need to determine that a limited number of guarantors are adequately capitalized. In addition, the regulator would be required to regularly administer stress tests to ensure that the capital of these entities is adequate, and could require them to raise additional capital if they are found deficient. Thus, a guarantor structure would provide diversification across vintages, and the stress tests would enable the government to require that more capital be raised at the first sign of trouble. Theoretically, equivalence with the capital required for the capital markets execution could be achieved by allowing guarantors to hold less capital, or hold less equity capital, than would be required by capital markets execution alone. But again, equivalence is difficult to calibrate.

Finally, there are questions as to whether the TBA market would be preserved, as capital markets execution requires very detailed loan-level disclosure. Would this raise privacy concerns? Would this potentially compromise the homogeneity of the TBA market? In a nonhomogeneous market, the cheapest-to-deliver security would dominate the pricing, and securities with more desirable characteristics would sell as customized products, potentially causing increasing fragmentation.

Who Will Play What Role? There are three important players in agency securitizations: the securitizer, the issuer, and the aggregator. The securitizer is the entity that manages the platform and governs the form of the securitization. The issuer is the legal entity in whose name the security is registered and who is generally responsible for the sale. The aggregator is the entity that collects the individual loans into a larger pool. In current GSE swaps, the GSE is the securitizer and issuer, and the originator is the aggregator. When loans are sold into the cash window, the GSE plays all three roles. Researchers and policy makers generally agree that the securitizer should administer the catastrophic government insurance.

Who is the issuer? Should a GNMA model be used, in which the originator (or for smaller originators, an aggregator) is the issuer? Should the guarantor be the issuer? Or should the platform be the issuer, with the private guarantor providing wraparound risk coverage?

Who is the aggregator? Is it the platform, the guarantor, or another entity, such as the originator of the FHLBanks? If the aggregator is the platform, how is the guarantor selected? If it is some entity other than the platform, that entity must absorb the pricing risk during the accumulation process.

Can entities play multiple roles? In the original version of Johnson-Crapo, a single entity could be the originator, aggregator, and guarantor. In the version that passed the Senate Banking Committee, however, the originator could not also be the guarantor.

How Will the System Serve Historically Underserved Borrowers and Communities? It will be very difficult to get a bipartisan bill through Congress without provisions for meaningful access to credit or affordable housing. However, while some legislators would like to see explicit goals restored, others also want to see language that explicitly states an entity's "duty to serve"; still others want a market-based solution, in which firms conduct their business as they see fit, but incentives are provided to encourage lending to low-income and underserved markets. These issues have proved to be among the thorniest in the debate over housing finance reform.

As mentioned earlier in the chapter, in 1992 Freddie Mac and Fannie Mae were given affordable housing goals—that is, they were required to source a fixed percentage of their book of business from clearly specified low-income and underserved markets. HUD was the mission regulator for these goals, which were ramped up over time. By 2007, the goals required that 55 percent of the GSEs' loans be directed to low- and moderate-income borrowers, 38 percent be directed to underserved areas, and 25 percent be directed to special affordable provisions (a loan could fall into more than one category). Many critics thought these goals had distorted credit allocation within the mortgage market. Moreover, the goals led market participants to play games in order to meet them, and thus the goals may not have helped increase access as intended. For example, financial institutions initially held on to goals-qualifying loans because they knew that each December the GSEs would be scrambling to meet their goals, and one GSE might be willing to pay more than the other to procure the loans. The loans could always be delivered into TBA pools, so it cost the financial institutions little to withhold these products until the final days of the year.

In 2008, as a result of HERA, the affordable housing goals were placed under the authority of the FHFA. The director of the FHFA was charged with establishing purchase money goals for three groups—low-income families, very low income families, and families that resided in low-income areas—in addition to a separate goal for refinance mortgages. On the multifamily side, two sets of goals were required: one for the number of units purchased by the GSEs of mortgages on multifamily dwellings that were affordable to low-income families, another for the number of units that were affordable to very low income families. These goals were finalized in 2009 and went into effect in 2010.

HERA also explicitly acknowledged that the GSEs have a "duty to serve" and assigned the FHFA the task of writing regulations to further define and implement that concept. In 2010, the FHFA proposed rules that charged the GSEs with a duty to provide "leadership to the market in developing loan products and flexible underwriting guidelines to facilitate a secondary market for mortgages for very low-, low-, and moderate-income families."[9] The rules were never finalized. HERA also required that the GSEs pay 4.2 bps on annual purchases into an affordable housing fund. The FHFA suspended the fee when the GSEs went into conservatorship shortly thereafter. The fee was not collected until early 2015.

9. See Michel and Ligon (2013) for a brief history of goals versus "duty to serve."

The Johnson-Crapo bill did not include either affordable housing goals or a duty to serve. However, the bill recognized the broad availability of credit as one goal of the FMIC, established the Office of Consumer and Market Access, and created a new affordable housing fee. This fee was set at an average of 10 bps on all MBS that receive a government guarantee from the FMIC. It would not apply to GNMA securities or the PLS market.

Johnson-Crapo included an incentive structure that would allow for variation in the affordable housing fee based on how well an aggregator or bond guarantor provides support for underserved communities and markets. The goals of the incentive-based fee were twofold: to ensure that "there is sufficient quality housing available" and to provide consumers with at least a portion of the benefit of the reduced fee. The idea of an incentive fee is very clever. However, the fee should be transparent, and the fee schedule should be set in advance to maximize the likelihood of the benefit being passed on to consumers (Goodman and Seidman 2014). If the fee is determined after the fact, there is little chance that the benefit will be passed on to borrowers as the loans are being extended.

Bear in mind that the Fannie and Freddie books of business included a fair amount of cross-subsidization before the housing crisis: all loans were charged similar G-fees, and higher-quality loans subsidized lower-quality ones. Beginning in 2008, the GSEs introduced loan-level pricing adjustments (LLPAs), or up-front charges on loans with various risk characteristics. These LLPAs have been increased several times, and the amount of cross-subsidization between the GSEs has been substantially reduced. None of the proposed reform bills have explicit provisions for cross-subsidies. In Johnson-Crapo, the affordable housing provisions (including the variable fee) are the only mechanisms that allow for any cross-subsidization, and hence they are central to the conversation about the bill.

THE BOTTOM LINE: THE DESIGN ISSUES ARE IMPORTANT

As we have seen, the design issues are important. It is much easier to agree on the general principle to replace the GSEs than it is to agree on the design.

While the design issues are major, they are not the only obstacles to achieving GSE reform through legislative channels. Others include the following:

- There is no sense of urgency. The current system is functioning, and the GSEs are profitable and contributing their dividends to the Treasury, which makes budget discussions a bit easier.
- Congress has higher legislative priorities, such as managing the budget, tax reform, and immigration.
- Bipartisan action requires compromise. Many legislators believe they have more to lose than to gain by compromising in this area.

Given these obstacles, any progress toward bringing back private capital will likely be made on the administrative side. The next section focuses on some administrative actions the FHFA can take to move the GSEs forward, as well as some actions the Treasury can take to amend the PSPAs.

Administrative Actions for GSE Reform

In February 2012, Ed DeMarco, acting head of the FHFA at the time, noted that "with the conservatorships operating for more than three years with no near-term resolutions in sight, it's time to update and extend the goals and directions of the conservatorships" (FHFA 2012a, 2). His plan was appropriately titled "A Strategic Plan for Enterprise Conservatorships: The Next Chapter in a Story That Needs an Ending." That document makes it very clear that the final chapter must be legislative; only Congress can abolish or modify the charter. However, much can be done administratively to move the housing finance system forward.

The 2012 FHFA strategic plan set in place by DeMarco is divided into three parts:

- *Build* a new infrastructure for the secondary mortgage market.
- *Contract* gradually the GSEs' dominant presence in the marketplace, while simplifying and shrinking their operations.
- *Maintain* foreclosure prevention activities and credit availability for new and refinanced mortgages (FHFA 2012a, 2).

In May 2014, FHFA head Mel Watt, who had been in the job only about four months, released his strategic plan (FHFA 2014d). While his plan retains DeMarco's three-part structure, the emphasis and order are different. Watt's plan calls for the GSEs to

- *maintain* . . . foreclosure prevention activities and credit availability . . . to foster liquid, efficient, competitive, and resilient housing finance markets; *reduce* taxpayer risk by increasing the role of private capital; and *build* a new single-family infrastructure for use by the GSEs and adaptable for use by others (5).

Given the plans' similarities and subtle differences, they are discussed together in this section.

BUILDING A NEW INFRASTRUCTURE

Integral to the first pillar of the 2012 plan, building the new infrastructure, was the creation of the Common Securitization Platform (FHFA 2012a). Since the onset of conservatorship, Freddie Mac and Fannie Mae had been reluctant to make major investments in their systems, as the fate of the entities was unclear. In 2012, the FHFA believed that infrastructure investments were needed because there was no immediate resolution in sight. These investments would have several advantages: the economies of scale from maintaining one platform rather than having Fannie and Freddie each maintain their own platform; ease of transition to a single security; and an open architecture that would allow future issuers of MBS to join the platform. These could include PLS issuers and, if there is eventually GSE reform, non-GSE issuers of securities with a government guarantee. The Common Securitization Platform would hopefully become a public utility and the backbone of the future housing finance system, whatever form that system might take. Teams from Fannie Mae and Freddie Mac are currently working on this platform.

The platform is intended to include systems and uniform standards for underwriting, disclosures, and servicing. The GSE pooling and servicing agreements would be standardized. The hope is that large parts of those standardized agreements would be able to be exported to the PLS market.

In 2014, with near-term GSE reform legislation unlikely, Watt narrowed the scope of the Common Securitization Platform to focus on meeting the needs of the GSEs' current securitization operations. The open architecture could be expanded later to accommodate others, once the form of a future state becomes clearer.

One commonly lodged complaint about the current system is that having two platforms is inefficient: it is expensive for the GSEs, and it compromises liquidity. (Freddie Mac securities are less liquid than their Fannie Mae counterparts.) Mortgage Bankers Association (2013) states, "While Fannie Mae has roughly 60 percent of the GSE MBS market, on a typical day, the trading volume in Fannie Mae MBS is ten times that of the much less liquid Freddie security. This liquidity difference makes the mortgage market less efficient and less competitive."

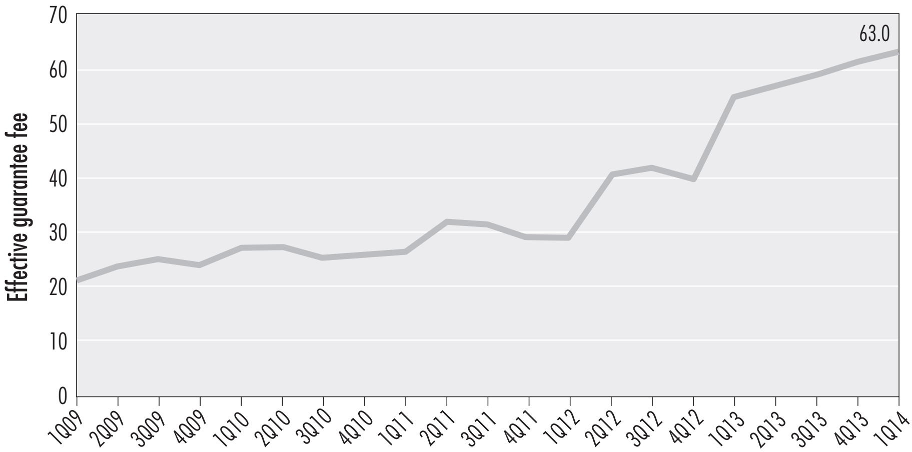
Because Freddie securities are less liquid, they trade at a lower price. Freddie must make up the difference between this price and the price of the Fannie securities in order to encourage originators to sell into Freddie. Given that GSE income is swept to the Treasury, this cost ends up being borne by taxpayers. Watt made it clear that he would like to move toward a single common security, which would require a multiyear effort before final implementation.

Thus, under Watt's leadership, building a structure that can support a single security has become a priority. The 2014 scorecard makes clear that the design principles for the Common Securitization Platform should "include the development of the operational and system capabilities necessary to issue a single (common) security for the Enterprises" (FHFA 2014c, 5). In May 2015, FHFA came out with an update on the progress toward a single security (FHFA 2015c), assuring the market that progress is being made.

CONTRACTING THE GSES' FOOTPRINTS AND RISK LEVELS

The second part of the 2012 plan has the most robust public policy implications (FHFA 2012a). The FHFA set out to gradually contract the presence of the GSEs in the market, by both shrinking their footprints and encouraging them to shrink their risks. The contraction of the footprints was to come through "crowding in" private capital by raising G-fees and, market conditions permitting, lowering

Figure 8.7
Fannie Mae Effective Guarantee Fee, 2009–2014 (basis points)



Note: The fee is the Fannie Mae single-family average G-fee charged by Fannie Mae on new acquisitions.
Sources: Data from Fannie Mae (various financial reports) and Urban Institute (2014).

loan limits.[10] The FHFA thought that by increasing costs and limiting the range of loans eligible for government support, the private market would step in, and Fannie's and Freddie's market shares would contract. G-fees have risen considerably over the past several years, increasing from 28 bps in late 2010 to 63 bps by the first quarter of 2014, as shown in figure 8.7. In December 2013, shortly before DeMarco left the FHFA, he proposed another 10 bps hike in G-fees and another round of increases in LLPAs, in order to decrease the amount of cross-subsidization in the system. Watt put the hikes on hold shortly after he took office in early 2014. He wanted time to "fully evaluate the rationale for the plan" (Timiraos 2013).

In June 2014, the FHFA put out a request for input on the base level of G-fees as well as the LLPA matrix (FHFA 2014b). G-fees must cover two components: the costs of capital and the expected losses. The capital component consists of the amount of required (or allocated) capital times the rate of return

10. In addition, as part of the 2013 strategic scorecard, actions on the retained portfolios were required. The third PSPA (2012) required the Freddie and Fannie retained portfolio caps to shrink by 15 percent per year. In its 2013 scorecard, the FHFA made it a goal for the GSEs to shrink their less liquid assets in these portfolios (nonagency MBS and unsecuritized loans) by 5 percent per year. This requirement was eliminated in the 2014 scorecard, but the GSEs were encouraged to prioritize selling their less liquid portfolio assets in an economically sensible manner to help reduce taxpayer risk.

on that capital. It should be noted that in the context of conservatorship, where a market return is not necessarily required, setting G-fees may be done without explicit cross-subsidization. A policy decision can be made to accept a market return for higher-FICO/lower-LTV loans and a submarket, but still positive, return on lower-FICO/higher-LTV loans.

In late 2013, the DeMarco FHFA had also solicited comments on lowering the conforming loan limits from $417,000 to $400,000 and lowering the maximum limit in high-cost areas from $625,500 to $600,000. This was viewed as a way to crowd in private capital. By contrast, the Watt FHFA has made it clear that this topic needs further study and there is less likely to be a change under his watch.

DeMarco's focus on shrinking the GSEs' footprints was not limited to the single-family business. Another goal in the 2013 scorecard was that Fannie and Freddie shrink their multifamily business by 10 percent relative to 2012. In August 2013, the FHFA announced that this goal was likely to be met through "a combination of increased pricing, more limited product offerings and stronger underwriting standards" (FHFA 2013b).

The second type of contraction envisioned by the DeMarco FHFA was shrinking the GSEs' risk profiles. Fannie and Freddie were encouraged to find ways to share risk with the private sector. Doing so, DeMarco reasoned, would lessen the GSEs' risk and provide valuable price discovery information. Two types of risk-sharing arrangements might be contemplated: risk sharing of loans already in the portfolios and risk sharing at the point of origination. As of June 2015, the GSEs had focused primarily on the former, the so-called back-end risk-sharing arrangements. This strategy had taken the form of reinsurance[11] and capital market transactions. As of June 2015, the GSEs had completed 20 risk-transfer transactions through the capital markets, all of which were very well received. Fannie Mae had done seven transactions through its Connecticut Avenue Securities (CAS) shelf, laying off part of the risk on $349 billion of its $2.6 trillion guarantee book of business, partially covering 13.3 percent of its book of business. Freddie Mac had done 13 transactions through its Structured Agency Credit Risk (STACR) shelf, laying off $311 billion in these deals, partially covering 20 percent of its $1.6 trillion guarantee book of business. While initially the risk sharing was on loans with LTVs of 60–80 (Lee and Bai 2014), that was broadened beginning in May 2014 to include loans with LTVs over 80. In 2015, Freddie Mac has begun to sell the first-loss risk exposure on the deals, which it had previously retained. Moreover, in 2015, the GSEs did the first deals in which their payouts were based on actual severities rather than a preset severity schedule.

11. In August 2013, Fannie purchased insurance from the National Mortgage Insurance Corporation on a $5 billion pool of mortgages already on its books. In November 2013, Freddie transferred a portion of the credit risk on its first risk-sharing deal (STACR 2013–DN1) to Arch Reinsurance. In April 2013, Freddie also bought insurance for up to $269.5 million in losses on a pool of loans purchased in the first quarter of 2013.

Fannie Mae has done several pilot front-end risk-sharing deals, in which the risk is laid off on the originator at the point of origination. That is, the originator bears the first loss, up to some prespecified amount, in exchange for a meaningful reduction in guarantee fees. It is also possible for the private mortgage insurers to take the first loss. The Mortgage Bankers Association (2013) proposed that the mortgage insurers provide deep mortgage insurance—down to an LTV of 50, for example—in exchange for a meaningful reduction in G-fees.

THE PIVOT: "REDUCE" REPLACES "CONTRACT"

The strategic path laid out by the FHFA changed considerably when the leadership changed hands in January 2014. The word "contract," used by DeMarco, was changed to "reduce" by Watt—a small but critical revision. The FHFA shifted its focus from bringing private capital back by shrinking the GSEs' footprints to bringing private capital back *within* those footprints (Parrott 2014a). Specifically, Watt embraced the risk-sharing initiatives created by DeMarco, while moving away from recommendations to crowd in private capital. The thought process: If the reasons for the lack of private capital go beyond price (for example, in PLS a number of governance/conflict of interest concerns have not been adequately addressed), further increasing G-fees will be counterproductive. Doing so will either drive more loans to the FHA, with its full-faith-and-credit guarantee, or constrict credit, neither of which would be desirable. Watt has made it very clear that there are no plans to lower loan limits. Fees and changes in LLPA proceeded slowly and gradually, with plenty of discussion and notice. In April 2015, the FHFA came out with its final decision on G-fees and LLPAs: there was a modest, revenue-neutral recalibration of GSE pricing (FHFA 2015a). Lower-credit-score, higher-LTV borrowers paid marginally less, high-balance borrowers paid slightly more. Parrott (2015) explains the intuition behind these marginal changes.

The risk-sharing initiatives have been expanded under Watt. The 2014 scorecard (FHFA 2014c) tripled the annual risk-sharing goals from $30 billion to $90 billion for each entity and added incentives to develop new structures to share the risk. The 2015 scorecard (FHFA 2015b) further expanded the risk-sharing goals to $150 billion for Fannie Mae and $120 billion for Freddie Mac. Each must utilize at least two different types of risk transfer.

The mortgage insurance industry is critical to the success of these initiatives, particularly if the risk sharing is to be done in conjunction with expanded access to credit, as is currently envisioned. In July 2014, the FHFA put out for comments the eligibility requirements for a mortgage insurer (MI) to do business with the GSEs. This document outlines the minimum financial and operational obligations; these rules include much more stringent capital requirements (FHFA 2014a). These private mortgage insurance eligibility requirements (often referred to as PMIERs) were finalized in April 2015 and posted on the Fannie Mae and Freddie Mac websites (see Fannie Mae [2015] and Freddie Mac [2015]). Finalizing these requirements gives the FHFA and the GSEs assurance that the MIs can meet the increasingly large demands being placed on them.

On the multifamily side, not only have further reductions in activity not been mandated, but lending to affordable multifamily housing was removed from the calculation of multifamily portfolio limits. This change was intended to encourage the GSEs to lend more aggressively in underserved communities facing shortages of affordable rental housing.

MAINTAINING CREDIT AVAILABILITY

GSE credit availability has been very limited under conservatorship. One reason for this is lender overlays stemming from perceptions about the GSEs' repurchase policies. When an originator makes a loan that has manufacturing defects, the GSEs are permitted to put the loan back to the originator. This is generally done when the loan has gone delinquent. As a result of the concern that the GSEs regard default as per se evidence of manufacturing defects, lenders have imposed overlays, which make the credit box far smaller than the stated GSE box (Parrott and Zandi 2013). The concern is that if lenders may have to repurchase loans that go delinquent, they will make only loans that are extremely unlikely to go delinquent.

In early 2013, the DeMarco FHFA tried to address the overlays by providing some clarification. A sunset period of 36 months was implemented for borrowers who had never missed a payment (if there was fraud, the possibility of a put-back did not sunset). However, lenders did not scale back their overlays, because it was ambiguous when the sunset period applied and when it did not. The following year, Watt (2014) announced that lenders will receive a formal letter relieving them of all liability for nonfraudulent underwriting defects if either of two events occurs:

- A borrower has no more than two 30-day delinquencies over the first 36 months after a loan has been purchased by one of the GSEs and no 60-day delinquencies.
- Fannie or Freddie have performed a quality control check on the loans and found no defects, irrespective of the age or performance of the loan.

These measures proved to be insufficient. There are certain representations and warranties that never sunset, including "misstatements, misrepresentations, and omissions," and lenders were concerned that these were not well defined, and that they undermined much of the certainty the sunsets were intended to create. In November 2014, after many discussions with lenders to better define these life of loans representations and warranties, Fannie Mae and Freddie Mac posted very granular definitions (see Fannie Mae [2014] and Freddie Mac [2014]). For example, a "misrepresentation must involve three or more loans from the same lender, be made pursuant to a pattern of activity, and be significant."

In addition, if an MI withdraws coverage on a loan, that loan will not automatically be put back to the lender, as has been done to date. The GSE will review the loan file, and if the lender has complied with underwriting requirements, the GSE will give the lender the option of finding another insurer or providing the coverage itself. While the changes in the representation and warranty procedures may seem purely technical to many, they are critical to encouraging lenders to open the credit box.

PLACING THE FHFA'S ACTIONS IN CONTEXT

The FHFA could go a long way toward meeting many of the goals envisioned by Johnson-Crapo by taking the following actions.

- Create a more prominent role for private capital through both risk-sharing arrangements and increased reliance on MIs. (Ultimately, the role played by private capital will be well short of what it would be in a system in which private capital bears the first loss, but much larger than it was either before 2005 or under conservatorship to date.)
- Preserve the liquidity of the TBA market and ultimately enhance it by achieving the goal of a single platform or single security.
- Address affordable housing issues.

It is important to realize that the third action could be addressed more easily in the current system than it could be in a more heavily private system. Right now, the GSEs can opt to cross-subsidize the rates on loans to underserved borrowers by charging adequately served borrowers more, or they can simply choose to receive a submarket, but still positive, return on capital for loans to underserved borrowers. In the Johnson-Crapo bill, deviations from risk-based pricing for underserved borrowers would be provided exclusively through an incentive fee for an affordable housing fund. That is, the competition among private market participants would eliminate any cross-subsidization. If an adequately charged borrower is paying too much to subsidize other borrowers, a new guarantor would swoop in and take that business. One issue that eventually denied Johnson-Crapo the necessary number of votes to bring it to the Senate floor was whether the incentive fee would be sufficient to guarantee adequate service to underserved borrowers and communities, and if it was not, what the backup plan would be.

Capitalizing the National Housing Trust Fund and the Capital Magnet Fund

When it was passed, HERA required that a surcharge of 4.2 bps be imposed on every newly purchased GSE mortgage, to be contributed to two newly created funds, the National Housing Trust Fund and the Capital Magnet Fund. Sixty-five percent of the proceeds were to be contributed to the National Housing Trust Fund and 35 percent to the Capital Magnet Fund.

The National Housing Trust Fund targets rental housing; at least 90 percent of the funds must be used for the production, preservation, rehabilitation, or operation of rental property. Up to 10 percent can be used for select home ownership activities for first-time buyers. This fund focuses on low-income housing:

at least 75 percent of the funds for rental housing must benefit extremely low income households (income equal to 30 percent of area median income or less), and all the funds must benefit very low income households (income equal to 50 percent of area median income or less).

The Capital Magnet Fund was intended as a funding source for community development financial institutions (CDFIs) and nonprofits to finance affordable housing and related economic development activities. The funding was awarded competitively by the CDFI Fund and had to be leveraged at least 10 to 1 with other funding. Contributions to the Capital Magnet Fund were suspended when the FHFA put the GSEs into conservatorship, although one round of awards were made through an $80 million appropriation in 2010.

With the GSEs now profitable, the 4.2 bps fee was adopted, beginning in 2015. One consideration that may have delayed the decision was the impact that imposing the fee would have on the lawsuits against the government seeking to overturn the third amendment to the PSPAs (discussed earlier in this chapter in the history section). Does the fact that the GSEs are now profitable, and are projected to remain so for the foreseeable future, mean that this amendment should not have been adopted, thus strengthening the plaintiffs' case?

Recapitalizing the GSEs

Policy makers and experts are now debating what steps to bring the GSEs out of conservatorship can be taken through administrative actions and what must be done through legislation. Jim Millstein, the Chief Executive of Millstein & Co. and a former Treasury official, has argued that the current terms of the federal bailout prevent the GSEs from building capital. However, he points out, HERA didn't mandate either the 10 percent dividend or the dividend equal to 100 percent of the companies' earnings. "Two administrations' decisions over the past six years did. Ending the conservatorships won't require an act of Congress—HERA already provides a path to its end" (Millstein 2014). The administration could simply change the PSPAs to stop requiring dividends and let the institutions rebuild capital. After the GSEs accomplished that, the government could allow them to be sold back to private investors.

Jim Parrott, my colleague and a former adviser at the National Economic Council, has argued that this solution is not so easy to put into practice (Parrott 2014a, 2014b). Even if the GSEs might be viable, upon exiting conservatorship, without a government guarantee (itself a questionable assumption), section 6.3 of the PSPAs prohibits any change that would compromise the interests of the agency's MBS investors. And nothing would compromise the GSE MBS investors' interests more than removing the government's full-faith-and-credit guarantee. Exiting with a backstop also poses a challenge. Under the PSPAs, the taxpayers are owed a fee equal to the value of the backstop. According to Parrott, a fee equal to the fair value of the Treasury's $265 billion line of credit would be prohibitively high, particularly when added to the dividend also owed under the agreements. Thus, as a practical matter, the GSEs cannot exit conservatorship with or without a guarantee, making legislative action necessary.

What about leaving Fannie and Freddie in conservatorship and letting them accumulate capital? The Treasury Department could amend the PSPAs to abolish the earnings sweep and restore the 10 percent dividend. If this highly unlikely course of action were taken, it is even less likely that the Treasury would count past payments in excess of the 10 percent dividend as repayment of the amount owed. Thus, even if the Treasury elected to change the PSPAs in this way going forward, with most of the one-shot earnings boosts behind them, it would take the GSEs years to repay the debt and build up adequate capital. Earlier in this chapter, it was projected that the GSEs would earn \$25 billion to \$31 billion annually in the coming years. A 10 percent dividend on \$188 billion, the amount owed to the Treasury, is \$18.8 billion. Subtracting that from the earnings estimate leaves \$6 billion to \$12 billion a year to use for building capital. Assuming a 4 percent capital requirement based on \$4.2 trillion of assets, the size of the GSEs' guarantee business, the GSEs would need \$168 billion for recapitalization, which would take them 14–28 years to accumulate. Obviously, if the dividend were reduced or eliminated, the time to recapitalization would be much shorter. With no dividend and assuming \$28 billion of steady-state profits, it would take six years to accumulate \$168 billion.

It also would be possible to recapitalize the GSEs through legislative action, per Millstein's plan (Millstein 2013). This possibility, too, seems remote, as there is no political will to do this. The bottom line: there is no easy exit from conservatorship, and we expect these entities to stay in conservatorship for a very long time.

Conclusions

The current state of the GSEs can best be summed up in a single word: *limbo*. Despite the fact that Fannie Mae and Freddie Mac were placed in conservatorship in 2008, with the very clear intent that they not emerge, little progress has been made toward creating a new system with a large role for private capital to take their place. It seems to be relatively easy for legislators to agree on a set of principles for a new system, but much harder for them to agree on the system's design. It is clear there will be no congressional action before the 2016 presidential election. We would be surprised if GSE reform was a top priority item after the election. As a result, we expect the GSEs to remain in conservatorship for a long time.

Given this, the major path forward over the near term will be administrative. Much, but not all, of what can be achieved by legislation can be achieved administratively. Certainly, a larger role for private capital through risk sharing and expanding the participation of the mortgage insurance industry, as well as actions to achieve a bigger credit box, can be accomplished in this way. However, the role for private capital will fall short of what it would be if change could be achieved through legislation, and it will still leave Fannie and Freddie's status in limbo.

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