

## What to Do about the GSEs?

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### Introduction

Fannie Mae and Freddie Mac—the two large “Government-Sponsored Enterprises” (GSEs) that are at the center of U.S. residential mortgage finance<sup>207</sup>—remain the “elephants in the room” that are being ignored as part of broad-brush financial sector reform. Neither the Dodd-Frank Act nor the proposed Financial CHOICE Act have addressed the reform of the GSEs’ structures—even though the GSEs were placed in government conservatorships in early September 2008 and have remained in that state since then.

Nevertheless, as we argue in this section, their reform is essential for a more efficient housing finance system.

Accordingly, there are two central issues for financial reform with respect to the GSEs: first, the immediate issue of what should be done with/about the GSEs; and second, the larger issues of how residential mortgages should be financed and how U.S. public policy toward housing finance and toward housing, more generally, should be structured.

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<sup>207</sup> There is one additional large GSE—the Federal Home Loan Bank System (FHLBS)—that will not be addressed in this section. The FHLBS is a group of 11 large wholesale banks that collectively borrow in the capital markets and provide wholesale financing for banks and other depository institutions. As of year-end 2015, the FHLBS had \$969 billion in assets. Any legislative reform of Fannie Mae and Freddie Mac would likely—and should—include the reform of the FHLBS. More detail on the FHLBS can be found in Frame and White (2011). For the remainder of this section, references to “GSEs” will mean only Fannie Mae and Freddie Mac, unless otherwise indicated.

*What the GSEs Do*<sup>208</sup>

Fannie Mae and Freddie Mac are large financial institutions that operate in the secondary mortgage market. They buy residential mortgages<sup>209</sup> from mortgage originators—banks<sup>210</sup> and mortgage companies<sup>211</sup>—and bundle the mortgages into pass-through mortgage-backed securities (MBS) that are sold in the capital markets. Those MBS carry the GSEs' guarantees to the MBS investors against losses due to credit risks on the underlying mortgages.<sup>212</sup> They charge a small fee to the mortgage originators for this guarantee and, at least in the past, were required to hold \$0.45 of capital for every \$100 of mortgage face value guaranteed.

In addition, both banks and the GSEs keep some of the mortgages on their own balance sheets, financing these retained mortgages

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<sup>208</sup> More detail on Fannie Mae and Freddie Mac can be found in Frame and White (2005), and Acharya, Richardson, Van Nieuwerburgh, and White (2011); see also Jaffee, Richardson, Van Nieuwerburgh, White and Wright (2009) and Acharya, Oncu, Richardson, Van Nieuwerburgh, and White (2011).

<sup>209</sup> The mortgages that they buy must conform to specified standards and are thus described as “conforming loans:” There are limits on the value/size of the mortgage that can be bought; and the mortgage borrowers are expected to make a 20% down payment (unless they obtain mortgage insurance or there is some other support for the mortgage) and to have credit scores that make them good credit risks.

<sup>210</sup> Unless otherwise indicated, by “banks” we mean commercial banks and other depository institutions, such as savings institutions and credit unions.

<sup>211</sup> These are companies that originate mortgages and immediately sell them in the secondary market; they are sometimes described as “mortgage banks.”

<sup>212</sup> The GSEs charge an annual “guarantee fee” (“g-fee”) for that credit-risk guarantee. Elenev, Landvoigt, and Van Nieuwerburgh (2016) argue that this guarantee fee was substantially underpriced prior to the crisis. This led to a system with too much mortgage credit extension, more risky mortgages, a more levered financial system, and artificially inflated house prices. A radical increase in g-fees would crowd in the private sector and remedy these issues.

with deposits (for banks) and debt (for the GSEs).<sup>213</sup> During the financial crisis, banks and GSEs purchased large amounts of both prime and nonprime (Alt-A and subprime) mortgage-backed securities. While the GSEs were required to hold just \$2.50 for every \$100, banks were required to hold an even smaller amount, i.e., \$1.60, if the MBS were guaranteed by the GSEs. Coupled with the aforementioned \$0.45 capital requirement for GSE guarantees, the total capital required in the system was then a paltry \$2.05. This is approximately half the \$4.00 per \$100 of mortgage assets that banks were required to hold on their balance sheets for the *exact same mortgage loans* without involvement of the GSEs.

Only Washington D.C. could dream up such a system.<sup>214</sup> Given both the implicit guarantee of the U.S. Government (resulting in a below-market cost for debt financing) and favorable capital requirements, the GSEs grew unencumbered for decades. From the last major GSE legislation in 1992, for example, Fannie Mae and Freddie Mac combined went from holding \$153 billion in mortgages and guaranteeing the credit risk of another \$714 billion to holding \$1.4 trillion and guaranteeing \$3.5 trillion, respectively, by the end of 2007.

The GSEs still play a major role in housing finance. During 2015, the GSEs' mortgage purchases accounted for approximately 45% of all single-family mortgage originations; and as of October 2016, their outstanding MBS guarantees plus the mortgages that they held on

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<sup>213</sup> The GSEs financed these asset purchases by issuing debt (so-called "agency" debt). Because of the implicit government guarantee (which has now become an explicit guarantee), the GSEs are able to borrow at below-market interest rates: below what an otherwise-similar company (but without the guarantee) would have to pay.

<sup>214</sup> David Frum, a former speechwriter for President George W. Bush, writes in the National Post, July 11, 2008: "The shapers of the American mortgage finance system hoped to achieve the security of government ownership, the integrity of local banking and the ingenuity of Wall Street. Instead they got the ingenuity of government, the security of local banking and the integrity of Wall Street."

their respective balance sheets accounted for 49% of all single-family residential mortgages.<sup>215</sup>

To understand how this happened, note that, as GSEs, they are hybrid organizations: They each have corporate structures, with private shareholders and boards of directors. But their charters come from Congressional legislation (and not, for example, from the state of Delaware); the President had the power to appoint five of the 18 directors on their respective boards; and they have had special access to U.S. Treasury financing and other special government-related privileges. Hence, they are described as “government-sponsored enterprises.” The problem with the GSEs is that capital markets have always treated them as special—with the strong expectation that the Federal Government would support their creditors if the GSEs had financial difficulties; and thus (as mentioned above), the GSEs were able to finance themselves at a lower cost than their financial structures would otherwise have warranted.

### *The Conservatorships*

Although the GSEs had had a history of conservative operation and substantial profitability, that discipline broke down in the early 2000s: The “private-label” (i.e., non-GSE) MBS (PLMBS) sector grew rapidly; and, to protect their market shares, the GSEs expanded their operations into buying and securitizing more risky mortgages than had previously been true. However, the aforementioned levels

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<sup>215</sup> The GSEs operate also in the secondary mortgage market for multi-family housing, but that is a far less important part of their operations; the mortgage market for multi-family housing is about a tenth of the size of the single-family mortgage market. In addition to the GSEs, Ginnie Mae (which is an agency within the U.S. Department of Housing and Urban Development) securitizes mortgages that are insured by the Federal Housing Administration (FHA), the Department of Veterans Affairs (VA), and U.S. Department of Agriculture. And banks hold some residential mortgages—typically those that exceed the conforming loan value limit and/or that don’t meet the documentation or other criteria of the GSEs—on their own balance sheets.

of equity financing that they were required to maintain—only 0.45% against their MBS credit-risk guarantees, and 2.5% against the mortgages that they held on their balance sheets—were not sufficient to protect them against the potential credit losses of these more risky mortgages.

The GSEs' profitability fell in 2006, and they ran losses in 2007 and the first half of 2008. By the late summer of 2008, they were approaching insolvency; and on September 6, 2008, they were placed into government conservatorships.<sup>216</sup> In essence, they were placed under the direct control of their regulator—the Federal Housing Finance Agency (FHFA)—where they remain today.

The capital markets' expectations that the GSEs' creditors would remain whole in the event of financial difficulties proved to be accurate: The direct creditors (bondholders) to the GSEs—including subordinated debt holders—have not suffered losses as a consequence of the conservatorships, and the GSEs' guarantees to their MBS investors have been honored as well.<sup>217</sup>

### *Important Changes during the Conservatorships*

Prior to the conservatorships, the GSEs' critics worried that their on-balance sheet holdings of mortgages had ballooned because of their favorable financing from the capital markets (due to their GSE status) and because their equity-financing requirement for these mortgages was only 2.5%. In essence, they worried that the GSEs

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<sup>216</sup> A discussion of the conservatorship decision and processes can be found in Frame, Fuster, Tracy, and Vickery (2015). See also Sorkin (2009), Poulson (2010), Morgenson and Rosner (2011), Hagerty (2012), Howard (2014), and McLean (2015).

<sup>217</sup> However, the common equity shareholders were wiped out, and the preferred shareholders were diluted—with the U.S. Treasury acquiring a 79.9% ownership—but not eliminated. The preferred shareholders—which are now largely hedge funds and private equity funds—are currently suing the Federal Government over the legality of the continued conservatorships and the Treasury's absorption of all of the current operating profits of the GSEs.

had become very large, highly leveraged, and (possibly) maturity-mismatched “hedge funds” for the benefit of their shareholders. Subsequent to the conservatorship, there was the realization that their credit-risk guarantees on their MBS also posed a risk to the Federal Government—again, because of the GSEs’ special status and the beliefs of the capital markets that the Federal Government would cover the GSEs’ losses at a time of financial difficulties, as had actually happened in 2008 and would likely happen again.

The FHFA has taken actions to address both of these concerns: First, the size of the GSEs’ balance sheets has shrunk. Whereas at year-end 2008 (shortly after the onset of the conservatorships) Fannie Mae had on-balance sheet mortgage holdings of \$768 billion and Freddie Mac had on-balance sheet mortgage holdings of \$749 billion, as of the third quarter of 2016, their on-balance sheet mortgage holdings were \$307 billion and \$308 billion, respectively.

With regard to the second issue, the GSEs have been reducing the credit risks on the mortgages that they own and have guaranteed through two mechanisms: a) They have been buying insurance against credit losses on the mortgages; and b) they have issued the rough equivalent of “catastrophe bonds,” whereby the bond buyer is repaid less principal in the event of credit losses on the underlying mortgages.<sup>218</sup> In essence, the GSEs have privatized some of these credit risks through these “front-end” (insurance) and “back-end” (CRT) transactions. As of November 2016, the risks on 23.7% of Fannie Mae’s guarantees and 34.9% of Freddie Mac’s guarantees had been privatized in this way. In addition, the annual guarantee fees on the GSEs’ MBS—which had been in the range of 20-25 basis points—have more than doubled to a range of 50-60 basis points. In conjunction with the privatization of some of the GSEs’ risks (which, as we discuss below, we strongly endorse), the higher g-fees have meant that the GSEs appear to be earning more

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<sup>218</sup> These bonds are frequently described as “credit risk transfer” (CRT) transactions.

in compensation for default risk than they have been paying for insurance and to the investors in the catastrophe bonds.

### **The GSEs: What Dodd-Frank Did and the CHOICE Act Proposes to Do**

As mentioned earlier, Dodd-Frank did nothing substantive with respect to the GSEs. Section 1074 of Dodd-Frank mandated a report by the Treasury on what should be done about the GSEs. The Obama Administration delivered its report in February 2011. That report provided a range of choices as to possible actions, but did not indicate what course of action the Obama Administration endorsed.<sup>219</sup>

The proposed CHOICE Act similarly avoids any substantive actions with respect to the GSEs. Like Dodd-Frank, it requires the Treasury to report to the Congress; however, the CHOICE Act requires annual reports (Section 336) rather than the single report specified in Dodd-Frank.

### **Why Have the GSEs Been the “Elephants in the Room?”**

Before we offer our recommendations for the disposition of the GSEs and for housing finance and housing policy more generally, it is worth considering why the GSEs were ignored by Dodd-Frank and seem likely to be ignored by the proposed CHOICE Act.

First, the crisis that precipitated the conservatorships for the GSEs has passed. The GSEs are not currently engaging in the kinds of risky activities that brought them to the brink of insolvency in 2008. Although the GSEs in conservatorships jointly had to draw on the Treasury for \$188 billion to avoid insolvency, they have

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<sup>219</sup> Dodd-Frank devoted a considerable amount of attention to regulation with respect to residential mortgages, which have some indirect consequences—often favorable—for the GSEs.

subsequently produced positive earnings and have made payments to the Treasury totaling \$250 billion.<sup>220</sup> That the GSEs are currently making positive contributions to the Treasury is no small thing when the overall Federal budget continues to run substantial annual deficits.

In addition, as discussed above, the FHFA has required the GSEs to take actions—shrink their balance sheets, offload some of their risks to the private sector, double their annual guarantee fees—that have reduced the Federal Government’s exposure to the downside risks of the GSEs’ actions. Again, the crisis has passed.

Second, broadly encouraging and subsidizing home ownership (and also rental housing, which the GSEs also finance) has been a politically popular activity. It is even more popular when the subsidy is implicit and off-budget, as has been true because of the special GSE status of the two organizations. Any proposed reform of the GSEs would likely reduce the extent of government backing for them and thereby raise mortgage costs for their future borrowers. A substantial fraction of the Congress would immediately object.

Third, any proposals to reform Fannie Mae and Freddie Mac would raise the question of whether the other large GSE, the FHLBS, should also be reformed. That prospect adds an extra set of issues and controversies.

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<sup>220</sup> This fact deserves two comments. First, these are nominal sums and do not take into account the time value of money. Whether one believes that the GSEs have completely “paid back” their original draws on the Federal Government depends on what one thinks the appropriate interest rate on the government investment in the GSEs should be. It is worth recalling that at the time of the conservatorships the GSEs were unable to raise funds in the capital markets—i.e., private investors were unwilling to lend to them. Second, these earnings do not incorporate potential losses from future mortgage defaults that may arise if another widespread housing collapse occurs. Since the financial crisis of 2007-2009, housing prices have mostly recovered, and therefore there have been far fewer defaults. Extensive defaults take place only during periods when housing prices fall, so earnings of the GSEs will tend to be asymmetric.

In recognition of all of this, in addition to the silence of Dodd-Frank and the CHOICE Act with respect to the reform of the GSEs, there have been very few specific legislative proposals aimed at addressing the GSEs. During 2013-2014, there were a few exceptions—such as the Corker-Warner Act, the Johnson-Crapo Act, and the Protecting American Taxpayers and Homeowners (PATH) Act<sup>221</sup>—that gained some media attention but then lost momentum without being passed by the Congress. We comment on these proposals in a later section.

### **What Should Be Done?**

The goal of reforming housing finance should be to ensure an efficient mortgage market, both in primary (origination) as well as in secondary mortgage markets. We have in mind a housing finance system that incorporates the following:

- Corrects any market failures if they exist—notably, in this case: (i) unpriced government guarantees that destroy market discipline and lead to below-market borrowing rates, encouraging excess leverage and risk taking; and (ii) the externality from undertaking too much credit and interest rate risk, as this risk is inherently systemic in nature;
- Maintains a level playing field between the different financial players in the mortgage market to limit a concentrated buildup of systemic risk;
- Does not engender moral hazard issues in mortgage origination and securitization; and

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<sup>221</sup> See

<http://www.housingwire.com/ext/resources/files/Editorial/GSELegislativeProposalsComparison.pdf> for detailed summaries of all three bills.

- Does not inject public housing policy into the mortgage finance system.

As a result of what we learned from the financial crisis, the mortgage finance system should be one that is primarily private in nature, involving the securitization of mortgages that conform to reasonable credit quality and are standardized with the underlying credit risk being borne by investors, perhaps with some support from private guarantors—in other words, with few guarantees (if any) from the government. We see no reason why the system cannot be capital-market based (i.e., relying on securitization), compared to bank-based. The institutions involved in this endeavor should not be housed in government, and, to the extent securitization requires government guarantees of tail credit risk, these guarantees must be priced by the market.

### *Housing Finance and Private Securitization*

The question is how does one effectively get to this private system given the current state of mortgage finance? We call this the “genie in the bottle” problem. A quarter century ago, the proverbial “genie” was let out of the bottle when mortgage markets were exposed to wider market forces, yet the government guarantees and special treatment of Fannie Mae and Freddie Mac were left in place. Capital markets over the past 25 years have come to rely on these guarantees. To wean the system off these guarantees—to put the “genie back in the bottle”—we need to transition away from a government-backed system to a private-based one. The problem is that the transitional process will only succeed if private markets are not crowded out, regulatory capital arbitrage by private guarantors is averted, and the systemic risk that is inherent in mortgage credit and interest rate risks is managed.

There has been some limited success at moving in this direction. Even though the GSEs remain front and center of the mortgage market, they have been shrinking their portfolio of mortgages,

effectively reducing their footprint. Also, the GSEs' guarantee fees were increased after the crisis, thus reducing the market subsidy and, in theory, increasing market discipline. Moreover, a 2015 report by the FHFA argued that the guarantee fees were consistent with the pricing implied by the GSEs' credit-risk transfer (CRT) transactions.<sup>222</sup> Nevertheless, on the downside, these GSE reforms do not seem to have led to a significant re-emergence of PLMBS.

In the aftermath of the 2006 housing market collapse and the concomitant collapse of the PLMBS market, there has been no revival of significant PLMBS activity. The reasons for this absence aren't entirely clear. Among the possibilities: fears of a renewal of the moral hazard behavior by mortgage originators and securities packagers; continued uncertainty over the legal liabilities of private issuers and originators (with respect to their representations and warranties); distrust of the credit rating agencies' ratings for PLMBS; continued favorable capital treatment (a 1.6% equity financing requirement) that applies to the GSEs' MBS when they are bought by banks; and a lack of comfort and familiarity by insurance companies and pension funds (who would be the natural buyers of long-lived MBS that are based on 30-year fixed-rate mortgages) for PLMBS.

It is often argued that mortgage finance necessarily requires heavy government involvement, in particular, guarantees of mortgage defaults. This is clearly untrue. The cross-section of mortgage funding models across various developed countries shows that few countries have any entities that resemble Fannie Mae or Freddie Mac. The majority of countries rely on a deposit-based system in which the mortgage lender retains the mortgage loans on their books. These institutions are subject to prudential regulation just like any other bank. And the argument cannot be that this has a major impact on homeownership rates. Of the 25 most developed

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<sup>222</sup> See, for example, <https://www.fhfa.gov/Media/PublicAffairs/Pages/Results-of-Fannie-Mae-and-Freddie-Mac-Guarantee-Fee-Review.aspx>.

countries, the U.S. ranks 17<sup>th</sup>. What is unique about U.S. mortgage finance is that almost two thirds of all mortgages are securitized, whereas abroad, for the next largest securitizers—Australia and Canada—it’s only around 20%.<sup>223</sup>

In the mortgage finance systems abroad, lenders retain the risk of mortgages (“skin in the game”). Yet there are reasonable economic grounds for preferring the U.S. mortgage finance system of securitization. Securitization truly can turn “lead into gold.” Securitization takes illiquid mortgage loans and pools them to form liquid MBS that trade on the secondary market. Because illiquidity commands a risk premium, the more liquid mortgage assets from securitization command better prices and thus a reduced mortgage rate. An additional benefit is that the credit risk gets transferred out of the systemically risky banking sector to the capital market at large. In other words, if securitization works the way it is supposed to, the banking sector can better share its mortgage risks with rest of the economy. Finally, MBS provide banks with access to investors worldwide, which diversifies their funding base.

However, since mortgage default guarantees were an essential element of the development and liquidity of the mortgage securitization market, it seems likely that investors would continue to demand mortgage default insurance in some form or another (at least in the short term).<sup>224</sup> The problem is that the private sector cannot be the sole provider, as this insurance is systemic due to its dependence on macroeconomic events, resulting in mispriced negative externalities. Yet because there is no accountability (let

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<sup>223</sup> Denmark’s mortgage market relies for 90% of financing on covered bonds, which are a close cousin of mortgage-backed securities, but which provide investors with full recourse not only to the mortgage loans but also to the bank’s capital. Several other European countries, such as Germany, the U.K., and Spain, have substantial covered bond market shares.

<sup>224</sup> This statement is controversial. There are other parts of the capital market, albeit smaller and less liquid, that function just fine without guarantees of the underlying credit risk. Two examples include corporate bonds and commercial MBS.

alone political considerations) and the incentive structure is not right, the public sector cannot step into the breach.

In Acharya, Richardson, Van Nieuwerburgh and White (2011), we argue for a public-private partnership in which the private sector prices the mortgage guarantees and insures a small  $X\%$  fraction, while the government is a silent partner, insuring the majority ( $100-X\%$ ) of the remainder and receiving the corresponding premiums.<sup>225</sup> Market pricing of the guarantees will ensure that: (i) a competing private sector mortgage market (without guarantees) will not be crowded out; and (ii) market discipline will return to the mortgage market. Interestingly, a similar proposal—*The Partnership to Strengthen Homeownership Act*—was offered in 2014 by Congressmen John Carney, John Delaney and Jim Himes, along with a number of bipartisan cosponsors.<sup>226</sup>

Thus, we envision that the initial phase of a transition to a new mortgage finance system would preserve mortgage default insurance via the aforementioned public-private partnership, primarily because such guarantees have been essential for the way that the securitization market for mortgages has developed. This way, the private sector would be encouraged to shrug off any regulatory uncertainty and allowed to flourish. Financial innovation in these markets could return. New investors that are focused on the credit risk of mortgage pools would emerge. Mortgages would become more standardized, and underwriting standards would improve.

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<sup>225</sup> The private sector firm/subsidiaries would be “well-capitalized” and, if large enough, would be subject to the nonbank “systemically important financial institution” (SIFI) designation. An example of one such private-public program is given by the Terrorism Risk Insurance Act (TRIA) of 2007. Note that, given the aforementioned development of the market for mortgage credit risk sold off by the GSEs, it is possible that the public-private partnership is only required for tail or catastrophe risk.

<sup>226</sup> For a text of the bill, see

<https://delaney.house.gov/sites/delaney.house.gov/files/Partnership%20to%20Strengthen%20Homeownership.pdf>.

### *Transitioning the GSEs*

To help the transition process, reliance on the GSEs' guarantees should be mandated to end and their mortgage portfolios should continue to shrink. One example of such a mandate would be a gradual reduction of the size limit for conforming mortgages; another would be an increase in the fees that the GSEs charge for their guarantees (as was done post financial crisis).<sup>227</sup> Keeping the GSEs in conservatorships and thereby as wards of the Federal Government serves no good purpose. If there are efficiency gains and/or innovation possibilities that would accompany their operation as private for-profit companies, these advantages are foreclosed by their continued operation as government wards.

Further, their continued operation as government wards makes them prime candidates for “mission creep” and the diversion of their revenues and activities to other purposes. For example, within the past few years, 4.2 basis points of their annual guarantee fees has been earmarked for an affordable housing fund, and ten basis points has been earmarked for transfers to the Social Security Trust Fund to offset reduced payroll taxes. In addition, affordable housing goals for their securitization activities remain likely.<sup>228</sup>

A reasonable question is whether the two GSEs have significant going-concern value—e.g., that their brand names have worth and/or their organizations and technologies have value if kept intact. It may be a waste, therefore, to shutter them, and instead

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<sup>227</sup> From 2006-2016, the conforming loan limit for most parts of the U.S. was \$417,000, with higher amounts allowed in “high” housing price areas. For 2017, however, the conforming loan limit will be raised to \$424,100—which is the opposite direction from what we believe is appropriate.

<sup>228</sup> Of course, even before the conservatorships, the GSEs (starting in 1992) were subject to explicit (and rising) affordable housing goals; and commercial banks and savings institutions have been subject to obligations to support their local communities by the Community Reinvestment Act of 1977. Nevertheless, the temptations and likelihoods of mission creep and diversions are surely greater when an organization is the direct ward of the government.

the GSEs should be privatized. Indeed, given that they currently securitize large chunks of the mortgage market, guarantee the mortgage payments, and sell off an increasing fraction of the credit risk to private investors, the GSEs might be good candidate firms to handle the residual “catastrophe risk” guarantees of the aforementioned public-private partnership.

If this is the case, then the Federal Government’s 79.9% stake in the companies should be sold to the public in an initial public offering (IPO), and the companies should be structured (to the greatest extent possible) as normal companies (i.e., not as GSEs) with normal charters (e.g., from the state of Delaware) and normal bylaws, etc. The Federal Government’s IPO of Conrail in 1987 could serve as an example. In the IPO of the GSEs, however, the Federal Government should be clear that the resulting private-sector entities will be required to be well financed with equity and that they (along with other residential mortgage securitizers) would be subject to bank-like rigorous prudential regulation, so that the likelihood that they would (again) require bailouts from the Federal Government would be quite small.

If the two GSEs are privatized—or even if they are wound down and replaced by other securitizers—it is clear that the maintenance of adequate levels of equity financing for private residential mortgage securitizers (relative to the risks of the mortgages that are securitized) is a key feature. It was clear in 2008 that the two GSEs were systemic and could not be allowed simply to fail and cause their creditors to suffer losses. The same would continue to be true if the two organizations are privatized and maintain roughly their current sizes, or even if they are wound down and replaced by somewhat smaller organizations.

For such systemic organizations, any *ex ante* government statements about refusals to bail out the organizations (or, in reality, their creditors) are likely to lack credibility *ex post* at times

of financial difficulties.<sup>229</sup> It follows, then, that to reduce the likelihood of such situations arising, the organizations should be required to maintain adequate levels of equity financing relative to the risk characteristics of the mortgages that they are securitizing. They would therefore have adequate loss-absorbing capacities (i.e., equity) that will allow them to continue to operate and (until the equity is wholly depleted) avoid the disruptions and uncertainties of insolvency.<sup>230</sup> In the determination of appropriate levels of equity financing for these organizations, the same kinds of stress testing that is conducted for banks should be applied to these organizations, as well.

In addition, their prudential regulator should have clear powers of receivership in the event of insolvency, as is true for bank regulators. One of the important features of a receivership is that it eliminates the existing shareholder-owners—which was not true of the conservatorships of the GSEs. Receivership need not imply liquidation of the insolvent entity: As is true for banks, if there is sufficient going-concern value (which would disappear in a liquidation), the receiver can try to find new owners quickly, or even operate the entity for an interim period while finding those new owners.

GSEs aside, even if PLMBS returns to pre-crisis levels, given that the tranching/subordination structure was supposed to—but didn't—provide safety for the holders of the “safe” PLMBS tranches, the provision of guarantees (similar to those that have been offered by

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<sup>229</sup> It is worth recalling that all of the GSE debt securities explicitly stated that these were not obligations of the U.S. Government; nevertheless, in September 2008, those securities did become obligations of the U.S. Government.

<sup>230</sup> Equivalently, adequate equity financing will mean that the equity holders/owners of these organizations will bear most of the losses, as well as enjoy all of the gains. The pre-2008 GSE structure, with inadequate equity financing, meant that the GSEs' gains were privatized, while their losses were socialized. “Never again” is an appropriate phrase for this outcome.

the GSEs) may be necessary.<sup>231</sup> Whether those guarantees are offered by the securitizers themselves (as was true for the GSEs) or by a set of third-party guarantors seems less important than the issue of who will back up the guarantors.

Rigorous prudential regulation of the guarantors is surely part of the answer. But the provision of a government backstop for the guarantors—in essence, government coverage of “catastrophic risk,” much like the role that government-provided deposit insurance plays for bank depositors—may be important as well.<sup>232</sup> But the pricing of the risk to which the government is thereby exposed is a difficult problem by itself; there will always be intense political pressures to underprice that risk and thereby provide an implicit subsidy for mortgage finance.

To address these problems, we propose a system of side-by-side guarantees, whereby the Federal Government would provide PLMBS guarantees that would stand *pari passu* with those of private guarantors. The Federal Government could thereby price its guarantees on a par with the pricing of the private guarantors. Given the dearth of PLMBS activity since 2008, we continue to believe that such a system deserves serious consideration.

## Other Proposals

Despite the absence of successful legislation—or, perhaps, *because* of that absence—there have been a plethora of policy papers and blueprints for GSE reform and/or more general reform of the residential mortgage finance system that have been offered by individuals and policy think tanks. For a recent effort under the auspices of the Urban Institute that offers a diversity of proposals,

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<sup>231</sup> Indeed, if privatization of the GSEs occurs along the lines that we have described above, then their MBS ought to be considered as PLMBS.

<sup>232</sup> Once the government enters the role of a backstop for the guarantors, then the system of prudential regulation can be seen as a protection for the government (and ultimately taxpayers).

see: <http://www.urban.org/policy-centers/housing-finance-policy-center/projects/housing-finance-reform-incubator>. The NYU Center for Real Estate Finance Research hosted a discussion of recent reform proposals, a summary of which can be found here: <http://www.stern.nyu.edu/experience-stern/about/departments-centers-initiatives/centers-of-research/center-real-estate-finance-research/research/gse-reform-will-it-happen-and-what-form-will-it-take>.

Most of these proposals describe specific mechanisms whereby the government catastrophic risk insurance is provided in conjunction with the securitization and first-loss private-sector guarantee processes. Regardless of the details of these proposals, along with the previously mentioned legislative proposals, we reiterate that rigorous prudential regulation of the securitizers and guarantors—with adequate levels of equity financing, so as to provide private-sector first-loss and second-loss capacity that will protect the ultimate government (and thus taxpayer) guarantor—is an essential first step for any such plan.

## **Housing Finance Reform in General**

Any discussion of the reform of the GSEs should acknowledge the larger policy context in which the GSEs are embedded: Public policy in the U.S. broadly favors housing—encouraging the construction, financing, and consumption of housing—through a broad range of explicit and (all too often) implicit policy tools at all levels of government. In addition to the GSEs,<sup>233</sup> the FHA, VA, and USDA provide government-backed mortgage insurance; and the mortgages that are insured by these three agencies are securitized by another government agency: Ginnie Mae. With respect to

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<sup>233</sup> Also, the FHLBS was established in 1932 as a wholesale bank for savings institutions, which at that time were focused almost entirely on making residential mortgages. Although the FHLBS has broadened in terms of its institutional members and the kinds of lending that it supports, the support of residential mortgage lending is still an important part of its mission.

personal income taxes, the Federal Government and the states encourage housing through the mortgage interest deduction and the exemption of most capital gains on housing from reported income; the Federal Government also allows deductions for the state and local property taxes that home owners pay. The Federal Government and the states provide subsidies to builders to build multi-family housing; the Federal Government provides rental vouchers to low-income households; and “public housing” continues to be provided to low-income households by various levels of government.

“Too much is never enough” is a reasonable overall description of U.S. public policy toward housing. In that context, then, along with the above suggestions for reforming the GSEs, we discuss changes in mortgage finance and housing policy more generally.

*Subsidies for Home Ownership Should Not Be Done Through a Revived PLMBS Market.*

Whether the GSEs survive and are privatized—or are wound down and replaced—the resulting PLMBS market should not be the vehicle for subsidies for home ownership and/or for income redistribution that favors lower-income households:

First, any subsidies should be transparent, explicit, and on-budget; none of those characteristics apply to the cross-subsidies that would occur through a distorted PLMBS market. The FHA and Ginnie Mae, as on-budget entities of the Federal Government, are better vehicles for such subsidies.

Next, we believe that home ownership is an overvalued feature of U.S. housing policy. A house is a large, illiquid asset, with large transactions costs for buying and selling. Home ownership, and the accompanying mortgage finance, is not for everyone; it requires a relatively steady (and adequate) income and budgetary discipline on the part of the owning household. Those large transactions costs

can impede job mobility when better employment opportunities would require moving to a different community. And, given the experience of the steep decline in house prices after the 2006 peak, by now the idea that home ownership is a sure road to building household wealth should have been dispelled.<sup>234</sup>

Any de-emphasis of home ownership should include a de-emphasis of the importance of national home ownership rates. In essence, renting should be promoted in respectability.

Finally, trying to do income redistribution through housing policy—whether explicit (e.g., through rent vouchers) or implicit (e.g., through the GSEs)—is a distinctly inferior method compared with direct income transfers (e.g., through refundable tax credits for low-income households).<sup>235</sup>

There may well be some modest positive externalities from home ownership and from encouraging low-income households to move to better neighborhoods through vouchers.<sup>236</sup> But, again, these goals should be pursued through transparent, explicit, on-budget means and vehicles.

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<sup>234</sup> To the extent that the paying off of mortgage principal is a form of forced saving for a household, there may be some wealth building. But, again, the transactions costs of buying and selling are large; and the variance in house prices can also wipe out the forced saving.

<sup>235</sup> If one thinks of the GSEs as providing a subsidy for borrowing, they encourage greater leverage by home-owning households. And, to the extent that lower-income households are more leveraged, there may be income-distribution consequences from the termination of subsidies through the GSEs. See Gete and Zecchetto (2016). As they point out—and as we discuss below—a ready offset would be the termination of the income tax deduction for residential mortgage interest.

<sup>236</sup> See Sodini, Van Nieuwerburgh, Vestman, and von Liliensfeld-Toal (2016) for a recent study on the benefits from home ownership, and the references therein.

*Reforming Housing Policies More Generally.*

We believe that U.S. public policy has encouraged too much investment in housing. Concomitantly, other forms of investment—whether in physical production capital, such as plant and machinery; in community capital, such as schools, hospitals, roads, airports, etc.; or in human capital, such as more and better education and skill development for children and adults alike—have been neglected. Similarly, U.S. Gross Domestic Product (GDP) has suffered. Along the way, the specific tools that are used to encourage investment in housing are often inefficient and have perverse consequences for income distribution.

The personal income tax deduction for mortgage interest is a prime example. Notionally, it is intended to encourage home ownership by reducing the personal cost of a mortgage that is used to purchase a house. But it is explicitly a subsidy for borrowing, which encourages households to become more leveraged than would otherwise be the case. Next, it is far more likely to provide benefits to high-income households, who are more likely to itemize on their income tax filing and who are far more likely to take out a larger mortgage on a more expensive house and thereby get a larger deduction, than to low-income households.<sup>237</sup> Since high-income households are more likely to buy even in the absence of a mortgage subsidy, the mortgage interest deduction largely encourages those who would buy anyway primarily to buy a larger and better-appointed house. We fail to see the social value of such outcomes. And, finally, we question the goal of broadly encouraging home ownership—even if the mortgage interest deduction was effective in doing so, which it largely is not.

In sum, we believe that the American economy would be better served by a general “dialing back” of subsidies to housing. But where a good case can be made for correcting a substantial market

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<sup>237</sup> See, for example, Poterba and Sinai (2008).

failure, we urge that the relevant housing program be focused on that specific problem and that it be conducted in an explicit, transparent, and on-budget fashion.

### *Better Ways to Reduce the Cost of Housing*

There are better ways to reduce the cost of housing. They involve attacking the issue from the supply side, instead of (through subsidies) through the demand side.<sup>238</sup> There are at least three such ways:

First, the Federal and state governments should limit the ability of local (suburban) communities to restrict the supply of land for rental housing and for smaller houses (that tend to be on smaller lots) through those communities' restrictive zoning ordinances. Second, the Federal Government should undo protectionist trade measures that have limited the supplies of building materials, such as cement and lumber. And third, the Federal and state governments should limit the ability of local communities generally to impose local building codes that raise costs without providing commensurate benefits. In sum, there are ways of reducing the cost of housing that are consistent with improved efficiency—and with improved social equity.

### **Conclusion**

It has been more than eight years since Fannie Mae and Freddie Mac were put into government conservatorships. The Dodd-Frank Act largely ignored them. The Financial CHOICE Act does the same. And thus, the GSEs remain in those conservatorships.

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<sup>238</sup> Builder subsidies for multi-family housing appear to be the sole existing policy that operates through the supply side.

The U.S. system of financing residential housing is badly in need of reform. Keeping the GSEs in conservatorships is surely not an element of any sensible reform.

In this chapter, we have laid out our ideas for moving the system of financing residential housing in the direction of greater efficiency and greater equity. Since the CHOICE Act is still at the stage of proposed legislation, there is plenty of time for its drafters to address the GSEs and develop a blueprint for a better financial system for residential housing. We hope that this analysis can be useful in that process.

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