



A More Promising Road to GSE Reform: Why It Leads to a Government Corporation

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Earlier this year [we put forth a proposal](#) for housing finance reform that would transition the functions of the current system into a structure that better serves taxpayers and stakeholders. We concluded that the best course is to merge Fannie Mae and Freddie Mac into a single government corporation that performs all of the functions these institutions perform today, but is required to transfer all but the catastrophic credit risk to the private market. We followed up our initial proposal with an [in-depth examination of the role of both the government corporation and private capital in that system](#).

In this piece we discuss why putting the critical secondary market infrastructure into a government corporation will result in a better system than that envisioned in other reform proposals most often discussed: the multiple guarantor model, the utility model, and the mutual model. We assess what each model would mean for competition and innovation, access for small lenders and underserved communities, too-big-to-fail risk, the costs of transitioning from the current system, and mortgage rates for borrowers throughout the credit box. We conclude with why, in comparing the trade-offs involved, we believe that the most promising road to reform leads to a single guarantor owned by a government corporation.

Multiple shareholder-owned guarantors

One of the most common reform proposals offered since the financial crisis has been to replace the duopoly of Fannie Mae and Freddie Mac with multiple shareholder-owned guarantors. Under this proposal, multiple privately owned guarantors would manage both the secondary market infrastructure in the government-backed channel of the mortgage market and the flow of the non-catastrophic credit risk. These guarantors would compete on products, services and pricing, subject to the limitations imposed by the regulator overseeing the market. The government would provide an explicit guarantee of the mortgage-backed securities that guarantors issue but not for the guarantors themselves. The model is designed to maximize competition for access to the secondary mortgage market.

Given the significant fixed costs and barriers to entry associated with running such a guarantor, however, it is uncertain how many guarantors the secondary mortgage market would sustain, raising serious questions about what kind of competition this model would

create. It takes considerable resources to develop and maintain both the information technology infrastructure necessary to evaluate the credit risk involved and the financial strength necessary to purchase and pool billions of dollars in mortgage loans. Moreover, to ensure that these guarantors provide adequate access for borrowers and lenders in all communities, regulators are almost sure to require them to maintain a national footprint. These costs will reward the largest, most well capitalized institutions with an enormous competitive advantage, likely leaving us with at best a few institutions that dominate the market.

Given their small number, if any of these guarantors were to fail, a significant segment of the market may find itself without a way to sell their mortgages, freezing the flow of mortgage credit and with it the housing market. Policymakers would not let that happen of course, but step in to save them before they stumbled badly. Recognizing their implicit guarantee, these institutions will have a strong incentive to take excessive risk. With greater risk comes the possibility of greater reward but not necessarily greater cost, since the taxpayer stands at the ready to pay off if the bets go too badly. It is unclear whether financial regulatory reform and changes to the resolution process for troubled financial institutions will significantly impact this dynamic.

The inevitable market concentration among guarantors also raises doubts that the competition that the multiple guarantor model *does* create is actually productive. The value the guarantors provide is inevitably very similar, which makes it difficult for them to distinguish themselves in a competitive market. This puts significant pressure on them to pursue market share by either underpricing credit risk or simply taking more of it than others are willing to take.

This is precisely what happened in the private mortgage insurance industry in the competitive years leading up to the crisis, and it put many mortgage insurers in deep trouble when the market turned. Moreover, allowing a few dominant institutions to set the terms by which lenders can sell their loans into the secondary market would impair competition in the primary market. The secondary market gatekeepers would strike deals with those lenders that can offer them the greatest returns, leading to an un-level playing field favoring larger lenders.

Compounding all of the challenges arising from market concentration, it would be difficult to ensure that such a system is able to serve the broadest possible range of borrowers. Left to pursue their bottom line, privately owned guarantors will serve lower-risk borrowers differently than higher-risk borrowers, as the economics of each is often different. To ensure that historically underserved communities have adequate access to the system, policymakers would need to design and oversee a complex regulatory regime to ensure these guarantors act in ways that may not otherwise be in their interests, including subsidizing some higher-risk borrowers as Fannie and Freddie do today. It would be extremely challenging to develop a regime that would function effectively through all market conditions.

No matter how policymakers address the formidable design issues facing a multiple guarantor model for reform, the cost and uncertainty of transitioning to such a dramatically different system will be daunting. In addition to devising a way to ensure adequate access to the mortgage market for underserved communities and smaller lenders, it is not clear how to establish several capital-intensive guarantors. For instance, if Fannie and Freddie are to be re-privatized as guarantors in this future system, as is often suggested, private investors would surely be reluctant to provide the capital needed to stand up additional competitors, leaving us with roughly the system we had prior to the crisis.

How to capitalize the re-privatized GSEs, which will have no capital by 2018, will also be a thorny problem. With some \$5 trillion in assets and what they currently charge in guarantee fees, it would take approximately 20 years for the GSEs to capitalize to their current implicit capitalization, and longer to capitalize to a level consistent with being systemically important financial institutions, [as they would certainly be required to be](#). Policymakers could possibly address the issue by [creating successor guarantors](#) freed from the legacy liabilities of the current GSEs and thus from the obligation to build the prohibitive amount of capital that would need to be held against them. The Treasury's current backstop would cover the GSEs' legacy outstanding mortgages as they pay off, with the successor guarantors building capital as they take on new obligations. Without a clear understanding of how to address these transition issues, policymakers are inevitably taking a leap of faith with one of the largest sectors of the nation's economy and financial system.

Shareholder-owned utilities

A recent variation on the multiple guarantor system addresses its difficult mix of challenges by forgoing open competition among many

guarantors. Instead, a few tightly regulated shareholder-owned utilities would manage the secondary market infrastructure and the flow of the non-catastrophic credit risk and issue securities with an explicit government guarantee. The utilities would ostensibly be assured a modest but stable rate of return in exchange for strict limits on their products and services, pricing, and risk-taking. This would allow policymakers greater control over the risks involved, while allowing for competition across some aspects of the utilities' activities.

A utility model for the secondary mortgage market has some precedent in the nation's electricity market. States began regulating electric companies as monopoly utilities in the early 20th century to address dynamics much like we see in this market. Providing electricity involves high fixed costs that create significant competitive advantages for large institutions. This invites concentration, and all of the accompanying challenges, in a sector on which the public is highly dependent. By turning to a utility model, policymakers were able to control the risks of relying on a small number of too-big-to-fail companies.

Policymakers could make a similar move here, and solve for the risks associated with reliance on too-big-to-fail guarantors not by trying to avoid them, but by constraining their ability to take risk. This has the benefit of averting the daunting task of fighting concentration in the market. Also compelling, it minimizes the transition costs of reform. Fannie and Freddie are being run much like utilities already, with a conservator tightly overseeing pricing, products and services to ensure that they are not taking on excessive risk. They could be transitioned out of conservatorship to shareholder-owned utilities that function similarly, with comparable constraints on pricing, products and services. While this model too will face the question of how to capitalize the re-privatized GSEs, overall the transition costs here are likely modest relative to the alternatives.

The model itself faces several additional challenges, however. First, it may prove difficult, if not impossible, to provide both stable returns to the utility guarantors *and* stable pricing to the primary mortgage. Classic utilities, like electricity companies, match their revenues to costs. If the price of natural gas rises 10%, for example, they can just raise electric bills by the appropriate amount. In the case of mortgages, on the other hand, the utility guarantor doesn't have that flexibility. When the credit costs on those loans turn out to be higher than expected, the guarantor can't re-price all their outstanding loans. This leaves them with a choice: either absorb the volatility in their earnings, or pass that volatility on to the primary market in the form of more variable pricing of new loans. The former will significantly increase their cost of capital, given that they will have to provide investors compensation for their earnings volatility; and the latter is deeply problematic as a matter of policy, as it would lead to pro-cyclical pricing in the mortgage market.

There is also a heightened risk of regulatory capture in heavily regulated industries dominated by a few powerful utilities. Indeed, before the crisis, the GSEs arguably captured OFHEO, allowing them to take on too much risk and hold too little capital. Though the opportunity for this risk to go unchecked has declined post-crisis and

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financial regulatory reform, and we are fortunate today to enjoy an effective regulator in FHFA Director Melvin L. Watt, this risk remains consequential in a system so reliant on a few powerful utilities.

And finally, the easier transition of this model comes at the cost of less reform, as the system will continue to be dominated by institutions whose functions are so vital to a well-functioning housing finance system that they cannot be allowed to fail. This will once again create an incentive for the institutions to take on excessive risk where they are able, which means that they will have to be tightly and effectively regulated across every dimension in which they can assume risk. It would also require that the utilities maintain substantially more capital and liquidity than the GSEs currently implicitly hold. And that would mean meaningfully higher mortgage rates than in the current system.

In designing and managing a system of shareholder-owned utilities, policymakers would have to thread a thin needle. On the one hand, the too-big-to-fail institutions must be heavily regulated, not only to overcome their natural inclination to treat different communities of borrowers and lenders of different sizes differently, but also to contain the risk in every single activity in which the institutions could take it on. If policymakers fail to do this, then they will simply re-create the same problematic incentives that led to the need for reform in the first place. On the other hand, if policymakers regulate too heavily, then they will wring from the institutions the room needed for any significant competition, defeating the purpose of putting them into private hands. It is not clear there is an opening here to succeed on both of these fronts, but if there is, it is quite narrow.

Mutually-owned guarantors

Instead of using tight regulation to ensure that the guarantors don't take on too much risk, some propose to align the guarantors' interests with those of taxpayers. This is the idea behind proposals to transition to a system with mutually-owned guarantors, in which the guarantors are owned by those most dependent on the health of the system, the nation's lenders. As with the multi-guarantor and utility models, the mutual guarantors would manage the secondary market infrastructure and the flow of the non-catastrophic credit risk. And as with those models, while the securities that they issue would have an explicit government guarantee, the institutions would not.

Mutuals already play an important role in the housing finance system through the Federal Home Loan Bank system, in which each of the 11 FHLBs is owned by the institutions to which it lends money. Each member institution is able to borrow in amounts that reflect their investment in the bank from which they are borrowing and is thus exposed to the bank's risks at a level consistent with their use of it. Each FHLB is also jointly liable for all debt raised in the system, making the owners of each one dependent on the judiciousness of the others. By giving the owners of each of the FHLBs a stake in its risks, and each of the FHLBs a stake in the risk of the other FHLBs, the system provides a useful check against excessive risks.

Similarly, by putting management of the pooling, securitizing and master-servicing functions into institutions owned by the lenders

whose businesses depend entirely on the sustainability and efficiency of these functions, policymakers would align the incentives of these institutions with the taxpayers who would be left shouldering the financial burden should the institutions fail. Managing the risks associated with too-big-to-fail institutions in this way rather than through restrictive regulations allows the institutions managing the secondary market to compete on products, services and pricing.

While a mutual model would help address some of the risks inherent in the concentration that comes with a multiple guarantor system, it would not address either the difficulty of ensuring access for underserved communities or the transition costs of standing up multiple guarantors. Moreover, the need to manage the competing interests of members of the mutual raises additional challenges for a mutual model, challenges that have led most of the mutuals in the financial services industry that manage risk, such as the Chicago Mercantile Exchange, the New York Stock Exchange, NASDAQ, and Visa, to abandon the model altogether.

The larger the lender, the more they will use the mutual guarantors, and thus the more capital they will be called upon to cover their operation and risk. If they do not have a comparable level of control, they will be uncomfortable lending through this channel any more than they have to, as they will be putting significant capital on the line to cover the risk and management decisions of those with much less at stake. However, if they are given control commensurate with the capital they have put up, then the mutual will be run in a way that may well serve their interests but not those of other smaller lenders.

Putting up the significant capital needed to cover the credit risk taken on by the mutual will also make mortgage lending a riskier and less profitable business for all lenders. This will drive up mortgage costs, constrain access to credit, and likely cause the Federal Reserve and other prudential regulators to reconsider the risks involved in the mortgage market for the institutions they regulate.

A lender-owned mutual could attempt to avoid these issues by limiting its role to managing the securitization process, acting as an intermediary between lenders and the investors that purchase their loans. In this variation of the mutual model, the mutual would pool loans from lenders, securitize the pools, obtain the government's wrap, and then sell the securities to mortgage-backed securities investors and the credit risk to credit risk investors. This would put the model more in line with the mutuals in the financial services industry left today, which are either risk intermediaries that allocate risk back to members, such as the FHLBs, or service providers that do not take risk to begin with, including the Depository Trust and Clearing Corp.

Limiting their role this way raises its own set of problems, however. First, as lenders would not be selling their loans to the mutual as they sell them to Fannie and Freddie, they would not be able to get the loan off their books until the pool that contains it is sold to investors. This would require the lender to allocate capital against loans as they await sale, making mortgage lending through the government-backed channel more expensive. Second, the mutual would be unable to provide a cash window, shutting off a channel to the

secondary market that has proven critical for many smaller lenders. And third, it would be ill-equipped to operate efficiently during times of crisis. Unable to hold credit risk, the mutual will be forced to sell pools and credit risk into the secondary market even when it is prohibitively expensive, driving mortgages beyond the reach of many if not most borrowers at the worst time, further exacerbating financial and economic stress.

Mutual-shareholder owned hybrids

There are ways of combining the features of the utility and mutual models to help mitigate some of the challenges that they each face. In one variation, lenders would receive a portion of their compensation for the loans they sell to guarantors in equity in the guarantors. Once the new guarantors are appropriately capitalized, compensation for loan sales would shift back to securities and cash, except perhaps in times of crisis when the guarantors might require more capital. Retained earnings and capital raised from the public markets would supplement the equity provided by lenders to the guarantors. Lenders would be free to sell their shares to the public after a lock-up period, and public shareholders would receive all of the voting stock in the guarantors.

This approach would address the transition issue of capitalizing shareholder-owned guarantors in a new system. It would also maintain much of the skin-in-the-game incentives that make a mutual model appealing, with fewer of the governance problems created by that model. And it would partially free lenders from the capital burden of a pure mutual. However, it is unlikely that small and non-bank lenders would have the equity needed to participate in such a system, as is evident in their reliance on the GSEs' cash window in the current system.

Government-owned corporation

Turning the core infrastructure of the secondary market over to the private sector thus raises significant challenges, no matter what form it takes. This realization is what ultimately motivated us to propose moving it instead into a single government corporation, a merged Fannie and Freddie that is required to transfer all non-catastrophic credit risk into the private market.

This move has several key benefits. It eliminates too-big-to-fail risk, taking the secondary market infrastructure that larger institutions would inevitably come to dominate out of the private sector, and pushing the bulk of the credit risk into an open market. There, competition will make it difficult for too-big-to-fail institutions to dominate, given the capital that they will have to hold against that risk. Moreover, having the government playing the role of secondary market gatekeeper makes it much easier to ensure a level playing field for smaller lenders and broad access to credit in underserved communities. Rather than creating a complex and challenging set of incentives to motivate private institutions to do what is not always in their economic interest to do, it would simply impose precisely the same duty-to-serve and goals regime onto a government entity.

A government corporation model also has its challenges. Most notably, the government's track record in creating and managing complex financial institutions should give us pause. In this very space, the Federal Housing Administration has long been slow to adapt to changing markets and changing risks; it has found itself under-resourced and often bogged down in bureaucracy and politics. Second, by having one institution rather than multiple ones managing the secondary market infrastructure, the model forgoes the benefits of competition in managing access to the secondary market.

We believe that the first of these challenges can be addressed. By creating a government corporation rather than a government agency, policymakers have the flexibility to create an institution that is governed in much the same way that a privately owned institution is, with a board of directors and senior management obligated and incentivized to manage the institution responsibly. It would be well funded by the revenues it generates and positioned to take additional measures such as issuing bond-like dividends to add an additional level of market discipline. We provide more detail on how to maximize the degree to which the government corporation would function like a sophisticated privately owned institution in [a paper on how governance and capital would work in our proposal](#), but the bottom line is that a government corporation need not function in the way that government agencies such as the FHA do today. Indeed, our preference for this model depends greatly on its being designed and governed more like a privately owned institution than a government agency. If it is not, then we believe that the costs of this model are prohibitive.

The second challenge, on the other hand, is by definition insurmountable, because competition requires multiple parties. To assess how significant a cost it is to forgo competition over the management of access to the secondary market infrastructure, one needs to consider both what kind of competition is being lost and what the impact on competition might be in the broader system. Given that the alternative models almost inevitably rely on too-big-to-fail institutions and thus will require tight regulation, there will be much less room for competition than in a normal, open market. The primary areas of competition will likely be in the services provided to lenders, technological innovation and some variation in risk sharing and guarantee programs, though the room for differentiation across these dimensions will be constrained by the need to contain the drift of too-big-to-fail institutions towards taking excessive risk and to maintain a level playing field for small lenders.

The loss of this competition then needs to be considered against gains in competition that we would see elsewhere in such a system. By putting the market's infrastructure into a government corporation, lenders of all sizes will be able to compete on a level playing field, increasing competition in the primary market. And by requiring the government corporation to sell most of its credit risk into the private market, we will see an expanded market for credit risk created, with a wide range of sources of capital competing vigorously over a steady and significant flow of credit risk.

Mortgage Rate Under Government Corporation and Current Housing Finance System

	Current system		Government corporation		
Mortgage rate		6.10%		6.11%	
<i>Difference with current system</i>				0.02%	
Mortgage-backed securities yield		4.90%		4.70%	
Spread on mortgage securities		90 bps		70 bps	
Treasury rate (duration matched)		400 bps		400 bps	
Servicing and origination compensation		50 bps		50 bps	
Guarantee fee		70 bps		91 bps	
Expected credit losses		4 bps		4 bps	
Administrative costs		7 bps		7 bps	
Mortgage insurance fee		0 bps		10 bps	
Affordability fee		0 bps		10 bps	
Payroll tax surcharge		10 bps		10 bps	
		Implicit capitalization	Implicit cost of capital	Capitalization	Cost of capital
Total capitalization and cost of capital		3.5%	49 bps	6.0%	50 bps
First loss capital		3.5%	56 bps	3.5%	43 bps
Fixed dividend securities		0.0%	0 bps	2.5%	18 bps
Less: Return on cash reserves to pay for losses			-7 bps		-10 bps
Assumptions:					
After-tax cost of first loss capital			10%		10%
After-tax cost of fixed dividend securities			7%		7%
Pre-tax return on unlevered capital			2%		2%
Tax rate			37%		18.5%

This analysis is based on the following assumptions:

This analysis is for 30-yr fixed-rate mortgage borrowers with loan-to-value ratios and credit scores consistent with the current distribution of Fannie Mae and Freddie Mac loans. The economy is at full employment and inflation is consistent with the Federal Reserve's 2% target. One-half of risk transfers are to tax-deferred investors, and the other half to taxable entity-based capital. The Mortgage Insurance Fund is equal to 2.5% of outstandings.

Source: Moody's Analytics

Another challenge with the government corporation model is the transition costs of merging Fannie's and Freddie's operations. Combining large and complex financial institutions is never easy, and these are two of the largest and most complex in the nation's financial system. But the costs of merging the GSEs are steadily declining as the FHFA works to harmonize their activities, including the representation and warranty framework, capital levels, and other standards. More important, however, is their adoption of a common securitization platform and single security, which is well under way and will offer a useful starting point for a more comprehensive effort to unify their activities.

Mortgage rates under alternative models

How mortgage rates would fare under each of the alternative models is also an important consideration. The securities issued by the government corporation will enjoy the same full faith and credit backing of the Treasury that Ginnie Mae securities do today, lowering yields required by investors and thus mortgage rates charged to bor-

rowers. Mortgage rates will be pushed lower still by the lower cost of capital for capital market investors competing for the credit risk transferred by the government corporation, as many of these investors will price it on a pre-tax basis because they have offsetting tax liabilities or are investing on behalf of tax deferred accounts. These two downward pressures, especially the first, will allow the government corporation to maintain current mortgage rates while holding significantly more capital than currently implicitly held by the GSEs (see Table).

Mortgage rates will be higher in the other models considered, primarily because the private guarantors at the center of these models would be deemed too-big-to-fail and thus required to hold more capital. Fannie and Freddie currently guarantee close to \$5 trillion in mortgage securities and are among the largest financial institutions in the world by asset size. Even if a future system were to have several guarantors, each would still remain among the world's largest and each deemed too-big-to-fail. By contrast, there are no too-big-to-fail sources of capital in the government corpora-

tion model, as the secondary market infrastructure that cannot fail will be owned by the government, and the credit risk will be widely dispersed largely among private sources of capital that are not too big to fail.

Conclusion

Since Fannie Mae and Freddie Mac were put into conservatorship more than eight years ago, numerous alternative models for replacing them have been proposed. The multiple guarantor model has been popular, and at first blush it is appealing, given its emphasis on competition for access to the secondary mortgage market. But it turns out to be burdened by such an unwieldy mix of challenges related to access, transition costs, and managing too-big-to-fail risk that the model is ultimately unviable.

The mutual model faces significant governance and transition issues, and the utility model faces a formidable issue with earnings and pricing volatility and manages to avoid many of the issues faced by the other options primarily by offering the least reform. In essence, it forgoes structural reform altogether, choosing to address the problems with the current system instead by tightly regulating behavior. These privately owned alternatives also pose a challenge in assuring that responsible, sustainable credit is provided in all communities through all market conditions, introducing complexities that will be difficult to design and manage.

This brings us to the government corporation. It presents something of a middle way, offering structural reform with as much continuity and as little disruption as possible. As with the other models, it faces its own challenges, namely the central role of the government and the lack of competition in managing the secondary market infrastructure. But we believe that the former is manageable and the latter worth the trade-off, and that overall this option is the most promising. However, this comes with an important caveat: It is only the most promising if policymakers manage the challenges inherent in turning the infrastructure over to a government entity in something like the manner that we have suggested, to ensure that it is up to the task of taking on such a critical role in such a complex and important market. If policymakers instead placed it into a government agency, for instance, then the costs of such a system likely vastly outweigh the benefits, making one of the alternatives a preferable path.

Each of these models for the future housing finance system presents trade-offs and a host of difficult challenges that would need to be addressed in its design and implementation. But not all trade-offs are equal and not all challenges insurmountable, so what we have is not a laundry list of reasons to avoid reform but a framework within which to compare the paths available to us. After all, wherever one comes out in comparing them, each of these paths is preferable to [returning Fannie and Freddie to the private market in their prior form](#), the one path we should all agree should not be taken again.

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