If policymakers will not fully privatize the GSEs, then they should spin off their retained portfolios.

Reforming Fannie and Freddie

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There is a growing consensus that Congress and the new Obama administration should give a very high priority to determining the proper long-term regulation of the government-sponsored enterprises (GSEs) Fannie Mae and Freddie Mac. Federal Reserve chairman Ben Bernanke, speaking this fall at a symposium on the financial crisis, said:

> Our task now is to begin thinking about how best to reestablish a link between homebuyers and capital markets in a way that addresses the weaknesses of the old system. In light of the central role that the GSEs played, and still play, any such analysis must pay particular attention to how those institutions should evolve.

Similarly, Treasury secretary Henry Paulson recently noted:

> [T]hese factors should give momentum and urgency to the reform cause. Policymakers must view this next period as a "time out" where we have stabilized the GSEs while we decide their future role and structure.

Reforming financial regulations after a major financial crisis is the norm in U.S. financial history, and a process that has met with generally very positive results. Actions to reregulate have typically solved the problem at hand, while maintaining an overall efficient and innovative financial system. In this spirit, this article develops a framework and offers a proposal for the reform of Fannie and Freddie.

FINANCIAL FAILURE

Fannie and Freddie, of course, did not fail in a vacuum, and it is important to understand how the subprime mortgage conditions led to their financial failure. The starting point is the business structure and strategy the two firms adopted.

The two GSEs have dominated the U.S. mortgage market through two distinct business lines:

- The firms issue and guarantee residential mortgage-backed securities (MBS) in amounts that historically have represented the majority of all MBS issued in the United States. The MBS are sold to capital market investors, but Fannie and Freddie guarantee the timely payment of interest and principal on the securities. Currently, investors hold about $3.5 trillion of the two firms' MBS.
- Fannie and Freddie maintain retained mortgage portfolios on their balance sheets. Those mortgages have represented as much as 20 percent of all outstanding U.S. mortgage securities. The current combined size of the two firms' retained portfolios is about $1.5 trillion. The portfolios are primarily funded by issuing "agency bonds," for which investors have presumed an implicit Treasury guarantee.

For both business lines, the two GSEs retain (through guarantee or ownership) all the risks of possible default by mortgage borrowers. The retained portfolios additionally create significant interest rate and liquidity risks for Fannie and Freddie because of the particular strategies employed by the firms in managing their portfolios.

The MBS issue/guarantee business is relatively straightforward in both design and implementation. Mortgage originators offer pools of newly originated and qualifying mortgages, which are evaluated by Fannie and Freddie using proprietary loan evaluation tools. As compensation for the guarantees, the two GSEs charge a fee as a percentage of the outstanding loan balance, which historically has been about 0.20 percent (that is, 20 basis points) annually. The MBS are then sold to third-party investors, who hold them until maturity. If any of the

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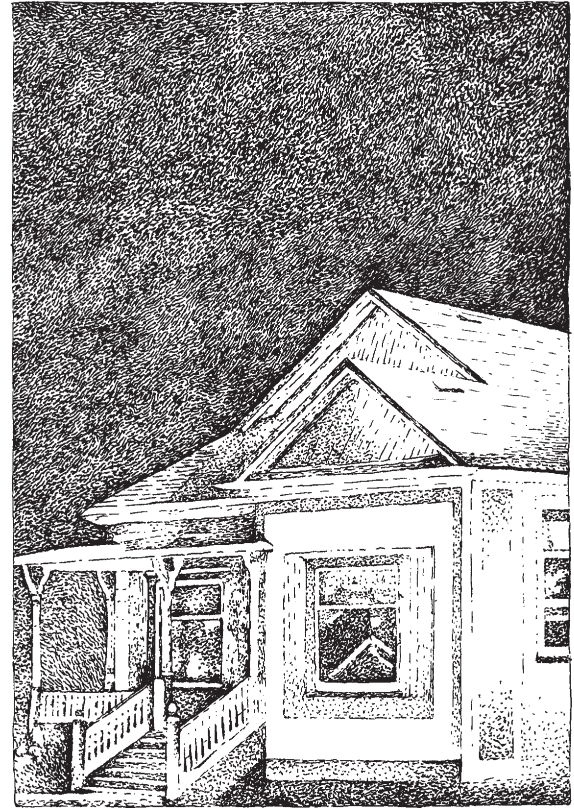
underlying mortgages become delinquent or default, the guarantee requires that the two GSEs provide timely payment of all interest and principal. Fannie and Freddie's charters further require that the firms hold capital equal to 0.45 percent (45 basis points) of their outstanding MBS to backstop their guarantees. For most of their history, losses on insured mortgages never approached the 20–basis point guarantee fee, so the MBS business was both safe and profitable, generating returns on equity of about 15 percent annually.

The retained mortgage portfolio business has been implemented with a substantially more complex strategy. The portfolios are funded with agency bonds, which historically could be issued in virtually unlimited amounts and at a small spread to comparable U.S. Treasury rates (based on the implicit Treasury guarantee). Fannie and Freddie face a statutory capital requirement of 2.5 percent of their retained portfolio assets, which means that $1 of equity supports $40 of earning assets. That leverage ratio would be the envy of even the most aggressive investment banks and hedge funds.



The profitability of the retained portfolios arises from the spread equal to the interest rates earned on the mortgage assets minus the interest rates paid on Fannie and Freddie's agency bonds. This spread often exceeded 1 percent annually, creating a return on capital often above 30 percent annually, a level more than double that of most successful financial firms. Given this high profit margin, the firms had incentive to grow the portfolios at a fast pace and generally did so. They also had incentive to expand the profit margin by taking on riskier portfolio positions. One basic strategy was to use short-term debt to fund long-term mortgage assets, a version of the so-called "carry trade." While this generally expanded profits, it exposed the firms to losses from large interest rate changes or from a liquidity crisis, the latter arising if capital market investors became unwilling to roll over the firms' maturing debt. A second and more recent strategy was to invest in subprime and "Alt-A" mortgages that were higher-risk than traditional conforming loans but that offered exceptionally high interest rates.

CONSERVATORSHIP The proximate cause of the conservatorship imposed on Fannie and Freddie last September was expanding credit losses and expected losses on their retained mortgage portfolios, primarily from their subprime and Alt-A positions. As a result of the losses, the firms violated, or soon would have violated, their capital requirements, and they had no likely prospect to raise new capital. As a further consequence, investors became increasingly reluctant to roll over the firms' maturing debt, raising the prospect of an immediate bankruptcy.

Even under normal conditions, the two GSEs' bankruptcies would have disrupted the firms' ongoing MBS issue/guarantee and retained portfolio businesses, with major consequences for the U.S. mortgage markets. In the context of the evolving subprime mortgage crisis, with virtually no ongoing private mortgage investment activity, the result would likely have been a systemic failure of the U.S. mortgage system and quite possibly the entire financial system. Thus, the government had no choice but to place the firms in conservatorship and to implement various Treasury loan and equity backstops using its authority under the newly passed Housing and Economic Recovery Act of 2008.

The conservatorship places Fannie and Freddie under the

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stewardship of the director of the Federal Housing Financing Agency (FHFA), the latest regulator for the GSEs. Statements by the director indicate that Fannie and Freddie will be managed with the joint goals of restoring them to a safe and sound status and continuing their support of the mortgage market. It is thus sensible to look forward to a time — hopefully not too distant — when the firms can be released from conservatorship. This will be the moment to reregulate the two GSEs.

REFORMING FANNIE AND FREDDIE

Regulatory reform of Fannie Mae and Freddie Mac has been a continuing quest for most of the firms' history, and with a notable, even remarkable, lack of success. The most concerted effort was a mid-1990s congressionally mandated multi-agency study of the possibility of privatizing the two mortgage giants. Ultimately, no agency made a formal privatization proposal and Congress took no action. Since then, congressional committees have regularly revisited the issue, but again with no action.

The primary case for regulatory reform has always been based on the systemic risks that the firms pose for the U.S. mortgage and financial markets. But in the absence of an actual crisis, the firms always deterred any serious action. The two GSEs' lobbying power in this regard is legendary.

It is now clear, of course, that the fears of a systemic meltdown were all too accurate and that the GSE model — combining a public mission with an implicit guarantee and a profit-maximizing strategy — is untenable. Nevertheless, Fannie and Freddie's mission to support the mortgage market retains strong congressional and public support, perhaps even more than ever in the aftermath of the subprime mortgage crisis. Therefore, with the first-best option of ending the GSE model blocked by political realities, at least for now, let us instead consider proposals to reform and regulate the GSE model that will reduce its systemic risks.

MIMP I submit my own proposal first: the Middle-Income Mortgage Program (MIMP). The central idea of this program is to move the current MBS issue/guarantee divisions of the two GSEs to a government agency, and spin off the firms' assets, liabilities, capital, and retained portfolio technology to their shareholders.

This proposal rests on two principles:

- The reconfigured MBS issue/guarantee program can satisfy the principal goal of supporting the mortgage market for middle-income borrowers in a safe and efficient manner, while imposing no systemic risk on the financial markets.
- The retained portfolio net assets and technology will be transferred to the private sector, with no links — implicit or explicit, current or future — to the U.S. government.

Fannie and Freddie's MBS issue/guarantee programs, after being moved to a government agency, would continue their mission to support mortgage-market access for middle-income families. In this, the programs would resemble existing programs of another GSE, Ginnie Mae, and the Federal Housing Administration. Those programs provide a highly useful model for reform because they represent a longstanding, stable, and successful framework for supporting the homeownership goals of lower-income families through mortgage guarantees and MBS issues. It is thus useful to start with a brief summary of the FHA and Ginnie Mae programs.

Since it began in 1934, the FHA has operated to insure mortgages on homes for lower-income families, thus providing those families with access to mortgage funding that would not otherwise be available. The insurance premiums are paid by the borrowers and must be set high enough to cover the expected losses. Over its long history, the primary FHA program for single-family mortgages has been self-supporting and has required no government appropriations.

Ginnie Mae was created in 1968 as a government agency operating within the Department of Housing and Urban Development, with the primary task of securitizing the government-guaranteed FHA and Veterans Administration mortgages. Indeed, Ginnie Mae pioneered the concept of market-traded MBS. Ginnie Mae provides a guarantee on its MBS that represents the full faith and credit of the U.S. government, on par with U.S. Treasury securities.

The program I propose would charge its borrowers actuarially based insurance fees in exactly the same manner as the FHA. In fact, with its middle-income clientele, the MIMP insurance premiums would be much lower, approaching the same 0.20 percent (20 basis points) annually that Fannie and Freddie have historically charged for their guarantees. This assumes the program would require the same 20 percent down payment loans that have been the core of Fannie and Freddie's "conforming" loans. However, the program could be expanded to include lower down payment loans — say 10 percent — as long as credit standards are maintained and the proper risk-based insurance premiums are changed. In this regard, it could be efficient to create the new program as a division within the FHA. The FHA could then offer a range of mortgage insurance products depending on the creditworthiness of the borrower and the down payment provided.

Since MIMP mortgages would carry a government guarantee, they could be readily securitized just as FHA and VA mortgages are securitized today under the Ginnie Mae programs. Indeed, the securitization of MIMP mortgages would be efficiently organized as just an additional program within the already existing set of Ginnie Mae securitization plans. The resulting MBS would trade alongside other Ginnie Mae products, at a minimal interest rate spread to Treasury securities. The benefit of access to low-cost capital market funding would be passed back directly and fully to borrowers in the form of the lowest possible mortgage interest rates. To be clear, there is nothing to preclude lenders holding the guaranteed mortgages directly in their portfolios, but the experience with FHA and VA mortgages is that the additional liquidity provided by the Ginnie Mae securitization would lead to the securitization of virtually all these mortgages

Private-sector mortgage originators and mortgage investors would welcome the new government program for the same

reason they systematically endorse the FHA and Ginnie Mae programs. In particular, private-sector firms will continue to originate and private-sector investors will continue to hold the mortgages, so private-sector activity would be enhanced, and not crowded out, by the new program. Similarly, private-market securitizers of "jumbo" mortgages — above the Fannie and Freddie limits for conforming mortgages — would continue to operate as they do currently. In brief, the MIMP would simply and efficiently replace the existing Fannie and Freddie programs, while avoiding the systemic risks that the two GSEs now create.

The private mortgage insurers are the one set of current market participants that might object to the proposed program, and only then if the MIMP were to offer insured mortgage loans with down payments less than 20 percent. Even in that case, as long as the government insurance premiums are actuarially based, the greater efficiency or innovative skills of the private mortgage insurers would allow them to compete successfully with the MIMP. It is noteworthy in this regard that the private mortgage insurers have co-existed with the low-income FHA programs for over 50 years.

The second component of my proposal concerns the disposition of the existing Fannie and Freddie retained mortgage portfolios. The proposal is to spin off the retained mortgage portfolios — mortgage assets, bond liabilities, and net worth — to the two GSEs' shareholders, and to transform Fannie and Freddie into the equivalent of mortgage real estate investment trusts or hedge funds. The entities would receive the intellectual capital of the GSEs, including their proprietary software for evaluating loan quality, techniques for hedging interest rate risk, and similar items. The spinoff would thus fully respect the property rights of the GSEs' investors.

The new private-sector entities would have no links in any form to the federal government. The disassociation would be credible, because there would be no issues of safety and soundness and no form of regulatory oversight. Furthermore, the new firms would no longer be constrained by the limitations of the GSE charters. They would thus be allowed, for the first time, to originate mortgages directly. A similar path to privatization was taken earlier by Sallie Mae — the student loan government-sponsored enterprise — and it prospered for many years based on its new power to originate student loans.

Finally, the government insurance and securitization functions at the center of the MIMP have no need for a retained portfolio. The MIMP MBS would trade virtually at par with Treasury securities, and thus there would always be an active demand. If it wished, the government could mimic a retained portfolio by issuing Treasury or agency securities in order to repurchase MIMP MBS, but there would never be a reason to do so.

MODIFIED GSE PLANS Two broad categories of alternative approaches to regulating Fannie and Freddie appear to be forming. One category maintains the private/public GSE securitization model, but with modifications that are intended to remove any issues of the two GSEs' safety and soundness or of systemic risks. The other approach is to encourage banking firms to originate and then hold the mortgages directly by expanding the use of covered bonds.

The core concept of the modified GSE plans can be described as the "public utility model." The idea is that Fannie and Freddie would continue to operate as private firms with a public mission, but under much tighter regulatory restrictions. The restrictions could cover safety and soundness, rate of return for shareholders, product innovation, executive compensation, and so on. The appeal is that the basic structure of the current GSE model is retained, while presumably achieving a much higher and dependable level of safety and soundness.

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The public utility model, however, is a strange prototype because it is generally considered to be a clumsy and inefficient regulatory device. Its common use arises only because there are really no other viable regulatory models for dealing with natural monopolies such as water, gas, and electric providers. The recent attempts to privatize various public utility industries are indications of the poor regard in which the public utility model is held. At the same time, because the actual operation and management of public utilities is technically complex, direct government ownership is an uncommon alternative. In contrast, insuring and securitizing prime middle-income mortgages can be readily and efficiently carried out directly within the government, as called for under MIMP and confirmed by the long and successful history of the FHA and Ginnie Mae. It thus seems preferable to insure and securitize middle-income mortgages within the government than to create an awkward regulatory structure to control the reestablished GSE entity.

The application of the public utility model to Fannie and Freddie also raises a number of difficult issues that pertain particularly to the two GSEs. First and foremost, an explicit guarantee on the entities' capital market obligations would seem unavoidable. Otherwise, it is unclear how the firms could suc-

ceed while facing much higher regulatory standards than their private sector competitors. The public utility plan thus faces the fundamental dilemma of the GSE model: how to regulate a private firm when market pressures force it to maximize profits by creating large and risky retained portfolios. Of course, it is possible that a draconian regulatory regime could be enforced, but what would be the purpose? If risk-taking is to be ruled out in the interests of safety and soundness, then the basic functions of insuring and securitizing prime mortgages can be carried out efficiently and directly within the government. Private markets and institutions would remain free, of course, to create more efficient and innovative models, using the government program as the baseline.

COVERED BONDS Covered bonds are debt securities issued by banks and other lenders with the distinctive feature that they are secured by a high-quality portfolio of mortgages. In principle, the same mortgages could be used to back a covered bond or an MBS mortgage pool. Both mechanisms also tap capital market investors as the funding source. It is thus possible to isolate the difference between covered bonds and securitization as the most efficient means to fund a mortgage portfolio. Consider:

- Both mechanisms must confront the credit risk of the underlying mortgages. With covered bonds, the risk rests in the first instance with the issuing bank, while with MBS the risk rests with the MBS investors. This could be judged an advantage of the covered bond mechanism, since the lender is presumably better informed regarding the credit quality, and this ensures that the incentives are well aligned. However, as the following points indicate, securitization provides alternative means for controlling the credit risk, and it has other advantages as well.
- The special-purpose vehicles used in securitization are bankruptcy-remote from the originating lender, a valued protection for securitization investors. Covered bonds, in contrast, have the negative feature that if the mortgages go bad, this could cause the entire bank, as well as the covered bond, to fail. Concern for this potentially systemic risk has led to recent Federal Reserve interest in providing government guarantees for covered bonds as well as MBS.
- Covered bonds are intrinsically a single-class security: each investor receives, in effect, a prorated share of the underlying collateral. MBS, in contrast, are generally "structured products," meaning that a tranche structure is used and most of the credit risk is held by the lower, most junior, tranches. Of course, the lower tranches also offer higher expected returns. Structuring is a key benefit for securitization, because it allows the risk embedded in a mortgage portfolio to be allocated to precisely those investors who are the most informed and risk tolerant. This benefit results in a lower overall cost for the securitization model, a benefit that is passed back to mortgage borrowers as lower interest rates.
- The mortgages underlying covered bonds are maintained on the bank's balance sheet, and thus are subject to bank capital requirements. Proper securitizations, in contrast, satisfy a "true sale" test, removing the obligation entirely from the bank, and thus eliminating any capital requirement.

In U.S. practice, securitization has been, by far, the dominant risk-management tool, reflecting the key advantages in the second, third, and fourth points, above. In Europe, covered bonds are much more common, but it appears this mainly reflects the lack of an institutional and legal structure to carry out asset-backed securitization in an efficient manner. Thus, given a choice, it appears that well-designed securitization instruments will dominate covered bonds. In particular, the MIMP proposed above provides insured MBS issues, which would dominate even an insured covered bond plan because of the benefits of tranche structures savings and savings on capital requirements.

LOW-INCOME HOUSING

The last issue of concern is how to replace the support to lower-income borrowers that has been provided by Fannie Mae and Freddie Mac through their longstanding required housing goals and their recently imposed profit fees. Congressional support for the two mortgage giants has been based in significant part on the premise that aid to lower-income families from the GSEs was basically available at no cost — it certainly was perceived to be easier to "tax" Fannie and Freddie than to obtain congressional appropriations to increase the HUD budget for direct housing subsidies. As their bailout costs have demonstrated, however, the two GSEs' support for lower-income borrowers was actually far from free. Congress should now recognize that specific appropriations to the FHA represent a much more effective means to help low-income borrowers.

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REFORM The subprime mortgage crisis has raised two additional issues, predatory lending and modification of loans that face the risk of foreclosure. The good news is that the Federal Reserve in July 2008 issued important additions to the Truth in Lending Act (TILA), and HUD will soon announce parallel changes in the rules implementing the Real Estate Settlement Procedures Act. The key component of the TILA reform is a suitability requirement, whereby lenders on subprime mortgages are now required to verify that the borrower is capable of making mortgage payments at the highest level the mortgage contract can require. In addition, subprime mortgages now require full documentation of income and certified house value appraisals. Had those requirements been in effect earlier, predatory lending would have been reduced and quite possibly the subprime mortgage crisis would have been averted.

Loan modification to avoid home foreclosures is a much more difficult policy problem. For loan modifications, Congress has created and HUD has now implemented the Hope for Homeowners program. This program is well designed and provides a benchmark against which all new private and government programs can be compared. A recent Congressional Budget Office evaluation of the program is very revealing in terms of the problems than any mortgage modification program must face.

A loan modification plan must satisfy three classes of participants: the borrower, the mortgage holder, and the take-out mortgage lender. Mortgage borrowers are generally easy to please when their alternative is to face foreclosure. Under the Hope for Homeowners plan, mortgage holders are paid cash for their mortgage asset and thus would compare the cash received with the expected value from a foreclosure sale. The most difficult party to please is generally the take-out lender, which in the case of this program is the FHA itself. The borrower must pass a number of strenuous qualifications, while the mortgage holder is required to eliminate all second liens and accept a cash payment equal to 90 percent of the current property value. Even then, the Congressional Budget Office estimates a 1 percent loss rate for all participating mortgages, based on the likelihood of continuing default by the borrowers even after the loan modification. It also estimates a very low participation rate arising from the inability of many borrowers to qualify (even with the modified loan), the difficulty of extinguishing the existing second liens, and the reluctance of mortgage holders to sell their mortgage for only 90 percent of the property's current appraised value.

The Hope for Homeowners plan, including its subsidy, provides a benchmark that private-sector plans must surpass if they are to succeed. This is very difficult because mortgage modification is a zero-sum game in that additional benefits provided to one party must be offset by lower benefits offered to other participants. For this reason, as long as all costs are properly included, it will be very difficult for a private plan to compete successfully against the program. In particular, the major pitfall for many private plans will be to find a lender willing to take on the modified loan at the interest rate and default probabilities consistent with the plan's structure.

CONCLUSION

This article has provided a framework and a specific proposal for the reregulation of Fannie Mae and Freddie Mac in the aftermath of the subprime mortgage crisis and their conservatorship. The MIMP proposal would end the mortgage giants as we know them, reassembling the components of the two GSEs into an equitable and efficient structure. Fannie and Freddie's MBS issue/guarantee business would be transferred to a government agency, where it would support the middle-income mortgage market in the United States in parallel with the longstanding and successful FHA and Ginnie Mae programs for lower-income mortgages. The retained mortgage portfolios would be spun off to the GSEs' shareholders, thereby respecting the shareholders' ownership rights. The MIMP plan appears superior to other possible solutions, including a public utility model and covered bonds.

This article also considers the issues of predatory lending and loan modifications to avoid foreclosure. The recent revisions in the Truth in Lending regulations by the Federal Reserve may well have resolved the predatory lending problem. Loan modification to avoid home foreclosures is a more difficult problem, but the new Hope for Homeowners program appears to be as well designed as possible. R

Readings

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