Viral Acharya, Matthew Richardson, Stijn Van Nieuwerburgh and Lawrence J. White*

Guaranteed to Fail: Fannie Mae and Freddie Mac and What to Do about Them**

Abstract: In July 2008, in a column in the Canadian newspaper *National Post*, David Frum, the former speechwriter for President George W. Bush, wrote: "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." He has a point.

*Corresponding author: Lawrence J. White, The NYU Stern School of Business.

Consider the role of the government-sponsored enterprises (GSEs): Fannie Mae and Freddie Mac. The GSEs perform two functions – guaranteeing the credit risk in conforming mortgages that they securitize and purchasing mortgage-backed securities (MBS). The GSEs financed these MBS purchases almost entirely by issuing "agency" debt. Because of the implicit (now explicit) government guarantee and other forms of government support, the GSEs became the heads of U.S. mortgage finance.

While there were many problems with how the GSEs were regulated, three stand out:

- 1. The unpriced government guarantees of the GSEs destroy market discipline and lead to below-market borrowing rates. This encouraged excess leverage and risk taking by the GSEs.
- 2. Under regulatory capital rules the financial sector could be twice as levered with GSE involvement. If a bank makes a mortgage loan, the bank must hold 4 percent capital. If this same loan was sold to the GSEs and bought back as MBS, the bank would need to hold only 1.6 percent capital. Since the GSEs had to hold only 0.45 percent capital to support their guarantees, the system-wide capital requirement was effectively 2.05 percent. No wonder that Fannie and Freddie

^{**} The authors are all professors at the NYU Stern School of Business and co-authors of the book, "Guaranteed to Fail: Fannie Mae, Freddie Mac and the Debacle of Mortgage Finance" (Princeton University Press, 2011).

16 — Viral Acharya et al.

went from just 7 percent of the mortgage market to 45 percent in less than two decades and almost 40 percent of GSE MBS were held within the banking sector.

3. Starting in the 1990s, partly due to government mandates and partly due to their own risk-taking decisions, the GSEs took on mortgages with high credit risk, such as loans with down payments <20 percent and borrowers with low FICO scores. The light regulatory capital requirements – 2.5 percent for portfolio holdings and 0.45 percent for their MBS default guarantees – may have seemed reasonable when set back in 1992, but the mortgage-backed assets of the GSEs of 2007 had a quite different credit risk profile than those of 15 years earlier.

These institutions were in effect *guaranteed* to fail. By the time of their collapse, the GSEs had written \$3.5 trillion in mortgage default insurance – seven times that of the more infamous Financial Products Group of A.I.G. – and were holding an additional \$1.5 trillion worth of mortgages. No financial institution posed anywhere near the systemic risk of Fannie and Freddie.

The government-backed model of Fannie and Freddie is broken. Policymakers must decide how to deal with these financial institutions and determine the extent of government involvement in the mortgage market.

A standard view in economics is that regulation is only necessary when there is a market failure. So the relevant question *must* be: What, exactly, is the market failure in mortgage finance that justifies government intervention?

Mortgage finance does not require government involvement – in particular, guarantees of mortgage defaults. No other developed country has organizations that resemble Fannie or Freddie for creating a large securitization market. The majority of countries rely on a deposit-based system in which mortgage lenders retain mortgage loans on their books – as did the U.S. prior to the 1980s.

So the argument for government involvement in promoting mortgage securitization must rely on two assumptions: (i) securitization is a much more efficient model of mortgage finance, and (ii) government-backed institutions are necessary for securitization to work.

With respect to the first assumption, securitization has some clear advantages: Securitization takes illiquid individual mortgage loans, and pools them to form liquid MBS that are traded on the secondary market. Because illiquidity commands a risk premium, the more liquid securitized assets command better prices and a reduced mortgage rate and make available greater quantities of capital for originators. Moreover, systemic risk – the risk that deposit-taking banks will all collapse at once when hit by an aggregate shock (such as a collapse in house prices) – can be reduced because credit risk gets transferred out of the systemically risky banking sector to the capital markets. In other words, if securitization works properly, the banking sector can better share its mortgage risks with rest of the economy. Nevertheless, there is little doubt that securitization failed in this financial crisis, but not for the reasons most often cited (such as a fundamental failure of securitization due to weakening of origination incentives). Because of lighter capital requirements, securitized products were used by financial institutions to lever up and build systemically risky positions. These institutions did not fully internalize the costs of systemic risk. Private markets cannot solve this problem efficiently because individual firms do not have incentives to deal adequately with the systemic risk they produce.

If government intervention is required in mortgage finance, then it follows that the purpose of such intervention should be to reduce or manage the systemic risk that emerges from mortgage finance. It is not readily apparent why the GSEs, or government guarantees, are needed for this to take place. Worse, their presence has led to adverse unintended consequences.

Based on this conceptual background, we believe that fixing the U.S. mortgage finance requires three steps.

The first step is clear: Fannie and Freddie must be wound down. Their "heads I win, tails you lose" business model has been a disaster. While their \$1.5 trillion holdings of mortgages and MBS and their \$3.5 trillion worth of MBS insurance could simply be held on the government books as a buy-and-hold portfolio, we prefer a model along the lines of the Resolution Trust Corporation that pioneered "equity partnerships" to remove insolvent S&Ls' mortgage asset risks from the government's balance sheet in the 1990s.

These partnerships would involve a private-sector partner acquiring a partial interest in a pool of assets, controlling the management and sale of assets in the pool, and making distributions to the government reflective of the government's interest. Given that the annual pay-down rate of the GSEs' portfolios from 1997 to 2004 was about 25 percent, the mortgage holdings component of these partnerships could mostly be resolved within 5 years. The guarantees might take longer.

Skipping to the third, and final step, our eventual goal is a private mortgage finance system. The system must be well regulated to keep in check financial firms with access to the safety net and which might otherwise have an incentive to take on too much mortgage credit and interest rate risk that is inherently systemic in nature. Putting this aside, suppose that the underwriting standards are kept tight and standardized, as they were until the 1990s. Then, in the long run, credit guarantees would *not* be necessary for private mortgage securitization to work; there would be a large investor base that values and trades credit products. And, just as in other parts of the capital market, investors would bear the losses. If such a system cannot survive without government backing, then the business model of securitization really is a sham, and we should re-develop our depository-based mortgage finance system of yore.

The tricky thing is the second step. How does one 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 "genie" was let out of the bottle when public policy deregulated mortgage markets yet left the government guarantees and special capital treatment of Fannie and Freddie in place. Capital markets over the last 25 years have become reliant on these guarantees. To wean the system off these guarantees – to put the genie back in the bottle – we need to transition from a government-backed system to a private-based one. But this transition will only succeed if private markets are not crowded out, regulatory capital arbitrage by private players is avoided, and systemic risk is managed.

Capital markets do not develop out of thin air. It takes years to build the investor base and expertise to trade new securities. This base did not exist for private label securities (PLS) during this crisis because many of these securities (e.g., over 50 percent of AAA-rated subprime PLS) were held within the banking sector or by Fannie and Freddie to exploit capital regulatory requirements and because investors fled the market when the crisis hit.

We therefore envision that the initial phase of this process would preserve mortgage default insurance, but with the goal of a wholly private MBS market: Private insurers will determine which mortgages to guarantee and provide only a part (say, 25 percent) of the guarantee for each mortgage at the market-determined price. The government would be a silent partner, providing side-by-side insurance for the remaining part (75 percent), but importantly at the prevailing market rates. It is important that the public sector involvement be limited to conforming, strictly underwritten mortgages. In particular,

- 1. The systemic risk of mortgage insurance will no longer be artificially cheap. Some investors will choose to invest in uninsured mortgage securities with higher yields and take on the risk themselves. Market pricing of the guarantees will "crowd in" a competing private sector mortgage market (without guarantees).
- 2. Systemic risk will be minimized and mortgage availability guaranteed in this transition stage because the public-private partnership solves the problem that the insurers may not have enough capital initially to guarantee all conforming mortgages, at least until the aforementioned credit-based MBS investors make this moot.
- 3. The private sector mortgage guarantors would be subject to an irrefutable resolution authority when they fail. And, at the outset, but especially as the private market absorbs more credit risk, regulators will need to be vigilant that systemic risk does not build up in a few too-big-to-fail financial institutions. This will require a shift away from today's enormous concentration in banking toward a more competitive and well-capitalized financial architec-

ture in the mortgage market. Failing this, we will merely have replaced the GSE Godzillas with private market King Kongs.

4. Equally important, the government part of guarantees in the transition path will have to be adequately capitalized, and the remaining exposure recorded on its balance sheet for prudent fiscal management.

One potential concern is that, no matter how well intended, our government coinsurance program could suffer from "mission creep" and morph into yet another subsidized program. It is important therefore that it be written into law that the government has no say in the determination of either the price of mortgage insurance or which conforming mortgages are chosen by the insurer. To protect the government, an independent accounting firm could provide timely audits. In addition, reliance on government guarantees should be mandated to end – for example, through a gradual reduction of the size limit for conforming mortgages, falling from its current \$625,000 limit to \$0 in \$62,500 increments, effectively ending the program in a decade. This length is roughly consistent with the time period it took some of our more successful financial markets to develop, such as high-yield bonds, GSE-based MBS, collateralized mortgage obligations, and leveraged loan markets.

Over this decade-long transition, the private sector would be allowed to flourish. Financial innovation in these markets could return. New investors focused on the credit risk of mortgage pools would emerge. Mortgages would organically become more standardized, and underwriting standards would improve. It might take time for the mortgage market to put the proverbial genie back in the bottle, but, once it does, there will be no reason ever to take this genie out again.

Previously published online June 4, 2013