One Reason the Crisis Got So Bad

By Editor Test *Wed, Apr 6, 2011*

Banks needed to reserve 4% for mortgage loans, but only 1.60% for mortgage-backed securities issued by Fannie Mae or Freddie Mac. So banks loaded up on MBSs. A second excerpt from the newly-published "Guaranteed to Fail" (Princeton University Press, 2011).

The following excerpt from "Guaranteed to Fail" is reprinted with permission from Princeton University Press and from the authors, Viral Acharya, Matthew Richardson, Stijn van Nieuwerburgh and Lawrence J. White, all of the New York University Stern School of Business.

With the deregulation of the mortgage finance market, the decade of the 1980s was a period of substantial growth for Fannie and Freddie. At the end of the decade, Fannie and Freddie were fundamentally entrenched as parallel GSEs, with similar structures, privileges, responsibilities, and limitations.

The last major legislation to impact the GSEs until the financial crisis of 2007-2009 was the Federal Housing Enterprises Financial Safety and Soundness Act (FHEFSSA) of 1992. It produced a number of important rules, one in particular related to capital requirements.

In particular, a risk-based capital regulatory regime was specified for Fannie and Freddie and their two main functions: (i) securitizing and guaranteeing the credit risk of MBS, and (ii) investing in MBS or other similar portfolios of mortgages.

With respect to (i), the capital buffer that the GSEs were required to hold against these guarantees was 0.45% (i.e., 45 cents per $100 of guaranteed mortgages), which implied that the Congress believed that residential mortgages were quite safe instruments to guarantee against credit risk – or that the Congress meant to subsidize these guarantees and was (if push came to shove) prepared to cover any losses.

With respect to (ii), the GSEs were to hold 2.50% capital against their balance sheet assets (of which mortgages are by far the largest category). Thus, for every $100 in mortgages held, they could (in principle) fund those mortgages with $97.50 in debt and only $2.50 in equity.

In comparison to any other financial institution, Fannie and Freddie were afforded extraordinarily light capital requirements. For example, the capital requirement for federally insured banks and thrifts to hold residential mortgages was substantially greater: 4%. As a result, Fannie and Freddie had much higher leverage ratios – total assets to shareholder equity – than did comparable banking institutions.

To many fixed-income practitioners and analysts, the GSEs' growth and the expansion of securitization markets for mortgage finance should be considered a success story. But there was a darker side to the interaction between the GSEs and the banking sector: While banks were charged a 4% capital requirement for holding a portfolio of mortgage loans, they were charged only 40% of this, or 1.60%, if they held GSE MBS instead. Within the financial sector, this creates perverse incentives for banks to load up on GSE MBS, thereby increasing leverage all the way around the sector.

To see this, note that if a bank originated $100 worth of mortgage loans, they would have to hold a minimum $4 of capital to be considered adequately capitalized. If the bank sold these loans to the GSEs and the GSEs securitized them into MBS, however, the banks could buy back the GSE MBS and hold only $1.60 in capital, even though their portfolio holdings are identical.

Because the GSEs are only required to hold $.45, this means that, for the same level of risk, the capital requirement for the financial sector as a whole now is just $2.05, or 51% of what it used to be. There is little doubt that the growth in securitization is related to this type of regulatory arbitrage.

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The mortgage credit risk of Fannie Mae and Freddie Mac combined grew at an astonishing 16% (11%) annual growth rate from 1980 (1992) through 2007. We saw that this growth was financed using borrowed money and levels of leverage far in excess of other financial institutions.

Why would debt investors finance such growth? Because of the special status and treatment of the GSEs, the financial markets have historically treated them specially: The financial markets believed (correctly, as it turned out, or as a self-fulfilling prophesy) that if either company ever experienced financial difficulties, the federal government would likely intercede to make sure that the company's creditors did not suffer any losses.

This belief persisted despite the explicit statement on all GSE securities that these securities were not full-faith-and-credit obligations of the U.S. Government. The belief seems largely rational given that for most practical purposes, GSE debt is on par with Treasuries as "liquidity" or "risk-free securities" and therefore is held in hoards by financial firms much like Treasuries (in fact, 50% of GSE debt was held by financial firms in 2008). The "halo" effect of all of the special features of the GSEs was just too strong for them not to be deemed as too-big-to-fail.

With an implicit guarantee on their debt, Fannie and Freddie were able to borrow at interest rates that were below what the financial markets otherwise would have demanded. This meant that it was quite profitable for the GSEs to purchase mortgages and offer credit default guarantees below fundamental rates, allowing them to vanquish any competition and grow unfettered.

Because fixed income investors – either those holding Fannie and Freddie debt or MBS guaranteed by Fannie and Freddie – believed that there was a government backstop, market discipline went out the window, and there was no one left to restrain Fannie and Freddie.

As described above, adding to this subsidy was the fact that Fannie and Freddie had much lower capital requirements than did commercial banks and investment banks, for guaranteeing as well as holding MBS. With such a lack of a level-playing field, there was really no free market. Instead of capital flowing to its most efficient use, as the deregulation of mortgage markets in 1980's had anticipated, capital was in fact flowing to its most *levered* use.

There was no one left to restrain Fannie and Freddie, of course other than the federal government, but in the pursuit of myopic goals of boosting home ownership at all costs, each successive presidential administration turned a blind eye.