

DISMAL SCIENTIST

What to Do About Aunt Fan and Uncle Fred

BY CRISTIAN DERITIS — OCTOBER 24, 2008

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- » Fannie Mae and Freddie Mac have been controversial for years. Now their role in the economic crisis is an issue in the presidential campaign.
- » The data suggest that Fannie and Freddie contributed to the subprime crisis, but did not cause it.
- » While the two mortgage giants need to focus on stabilization in the short term, longer-term structural reform is needed soon.

The argument over who is to blame for the current economic crisis entered the presidential race this month. In the candidates' last televised debate, Senator John McCain called Fannie Mae and Freddie Mac the "catalyst for this housing crisis," claiming they had "caused [the] subprime lending situation that now caused the housing market in America to collapse." Senator Barack Obama and the Democrats, by contrast, have focused on Wall Street firms as prime culprits.

Understanding the crisis' origins is important for reasons that go beyond the election. U.S. taxpayers now own 80% of Fannie Mae and Freddie Mac; we need to decide what to do with them. Allowing them to linger indefinitely without a plan for their future introduces uncertainty—and we've all learned recently how well the market deals with uncertainty.

A brief history

The Federal National Mortgage Association was established in 1938 in response to the Great Depression, which saw house prices fall more than 30% across the country. At that time most home loans were "balloon" mortgages, which the borrower had to either pay off or refinance every five years. As financing dried up during the Depression, many borrowers were caught as their mortgages came due with no option but to default, which further depressed prices. Noting the vicious cycle between an illiquid credit market and falling house prices, the federal government established the FNMA—which would later formally adopt its nickname Fannie Mae—to liquify the mortgage market. Assured that the government would purchase the mortgages they originated, banks were willing to make loans. Borrowers were able to secure financing. The government received a fee for providing liquidity and bearing credit risk. Fannie Mae's 30-year fixed rate mortgage plan gave borrowers the security of a self-amortizing loan with fixed payments. Everyone seemed to benefit.

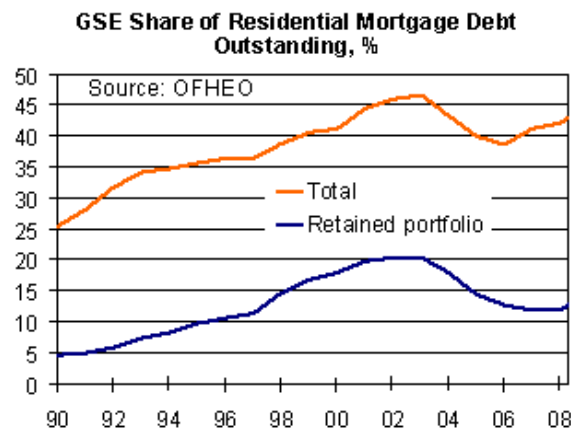
For 30 years Fannie Mae operated as a government agency, its operations included in the federal budget. The agency was self-funding, incurring no explicit cost to the taxpayer. Still, putting its liabilities on the government's balance sheet did have an implicit cost, which was becoming noticeable by 1968. That year, to free up funds for the Vietnam War, President Lyndon Johnson's administration spun Fannie Mae off, recapitalizing it as a private, shareholder-owned enterprise.

Freddie Mac was created by the government in 1970 to provide competition for Fannie Mae and to address restrictions that prevented state lending institutions from lending across state lines. Together, the two organizations developed the mortgage-backed security market in the 1970s and 1980s as a way to lay off interest-rate risk, by repackaging mortgages as tradeable fixed-income investments. The MBS innovation provided another win-win-win situation; borrowers were assured of ample financing, Fannie and Freddie could reduce their own risks, and fixed-income investors could benefit from higher returns.

The MBS market grew through the 1980s and 1990s. Over time other market participants saw profits in the mortgage-backed security business. Fannie and Freddie, however, dominated the market for conventional 30-year loans to borrowers with good credit. Rather than compete for such prime business with the two government-sponsored enterprises, Wall Street firms expanded what had been the much smaller markets for subprime and so-called "Alt-A" mortgages—unconventional loans made to borrowers with good credit. It is important to note that subprime loans had been around for decades, mainly targeted at borrowers with a lot of home equity but poor credit ("house rich but cash poor"). Done properly, subprime lending gave borrowers an opportunity to consolidate debts and rebuild their credit without having to resort to loan sharks or other unscrupulous lenders.

Private lenders grew the subprime and Alt-A markets, not Fannie Mae and Freddie Mac. With this increased competition, Fannie Mae and Freddie Mac's share of the overall mortgage-backed securities market plummeted between 2004 to 2006. As a result, their stock prices fell

on the order of 10% over this period at a time when investment banks were experiencing double-digit growth and the market in general was growing. Fearing further market-share losses, the two companies decided to bypass the warning signs and enter these markets themselves.



Freddie's and Fannie's investments contributed to the housing crisis, but there is little evidence to suggest that they caused it. Based on data provided in the companies second quarter financial statements, Fannie Mae and Freddie Mac are currently exposed to \$388 billion and \$392 billion, respectively, of subprime/Alt-A loans. Incredibly large volumes to be sure, but not within the context of annual private label MBS issuances of \$800 billion per year for 2005 and 2006 alone. There was ample demand from other investors for Wall Street's mortgage-backed securities, even without the two GSEs.

Wall Street firms and the subprime market might have imploded sooner had Fannie and Freddie stayed on the sidelines completely, but it is doubtful the calamity would have been avoided altogether, given the abundant use of leverage and exposure to counterparties through derivative contracts. Being exposed solely to the housing market by the terms of their Congressional charters, Fannie and Freddie would have incurred losses inevitably as house prices fell, unless they had exited markets and/or raised guaranty fees—actions inconsistent with their mandates to help raise homeownership rates.

So what fueled the fire?

The size and concentration of the GSEs may have aggravated the crisis, but was not its cause. At least four factors fueled the housing bubble and the global crisis:

First, changes in the tax treatment of capital gains from the sale of a principal residence in 1997 provided substantial incentive to invest in housing, on top of incentives already contained in the income tax deduction for mortgage-interest payments. After 1997, individuals were exempt from federal capital gains taxes on a house sale up to \$250,000. As returns from the internet stock boom faded, housing became a more attractive investment, with significant tax advantages.

Second, regulatory preferences for securities introduced distortions into banks' capital requirements, and encouraged a large runup in securitization. Specifically, what regulators call the "Tier 1 capital ratio" for adequately capitalized institutions is 4% in the U.S. To calculate the ratio, regulators weight banks' asset holdings according to a risk formula; riskier assets thus require banks to hold more equity capital. High quality mortgages held in whole loan form receive a 50% risk weighting. High quality (AAA) securities receive a 20% risk weighting; thus the capital required to hold the same loan in security form is significantly lower. The rise in securitization was in part the result of rational arbitrage of regulatory capital requirements.

Securitization done right

Still, it would be a mistake to say that securitization itself caused the crisis. Done properly, securitization can reduce friction within the financial system by providing a liquidity outlet. It was the execution of securitization for subprime and Alt-A mortgages that was flawed, due to poor quality data, overly optimistic assumptions and overly complex structures.

Data was either incomplete, as with limited-documentation loans; incorrect due to poor controls and processes; or simply wrong, due to explicit or implicit fraud. The assumptions used by investors and analysts to assess the credit quality of loans was also flawed, due to incomplete data. For example, many subprime and Alt-A products came of age only during the house price boom. Having never existed

before, modeling their performance empirically was at best a challenge. Their performance under stress was certainly unknown. In the absence of historical evidence, assumptions were based on overly optimistic extrapolations, encouraged by a herd mentality and "substantiated" by several years of exceptional performance until the bubble finally burst.

A third root cause involved public policies to expand homeownership and lending. Fannie and Freddie's loss of market share and a focus on higher yield were primary motivations for expansion, but a need to meet rising annual housing goals established by HUD may have pushed the GSEs to invest in lower-down-payment mortgages. Again, these may have helped expand the bubble, but were not its primary cause. Nonetheless, the crisis did expose inherent conflicts that arise when a private institution has government sponsorship. This is an important lesson now that the government has taken ownership interests in a number of financial institutions. Conditions of government participation need to be made explicit with an established exit strategy in order to minimize moral hazard.

Weapons of mass destruction

Fourth, it is now apparent that the global financial crisis spread through the widespread use of exotic derivatives. Warren Buffett was prescient in calling these products "financial weapons of mass destruction." Like securitization, derivatives can be useful when used appropriately to hedge and insure investment positions. But in this episode they were abused to the point that mortgage securities worth hundreds of billions of dollars generated derivatives in the tens of trillions. This was not prudent risk management but pure speculation supported by leverage.

The collapse of the subprime and Alt-A market may have been the match that lit the fuse, but it didn't cause the explosion. Had trillions of dollars of derivative contracts not been written on these securities, the impact would likely have been limited, just as the implosion of the junk bond market was contained in the 1980s.

The consequences of conservatorship

Fannie Mae and Freddie Mac's placement under conservatorship on September 7 signaled to the market that no firm was immune from the financial panic, and triggered the events that led to the bankruptcy of Lehman Brothers, the loan guarantees to AIG, and ultimately the passage of the Troubled Asset Relief Program and subsequent bank capital injections.

It is noteworthy that although the two GSEs reported nearly \$14 billion in losses over the past year, both enjoyed positive cash flow at the time of their conservatorship, and neither has yet tapped the Treasury for cash. One hypothesis being advanced is that the government's pre-emptive move actually caused the lack of confidence that rippled through the markets. This is impossible to prove; clearly there were many signs supporting a need for quick action. Nonetheless, it will be interesting to see the third-quarter financials of the two institutions when they are reported in a few weeks. If they end up needing only limited cash infusions from the Treasury, then the decision to put the companies under conservatorship will surely be debated.

Fred and Fan's current role

As part of the September 7 announcement, Treasury Secretary Paulson announced that Fannie and Freddie's current role would be to stabilize the mortgage market. Their investment portfolios were authorized to grow modestly over the next year, and to shrink over the longer term as the crisis subsides. Paulson has said he will leave office when the next administration takes over, so it remains to be seen if his advice to wind down the portfolios will be followed.

While continuing to purchase mortgages and issue MBS, Freddie and Fannie have taken two major actions toward stabilization. To provide additional liquidity, they eliminated the requirement that mortgage servicers forward principal and interest collections to a trust account on a daily basis. And to keep the cost of borrowing low, they canceled a planned increase in guarantee fees. The latter action gives an explicit subsidy to homebuyers and demonstrates a shift in strategy away from pure profit maximization.

If the Treasury is still determined to buy distressed assets under the provisions of the TARP in order to relieve bank balance sheets and stimulate lending, then Fannie and Freddie would seem to be appropriate agencies for this task. The companies have a long history of valuing mortgages and properties, in addition to having the infrastructure to acquire and dispose of foreclosed properties. Issues with senior management have been addressed, and tighter government oversight has been established. Their priorities have been adjusted in favor of stabilizing the mortgage market rather than maximizing shareholder value. Considering that taxpayers already own majority interests in these institutions, it seems wasteful to establish another agency within the Treasury department to buy these assets. It would also avoid obvious conflicts of interest that might result if the Treasury hired personnel from former investment banks or other Wall Street firms to

manage this fund.

That said, Fannie and Freddie recently announced that they would purchase approximately \$40 billion per month of distressed assets on their own (unrelated to the TARP). Not only is this another form of government assistance that hasn't received much discussion, but it runs against one of the main arguments used to pass the TARP: to enable price discovery and recreate the missing market for these assets. Price discovery should begin as soon as Fannie and Freddie buy their first securities.

A future for the GSEs?

What to do with Fannie and Freddie going forward? Some call for dismantling them completely and leaving housing finance to the private market. Yet considering how private firms handled other parts of the mortgage market, and acknowledging the many positive externalities that housing has for the economy, this is a doubtful prescription. It would be more prudent to return the institutions to their roots, running them like regulated utilities. Their sole mission should be to provide liquidity through the issuance of MBS for good quality, fully documented, fixed-rate mortgages.

Fannie and Freddie or their successors might not prevent the next speculative bubble from forming, but at least they won't contribute to its expansion.

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