Alan Greenspan: Government-sponsored enterprises

Remarks by Mr Alan Greenspan, Chairman of the Board of Governors of the US Federal Reserve System, to the Conference on Housing, Mortgage Finance, and the Macroeconomy, Federal Reserve Bank of Atlanta, Atlanta, (via satellite), 19 May 2005.

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Let me begin by thanking the Federal Reserve Bank of Atlanta and President Guynn for hosting this conference - "Housing, Mortgage Finance, and the Macroeconomy." Clearly, housing and the financing of housing purchases have been critical components of economic activity in recent years. Understanding better how the financial structure of housing transactions influences households' economic decisions is crucial both for academics and for policymakers.

In the United States, few financial innovations in recent decades have had so widespread an impact as the development of the secondary home-mortgage market and the attendant diversification of funding sources for depository institutions and other mortgage originators. Critical to the success of this innovation has been the role of Fannie Mae and Freddie Mac in promoting mortgage securitization - the key to the development of secondary mortgage markets in the United States.[1] Their efforts spawned the vast asset-backed securities market that, along with credit derivatives, has contributed to the transfer of credit risk from highly leveraged originators of credit - especially banks and thrifts - to less-leveraged insurance companies and pension and mutual funds, among other investors.

The stated intent of the Congress is to use the housing-related government-sponsored enterprises (GSEs) to provide a well-established channel between housing credit and the capital markets and, through this channel, to promote homeownership, particularly among lower-income families. Although prospectuses for GSE debt are required by law to stipulate that such instruments are not backed by the full faith and credit of the U.S. government, investors worldwide have concluded that our government will not allow GSEs to default. As a consequence, market participants offer to purchase GSE debt at interest rates substantially lower than those required of comparably situated financial institutions without direct ties to government.[2] Given this advantage, which private competitors have been unable to fully overcome, the housing-related GSEs have grown rapidly in recent years. Fannie and Freddie essentially dominate the market for purchasing conforming home mortgage loans.[3]

The strong belief of investors in the implicit government backing of the GSEs does not by itself create problems of safety and soundness for the GSEs, but it does create systemic risks for the U.S. financial system as the GSEs become very large. As I have recently testified before the Banking Committee of the U.S. Senate, systemic risks are difficult to address through the normal course of financial institution regulation alone. But in the case of the GSEs, these risks can be effectively handled by limiting their investment portfolios, which are funded by implicitly subsidized debt.

The government guarantee for GSE debt inferred by investors enables Fannie and Freddie to profitably expand their portfolios of assets essentially without limit.[4] Private investors have granted them a market subsidy in the form of lower borrowing rates, which staff at the Federal Reserve Board has estimated at 40 basis points in recent years. This market subsidy is a formidable advantage in our

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[1] Under securitization, mortgages are bundled into pools and then turned into securities that can be easily bought and sold alongside other debt securities. Combining a diversified pool of home mortgages into a single package in this way reduces the sum of the risks associated with the individual mortgages and enables the packager to sell claims against the package that pay interest rates below the average yield of the package as a whole.

[2] For example, the government provides the housing-related GSEs with a line of credit from the Department of the Treasury, fiscal agency services through the Federal Reserve, exemptions from securities registration requirements, exemptions from bank regulations on security holdings, and tax exemptions.

[3] Fannie and Freddie can buy a single-family home mortgage only if the principal balance is below the "conforming loan limit." For 2005, that limit for most loans is $359,650.

[4] The boards of directors of Fannie and Freddie are allowed to invest in almost anything so long as there is some link, direct or indirect, to their mission of supporting conforming mortgage markets. As demonstrated by recent innovations in the home equity lending and asset-backed securities markets, much of the $9 trillion in household credit can potentially be secured by real estate and thus appears to be available to the GSEs as investments. Moreover, the GSEs have been allowed to invest in many forms of non-mortgage debt, such as corporate bonds and commercial paper, to the degree that the GSEs can argue such investments support their liquidity goals and thus indirectly support mortgage markets.

highly competitive Aaa market, where a few basis points are often competitively determinant. Unlike subsidies explicitly mandated by the Congress, the implicit subsidies to the GSEs are initiated wholly at the discretion of the GSEs. They choose when to borrow and gain the advantage of the subsidy, and because markets perceive such debt as government guaranteed, GSEs can effectively borrow without limit.

Investors have provided Fannie and Freddie with a powerful vehicle for achieving profits that are virtually guaranteed through the rapid growth of their balance sheets, and the resultant scale has given them an advantage that their potential private-sector competitors cannot meet. As a result, their annual return on equity, which has often exceeded 30 percent, is far in excess of the average annual return of approximately 15 percent that has been earned by other large financial competitors holding substantially similar assets. Virtually none of the GSE excess return reflects higher yields on assets; it is almost wholly attributable to subsidized borrowing costs.

In a market system, lenders and investors typically monitor and discipline the activities, including leverage, of their counterparties to assure themselves that these entities are financially sound. Because the many counterparties in GSE transactions assess risk based mainly on the GSE's perceived special relationship to the government, rather than on the underlying soundness of the institutions, regulators cannot rely on market discipline to contain systemic risk.

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The profit potential created by subsidized debt has been available to the GSEs for decades. However, the management of Fannie and Freddie chose to abstain from making profit-centers out of their portfolios in earlier years, and only during the mid-1990s did they begin rapidly enlarging their portfolios. At the end of 1990, for example, Fannie's and Freddie's combined portfolios amounted to $132 billion, or only 5.6 percent of the single-family home-mortgage market.

Indeed, in 1989, before the rapid expansion of its portfolio, Freddie testified before the Congress that the need for safe and sound operation and the need to provide affordable mortgages to homebuyers were inconsistent with holding a substantial portfolio. As Freddie's CEO argued at that time, by financing mortgages with mortgage-backed securities sold to investors rather than with a portfolio, Freddie avoided interest rate risks and thus could keep mortgages flowing when depository institutions were suffering an interest rate squeeze.[5] Moreover, Freddie's 1990 annual report stated that Freddie could provide ample liquidity to mortgage markets and make profits by financing mortgages with mortgage-backed securities sold to investors rather than by holding a mortgage portfolio. To quote, "Freddie Mac maintains a presence in the secondary market each and every day - regardless of economic conditions - by buying mortgages from lenders, pooling and packaging them into securities, and selling these securities to investors"(emphasis added).

When Freddie Mac became owned by private shareholders and began to realize the potential for exploiting the risk-adjusted profit-making of a larger portfolio, the message changed. Freddie stated in its 1993 annual report that "in short, to achieve our earnings objective, we are striving to increase our total portfolio at a rate faster than residential mortgage debt growth ... [and] generate earnings growth in excess of revenue growth through focused management of credit and operating expenses." By 2003, Freddie's portfolio had grown tenfold, and Fannie and Freddie together held $1.5 trillion in assets, or 23 percent of the home-mortgage market.

Today, the interest rate and prepayment risks inherent in mortgages with a low-cost refinancing option is concentrated in the large portfolios at Fannie and Freddie. These concentrations cannot be readily handled by private-market forces because there are no meaningful limits to the expansion of portfolios created with debt that the market believes to be federally guaranteed.

As Fannie and Freddie increase in size relative to the counterparties to their hedging transactions, the ability of these GSEs to quickly correct a misjudgment in their complex hedging strategies becomes more difficult, especially when vast reversal transactions are required to rebalance portfolio risks. We are thus highly dependent on the risk-managers at Fannie and Freddie to do everything right. Moreover, the success of interest-rate-risk management, especially the exceptionally rapid timing required by dynamic risk adjustments, requires that the ultimate counterparties to the GSEs' transactions provide sufficient liquidity to finance an interest-rate-risk transfer that counters the risk.

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5 Leland C. Brendsel, "Government-Sponsored Enterprises," Hearing before the Subcommittee on Oversight of the Committee on Ways and Means, House of Representatives, the 101st Congress, September 28, 1989.

Otherwise, large and rapid dynamic adjustments will result in sharp changes in the prices for rebalancing and hedging a mortgage portfolio. The consequence would be added to interest rate volatility.

In the end, we cannot eliminate the risk inherent in mortgages with refinancing options. But we can markedly contain the accompanying risks to systemic stability by diversifying the concentration of risk away from large, highly leveraged portfolios for which misjudgments can have quick and devastating consequences. A system of diversified and less-leveraged interest-rate-risk management would be far more resilient to the inevitable mistakes and shocks of individual risk-mitigating strategies. Such diversification would thus pose much less systemic risk, largely because of lowered leverage, which in turn is the consequence of the private-market discipline imposed on commercial and investment banks, mutual funds, insurance companies, and other current or potential holders of mortgage-backed securities.

Some argue correctly that, although the borrowing rates of the GSEs are subsidized, so are those of commercial banks because of deposit insurance and access to the Federal Reserve's discount window and payments system. But interest rates on the long-term debentures of banks exceed the rate of interest required on GSE debt, suggesting that market participants perceive banks as far less subsidized than GSEs. Banks accordingly have access to significantly less-subsidized credit than do GSEs.

To be sure, banks do have access to insured deposits at low rates. But large banks find it difficult to grow using only insured deposits. Interest rates on banks' insured deposits, while usually less than those on GSE debentures, do not account for the substantial costs that banks incur to collect, and provide services for, core and small time deposits. If larger banks could rely on low-cost insured deposits as their effective marginal source of funds, why would they pay higher interest rates to holders of their debentures?

The borrowing edge of the GSEs prevails even though the biggest banks must maintain at least twice the capital ratio of Fannie and Freddie and smaller banks hold even more. Moreover, with the additional capital available at banks to absorb the inevitable hedging misjudgments, reversals of fortune are likely to create less disruption to the banking system relative to the disruption possible at Fannie and Freddie.

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The Federal Reserve Board has been unable to find any credible purpose for the huge balance sheets built by Fannie and Freddie other than the creation of profit through the exploitation of the market-granted subsidy. Fannie's and Freddie's purchases of their own or each other's mortgage-backed securities with their market-subsidized debt do not contribute usefully to mortgage market liquidity, to the enhancement of capital markets in the United States, or to the lowering of mortgage rates for homeowners.

The key activity of the GSEs - the provision of liquidity to the primary mortgage market - can be accomplished exclusively through the securitization of mortgages; GSE portfolios of mortgage-related assets cannot serve this function. Indeed, during a crisis, the GSEs' portfolios of mortgage-backed securities (MBS), in contrast to portfolios of liquid assets such as Treasury bills or cash, cannot provide liquidity to either the primary or the secondary mortgage market. To sell mortgaged-backed securities to purchase other mortgage-backed securities clearly adds no net support to the mortgage markets.

GSE portfolios could act as a source of strength to the mortgage markets only if they contained highly liquid, non-mortgage assets such as Treasury bills, which can be readily turned into cash under all possible scenarios without importantly affecting the prices of home mortgages. Indeed, only such highly liquid portfolios would be consistent with the GSEs' mission of providing primary mortgage market liquidity during a crisis, particularly during a financial crisis.

Fannie and Freddie do need to hold in portfolio some mortgage-related assets to achieve their mission. In the normal course of securitization, timing differences between purchases of home mortgages and sales of MBS imply an inventory of home loans, although most such transactions are simultaneous swaps of packages of home mortgages for MBS. Moreover, there may be some affordable housing mortgages unsuitable for securitization that serve the chartered mission of the GSE. But in total, the assets required for Fannie and Freddie to achieve their mission are but a small fraction of the current level of their assets.

Thus, if the Congress legislates a mission-only need for GSE portfolio assets, a substantial liquidation of MBS over time, coupled with an equivalent redemption of GSE debt, will doubtless be required. Such liquidation would entail not solely a removal of demand but an equal removal of both supply and demand for MBS. Accordingly, the implementation of portfolio limits should pose no significant difficulties: The amassing of GSE portfolio assets is a simple grossing-up of mortgage assets, which can be initiated and reversed in quite large volumes with relative ease.

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The average paydown rate of the GSEs' portfolios from 1997 to 2004 was about 25 percent. Even if outright sales of MBS were required to shrink portfolios, the proceeds would presumably be employed to redeem GSE debt. In effect, a private investor whose holding of GSE debt has been redeemed receives, in exchange, either the mortgage-backed security sold by the GSE or other assets sold by those who acquire the mortgage-backed security. In either case, the grossing-up or its reversal does not affect the net demand for high-quality securities.[6]

The concern of some observers that large sales of MBS will be difficult to absorb runs counter to the evidence that GSE-backed MBS, being Aaa-rated securities, already trade as part of the large worldwide market for high-quality corporate debt and U.S. Treasury issues. GSE sales of MBS, matched with redemptions of debt, will be readily absorbed in the vast market without a significant change in the relative interest rate spreads of such investments. At the most, the grossing-up and liquidation of MBS and the corresponding GSE debt might conceivably affect the MBS-GSE interest rate spread at the margin.

Moreover, unwinding MBS financed by GSE debt does not affect the level of home mortgage debt outstanding or of mortgage interest rates. Indeed, we have found little, if any, evidence that the spread of home-mortgage interest rates over comparable-maturity U.S. Treasuries are affected at all by variations in the size of GSE portfolios.[7] In fact, contrary to the expectations that MBS portfolio accumulation lowers home mortgage interest rates, the spreads apparently widened as the portfolios grew from 1995 to 2003.

In any event, since the development of the MBS market, the determinants of interest rates that finance home purchase have exhibited little, if any, response to the size of GSE portfolios. The past year provides yet more evidence of this independence, with GSE portfolios not growing and mortgage spreads, as well as the spread between yields on GSE debentures and Treasury securities, declining further. Despite the turmoil at Fannie and Freddie during the past two years, home mortgage markets have functioned well. Indeed, as an indication that the yield on debt owed by GSEs is wholly a function of the yield's perceived status as government guaranteed, the credit default swaps of both Fannie and Freddie have barely budged as the disruption in the markets for GSE equities has deepened.

The MBS-GSE or GSE-Treasury interest rate spreads seem to be insensitive to changes in the degree of intermediation because of the extraordinary substitutability of Aaa mortgages and their financing vehicles for high-quality corporate debt and Treasuries. The method of GSEs' intermediation may be another reason that we find so little effect of the size of the GSEs' MBS portfolio on home-mortgage interest rates. The decision by a GSE to purchase and securitize a mortgage is made independently of the decision to place the mortgage or mortgage-backed security in the GSEs own portfolio. Thus, whatever effect the GSEs have on primary home-mortgage rates appears to flow from the decision to purchase and securitize the mortgage, not from the decision of whether to put the mortgage-backed security into the GSEs' portfolios or sell the MBS in the private market.[8]

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6 In effect, investors who purchase MBS use their own savings or the savings of others to fund the asset. But purchasers of GSE debt fund in the same manner. Thus, if Fannie securitizes and sells an MBS, it has no need to fund it. But if Fannie does fund it, the private investor, of course, does not. In effect, the same amount of the nation's saving is drawn upon whether a purchased origination is sold as MBS to investors or Fannie funds the mortgage or MBS.

7 See Wayne Passmore (2005), "The GSE Implicit Subsidy and the Value of Government Ambiguity," Finance and Economic Discussion Series 2005-5 (Washington: Board of Governors of the Federal Reserve System, January) (forthcoming in Real Estate Economics); Wayne Passmore, Shane M. Sherlund, and Gillian Burgess (2005), "The Effect of Government Sponsored Enterprises on Mortgage Rates," Finance and Economic Discussion Series 2005-6 (January) (forthcoming in Real Estate Economics); and Andreas Lehnert, Wayne Passmore, and Shane M. Sherlund (2005), "GSEs, Mortgage Rates, and Secondary Market Activities," Finance and Economic Discussion Series 2005-7 (January).

8 One issue that has been raised in the debate about the size of GSE portfolios is the following: In the event of a shrinkage of GSE debt, would the reduction of foreign holdings of GSE debt deprive the U.S. housing market of a net source of savings not otherwise available? Foreign holders whose GSE debt is redeemed will reinvest the proceeds in U.S. Treasury issues,

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Some observers have suggested that the availability of fixed-rate mortgages is tied to the size of GSE portfolios. We see little empirical support for this notion. For example, we have found no evidence that fixed-rate mortgages were difficult to obtain during the early 1990s, when GSE portfolios were small. Indeed, the share of fixed-rate mortgage originations averaged slightly less than 80 percent in 1992, when GSE portfolios were small, and averaged 66 percent in 2004, when GSE portfolios were large. Clearly, these data do not support the proposition that the size of the GSEs' portfolios positively contributes to the availability or popularity of fixed-rate mortgages. It is, of course, mortgage securitization, and not GSE portfolios, that is the more likely reason for the continued market support for the popular thirty-year fixed-rate mortgage.

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Without a notable direct or indirect effect on primary home-mortgage rates, it is difficult to see how the GSEs' portfolios can influence homeownership. The evident de minimis to small changes in home mortgage interest rates owing to GSE mortgage market intermediation suggested by recent studies would have little effect on homeownership. Indeed, a comprehensive survey by Ron Feldman (2001) finds that a change in mortgage rates would have to be at least 200 basis points before it would have more than a trivial effect on homeownership.[9]

Most analysts conclude that the primary determinants of homeownership appear to be the loan-to-value, debt-to-income, and payment-to-income ratios associated with the mortgagor and the mortgage. Over the 1990s, homeownership rates in the United States increased from about 64 percent to about 67 percent. Much of this increase seems to be due to growing incomes of households, a generally lower level of interest rates, and an increased ability to extend loans to borrowers who require higher loan-to-value ratios. The generally declining level of mortgage rates that occurred in the 1990s reflects the fact that worldwide interest rates have been generally lower and that worldwide development cannot be a consequence of GSE portfolio growth.

Even with smaller portfolios, Fannie and Freddie would remain formidable institutions and their profits would provide more than sufficient support for their special affordable-housing programs. GSE mortgage securitization is a profitable activity and, with its modestly subsidized guarantee, earns above-normal rates of returns.

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As I testified before the Congress both this year and in 2004, the GSEs need a regulator with authority on par with that of banking regulators, with a free hand to set appropriate capital standards, and with a clear and credible process sanctioned by the Congress for placing a GSE in receivership, where the conditions under which debt holders take losses are made clear. However, if legislation takes only these actions and does not limit GSE portfolios, we run the risk of solidifying investors' perceptions that the GSEs are instruments of the government and that their debt is equivalent to government debt.

The GSEs will have an increased facility to continue to grow faster than the overall home-mortgage market; indeed because their portfolios are not constrained, by law, to exclusively home mortgages, GSEs can grow virtually without limit. GSE's mortgage securitization, in contrast to their portfolio holdings, is the key to maintaining and enhancing the benefits of Fannie and Freddie to homebuyers and secondary mortgage markets. And mortgage securitization, unlike the GSE portfolio holdings, does not create substantial systemic risks.

Thus, one way to limit the GSE portfolios is to create a strong presumption that almost all mortgage-related assets can be securitized. The GSEs would need to establish, with their regulator, that any asset held in their portfolio could not be securitized. In other words, the method of GSE financing most consistent with their missions is to securitize assets first and to hold in their portfolios only those assets that are very difficult or unduly expensive to securitize.

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as GSE debt was perceived, in effect, as higher-yielding Treasury debt. Accordingly, the effect on the financing of our current account deficit would likely be nil. Moreover, there is no reason to believe that the effect on interest rates for MBS and home mortgages from reduced foreign holdings of GSE debt would be any different from the evident quite small change owing to reduced domestic holdings of GSE debt.

[9] Ron J. Feldman (2001), "Mortgage Rates, Homeownership Rates, and Government-Sponsored Enterprises," Federal Reserve Bank of Minneapolis Annual Report, pp. 3-23.

Without the needed restrictions on the size of the GSE balance sheets, we put at risk our ability to preserve safe and sound financial markets in the United States, a key ingredient of support for housing.

Financial instability coupled with the higher interest rates it creates is the most formidable barrier to the growth, if not the level, of homeownership. Huge, highly leveraged GSEs subject to significant interest rate risk are not conducive to the long-term financial stability that a nation of homeowners requires.