

# CRS Report for Congress

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## Limiting Fannie Mae's and Freddie Mac's Portfolio Size

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### Summary

Federal Reserve Chairman Alan Greenspan and Treasury Secretary John W. Snow recently have urged the 109<sup>th</sup> Congress to pass legislation to limit the size of Fannie Mae's and Freddie Mac's portfolio to reduce the risk to the federal government and the economy. In 2003, these government-sponsored enterprises (GSEs) combined retained portfolio had risen to \$1.6 trillion from \$136 billion in 1990.

One of the more controversial aspects of GSE reform is this proposal to limit the size of the investment portfolios, which consist of mortgages and mortgage-backed securities (MBSs) that are subject to several types of financial risk. If these risks are not managed properly, or if market movements turn dramatically against the GSEs, the government may face two unsatisfactory alternatives: either let the GSE go into default and hope that the financial repercussions can be controlled, or step in and assume payments on the GSE debt at a significant cost to taxpayers. Proponents of portfolio limits argue that shrinking portfolio size reduces the likelihood and cost if this choice will ever have to be made. The GSEs and their supporters argue, on the other hand, that the profits generated by the investment portfolios enhance the GSEs' ability to support affordable housing programs and reduce mortgage interest rates.

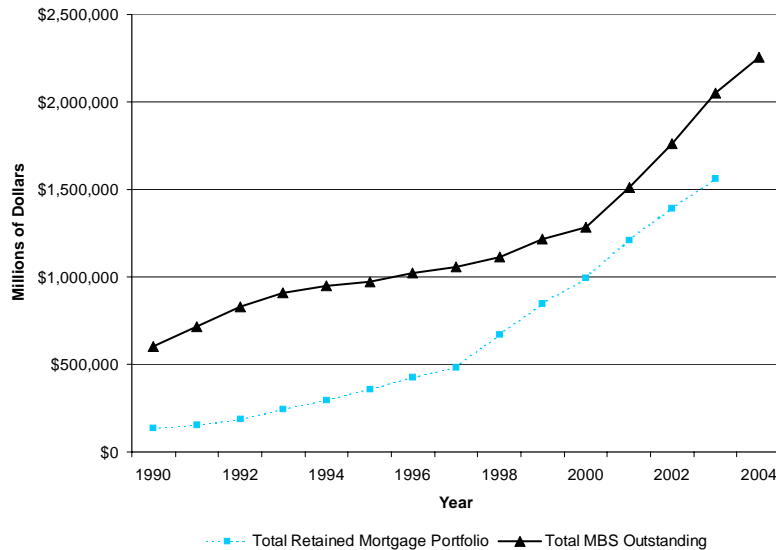
S. 190 and H.R. 1461 propose many changes in the rules governing the activities and regulation of Fannie Mae and Freddie Mac. S. 190 includes portfolio limits. H.R. 1461 does not. CRS Report RL32795, *Government-Sponsored Enterprises (GSEs): Regulatory Reform Legislation*, by Mark Jickling, compares them in a side-by-side report. For additional information on the GSEs, see CRS Report RS21724, *GSE Regulatory Reform: Frequently Asked Questions*, by Loretta Nott and Barbara Miles.

This report analyzes the types of risk that the GSEs pose to the economy, and the advantages and disadvantages of proposals to limit portfolio size. It will be updated as warranted by significant developments.

Recently Federal Reserve Chairman Alan Greenspan<sup>1</sup> and Treasury Secretary John Snow<sup>2</sup> have warned that the mortgage portfolios of Fannie Mae and Freddie Mac (the housing government-sponsored enterprises, or GSEs for short) present a risk to the nation's financial system and federal government.

Fannie Mae and Freddie Mac buy mortgages from the original lenders and package them into mortgage-backed securities (MBSs), which are either sold to investors or held in portfolio by the GSEs themselves.<sup>3</sup> These portfolios are large and have grown rapidly, both in dollar terms and as a percentage of all MBSs outstanding. According to the most current complete information (the end of 2003),<sup>4</sup> Fannie Mae's retained mortgage portfolio was \$902 billion<sup>5</sup> and Freddie Mac's was \$661 billion.<sup>6</sup> At the end of 2003, their combined portfolios were more than 11 times their size in 1990. Under S. 190, the GSEs could purchase mortgages and MBSs only for the purpose of securitization and sale to others. (Existing portfolios are grandfathered out of this provision.) **Figure 1** illustrates the growing size of the combined portfolios and the amount of MBSs outstanding.

**Figure 1. Combined MBSs Outstanding and Retained in GSE Portfolios**



**Source:** Office of Federal Housing Enterprise Oversight, *2005 Report to Congress*.

<sup>1</sup> Letter from Alan Greenspan, Chairman of the Federal Reserve, to the Honorable Robert F. Bennett, U.S. Senate, Sept. 2, 2005, at [<http://online.wsj.com/public/resources/documents/Greenspan091505.pdf>].

<sup>2</sup> U.S. Department of Treasury, "Testimony of Secretary John W. Snow Before the U.S. Senate Committee on Banking, Housing and Urban Affairs. Proposals for Housing GSE Reform," press release, April 7, 2005, at [<http://www.treas.gov/press/releases/js2362.htm>].

<sup>3</sup> A relatively small number of mortgages are directly held in the GSEs' portfolios.

<sup>4</sup> Because of accounting problems, Fannie Mae's 2004 financial reports are not available.

<sup>5</sup> U.S. Office of Federal Housing Enterprise Oversight, *2005 Report to Congress*, Table 4, p. 31.

<sup>6</sup> *Ibid.*, Table 14, p. 47.

## Why Are the Portfolios So Large?

The GSEs are designed by their congressional charters to be profit-seeking enterprises. Their portfolios have grown as part of profit maximization. The GSEs have a funding advantage that appears to be unlimited because of the close connection between the GSEs and the federal government. Market forces that limit the size and risk of other financial intermediaries' portfolios do not apply to the GSEs. The GSEs can borrow more money at lower rates. These rates are slightly higher than the comparable Treasuries, but lower than companies (or competitors) with similar financials that lack a federal government connection. Federal Deposit Insurance Corporation staff has estimated that without the implicit guarantee, the GSEs would have credit ratings of AA or A, rather than their current AAA ratings. This reduced cost of borrowing can give the GSEs a profit advantage in any activity they undertake. Relatively little money is required to finance the purchase of mortgages while they are being combined into MBSs. When MBSs are sold, money borrowed can be repaid. Because short-term bonds and loans have lower interest rates than long-term ones, the GSEs use portfolio management techniques to allow them to borrow using short-term bonds to finance long-term mortgages. The key issue is whether the benefits of this portfolio growth to the companies and homeowners exceed their costs to the nation. The main cost is the implied guarantee of GSE debt provided by the federal government without charge. The more GSE debt, the greater the value of the implicit guarantee, the larger the portfolios, and the greater the profit.

There are some benefits to the nation from the GSEs' portfolio. Section 128 of H.R. 1461 would require the GSEs to contribute 5% (3.5% in the first year) of their profits to an affordable housing fund. The higher the profits are, the larger this fund will be. Based on recently available results, CRS has estimated that this contribution will be \$380 million in the first year and \$540 million in later years.<sup>7</sup>

The GSEs say that large portfolios add liquidity to the secondary mortgage market. Independent analysts do not dispute that a retained portfolio and active trading can help to maintain a liquid market for MBSs and encourage investments in them. (The reason that the portfolios contribute to liquidity is that they allow the GSEs to sell and buy MBS when others are unwilling.) They disagree that the portfolios need to be as large as they are.

The exact distribution of the benefits of the GSEs' status is subject to debate. CBO has concluded that the GSEs retain more than 40% of the subsidy from the implicit guarantee.<sup>8</sup> The larger their portfolios, the more implicitly guaranteed borrowing, and the larger the GSEs' profits. In contrast, the benefit to homeowners is largely independent of portfolio size and is estimated to result in mortgage rates that are lower by 7 to 40 basis points (0.07% to 0.40%).<sup>9</sup> On the maximum single-family loan that Fannie and Freddie

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<sup>7</sup> CRS Report RS21724, *GSE Regulatory Reform: Frequently Asked Questions*, by Loretta Nott and Barbara Miles, p. 6.

<sup>8</sup> U.S. Congressional Budget Office, *Assessing the Public Costs and Benefits of Fannie Mae and Freddie Mac*, May 1996. Available at [<http://www.cbo.gov/ftpdocs/0xx/doc13/Fanfred.pdf>].

<sup>9</sup> CRS Report RL32795, *Government-Sponsored Enterprises (GSEs): Regulatory Reform* (continued...)

may purchase (\$359,650) at a currently typical 5.7% rate, this saves the homeowner \$0.53 to \$3.07 per day, or \$195 to \$1,120 per year.

## GSE Risks

The GSEs share many risks with all business. These risks can affect the companies, stockholders, employees, bondholders, and business partners. The GSEs' risks can also affect the nation's financial system and the economy. There are many ways to analyze these risks. One useful strategy is to look at credit risk, prepayment risk, interest rate risk, and operational risk.

**Credit Risk.** Credit risk is the risk that the borrowers (mortgagors) will not repay their loan on time — in other words, the risk of delinquency and default. When Fannie and Freddie buy mortgages and combine them into MBSs, they add their guarantee that the loans will be repaid on time. They charge an annual fee of about 20 basis points (0.20%) for this guarantee. Standard & Poor's and most other major observers conclude that because of the different maturity dates, loan-to-value ratios, private mortgage insurance, and geographic diversification, credit risk is not a serious problem.<sup>10</sup>

**Prepayment Risk.** Prepayment risk is potentially more serious. This is the risk to an investor that a 30-year mortgage will be paid before the full 30 years is concluded. Homeowners prepay for two major reasons: moving, and to obtain more favorable terms. As the cost of refinancing has declined over the last 10 years, the decline in interest rates necessary to justify refinancing (with or without cash out or financing improvements to the home) has been reduced. In recent years, the decline in mortgage rates has caused prepayment rates to increase. This results in uncertainty for lenders and the holders of MBSs.<sup>11</sup> When the GSEs create MBSs and sell them to investors, this is a risk for the investor, not the GSE. When GSEs keep the MBSs, this is a risk to them.

**Interest Rate Risk.** Interest rate risk comes from financing the MBS portfolios by borrowing money (issuing bonds), and is related to prepayment risk. In 2003, Fannie had \$962 billion of debt outstanding; Freddie had \$740 billion. Fannie and Freddie use short-term bonds and financial derivatives to finance long-term loans. University of California at Berkeley finance professor Dwight Jaffee has demonstrated how either an increase or decrease in market rates can cause the GSEs' unhedged portfolios to lose value.<sup>12</sup> When interest rates increase, they must roll over their bonds with higher-rate ones. When interest rates decrease, homeowners prepay their mortgages, and the GSEs buy new ones at lower rates. To minimize the losses that occur when interest rates

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<sup>9</sup> (...continued)

*Legislation*, by Mark Jickling.

<sup>10</sup> James R. Haggerty, "Mortgage-Securities Drop Will Depend on Economy," *The Wall Street Journal*, Sept. 17, 2005, p. B7.

<sup>11</sup> Since 1986, the GSEs have offered multiclass MBSs, which divide prepayment risk among the different classes. They are customized for investors to match their tolerance and preference for prepayment risk versus anticipated yield.

<sup>12</sup> Dwight Jaffee, "On Limiting the Retained Mortgage Portfolios of Fannie Mae and Freddie Mac," 2005, available at [<http://repositories.cdlib.org/iber/fcreue/fcwp/294/>].

change, the GSEs constantly use sophisticated portfolio management techniques, including derivative securities. One technique they have used involves selling callable bonds that give them the option to pay the bonds off before the stated maturity, much as mortgagors prepay mortgages.

Interest rate risk can be very serious. Many savings and loan associations became insolvent in the early 1980s because of it. During that time, Fannie Mae's portfolio was poorly hedged. According to Secretary Snow, "Fannie Mae became insolvent on a mark-to-market basis. Only a combination of legislative tax relief, regulatory forbearance, and a decline in interest rates allowed Fannie Mae to grow out of its problem."<sup>13</sup> Despite state-of-the-art hedging today, the GSEs' portfolios have significant interest rate risk.

Chairman Greenspan recently wrote: "Moreover, the success of interest-rate-risk management, especially the exceptionally rapid timing necessitated 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. Otherwise, large and destabilizing adjustments will result in sharp changes in the interest rates required to rebalance and hedge a portfolio."<sup>14</sup> In other words, if the GSEs have to make large adjustments to their portfolios, only very large financial institutions will be able to handle the other side of the financial transactions.

**Operational Risk.** Operational risk is the risk of loss due to inadequate or failed internal procedures and systems. It is addressed by the various reforms in the House and Senate bills that increase regulatory powers, and in S. 190 reducing the size of the GSEs' portfolios. A smaller portfolio would be easier to adjust because the size of transactions would be smaller. It would be possible to find more counterparties for these smaller transactions. In addition, the risk to the financial system from possible future accounting and other operational problems would be less with smaller enterprises. Limitations on portfolio size are consistent with other changes in the proposed legislation.

Fannie Mae's current accounting problems, and those of Freddie Mac in 2003, raise questions about internal controls. Accounting systems provide the basis for portfolio adjustment decisions. If the accounting system is providing inaccurate information, the resulting portfolio adjustment decisions are likely to be incorrect.

Chairman Greenspan has raised the concern that as the GSEs' portfolios have grown, the size and number of transactions needed to rebalance their portfolios have increased. As the size of the adjustments required has increased, the number of financial institutions that can meaningfully participate has decreased.

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<sup>13</sup> U.S. Department of Treasury, "Testimony of Secretary John W. Snow Before the U.S. Senate Committee on Banking, Housing and Urban Affairs. Proposals for Housing GSE Reform," press release, April 7, 2005, p. 4, at [<http://www.treas.gov/press/releases/js2362.htm>]. See also, the Miscellaneous Revenue Act of 1982 (P.L. 97-372, 96 Stat.1726 et seq.), especially Section 102, titled "Adjustment to Net Operating Loss Carryback and Carryforward Rules for Federal National Mortgage Association."

<sup>14</sup> Letter from Alan Greenspan, Chairman of the Federal Reserve, to the Honorable Robert F. Bennett, U.S. Senate, Sept. 2, 2005, p. 1, at [<http://online.wsj.com/public/resources/documents/Greenspan091505.pdf>].

## Reducing Systemic Risk

At a summary level, risk has two dimensions: the probability that the event will occur and the cost if it does. A complete approach to reducing risk works on both aspects. Reducing the size of the portfolios would reduce both dimensions. With smaller portfolios, the GSEs would be able to adjust more nimbly to changing financial markets. The cost of bailing them out would, also, be reduced. Chairman Greenspan summarized the potential for both concerns when he wrote:

Today, the U.S. financial system is highly dependent on the risk-managers at Fannie and Freddie to do everything right.... The concentrations of mortgage-backed securities at Fannie and Freddie are well beyond what market forces would normally allow because there are no meaningful limits to the expansion of the GSEs' portfolios, which are funded with debt that the market believes to be federally guaranteed.<sup>15</sup>

That is, the implied guarantee allows the GSEs to grow without the usual market forces that would raise their costs as their risks rose. As a result, Fannie and Freddie represent significant systemic risk to the nation's financial system, both because they can make mistakes and because their size and concentration raise the likelihood of high costs for the economy when they do.

Reducing the seriousness of the systemic risk requires reducing the size of the implied guarantee. Some have proposed complete privatization of the GSEs, such as occurred for the college student loan market when Sallie Mae gave up its congressional charter and became entirely private. This would totally eliminate the implied guarantee. The GSEs would be subject to market forces that might drive them to reduce the size of their portfolios. This option is not currently before Congress. Closer regulation along the lines proposed in H.R. 1461 and S. 190 would reduce much of the operational risk, but risks coming directly from the size of the portfolios of mortgages and retained MBSs would remain as long as the portfolios remain larger than necessary to provide a liquid secondary mortgage market.

While it is true that this would distribute the risk more widely, this is less of a concern because the cost of a bailout would be less for any one company. In addition, it is likely that these other companies would use simpler ways to fund their portfolios, which would reduce the risk of hedging errors.

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<sup>15</sup> Letter from Alan Greenspan, Chairman of the Federal Reserve, to the Honorable Robert F. Bennett, U.S. Senate, Sept. 2, 2005, pp 1-2, at [<http://online.wsj.com/public/resources/documents/Greenspan091505.pdf>].