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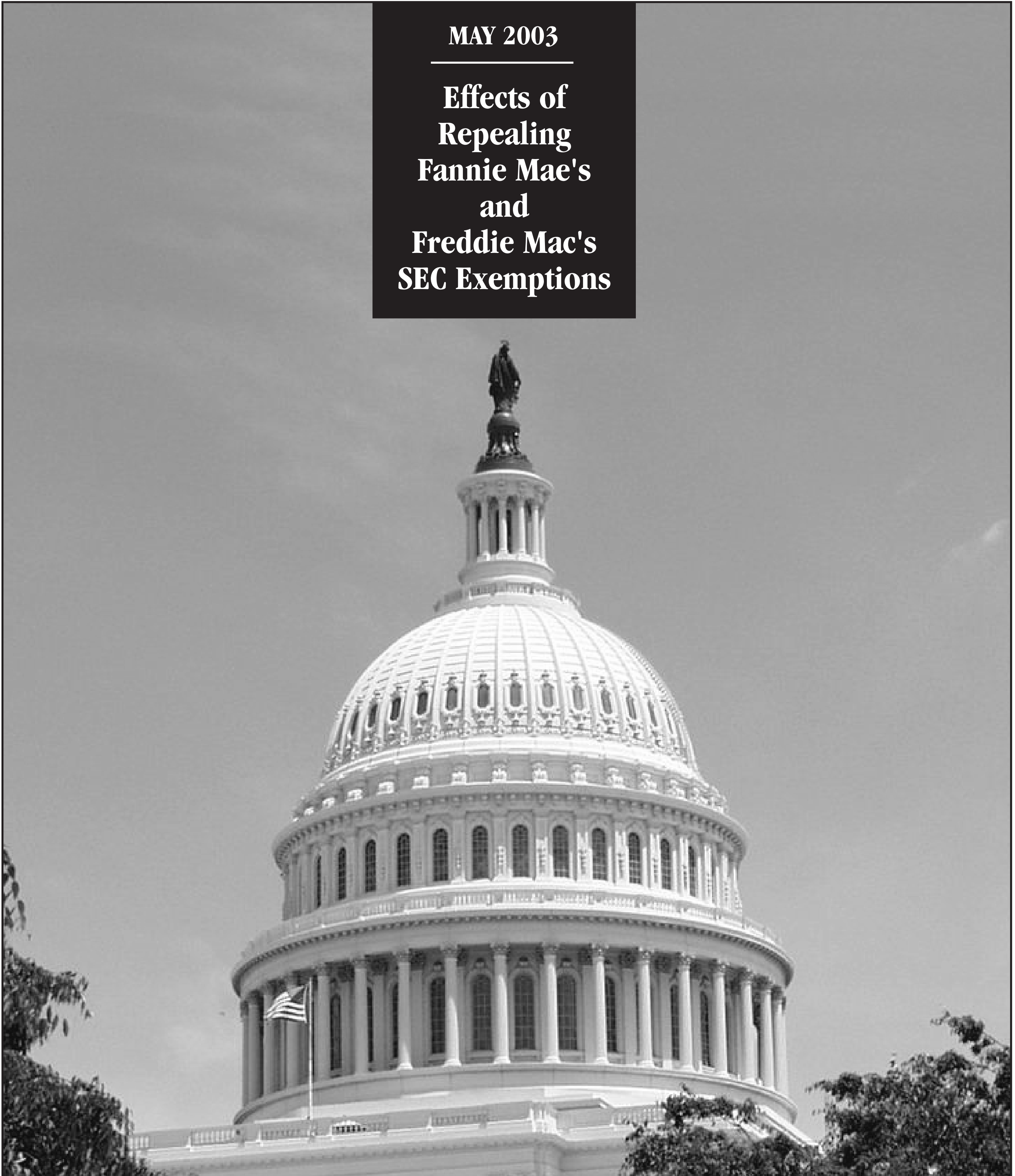

MAY 2003

Effects of Repealing Fannie Mae's and Freddie Mac's SEC Exemptions

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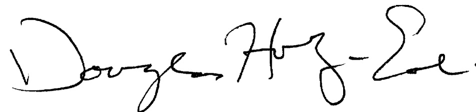
Preface

This Congressional Budget Office (CBO) paper, prepared at the request of Congressmen Christopher Shays and Edward Markey, analyzes the likely economic effects of a proposal to repeal Fannie Mae's and Freddie Mac's exemptions from the Securities and Exchange Commission's registration and disclosure requirements. In keeping with CBO's mandate to provide objective and impartial analysis, this report makes no recommendations.

David Torregrosa of CBO's Microeconomic and Financial Studies Division conducted the analysis, with contributions from Deborah Lucas, under the direction of Marvin Phaup and Roger Hitchner. Brian Doherty, Patrick Lawler, Forrest Pafenberg, David Pearl, and Robert S. Seiler Jr. of the Office of Federal Housing Enterprise Oversight; Ron Feldman of the Federal Reserve Bank of Minneapolis; Wayne Passmore of the Federal Reserve Board; and Mario Ugoletti of the Department of the Treasury provided helpful reviews. Charles Capone, William Gainer, Doug Hamilton, Arlene Holen, Ken Johnson, Angelo Mascaro, Robert Murphy, and Jennifer Smith—all of CBO—made useful suggestions. In addition, staff members of the Securities and Exchange Commission, Fannie Mae, and Freddie Mac provided assistance, as did Susan Woodward of Sand Hill Econometrics, Anne Canfield of the Consumer Mortgage Coalition, Andrew Davidson of Andrew Davidson & Co., and Mitch Flack of Metropolitan West Asset Management.

Edward Cowan and John Skeen edited the paper, and Christian Spoor proofread it. Rae Roy produced drafts of the manuscript, and Kathryn Winstead prepared the paper for publication. Annette Kalicki produced the electronic versions for CBO's Web site (www.cbo.gov).



Douglas Holtz-Eakin
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May 2003

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Summary

Fannie Mae and Freddie Mac are government-sponsored enterprises (GSEs), established and granted special exemptions and status by federal statute. Their primary purpose is to facilitate the flow of funds from the capital markets to finance housing. Congressmen Christopher Shays and Edward Markey have proposed repealing one of Fannie Mae's and Freddie Mac's privileges as GSEs: the exemptions from the Securities and Exchange Commission's (SEC's) registration and disclosure requirements. Enactment of that legislation, the Uniform Securities Disclosure Act (which was introduced but not adopted in the 107th Congress), would subject those GSEs to the legal requirements that apply to other publicly traded companies and to other issuers of private mortgage-backed securities (MBSs). Accordingly, those GSEs would be required to pay registration fees and to disclose information, as specified by the SEC, about their securities. Inasmuch as the new fees would amount to less than $25 per mortgage, most of the effects of repealing the exemptions would result from the new requirements for the GSEs to register their securities and to disclose information. Three types of GSE securities would be subject to the new requirements: common and preferred stock, debt, and MBSs.

Following the introduction of the legislation to repeal the exemptions, Fannie Mae and Freddie Mac have taken steps to comply voluntarily with some of the requirements that would result from enactment. Specifically:

- In July 2002, the GSEs announced that they would register their common stock under the Securities Exchange Act of 1934 and make the requisite disclosures for equity, and

- In accord with recommendations made by a multiagency task force in January 2003, the enterprises decided to disclose additional information about their MBS pools. For example, the enterprises will release loan-to-value ratios, borrowers' credit scores, the identities of the servicers of the loans, borrowers' use of properties (as a principal residence, second home, or investment), and the purposes of loans (to purchase or to refinance properties).

Registering those securities is expected to have little effect on the prices of the GSEs' stock because the enterprises were already disclosing detailed information on their overall financial condition and performance. Because investors in corporate debt rely on much the same information as equity investors, any new disclosures that would accompany the registration of debt would also have little effect on the prices of those securities. However, the new voluntary disclosures for MBSs may affect the market prices of those securities if they enable investors to predict more accurately the speed at which the mortgages will be paid off. In fact, the uncertain rate at which homeowners refinance or sell their homes and prepay their mortgage balances, or prepayment risk, is an important factor affecting the value of individual issues of MBSs. But whether the net effect will be higher or lower security prices is uncertain. To the extent that the new information is useful in identifying MBS issues with above- or below-average prepayment risk, the prices of those securities

would vary more widely—some rising, others falling, and many staying the same—reflecting differences in the characteristics of mortgage pools that affect prepayments and the value of the securities.

Increased disclosures about individual pools could also change investors' perceptions about the quality of the MBSs they are buying and perhaps reduce the discount resulting from a perceived risk of purchasing securities that (in terms of prepayment risk) are of below-average quality. A reduction in that "lemons" discount would raise the average price of MBSs.

Added disclosures by the GSEs could, however, cause some segmentation of the market for MBSs by prepayment risk. Rather than being valued as if prepayment risk were virtually the same for all issues of the same type (for example, securities based on a pool of 30-year fixed-rate mortgages) with the same interest rate and age, prices might reflect whether prepayments were expected to occur at below-average, average, or above-average rates. Finer differentiation of securities by risk of prepayment could lead to smaller volumes in submarkets, which could reduce liquidity and thereby lower prices for MBSs. The potentially offsetting effects of higher prices from a smaller lemons discount and lower prices from reduced market liquidity make the net effect on average prices ambiguous but probably small.

Fannie Mae and Freddie Mac have not elected to register their debt or MBS issues voluntarily. Voluntary disclosure is not equivalent to mandatory requirements to which the GSEs would be subject under the Shays-Markey bill. That legislation would make the GSEs' debt and MBSs subject to enforced disclosure requirements and fees and would reduce the enterprises' future discretion. Any further effects of that legislation on the GSEs' securities would depend on the specifics of the implementing regulations issued by the SEC.

Introduction

Fannie Mae and Freddie Mac are government-sponsored enterprises (GSEs), established by federal law in 1968 and 1970, respectively, to overcome then-existing legal and institutional impediments to the flow of funds for housing.[1] They act as financial intermediaries, raising funds in the capital markets and channeling the proceeds to lenders, who in turn provide financing for their customers. Fannie Mae and Freddie Mac are restricted to financing "conforming" mortgages, which are high-quality loans secured by residential real estate whose original principal amount is no greater than the conforming ceiling—$322,700 for single-family mortgages in 2003.[2] Loans above that limit are called "jumbo" loans and are bundled and sold in the capital markets by private issuers as "private-label" securities. Although the GSEs receive special benefits from the government and are restricted in the mortgages that they can finance, they are owned by private investors, to whom they have a fiduciary responsibility.

Fannie Mae and Freddie Mac supply funds to mortgage lenders in two ways. First, they borrow money by selling corporate debt securities and use the funds to purchase mortgages and mortgage-backed securities (MBSs). They profit from that activity because the income that they earn on those assets exceeds the interest that they must pay on debt plus their operating costs. Second, Fannie Mae and Freddie Mac guarantee investors against credit losses on securities backed by pools of conforming mortgages. Those GSE-guaranteed mortgage-backed securities can be held as investments by the sellers of the loans (in a "swap" transaction) or sold to investors, including Fannie Mae and Freddie Mac themselves.[3] The sale of pools of mortgages, packaged as standardized MBSs, provides lenders with a ready supply of mortgage financing. The GSEs receive fees from guaranteeing timely payment of principal and interest to the investors in the MBSs. (For more details, *see Box 1*.)

The Benefits of GSE Status

Current law treats the GSEs as instrumentalities of the federal government, rather than as fully private entities. As a consequence, they are afforded exemptions from many taxes, fees, and regulations; and for many purposes, their securities are treated as government securities. For Fannie Mae and Freddie Mac, GSE status starts with their federal statutory

1. Fannie Mae was originally created as a wholly owned government corporation (the Federal National Mortgage Corporation) in 1938, and its securities were federal obligations until 1968, when it was converted into a government-sponsored enterprise. Freddie Mac, or the Federal Home Loan Mortgage Corporation, was created in 1970 as part of the Federal Home Loan Bank System.

2. The conforming-loan limits are 50 percent higher in Alaska and Hawaii. Under law, the enterprises adjust the conforming ceiling annually for the change in house prices. In 2002, the ceiling was $300,700 on single-family residences. The two GSEs also finance multifamily mortgages.

3. In general, the GSEs purchase MBSs through dealers who serve as intermediaries. Some of those dealers are subsidiaries of the large originators of mortgages.

Box 1.

Understanding Mortgage-Backed Securities

Mortgage-backed securities (MBSs) are created when mortgages are packaged, or "pooled," and sold as securities. The mortgages in the pool generally are of the same type (fixed-rate or adjustable-rate mortgages), have fairly similar interest rates, and have the same maturities (30 years, 20 years, or 15 years) so that investors can estimate the cash flows as if the pool were a single mortgage.[1] In most cases, and particularly with pools of mortgages by a single lender, the mortgage originators pool the loans and then obtain a guarantee from either Fannie Mae or Freddie Mac, which evaluates the loans to ensure that they meet its credit quality standards. In those transactions, the lender is swapping the pool of loans for MBSs representing ownership in the same mortgages. Exchanging pools of mortgages for MBSs can be beneficial to a commercial bank or thrift because the securities have lower capital requirements and are more liquid. Often, the lender has already agreed to deliver the MBSs in the market for forward sales, the so-called To Be Announced market (*described in Box 3*).

The interest rate paid on the MBSs, the "pass-through" rate, is less than the mortgage interest rate on the underlying loans because borrowers are indirectly paying fees to mortgage servicers and the government-sponsored enterprises. Mortgage loan servicers (either mortgage originators or other parties) collect payments from borrowers, ensure

1. Linda Lowell, "Mortgage Pass-Through Securities," in Frank J. Fabozzi, ed., *The Handbook of Mortgage-Backed Securities*, 5th edition (New York: McGraw Hill, 2001), pp. 25-50. See also Fannie Mae, "Understanding Fannie Mae MBS,"available at www.fanniemae.com, and Freddie Mac, "Value in Gold PCs Fact Sheet," available at www.freddiemac.com/mbs/html/asp_gold.html.

charter, which exempts them from state and local income taxes (but not federal taxes or local property taxes) and enables them to use the Federal Reserve as their fiscal agent. In addition, the U.S. Treasury is authorized to lend $2.25 billion to each enterprise either through purchases of its securities or through direct lending. Like Treasury debt, debt issued by the GSEs is eligible for use by banks as collateral for both public deposits (for example, the Treasury's deposits)[4] and loans from Federal Reserve banks, for unlimited

4. States also allow debt issued by the GSEs to be used as collateral for state and local governments' deposits in commercial banks.

Box 1.

Continued

that borrowers' tax and insurance payments are current, and handle defaults. Borrowers do not deal directly with the enterprises. The originators pay Fannie Mae and Freddie Mac guarantee fees equal to a percentage of a pool's outstanding balance. Those fees averaged 19 basis points (0.19 percentage points) in 2001.[2]

While the government-sponsored enterprises are the sellers in the MBS market, the buyers are generally institutional investors—investment banks, commercial banks and thrifts, pension funds, and mutual funds. About 85 percent of the trades in that market are made by 20 percent of the investors; the retail market is negligible.[3] Most individuals who invest in MBSs do so through mutual funds. MBSs are attractive to investors because they offer buyers relatively safe and highly liquid investments with yields higher than those of comparable Treasury securities.

The size of a pool of mortgage-backed securities varies greatly, and investors may own all or part of the pool. As of September 2002, the average pool for Fannie Mae's MBSs included 58 loans with a combined principal balance of $8.2 million. Some pools had almost 300 loans, while others had as few as 10 loans. Such figures and averages vary over time.[4] The minimum value for most pools is $1 million.

2. Office of Federal Housing Enterprise Oversight, *Mortgage Markets and the Enterprises in 2001* (Revised/corrected September 16, 2002), pp. 42 and 58.
3. Personal communication to the Congressional Budget Office by Fannie Mae staff, September 13, 2002.
4. Ibid.

investment by federally chartered and insured banks and thrifts, and for purchase by the Federal Reserve in its open-market operations.[5] Finally, Fannie Mae and Freddie Mac—along with the Federal Home Loan Banks and the Farm Credit System (but not the Federal Agricultural Mortgage Corporation, which is known as "Farmer Mac")—are exempt by law from the registration and disclosure requirements that the Securities

5. Board of Governors of the Federal Reserve System, *Alternative Instruments for Open Market and Discount Window Operations* (December 2002), available at www.federalreserve.gov/boarddocs/surveys/soma/alt_instrmnts.pdf.

and Exchange Commission (SEC) imposes on nearly all other large privately owned issuers of publicly traded securities.[6] Fannie Mae and Freddie Mac are also the only issuers of publicly traded stock that are exempt.

If Fannie Mae and Freddie Mac were federal, rather than government-sponsored, agencies, those provisions would be unremarkable. But the enterprises are privately owned entities that have a possibility of insolvency. Although Fannie Mae is financially strong now, it experienced a series of losses in the early 1980s that could have caused the failure of a purely private firm.[7] The statutory provision for the U.S. Treasury to lend to the GSEs in time of financial distress acknowledges the risk of failure. Indeed, the Office of Federal Housing Enterprise Oversight (OFHEO), the safety and soundness regulator of Fannie Mae and Freddie Mac, was established to control GSEs' risks.

The GSEs receive two distinct but related benefits from their sponsored status.[8] First, regulatory and tax exemptions reduce their operating costs. Second, and far more important, their treatment in federal law is interpreted by investors as implying that the credit risk of GSE debt and MBSs is comparable to that of U.S. Treasury debt, which is regarded as the least risky debt in the financial markets.[9] As a consequence, GSEs' debt

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6. Section 304 of the Fannie Mae Charter Act of 1954 (codified at 12 U.S.C. 1719 (2000)) states, "[Securities] issued by the corporation . . . shall, to the same extent as securities which are direct obligations of or obligations guaranteed as to principal and interest by the United States, be deemed to be exempt securities within the meaning of the laws administered by the Securities and Exchange Commission." Freddie Mac's charter contains a nearly identical provision. Banks and thrifts are also exempt from registration requirements, although bank holding companies, which issue most bank securities, are not. In addition, state and local governments' securities are exempt.

7. Fannie Mae was insolvent on a mark-to-market basis; that is, the market value of its liabilities exceeded the market value of its assets. See Congressional Budget Office, *Controlling the Risks of Government-Sponsored Enterprises* (April 1991), p. 129.

8. The enterprises' charters also impose restrictions. For example, the enterprises cannot originate mortgages or buy a bank or thrift.

9. To interpret provisions of federal law as implying a federal guarantee of GSE debt and MBSs, investors must overlook a contrary provision in Fannie Mae's and Freddie Mac's charters: an explicit disavowal of federal responsibility. As stated in section 304 of the 1954 Fannie Mae Charter Act, Fannie Mae "shall insert appropriate language in all of its obligations . . . clearly indicating that such obligations, together with the interest thereon, are not guaranteed by the United States and do not constitute a debt or obligation of the United States or of any agency or instrumentality thereof other than the corporation" (codified at 12 U.S.C. 1719 (2000)). That requirement was explicitly extended to subordinated debt in 1968 and to MBSs and all of Freddie Mac's securities in 1992. Investors in subordinated debt are exposed to greater credit risk than other debt investors because their claims are paid last in the event of default.

issues are traded in the market for federal agencies' obligations, where interest rates are somewhat higher than those on Treasury debt but below those on the highest-quality private securities.

A Legislative Proposal to Repeal the GSEs' SEC Exemptions

The Uniform Securities Disclosure Act, or H.R. 4071—introduced on March 20, 2002, by Congressmen Christopher Shays and Edward Markey—would repeal Fannie Mae's and Freddie Mac's exemptions from the SEC's registration and disclosure requirements.[10] Accordingly, the two GSEs would be required to pay registration fees and to disclose information as specified by the SEC about their securities, just as other publicly traded companies and other issuers of private MBSs do. The bill does not include changes to other special provisions of law that favor the GSEs, nor does it refer to the Federal Home Loan Banks or the Farm Credit System, two GSEs that share the exemption on debt issues but that do not issue publicly traded stock or MBSs.[11]

On July 12, 2002, prior to legislative action on H.R. 4071, Fannie Mae and Freddie Mac reached an agreement with the SEC and OFHEO to register their common stock. Although registration was voluntary, Fannie Mae and Freddie Mac cannot terminate it. In addition, voluntary registration triggers mandatory disclosures and the SEC's review and enforcement authority.[12]

Fannie Mae registered its common stock when it filed its registration statement and first periodic financial report (its Form 10-K annual report, which contains audited financial statements) with the SEC on March 31, 2003, just as non-GSE firms do. Freddie Mac will register later in the year. Equity investors can obtain those filings through the SEC's electronic reporting system, known as EDGAR. In the interim, Freddie Mac's information is available on its Web site.

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10. A 1992 interagency report issued by the Department of the Treasury, the SEC, and the Federal Reserve had recommended that the GSEs' unsecured debt and equity be subject to the SEC's registration and disclosure requirements. See Department of the Treasury, Securities and Exchange Commission, and Board of Governors of the Federal Reserve System, *Joint Report on the Government Securities Market* (January 1992), p. 34.

11. Farmer Mac issues asset-backed securities and publicly traded stock; however, that GSE is subject to the SEC's registration and disclosure requirements. The Department of the Treasury has proposed that the Federal Home Loan Banks, which are owned by their member banks and thrifts, register their stock with the SEC. See Rob Garver, "Treasury Rejects FHLB Offer on Disclosure," *American Banker*, December 4, 2002, p. 1.

12. Letter from Paula Dubberly, Chief Counsel, Division of Corporate Finance, Securities and Exchange Commission, to Ann Kappler, Senior Vice President and General Counsel, Fannie Mae, July 12, 2002.

Voluntary registration under the Securities Exchange Act of 1934 rather than the Securities Act of 1933 offers the GSEs certain advantages.[13] For example, they were able to register one class of securities (common stock) without registering their preferred stock, debt, and MBSs.[14] Moreover, registrants under the Exchange Act pay no fees to the SEC. Further, with voluntary registration, not all of the legal requirements of that law may apply to the enterprises.[15]

Registration of those securities is expected to have little effect on the prices of GSE stock because the enterprises were already disclosing detailed information on their overall financial condition and performance in the form of monthly, quarterly, and annual reports and detailed information statements. Under voluntary registration, Fannie Mae and Freddie Mac will have to make all of the disclosures mandated by the Sarbanes-Oxley Act of 2002.[16] The companies also will voluntarily disclose transactions in company stock by corporate officers and directors.[17]

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13. Section 12(g) of the Securities Exchange Act of 1934 (codified at 15 U.S.C. 78l(g)) allows voluntary registration of any class of equity security—as opposed to particular issues—by firms that are not legally required to register with the SEC. Consequently, one registration covers any future issues of common stock. Firms register individual security issues under the Securities Act of 1933 (codified in various sections of title 15 U.S.C.).

14. Preferred stock pays a dividend that is fixed at the time of issuance. Those dividends are paid before dividends are distributed to common stockholders.

15. OFHEO has proposed a securities disclosure regulation—"Public Disclosure of Financial and Other Information"—that would virtually eliminate the remaining gaps, including those covering proxy statements and stock transactions by company directors and officers. See Office of Federal Housing Enterprise Oversight, "OFHEO Proposes Securities Disclosure Regulation for Fannie Mae and Freddie Mac" (press release, Washington, D.C., January 21, 2003).

16. The Sarbanes-Oxley Act (Public Law 107-204) enhances disclosure requirements and reduces to two business days the time for firms to report insider transactions to the SEC. The new law also requires a firm's chief executive and chief financial officer to personally certify its financial statements. See Mark Jickling, *The Sarbanes-Oxley Act of 2002: A Side-by-Side Comparison of House, Senate, and Conference Versions*, CRS Report for Congress RL31483 (Congressional Research Service, July 26, 2002).

17. Statement of Peter R. Fisher, Under Secretary for Domestic Finance, Department of the Treasury, before the Subcommittee on Capital Markets, Insurance, and Government Sponsored Enterprises of the House Committee on Financial Services, July 16, 2002. Freddie Mac had been making information about insider transactions available upon request since 1996 and began posting information about those transactions on its Web site as of April 26, 2002. Fannie Mae also began posting such information in April 2002.

Voluntary compliance with the disclosure requirements for debt that would be triggered by H.R. 4071 might not be a significant burden to the enterprises because few additional disclosures would be necessary.[18] That is because investors in the enterprises' debt generally rely on the same periodic financial disclosures already made for the enterprises' stock. However, SEC registration for those securities would entail additional administrative costs and some fee expenses.

The Basics of Mortgage-Backed Securities

Mortgage-backed securities are created when a financial institution originates mortgages and then, rather than holding the loans, pools them and sells shares of the pooled assets to investors. A mortgage-backed security differs from a debt security—an obligation of the issuer—in that it represents an ownership interest in the underlying loans. That ownership interest provides the investors a claim to a pro rata share of the interest and principal payments from a specified group of individual mortgages rather than a fixed stream of payments. Payments on MBSs vary depending on the rate at which borrowers sell their homes and pay off their loans or refinance their mortgages.

The value of a mortgage-backed security depends on the credit and prepayment risk of the pool. The potential credit risk on MBSs is reduced through diversification among many borrowers and various forms of credit enhancement, including mortgage and pool insurance, and the GSEs' guarantees of payment. Fannie Mae's and Freddie Mac's guarantees are backed by the capital of the agencies. Because of the perception of an implicit federal guarantee and the fact that investors in the GSEs' MBSs have never suffered losses from default, credit risk is not a major concern for investors in this market. In contrast, credit risk is a concern for investors in private-label MBSs. Prepayment risk, which is the major source of uncertainty in the cash flows from MBSs, however, is a concern for investors in both the GSEs' and private-label MBSs.

The market for the GSEs' MBSs is large and liquid. New issues have exploded. In 1990, the enterprises issued $171 billion of MBSs; in 2001, they issued $918 billion—$528 billion by Fannie Mae and $390 billion by Freddie Mac (*see Figure 1*). Those amounts

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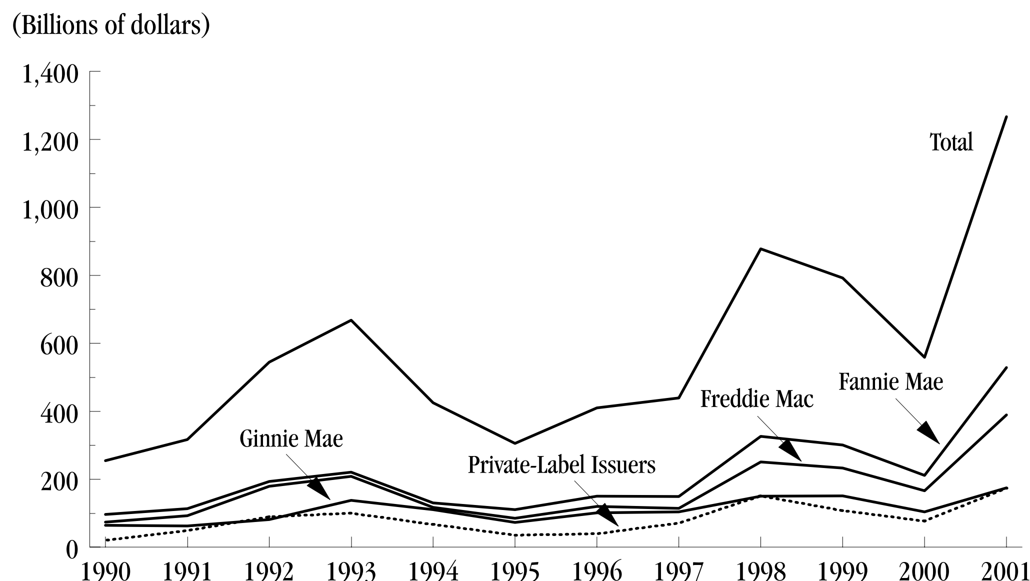
18. After policymakers had expressed interest in increased disclosures about risk, in October 2000 Fannie Mae and Freddie Mac announced six voluntary steps to increase their reporting. For example, the enterprises agreed to provide enhanced disclosures of interest and credit risk and to obtain an annual rating of their risk from one of the credit-rating firms and to disclose that to the government. See W. Scott Frame and Larry D. Wall, "Fannie Mae's and Freddie Mac's Voluntary Initiatives: Lessons from Banking," *Economic Review*, Federal Reserve Bank of Atlanta, vol. 87, no. 1 (2002), pp. 45-59; and Michael Fratantoni, "Fannie Mae's Voluntary Initiatives After 18 Months: A Report on Implementation and Policy Issues," *Fannie Mae Papers*, vol. 1, no. 4 (June 2002).

Figure 1.

New Issues of Mortgage-Backed Securities, 1990-2001

(Billions of dollars)



Sources: Office of Federal Housing Enterprise Oversight, *Mortgage Markets and the Enterprises in 2001* (Revised/corrected September 16, 2002), pp. 41 and 57; Bond Market Association, "Issuance of Agency Mortgage-Backed Securities, 1980-2002" (2002), available at www.bondmarkets.com/Research/mbsdat1.shtml; and Fannie Mae, "A Statistical Summary of Housing and Mortgage Finance Activities" (2002), available at www.fanniemae.com.

ran far ahead of the $174 billion of new issues in the private-label market in 2001 and the $175 billion of absorption of issues guaranteed by the federally owned Government National Mortgage Association, or Ginnie Mae.[19] At more than $2 trillion, the GSEs' outstanding MBSs are equal to about two-thirds of the U.S. public debt. Even though the enterprises are major investors in their own MBSs, retaining more than $730 billion in their portfolios, holdings by other investors exceed $1.5 trillion (*see Table 1*).

Prepayment Risk

Mortgage borrowers can generally prepay all or part of their debt at any time without penalty. That option for borrowers exposes investors in MBSs to a risk that they do not

19. The Department of Housing and Urban Development's Government National Mortgage Association guarantees privately issued securities that are backed by pools of mortgages insured or guaranteed by the Federal Housing Administration, Department of Veterans Affairs, and Rural Housing Service. Those federally guaranteed securities are exempt from the SEC's registration and disclosure requirements. For data on issues of Ginnie Mae securities, see Bond Market Association, "Issuance of Agency Mortgage-Backed Securities, 1980-2002" (2002), available at www.bondmarkets.com/Research/mbsdat1.shtml; and for data on private-label issues, see Fannie Mae, "A Statistical Summary of Housing and Mortgage Finance Activities" (2002), available at www.fanniemae.com/global/pdf/ir/resources/housingmortgage2002.pdf.

Table 1.

Fannie Mae's and Freddie Mac's Outstanding Mortgage-Backed Securities, 1981-2001

(In millions of dollars)

	Fannie Mae's Mortgage-Backed Securities			Freddie Mac's Mortgage-Backed Securities		
	Held by Investors	Retained in Portfolio	Total Outstanding	Held by Investors	Retained in Portfolio	Total Outstanding
1981	717	0	717	19,897	n.a.	n.a.
1982	14,450	0	14,450	42,952	n.a.	n.a.
1983	25,121	0	25,121	57,720	n.a.	n.a.
1984	35,738	477	36,215	70,026	n.a.	n.a.
1985	54,552	435	54,987	99,909	n.a.	n.a.
1986	95,568	1,606	97,174	169,186	n.a.	n.a.
1987	135,734	4,226	139,960	212,635	n.a.	n.a.
1988	170,097	8,153	178,250	226,406	n.a.	n.a.
1989	216,512	11,720	228,232	272,870	n.a.	n.a.
1990	288,075	11,758	299,833	316,359	n.a.	n.a.
1991	355,284	16,700	371,984	359,163	n.a.	n.a.
1992	424,444	20,535	444,979	407,514	6,394	413,908
1993	471,306	24,219	495,525	439,029	15,877	454,906
1994	486,345	43,998	530,343	460,656	30,670	491,326
1995	513,230	69,729	582,959	459,045	56,006	515,051
1996	548,173	102,607	650,780	473,065	81,195	554,260
1997	579,138	130,444	709,582	475,985	103,400	579,385
1998	637,143	197,375	834,518	478,351	168,108	646,459
1999	679,169	281,714	960,883	537,883	211,198	749,081
2000	706,684	351,066	1,057,750	576,101	246,209	822,310
2001	858,867	431,484	1,290,351	646,448	301,961	948,409

Source: Congressional Budget Office based on Office of Federal Housing Enterprise Oversight, *Mortgage Markets and the Enterprises in 2001* (Revised/corrected September 16, 2002), pp. 44, 46, 60, and 62.

Note: n.a.= not available.

face when holding noncallable debt securities.[20] That risk arises because, unlike noncallable debt instruments, which promise a series of predetermined payments from the issuer to investors, MBSs pay investors shares of the often uneven and somewhat unpredictable cash flows from the underlying pool of mortgages. The major source of the uncertainty about those cash flows is the speed with which borrowers—the homeowners—will prepay the mortgages in the pool.

20. Investors in callable debt bear call risk. Call risk is similar to prepayment risk, but determining the trigger level at which it makes economic sense for a firm to exercise a call is easier than assessing prepayment risk.

Box 2.

What Determines Whether Borrowers Prepay Single-Family Mortgages?

The actual cash flows to investors from mortgage-backed securities (MBSs) depend on the speed at which loans in a pool are paid off as homeowners refinance or sell their homes, that is, the prepayment rate. A higher prepayment rate means that investors get their money back more quickly. Because the value of an MBS pool depends on the timing of cash flows, analysts have developed models to predict prepayment speeds for different mortgage-backed securities.[1]

Movements in interest rates are the most important determinant of borrowers' prepayments. Borrowers are more likely to refinance and prepay their mortgages when rates fall sharply than when rates are unchanged or rise. Loan-specific factors also affect prepayments.[2] In general, borrowers holding mortgages with larger loan balances are more likely to prepay in response to a decline in interest rates than are borrowers with smaller balances. Borrowers with bigger loans save more by refinancing at lower rates. In addition, borrowers with more equity in their homes are more likely to prepay, for several reasons. First, they will find qualifying for refinancing easier than will borrowers with little equity. Second, they have more equity to take

1. Prepayment models vary in their reliability and accuracy. See Michael Bykhovsky, "Overview of Recent Prepayment Behavior and Advances in Its Modeling," in Frank J. Fabozzi, ed., *The Handbook of Mortgage-Backed Securities*, 5th edition (New York: McGraw Hill, 2001), pp. 365-378.

2. In Freddie Mac's view, pooling smooths out a lot of the loan-specific determinants of prepayments, and prepayment risk is largely a function of future interest rates rather than of variability among loans. Hence, by that view, if the sizes of pools are sufficiently large, additional new disclosures about loans' characteristics will add only marginally to assessments of prepayment risk. Personal communications to the Congressional Budget Office by Freddie Mac staff, December 12, 2002, and January 13, 2003.

Borrowers are especially likely to prepay and refinance their homes when interest rates fall because refinancing at lower rates saves them money. When that happens, MBS investors get some of their money back sooner than expected and then face less desirable opportunities for reinvesting because of the lower prevailing interest rates.[21] Conse-

21. Investment bankers often unbundle, or separate, principal payments and interest flows. The early return of principal is always good for investors; investors in principal-only securities gain from higher prepayment rates. The loss arises from the termination of the interest stream; investors in interest-only

Box 2.

Continued

out of their homes in "cash out" refinancings, which accounted for more than half of the 11.2 million refinancings in 2001.[3] Third, they are more likely to sell their residence and move to a more expensive one. Consequently, prepayment rates are sensitive to loan-to-value (LTV) ratios. Borrowers with higher LTVs (less equity) are often less likely to prepay. Prepayments are also more likely in areas with rapidly rising home values, which raise homeowners' equity and lower LTV ratios.

A number of other factors also affect prepayment rates. State laws can come into play; for example, New York's tax on refinanced mortgages slows prepayments in that state. Borrowers' creditworthiness and the proportion of loans to subprime borrowers, who are more likely to prepay if their credit standing improves, also have a bearing—as does the seasoning of loans (the time since origination).[4] Prepayment speeds typically increase for about 30 months after origination and then stabilize. Finally, a sharp decline over the past five years in the transaction cost of refinancing, driven by automated underwriting and other technology, has provided an incentive for borrowers to prepay.[5]

3. See Akash Deep and Dietrich Domanski, "Housing Markets and Economic Growth: Lessons from the U.S. Refinancing Boom," *BIS Quarterly Review* (September 2002), pp. 37-44.
4. Subprime borrowers prepay and default more frequently than prime borrowers do, but when interest rates drop, prime borrowers refinance more frequently than subprime borrowers do. See Anthony Pennington-Cross, *Patterns of Default and Prepayment for Prime and Nonprime Mortgages*, Working Paper 02-1 (Office of Federal Housing Enterprise Oversight, March 2002), available at www.ofheo.gov/docs/working/02-1cross.pdf.
5. See Deep and Domanski, "Housing Markets and Economic Growth," pp. 37-44.

quently, the likelihood of prepayment of the mortgages in a pool of MBSs is an important determinant of expected cash flows and hence the value of the securities. Investors are also at risk when rates rise and borrowers pay off mortgages more slowly than expected

securities are the big losers from an unanticipated increase in prepayment rates. Prepayment risk can also be differentially allocated through structured MBSs that divide cash flows from a pool of mortgages into multiple classes with different maturities or risk profiles. Investors can also hedge against prepayment risk in a variety of ways. See Roger W. Ferguson Jr., Vice Chairman of the Federal Reserve Board, "Financial Engineering and Financial Stability" (address given at the Annual Conference on the Securities Industry, New York, N.Y., November 20, 2002).

—extension risk. Thus, unexpected changes in interest rates in both directions can hurt MBS investors. (*See Box 2 on pages 10 and 11* for further discussion of factors affecting borrowers' prepayments.)

Although prepayment risk is an important factor affecting the value of the GSEs' and private- label mortgage-backed securities, the former have generally traded as though that risk were virtually the same for all issues of the same type (for example, securities based on 30-year fixed-rate mortgages) with the same interest rate and seasoning, or time since origination. That homogeneity in prices is particularly evident when the MBSs are first sold in what is known as the To Be Announced (TBA) market. That market currently prices new MBSs before the underlying pools are assembled; prices are based on the interest rate to be passed through to investors, which is disclosed in advance by the pooler (*see Box 3* for a description of the TBA market). Consequently, the TBA market prices MBSs without specific information about the composition of the loan pools, including factors that affect prepayment risk.

Increasing Demand for Disclosures About MBSs

Investors' demand for information about securities depends on their ability to use it to value those investments. Until recently, there was little demand for detailed information about mortgage pools that might permit investors to differentiate among MBS issues on the basis of prepayment risk. Investors may have believed either that prepayments were equally likely on all MBSs or that any systematic differences in prepayment risk among MBSs could not be identified.

Three changes in the MBS market have increased investors' demand for information about GSEs' mortgage pools: increased diversity in the composition of pools, improved information technology, and the growing role of Fannie Mae and Freddie Mac as investors in MBSs. That growing role has the potential to disadvantage other investors because of the GSEs' greater access to information.

First, the loans eligible for pooling have become less homogeneous with increases in the conforming loan limit and the addition of loans to borrowers with higher credit risks. The enterprises can now purchase mortgages of up to $322,700, reflecting an increase of more than $95,000 in five years (*see Figure 2*); and Fannie Mae and Freddie Mac are now including in the mortgage pools limited numbers of mortgages from borrowers whose credit histories are blemished or who have little or no credit history and loans from

Box 3.

Understanding the "To Be Announced" Market

Most of the mortgage-backed securities (MBSs) that Fannie Mae and Freddie Mac guarantee are traded initially in the "To Be Announced" (TBA) market, as are issues guaranteed by the Government National Mortgage Association, or Ginnie Mae. That market prices new MBSs before the underlying pools are assembled and even before all of the loans have been originated. The liquidity and certainty of prices that the TBA market offers lenders makes them more willing to offer buyers a firm interest rate at the beginning of the loan process.

Specifically, the TBA market is a "forward" market in which lenders promise to deliver in the future—generally, in 30, 60, or 90 days—a package of loans that meets the government-sponsored enterprises' purchase requirements. The terms of delivery to the TBA market are generic, so the lenders pooling the loans do not need to have all the information about the loans at the time they commit to sell. Two days before delivering the package of loans, the sellers identify the specific pools of mortgages to be delivered to satisfy the commitment.[2] The assumption held by both buyers and sellers is that individual securities of the same type, interest rate, and maturity are interchangeable, so the transactions do not need to rely on loan-specific information. That lack of differentiation lowers transaction costs, increases liquidity, and facilitates efficient settlement. Because the price of the loans has been fixed before delivery, lenders can offer home buyers the opportunity to lock in a rate before the closing.

Private-label MBSs do not trade in the TBA market; however, borrowers who take out jumbo mortgages can still lock in their rates prior to closing. Lenders of those mortgages commit to rates in advance because they can take positions in the TBA market to hedge their interest rate exposure. Because of the varying credit and other risks of private-label issues, the market sets prices for those MBSs individually. Some forward trading of jumbo MBSs exists, but the loans have been made before the pools are formed. In that market, prices can be renegotiated if the delivered pool of loans is significantly different from the one described in the offering prospectus.

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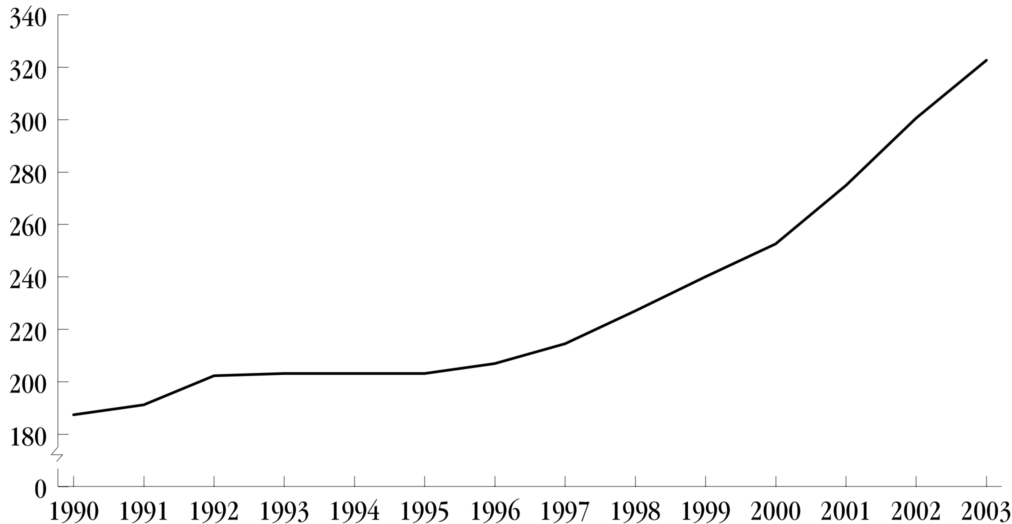
1. The TBA market also allows for stipulated trades so that an investor who wants certain characteristics in a pool of mortgages, such as loans in a particular area or of a particular size, can request them.

2. For a discussion of how this forward market works for Fannie Mae's and Freddie Mac's MBSs, see Jeffrey D. Biby, Srinivas Modukuri, and Brian Hargrave, "Trading, Settlement and Clearing Procedures for Agency MBS," in Frank J. Fabozzi, ed., *The Handbook of Mortgage-Backed Securities*, 5th edition (New York: McGraw Hill, 2001), pp. 105-114.

Figure 2.

The Conforming-Loan Limit for Single-Family Loans, 1990-2003



Source: Federal Housing Finance Board.

Note: The limit on conforming loans for single-family homes is 50 percent higher in Alaska and Hawaii.

borrowers who generally do not meet the standards for the lowest mortgage rates.[22] The GSEs are also increasing the number of loans with low down payments. As a consequence, MBS pools are growing more diverse with respect to factors that can affect prepayment rates, especially loan size and borrowers' credit quality. That development raises the

22. Fannie Mae and Freddie Mac have started buying loans made by traditional lenders to borrowers with a credit quality of A- rather than exclusively purchasing loans made to borrowers with the top credit rating of A. Although disagreement exists over what constitutes subprime loans, Freddie Mac places loans with A- standing in its MBSs but separately securitizes the subprime loans with lower credit ratings, discloses that information, and keeps those pools out of the TBA market. At the end of 2001, subprime mortgages were less than 2 percent of Freddie Mac's total portfolio. See Freddie Mac, "Information Statement," March 29, 2002, p. 6, available at www.freddiemac.com/investors/infostat/. Fannie Mae does not categorize loans in that manner or release similar statistics. The enterprises also guarantee Alternative-A loans, which are ones with little documentation. Such loans are often made to self-employed individuals and others whose income is difficult to verify but who otherwise have credit scores high enough for the standing. Also, some prime borrowers choose low-documentation loans simply to streamline refinancing. The enterprises generally provide greater disclosures on MBSs composed of Alternative-A loans.

value of more-detailed information about mortgage pools that could be used in predicting prepayment rates.[23]

Second, improved information technology has given analysts the ability to use more information to predict prepayments. In addition, the advent of electronic mortgage application and processing systems gives the originators and the GSEs' an ability to quickly process detailed information about the underlying mortgages.[24] Those technical advances increase the value of information that can be used to estimate prepayment risk.

In fact, lower costs of processing information have enabled large originators and poolers to sort their loans and create customized pools that are based on the characteristics of individual loans, including prepayment risk. Such pools are more valuable than those that are undifferentiated and delivered to the generic To Be Announced market.[25]

Third, the enterprises are now the largest investors in their own mortgage-backed securities. Some institutional investors believe that they could be at an informational disadvantage compared with the large originators of the mortgages and the GSEs.[26] Fannie

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23. Bear, Stearns & Co., "Converging Prepayments Make Non-Agency MBS Attractive Versus Agencies," *Non-Agency Mortgage Research*, May 29, 2001.

24. See Andrea Heuson, Wayne Passmore, and Roger Sparks, "Credit Scoring and Mortgage Securitization: Implications for Mortgage Rates and Credit Availability," *Journal of Real Estate Finance and Economics*, vol. 23, no. 3 (2001), pp. 337-364; Wayne Passmore and Roger W. Sparks, "Automated Underwriting and the Profitability of Mortgage Securitization," *Real Estate Economics*, vol. 28 (2000), pp. 285-305; and Wayne Passmore and Roger W. Sparks, "Putting the Squeeze on a Market for Lemons: Government-Sponsored Mortgage Securitization," *Journal of Real Estate Finance and Economics*, vol. 13, no. 1 (1996), pp. 27-43.

25. According to current estimates, about 20 percent of the volume of MBSs is diverted into customized pools rather than sold in the generic TBA market. Prices in that secondary market adjust monthly as information on actual prepayment rates is released, allowing investors to recalibrate their models. Personal communication to the Congressional Budget Office by Fannie Mae staff, December 10, 2002. Investors can also request that dealers sell them MBSs with particular characteristics, and they pay a premium for those MBSs. Personal communication to the Congressional Budget Office by Mitch Flack, Metropolitan West Asset Company, October 30, 2002. See also Bear, Stearns & Co., "Adverse Loan Selection and the True TBA Market," *Mortgage Research*, April 12, 2001.

26. See Shadow Financial Regulatory Committee, "Statement on Shays-Markey Bill on GSE Disclosure," Statement No. 178 (May 6, 2002), available at www.aei.org/publications/pubID.15128/pub_detail.asp; Consumer Mortgage Coalition, "H.R. 4071, the Uniform Securities Disclosure Act: Increasing Information About Fannie Mae and Freddie Mac for Investors" (issue paper, Washington, D.C., April 22, 2002); and Tommy Fernandez, "MBS Market Controversy: GSEs' Information Edge?" *American Banker*, August 23, 2002.

Table 2.

Selected Details on Fannie Mae's and Freddie Mac's Retained Mortgage Portfolios, 1981-2001

(In millions of dollars)

	Fannie Mae's Retained Mortgage Portfolio				Freddie Mac's Retained Mortgage Portfolio			
Year	Loans Not Pooled	Fannie Mae's MBSs	Freddie Mac's MBSs	Total Retained Mortgage Portfolio[a]	Loans Not Pooled	Freddie Mac's MBSs	Fannie Mae's MBSs	Total Retained Mortgage Portfolio[a]
1981	61,411	0	n.a.	61,412	n.a.	n.a.	n.a.	5,178
1982	71,777	0	n.a.	71,814	n.a.	n.a.	n.a.	4,679
1983	77,983	0	n.a.	78,256	n.a.	n.a.	n.a.	7,485
1984	87,205	477	n.a.	88,109	n.a.	n.a.	n.a.	10,018
1985	97,421	435	n.a.	98,649	n.a.	n.a.	n.a.	13,547
1986	94,167	1,606	n.a.	97,833	n.a.	n.a.	n.a.	13,093
1987	89,618	4,226	n.a.	96,746	n.a.	n.a.	n.a.	12,354
1988	92,220	8,153	n.a.	103,013	n.a.	n.a.	n.a.	16,918
1989	95,729	11,720	n.a.	110,721	n.a.	n.a.	n.a.	21,448
1990	101,797	11,758	n.a.	116,628	n.a.	n.a.	n.a.	21,520
1991	109,251	16,700	n.a.	128,983	n.a.	n.a.	n.a.	26,667
1992	134,597	20,535	n.a.	158,119	n.a.	6,394	n.a.	33,629
1993	163,149	24,219	n.a.	190,861	n.a.	15,877	n.a.	55,938
1994	170,909	43,998	564	225,057	n.a.	30,670	n.a.	73,171
1995	171,481	69,729	3,233	253,511	43,753	56,006	n.a.	107,706
1996	167,891	102,607	3,623	287,052	46,504	81,195	n.a.	137,826
1997	160,102	130,444	5,262	316,678	48,454	103,400	n.a.	164,543
1998	155,779	197,375	23,453	414,515	57,084	168,108	3,749	255,670
1999	149,105	281,714	25,577	523,941	56,676	211,198	13,245	322,914
2000	152,505	351,066	33,290	610,122	59,240	246,209	28,303	385,451
2001	165,957	431,484	42,921	707,476	62,792	301,961	69,972	494,585

Source: Congressional Budget Office based on Office of Federal Housing Enterprise Oversight, *Mortgage Markets and the Enterprises in 2001* (Revised/corrected September 16, 2002), pp. 46, 48, 62, and 64.

Notes: MBS = mortgage-backed security; n.a.= not available.

a. Includes mortgage-related securities held by Fannie Mae and Freddie Mac that are not shown in this table.

Mae's holdings of its own MBSs increased from $103 billion in 1996 to $431 billion in 2001 (*see Table 2*). Freddie Mac's holdings of its own MBSs shot up from $81 billion to $302 billion over that five-year period. As a result, the GSEs' share of the total outstanding issues doubled during that time span, and each now holds more than 30 percent of the securities that it has guaranteed.[27]

27. Fannie Mae's share of its own MBSs increased from 16 percent of the securities that it guaranteed to 33 percent between 1996 and 2001. Freddie Mac's share increased from 15 percent to 32 percent over that five-year period. CBO's calculations are based on data in Office of Federal Housing Enterprise

Fannie Mae and Freddie Mac deny that they trade on the basis of their superior information and point to the "information firewalls" that exist between their trading desks and the rest of the company so that employees making investment decisions on MBSs do not have access to loan-level data. In addition, the enterprises' opportunity to gain from their superior information may be limited because most of their purchases occur in the TBA market before the pools have been fully assembled and generally follow a buy-and-hold strategy. Moreover, no evidence of a breach of the firewalls has surfaced.[28]

New Disclosures in the MBS Market

On February 3, 2003, a joint task force consisting of staff from the Department of the Treasury, the Office of Federal Housing Enterprise Oversight, and the Securities and Exchange Commission released a report including recommendations for new disclosures to the GSEs' MBS market.[29] Subsequently, the enterprises agreed to disclose additional information about—but not register—their MBSs. That agreement continued the trend toward increased disclosures to investors in the GSEs' mortgage-backed securities.

The GSEs' Disclosures for MBSs Before 2003

Fannie Mae and Freddie Mac have always been subject to antifraud provisions of federal securities law, including rule 10b-5 under the Securities Exchange Act of 1934. Those provisions require the enterprises to disclose material facts to investors and prohibit fraudulent and deceptive practices. Accordingly, the GSEs have provided data on prepayments for generic classifications of MBSs (for example, pools of 7.0 percent interest, 30-year fixed-rate mortgages).[30] In addition, Fannie Mae and Freddie Mac have disclosed the weighted-average coupon (WAC)[31]; the weighted-average remaining maturity (WARM); the weighted- average loan age (WALA); the weighted-average original loan term (WAOLT); and the identity of the pooler. They have also provided the distributions

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Oversight, *Report to Congress* (June 15, 2002), Table 4, p. 102, Table 5, p. 103, Table 14, p. 113, and Table 15, p. 114.

28. See Department of the Treasury, Office of Federal Housing Enterprise Oversight, and Securities and Exchange Commission, *Enhancing Disclosure in the Mortgage-Backed Securities Markets* (January 2003), pp. 40-42 and 46, available at www.treas.gov/press. See also Credit Suisse/First Boston, "Mortgage Relative Values," *Securitized Assets Research*, February 15, 2002; and "Hard to Tell If GSEs Are Cherry Picking Own MBSs," *Inside the GSEs*, September 25, 2002, p. 5.

29. The study did not address registration issues and did not imply that registration was needed to enhance disclosure. Department of the Treasury, Office of Federal Housing Enterprise Oversight, and Securities and Exchange Commission, *Enhancing Disclosure in the Mortgage-Backed Securities Markets*.

30. Pool-by-pool prepayment data are widely available through Bloomberg to all investors.

31. The coupon is the annual interest paid and is normally stated in terms of the face value of a security.

of mortgages by state and by year of origination and the average original loan size (AOLS). In addition, they report changes in WACs and WARMs and actual prepayments on individual MBSs. Both GSEs also disclose updated distributions of loan size, and Freddie Mac provides monthly loan delinquency rates.

Private-Label Issuers' Disclosures for MBSs

Issuers of MBSs backed by mortgages not eligible for purchase by Fannie Mae and Freddie Mac, that is, private-label issuers, who are subject to the SEC's oversight, provided more information to their investors at issuance than the GSEs did before April 1, 2003. For example, private-label issuers generally reported and still report both the weighted average and the distributional ranges for loan-to-value ratios; the credit quality of borrowers as measured by the Fair, Isaac, and Company's (FICO) scores; the eligibility of loans for credit under the Community Reinvestment Act (Public Law 95-128); and the location of properties (sometimes by zip code).[32] Private issuers also disclose the purpose of loans (to refinance an existing loan, to refinance and pull the equity out, or to make a new purchase), the originators of the loans, documentation levels (details about borrowers' income, debt, and wealth) for loans, and delinquency history.[33] Loans that are subprime or Alternative-A loans may also be identified. Such extensive disclosure about borrowers informs the market for private-label MBSs about credit risk. Investors in private-label issues generally must look to borrowers rather than issuers for payments.[34]

The GSEs' New Disclosures for MBSs

On April 1, 2003, Fannie Mae voluntarily began releasing both the weighted average and quartile loan-to-value ratios and borrowers' credit scores for the loans making up

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32. Paul Bennett, Richard Peach, and Stavros Peristiani, "How Much Mortgage Pool Information Do Investors Need?" *Journal of Fixed Income*, vol. 11, no. 1 (June 2001), pp. 8-15.

33. For information on private-label issues, see Eric Bruskin, Anthony Sanders, and David Sykes, "The Nonagency Mortgage Market: Background and Overview" (April 1999), available at http: //fisher.osu.edu/ ~sanders_12/ch1c.pdf; see also Frank J. Fabozzi and others, "Nonagency CMOs," in Frank J. Fabozzi, ed., *The Handbook of Mortgage-Backed Securities*, 5th edition (New York: McGraw Hill, 2001), pp. 267-280. For a comparison of disclosures, see Merrill Lynch, *The Mortgage Investor*, July 17, 2002, p. 4.

34. Private-label MBSs typically are issued as "structured" securities that reallocate the cash flows from a pool or pools of mortgages. Structured, or multiclass, securities are designed to meet investors' specific requirements concerning prepayments or credit risk. Other forms of credit enhancements, including third-party guarantees, can reduce credit risk. See Mortgage Research Group Lehman Brothers, "Collateralized Mortgage Obligations," in Frank J. Fabozzi, ed., *The Handbook of Mortgage-Backed Securities*, 5th edition (New York: McGraw Hill, 2001), pp. 169-195.

its MBS pools.[35] The enterprise also began identifying the servicers for the pools, the occupancy status of the properties (borrowers' use of properties as a principal residence, second home, or investment property), property types (single unit dwellings, or two- to-four unit dwellings), and the purpose of the mortgages (to purchase or to refinance properties). Freddie Mac will begin making those same disclosures in June 2003. Such disclosures will largely be made after sales because most securities are initially sold in the To Be Announced market before such information is available.[36]

Some market participants had requested additional disclosures, including the points paid by borrowers, the level of loan documentation, and borrowers' debt-to-income ratios. While the interagency task force recognized some difficulties and limitations of that information, it believed that the enterprises should consider making those additional disclosures.[37]

Effects of New Disclosures on the MBS Market

The new voluntary disclosures by Fannie Mae and Freddie Mac could help investors better estimate prepayment risk on the GSEs' mortgage-backed securities. Increased disclosure on individual MBS pools, therefore, could reduce any "lemons" discount that investors might require as compensation for uncertainty about the quality of those securities (mainly the prepayment risk). The added disclosures by the GSEs might also segment the market by quality. If so, each submarket necessarily would have less volume than the entire market, and liquidity might be adversely affected. However, such effects are hard to estimate. The potentially offsetting effects of a smaller lemons discount and reduced market liquidity make it impossible to predict whether the net effect of new disclosures will be to raise or lower the prices of MBSs.

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35. See Fannie Mae, "Fannie Mae Announces Additional Disclosures on MBS" (press release, Washington, D.C., February 3, 2003); a sample disclosure for MBSs is available at www.fanniemae.com. See also Freddie Mac, "Freddie Mac to Expand Mortgage Participation Certificate Disclosures" (press release, McLean, Va., February 3, 2003), and "Freddie Mac Provides Formats and Details Around Expanded Mortgage Participation Disclosure" (press release, McLean, Va., February 13, 2003), available at www.freddiemac.com/news/archives2003/index.html.

36. In 1998, about 90 percent of the transactions, as measured by total dollar volume, were executed in the TBA market. See Bond Market Association, "TBAs: To-Be-Announced Mortgage Securities Transactions" (1999), available at www.bondmarkets.com.

37. Department of the Treasury, Office of Federal Housing Enterprise Oversight, and Securities and Exchange Commission, *Enhancing Disclosure in the Mortgage-Backed Securities Markets*, pp. 45-46.

Possible Effects on the "Lemons" Discount

The discount that buyers demand to offset the perceived risk of purchasing MBSs that have higher prepayment risk is referred to as a lemons price discount (or yield premium).[38] If the new voluntary disclosures change investors' perceptions of the appropriate size of that discount, the market price of MBSs will change. If investors discover that the current discount is too high, for example, market prices will rise. Or if investors feel more certain about the extent to which the best securities may be being withheld, the lemons discount could lessen and the average prices of MBSs could rise. Any increase in prices from that source is likely to be quite small, however, because if the discount had been large, Fannie Mae and Freddie Mac, as well as the large originators, would have had incentives to voluntarily disclose more information and thereby raise the price of their MBSs and the value of their guarantees.[39]

Possible Effects on the Liquidity of MBSs

MBSs guaranteed by Fannie Mae and Freddie Mac are highly liquid—a valued attribute that raises their price. But increased disclosures have the potential to reduce the liquidity of MBSs.[40] The GSEs' MBSs are highly liquid primarily because they are relatively homogeneous; the large size of the market also helps liquidity. Thus, investors determine value largely on the basis of generic characteristics such as coupon rate and maturity, rather than valuing each MBS issue on its own. Additional information that permits investors to differentiate among MBSs on the basis of expected prepayment rates may fragment the market and thus reduce MBSs' liquidity and price. For that reason, Ginnie Mae did

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38. George Akerlof, "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism," *Quarterly Journal of Economics*, vol. 84, no. 3 (August 1970), pp. 488-500.

39. One reason that the enterprises predominately purchase their own securities on the secondary market is to support their prices. The enterprises have a direct interest in maintaining high prices for MBSs (balanced by their interest in earning a spread on those investments) because they compete with each other for business. The higher the prices on the GSEs' MBSs, the higher the guarantee fees that wholesale lenders should be willing to pay. However, Fannie Mae and Freddie Mac might have chosen to not disclose additional information even if the lemons discount was too high because they could have feared that the adverse effect on liquidity might have outweighed the gains from reducing the lemons discount before 2003.

40. For a discussion of circumstances under which less information and less research improves market outcomes, see Jack Hirshleifer, "The Private and Social Value of Information and the Reward to Inventive Activity," *American Economic Review*, vol. 61, no. 4 (September 1971), pp. 561-574; and Sanford J. Grossman and Joseph Stiglitz, "Information and Competitive Price Systems," *American Economic Review*, vol. 66, no. 2 (May 1976), pp. 246-253.

not disclose the geographic location of loans in pools or other loan-level characteristics until a few years ago.[41]

Increased disclosures may also cause some investors to withdraw from the market because they will be forced to make use of the new information or risk losing out to better informed market participants. Given that choice and the increased cost of the information —occasioned by hiring more analysts and developing more complex prepayment models —some investors may switch to less complex investment instruments.

The interagency task force, however, believed that the additional pool-specific disclosures that it recommended would not have a significant adverse effect on liquidity in the MBS market. The task force reasoned that greater disclosures in the past had had little adverse effect on the market but did increase investors' confidence.[42] Indeed, fear of a loss of liquidity did not stop originators from customizing pools, disclosing additional information, and selling pools outside the generic TBA market at premiums.

The Net Effect on the Prices of MBSs

On balance, any adverse effect on the prices of MBSs is likely to be small. That is because if MBS prices fall, Fannie Mae and Freddie Mac will have a profitable opportunity to expand their purchases of "cheaper" MBSs with the proceeds of issues of debt, whose prices are not expected to be affected by the new disclosures. Alternatively, the GSEs could issue larger and more homogeneous pools of MBSs.[43] For similar reasons, the six new disclosures are unlikely to have much effect on mortgage rates (*see Box 4*).

Possible Effects of Registration

Registration would require the enterprises to pay fees to the SEC, might cause some investors to perceive a weakening of the implied federal guarantee of the GSEs' debt and MBSs, and could lead to some changes in the TBA market. Contrary to some claims, borrowers would still be able to lock in mortgage rates prior to closing.

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41. Susan Woodward, "Rechartering Freddie Mac and Fannie Mae: The Policy Issues" (working paper, Sand Hill Econometrics, Menlo Park, Calif., 2001).

42. Department of the Treasury, Office of Federal Housing Enterprise Oversight, and Securities and Exchange Commission, *Enhancing Disclosure in the Mortgage-Backed Securities Markets*, pp. 43-44.

43. See Susan E. Woodward, "Is More Information Always Better?" *Wall Street Journal*, January 2, 2003, p. A14.

Box 4.

The Implications of New Disclosures for Mortgage Rates

The prices that investors are willing to pay for mortgage-backed securities (MBSs) help determine the mortgage rates that are available to borrowers. Higher prices translate into lower mortgage rates. The effect that new disclosures Fannie Mae has just begun making and Freddie Mac is due to make soon will have on mortgage rates is ambiguous for the same reasons that the effect on the prices of MBSs is expected to be minor.[1] Specifically, the effects that those disclosures will have on the "lemons" discount and on liquidity are unlikely to be detectable.

Because the increased disclosures could alter the relative prices of individual issues of MBSs by further differentiating prepayment risk, that change might have a small effect on mortgage pricing at the retail level. Borrowers who are more likely to prepay could eventually face slightly higher rates, while those less likely to prepay could see their rates fall somewhat. But such effects are likely to be limited because lenders already have the information that will be disclosed to investors. And lenders already price prepayment risk, however crudely, by offering borrowers the opportunity to pay points (a percentage fee based on the size of the mortgage) in exchange for a lower interest rate.[2] That trade-off gives borrowers an incentive to sort themselves according to their own evaluation of their likelihood of prepayment because borrowers who anticipate prepaying their mortgages are less likely to be willing to pay points.

1. Department of the Treasury, Office of Federal Housing Enterprise Oversight, and Securities and Exchange Commission, *Enhancing Disclosure in the Mortgage-Backed Securities Market* (January 2003).

2. Investors in the GSEs' MBSs know only the quartile distribution of interest rates paid but not the points paid, which lenders do not provide to the enterprises. Thus, some analysts question the incentive of lenders to price prepayment risk accurately. Personal communication to the Congressional Budget Office by a staff member of the Office of Federal Housing Enterprise Oversight, October 17, 2002.

Registration Fees and Administrative Costs

The direct cost of paying SEC registration fees for debt and MBSs could reach $250 million in 2004.[44] In 2002, the Congress reduced the fees from $239 per $1 million in securities sold to $92 per $1 million and directed the SEC to adjust fee rates annually

44. Because of the large volume of their securities, the enterprises could end up paying nearly half of the fees that the SEC is projected to collect under current law. Issues with maturities of less than nine months, which include nearly 40 percent of the GSE debt, are not subject to the SEC's registration requirements.

thereafter to reach statutory targets for collections. Under H.R. 4071, the enterprises would pay fees of about 1.25 basis points in 2004.[45] If that fee was fully passed on to borrowers, the closing cost of a $200,000 mortgage would rise by less than $25. Registration could also require the GSEs to have their MBSs rated by one of the credit-rating agencies, which would have a small additional cost.

Charging Fannie Mae and Freddie Mac registration fees generally would not increase the total fees collected by the Securities and Exchange Commission. The Investor and Capital Markets Fee Relief Act (P.L. 107-123), enacted in January 2002, limits annual amounts of fees that the Commission should attempt to collect.[46] Because of those limits, collecting fees from Fannie Mae and Freddie Mac would lower the fees paid by all other issuers of securities.

Repealing the GSEs' exemption would not impose significant administrative costs on the enterprises because registration can be done electronically. Moreover, the enterprises could make use of "shelf registration," which allows an issuer to register in advance for an anticipated large volume and repeated issuances of securities. That is, one shelf registration can cover large volumes of mortgage-backed securities or corporate debt issued in installments.

The Implied Federal Guarantee

Although many factors affect yields on debt and mortgage-backed securities issued or guaranteed by the GSEs, the enterprises pay lower interest rates than other private issuers do as a result of the perception of the implied federal guarantee based on the special privileges accorded to the enterprises.[47] Some observers have suggested that enactment of H.R. 4071 would reduce the strength of the implied federal guarantee. If so, one effect could be to raise rates on the GSEs' securities. However, other analysts disagree. They note that the legislation leaves intact the GSEs' other privileges. In addition, investors' perceptions may be influenced by the size of the enterprises in the capital and housing markets as well as by provisions of law. If so, investors could conclude that the implicit guarantee would be unaffected by that statutory change.

The To Be Announced Market

The specifics of the SEC's implementing regulations would determine how registration might affect the To Be Announced market, which is currently not subject to regulation. Transactions in that market are notable in that they involve buying and selling pools of

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45. A basis point is one hundredth of a percentage point.

46. Congressional Budget Office, *Cost Estimate for H.R. 1088 Investor and Capital Markets Fee Relief Act*, (April 3, 2001); and *Pay-As-You-Go Estimate for H.R. 1088 Investor and Capital Markets Fee Relief Act*, (January 11, 2002).

47. See Congressional Budget Office, *Federal Subsidies and the Housing GSEs* (May 2001).

Fannie Mae, Freddie Mac, and Ginnie Mae loans before the loans have been made. At present, the Bond Market Association, an industry trade group, establishes the basic terms that those contracts must specify to constitute "good delivery," including the product type (for example, securities based on 30-year fixed-rate mortgages), interest rate, settlement date, and the total amount of the MBSs to be delivered. If the SEC was given authority to specify disclosure requirements for the GSEs' MBSs, that might trigger disclosure requirements for the contracts traded in the TBA market. Such requirements could be difficult for the poolers and the enterprises to meet and could curtail the operation of that market. To avoid disclosure requirements that might harm the efficiency of the TBA market, the SEC might require additional authority applicable to such disclosures.

The Ability to Lock In Mortgage Rates

Borrowers in both the market for conforming loans bought by Fannie Mae and Freddie Mac and the market for jumbo loans bought by private-label issuers can lock in mortgage rates up to 90 days prior to closing.[48] Borrowers attach substantial value to being able to fix their mortgage rate before closing, and they pay for that option through either a fixed fee (or points) or a higher interest rate. Lenders are willing to provide those commitments because the rates locked in reflect the current market rates for forward sale agreements in the To Be Announced market, and the fees paid at closing by borrowers compensate lenders who provide the commitments.

Because the TBA market probably would function in much the same way with registration of MBSs as it does now, the possibility that borrowers would lose the option to lock in rates seems remote.[49] Even if the TBA market changed significantly, mortgage lenders would have alternative ways of hedging their interest rate risk. But because the alternatives would probably be less efficient than the current system, borrowers might face somewhat higher costs to lock in rates.

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48. Although jumbo loans do not trade in the TBA market, lenders of those loans use that market to hedge their exposure to interest rate risk.

49. See Mark Jickling and Barbara Miles, *Fannie Mae, Freddie Mac and SEC Registration and Disclosures*, CRS Report for Congress RS21263 (Congressional Research Service, July 16, 2002); and Steve Thomas, "Securities Disclosures by Fannie Mae and Freddie Mac" (paper presented at the American Enterprise Institute Conference on "Are Fannie and Freddie Adequately Disclosing What Investors Need?" Washington, D.C., June 12, 2002), available at www.aei.org. See also Shadow Financial Regulatory Committee, "The Registration of Mortgage-Backed Securities of Fannie Mae and Freddie Mac," Statement No. 189 (February 24, 2003), available at www.aei.org/publications/pubID.16040/pub_detail.asp.

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