Systemic # 12

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January 29, 2001

Robert S. Seiler, Jr.
Manager of Policy Analysis
Office of Federal Housing Enterprise Oversight
1700 G Street, NW—Fourth Floor
Washington, D.C. 20552

Re: Solicitation of Public Comment, 65 Fed. Reg. 64718-64720 (October 30, 2000)

Dear Mr. Seiler:

Freddie Mac submits these comments in response to the Office of Federal Housing Enterprise Oversight's ("OFHEO") request for comments on the risks, if any, that Freddie Mac and Fannie Mae "may pose to the financial system in general and to U.S. housing finance markets in particular."[1] Freddie Mac believes that the best protection against disruption to the financial system from the failure of any large market participant is to ensure that each and every such market participant is too strong to fail. Our comments on systemic risk address three broad points:

- First, a study of any potential systemic risk posed by Freddie Mac and Fannie Mae must be conducted in the broad contexts of the overall financial system and should consider the potential systemic risks of alternative providers of housing finance. The study of systemic risk should consider the context of the U.S. housing and housing finance system, the regulation of integrated national and global financial markets, and the historical and structural role of Freddie Mac and Fannie Mae as sources of systemic stability and providers of liquidity. Freddie Mac recommends that any study of systemic risk be approached on an inter-agency and interdisciplinary basis.

- Second, Freddie Mac is among the least likely of large financ ial institutions to cause significant financial disruptions. Our safety and soundness and risk management practices are among the best, and the excellent supervisory examination that OFHEO provides strengthens those practices. Our credit risk, interest-rate risk, capital management and disclosure practices make Freddie Mac strong and well managed. We have superior risk management practices and an extraordinary record of successfully responding to external financial instability and crises.

[1] OFHEO, "Solicitation of Public Comments on Systemic Risk," 65 Fed. Reg. 64,718 (October 30, 2000).

- Third, Freddie Mac has taken a leadership role in the amelioration and prevention of systemic risk. Freddie Mac's voluntary commitments, announced in October 2000, for enhancing capital requirements, regulatory supervision, and market discipline through transparency and disclosure demonstrate the depth of Freddie Mac's commitment to ensuring our safe and sound operations. Today, Freddie Mac and Fannie Mae are at the vanguard of evolving financial institution capital, risk management and disclosure practices, having voluntarily adopted the best-practices recommendations of international financial regulatory bodies.

I. Understanding Systemic Risk Requires a Broad Context

A. What is Systemic Risk?

Large financial institutions have the potential to pose "systemic risk." Gerald Corrigan, the former President of the Federal Reserve Bank of New York, explains "it is the systemic risk phenomenon associated with banking and financial institutions that makes them different from gas stations and furniture stores. It is this factor – more than any other – that constitutes the fundamental rationale for the safety net arrangements that have evolved in this and other countries."[2]

Systemic risk requires the interconnectedness of institutions or markets to each other such that the illiquidity or failure of one institution or market impairs the operations of the other institutions or markets and imposes significant real costs on the economy. Thus, the Bank for International Settlements (BIS) defines systemic risk as the risk that the failure of a participant to meet its contractual obligations may in turn cause other participants to default, with the chain reaction leading to broader financial difficulties.[3]

The definition of systemic risk and the twenty questions for possible research contained in OFHEO's notice and solicitation of public comments appear to focus on the "riskiness" of Freddie Mac and Fannie Mae largely without reference to the context of the overall financial system. Freddie Mac is concerned that the study's research questions not be removed from a meaningful context. Such a context would include, at a minimum, consideration of alternative regimes for the housing finance system and the significant risks that may attend such alternative regimes. A study of systemic risk that fails to address these broader issues is unlikely to assist OFHEO in

[2] G. Corrigan, "The Banking-Commerce Controversy Revisited," 16 *Quarterly Review* (Federal Reserve Bank of New York) 1, 3 (1991).

[3] BIS, Annual Report, 1993-94 (Basle: June 1994). Federal Reserve Board Chairman Greenspan in his "Remarks at a Conference on Risk Measurement and Systemic Risk," at 7 (1995) states, "It would be useful to central banks to be able to measure systemic risk accurately, but its very definition is still somewhat unsettled. It is generally agreed that systemic risk represents a propensity for some sort of significant financial system disruption . . . Until we have a common theoretical paradigm for the causes of systemic stress, any consensus of how to measure systemic risk will be difficult to achieve."

achieving either of its stated objectives: enhanced oversight of Fannie Mae and Freddie Mac and an improved ability to contribute to Federal regulation of financial institutions and markets more generally.[4]

B. The Necessary Contexts for a Meaningful Study of Systemic Risk

A meaningful and constructive study of any systemic risk that Freddie Mac and Fannie Mae may pose would best be conducted with consideration of four critical contexts.

1. The U.S. Housing Finance System

First, a study of the potential systemic risk of Freddie Mac and Fannie Mae must consider the structure of the U.S. housing finance system. OFHEO's mission statement explicitly recognizes the centrality of Freddie Mac and Fannie Mae in the overall system of housing finance: "OFHEO promotes housing and a strong economy by ensuring the safety and soundness of Freddie Mac and Fannie Mae and fostering the strength and vitality of the nation's housing finance system."[5] An integral aspect of this system is its dominant mortgage instrument, the thirty-year, fixed-rate, low down-payment mortgage. Financing these mortgages is not, however, without risk.

Chief among these risks are credit risk, and interest-rate (or market) risk. In addition, offering this product has long entailed important transaction costs in both origination and servicing.[6] There can be no doubt that Freddie Mac and Fannie Mae manage these risks and costs more effectively than other participants in today's mortgage finance system. Policymakers should not attempt to remove all of the intrinsic risks of our housing finance system. The results may be not only less housing, but also the transfer or gravitation of those risks to institutions and market participants, including households, far less capable of managing them.

We believe that a study of the potential systemic risk of Freddie Mac and Fannie Mae should include, at a minimum, a consideration of the comparable risks posed by the other current and potential providers of mortgage funding. Other institutions have historically not managed mortgage risk as well as have Freddie Mac and Fannie Mae. In the event Freddie Mac's activities were curtailed, these other institutions would take larger roles in the market, supplying mortgage funds at a higher cost to consumers. As well, the shifting of risks to consumers and others would likely result in more risk to the worldwide financial system We believe that any responsible evaluation of comparable institutions would reach the conclusion that other institutional arrangements would likely pose significantly more risk to the financial system.

[4] 65 Fed. Reg. at 64718.

[5] See *www.ofheo.gov*.

[6] For a discussion of these risks and costs, see Barry Bosworth, *et al., The Economics of Federal Credit Programs*, 49-55 (1987).

A meaningful systemic risk study should include the actual and potential risks posed by insured depository institutions and their holding companies, the Federal Home Loan Banks, the Federal Housing Administration, and other participants in housing finance. The failure to place a study of the systemic risk potential of Freddie Mac and Fannie Mae in the context of the system of housing finance in which they participate may lead to misguided regulatory policy.

2. The Regulation of Integrated National and Global Financial Markets

The second context for a study of the potential systemic risk of Freddie Mac and Fannie Mae is within the system of highly integrated national and global financial markets. Experts from the financial, academic and regulatory communities strongly support the need for a comprehensive approach to systemic risk. For example, calls for strong regulatory controls on hedge funds abounded following the insolvency and collapse of Long Term Capital Management (LTCM)[7] in September 1998. Henry Kaufman,[8] a leading financial authority, stated that "[T]o conclude that tough restraints on hedge funds will cure the excesses in financial markets is rather simplistic. What's needed are supervision and regulations that will limit excesses in all major financial markets and institutions."[9]

Columbia University Professor Franklin Edwards' study of the LTCM collapse led him to similar conclusions.[10] According to Edwards, the focus should be

> on the risks of systemic financial fragility. The ways in which the plight of [LTCM] became entangled with the solvency of some large banks and securities firms is a wake-up call about problems in risk management practices and regulation that need to be addressed. The last 20 years have seen 90 banking crises throughout the world where banking system losses have equaled or exceeded those experienced by the U.S. banking system in the Great Depression. A common feature of these crises has been excessive risk-taking by banks. The public policy warning sent by the collapse of LTCM is clear: the risk management practices of even U.S. banks and other major financial

[7] LTCM was a privately-held investment partnership ("hedge fund") with assets of $134 billion at year-end 1997, some 7000 positions with more than 75 counterparties, and additional outstanding commitments in derivatives positions with a notional value of $1.4 trillion.

[8] Dr. Kaufman is a member of the Board of Directors of Freddie Mac.

[9] Henry Kaufman, "What Bankers Don't Know: How Major Lenders Failed to Appreciate the Dangers of Hedge Funds," *U.S. News and World Report*, October 12, 1998. A more complete discussion of Dr. Kaufman's analyses of LTCM, financial crises and the need for regulatory and supervisory reform is available in Henry Kaufman, *On Money and Markets* (2000) (see especially pp. 223-362).

[10] Franklin Edwards, "Hedge Funds and the Collapse of Long-Term Capital Management," 13 *Journal of Economic Perspectives*, 189-210 (Spring, 1999).

> institutions are not what they should be. Bank regulation has fallen seriously behind market developments . . . [11]

For these reasons, Freddie Mac suggests that a study of systemic risk would best be conducted through an *inter-agency, interdisciplinary* approach focused on truly *systemic* issues, and not on the specific operations of two institutions. This inter-agency effort optimally would include the representatives of all members of the Federal Financial Institutions Examination Council, the Federal Reserve Bank of New York, the Federal Housing Finance Board, international regulatory bodies including the Basel Committee on Banking Sup ervision, and other pertinent regulatory bodies (such as the Department of the Treasury, the Securities Exchange Commission, and the Department of Housing and Urban Development), along with important industry association representatives and leading academics.

3. The Historical and Structural Role of Freddie Mac and Fannie Mae

Freddie Mac's statutory mission and role make Freddie Mac an extraordinarily unlikely source of systemic risk, either to the housing finance system or to the financial system generally. Many believe that the companies' main role is simply to reduce the cost of housing finance for American consumers. The approximately $8 billion to $23 billion per year of interest cost savings that Freddie Mac and Fannie Mae provide American housing consumers demonstrates the importance of that function.[12] However, these savings result from the principal historical and structural role that Freddie Mac plays. Congress intended and designed Freddie Mac primarily to serve as a source of stability and increased liquidity for the residential mortgage market.

The stability and liquidity-enhancing roles of Freddie Mac and Fannie Mae are set forth in their respective legislative charters. The first of Freddie Mac and Fannie Mae's four explicit statutory purposes is "to provide stability in the secondary market for residential mortgages."[13] Congress also charged Freddie Mac with promoting access to mortgage credit "by increasing the liquidity of mortgage investments and improving the distribution of investment capital available for residential mortgage financing."[14]

[11] Edwards at 209.

[12] The most recent study of quantifiable consumer interest cost savings attributable to Freddie Mac and Fannie Mae is James E. Pearce and James C. Miller, "Freddie Mac and Fannie Mae: The Funding Advantage and Benefits to Consumers" (January 2001). Pearce and Miller estimate that Freddie Mac and Fannie Mae generate interest-cost savings for American consumers ranging from at least $8.4 billion to $23.5 billion per year.

[13] 12 U.S.C. §1451(b)(1)(Note).

[14] 12 U.S.C. §§1451(b)(3),(4) (Note).

The conforming residential mortgage market has remained liquid and mortgage spreads to Treasuries have remained low and stable through many significant financial disruptions. These include the thrift crisis of the 1980s, the credit crunch in commercial and construction lending of the early 1990s, the mortgage refinance boom of 1992-93, the unanticipated interest rate increases by the Federal Reserve in 1994, the extraordinary international financial instability associated with the collapse of the Mexican peso in 1994-95, the East Asian financial crisis of 1997 and the Russian default and LTCM crisis of 1998. For example, in 1993 Federal Reserve Chairman Greenspan testified before Congress that

> despite a massive contraction in the thrift industry since 1988, housing credit has remained readily available and, in fact, relatively inexpensive as a result of the further exploitation of financial innovations such as mortgage-related securities.[15]

The stability and liquidity of conforming residential mortgage credit stems from Congress' design. Congress established two market-driven, highly competitive firms whose sole authorized business is the purchase, sale, servicing, lending on the security of and otherwise dealing in conforming residential mortgages. Freddie Mac and Fannie Mae can neither exit the market nor, as their competitors frequently do, deploy their capital elsewhere in search of higher returns. Some twenty years after its creation of the conventional, conforming secondary mortgage market, Congress observed that

> The continuous presence of [Freddie Mac and Fannie Mae] in the secondary market in bad as well as good economic times provides assurances of a dependable and substantial funding source for home mortgages.[16]

Freddie Mac has proven to be a remarkably resilient presence in the markets in which we operate. Because of our express statutory purposes to provide stability and liquidity to the residential mortgage market, counterparties – whether they are mortgage sellers or securities purchasers – know that Freddie Mac *will* be in the market, regardless of financial conditions. This has created a positive effect. Because the world knows that we are charged with providing stability and liquidity to the mortgage market under all conditions, and that we manage our business to meet this charge, investors have greater confidence in Freddie Mac's stability and liquidity during market disruptions, when they may lack confidence in the reliability or intentions of other market participants having no similar purpose or record of performance.

[15] Statement by Alan Greenspan before the Committee on Banking, Housing and Urban Affairs, U.S. Senate, February 19. 1993, reprinted in *Federal Reserve Bulletin*, April 1993, at 297.

[16] H.R. Rep. No. 54, 101st Cong., 1st Sess., pt. 3 at 2 (1989).

(a) Freddie Mac, Fannie Mae and The Financial Crisis of 1998

Nothing illustrates the stabilizing and liquidity-enhancing roles of Freddie Mac and Fannie Mae and the role we play in reducing financial system fragility as clearly and dramatically as the events of August-November, 1998. On August 17, 1998, the Russian government devalued the ruble and declared a moratorium on paying its debts, shaking investor confidence throughout the world.[17] Over subsequent days and weeks, equity and debt markets throughout the world became extraordinarily volatile, with the difference (spreads) between Treasury securities and higher-yielding debt instruments widening sharply. According to William McDonough, President of the New York Federal Reserve Bank, "the abrupt and simultaneous widening of credit spreads globally, for both corporate and emerging-market sovereign debt, was an extraordinary event beyond the expectations of investors and financial intermediaries."[18] An article in the *New York Times* declared that "[t]he market turmoil is being compared to the most painful financial disasters in memory."[19]

The "extraordinary event" and resulting market turmoil triggered the imminent insolvency of LTCM.[20] Chairman Greenspan, in Congressional testimony on October 1, 1998, had raised the specter of the failure of LTCM "triggering the seizing up of markets" and the impairment of many national economies, including that of the United States.[21] Federal Reserve Bank of New York President McDonough explained the potential "systemic risk" scenario in his Congressional testimony that same day:

> there was a likelihood that a number of credit and interest rate markets would experience extreme price moves and possibly cease to function for a period of one or more days and maybe longer. This would have caused a vicious cycle: a loss of investor confidence, leading to a rush out of private credits [anything other than Treasury securities], leading to a further widening of credit spreads, leading to further liquidations of positions, and so on.[22]

[17] Testimony of William J. McDonough, President, Federal Reserve Bank of New York, before the Committee on Banking and Financial Services, U.S. House of Representatives, October 1, 1998 at 3.

[18] Id. at 2.

[19] Sam Dillon, "Economic Turmoil in Russia Takes Toll in Latin America," *New York Times*, August 27, 1998, quoted in Lowenstein at 153.

[20] McDonough Testimony at 3; Roger Lowenstein, *When Genius Failed: The Rise and Fall of Long-Term Capital Management* at 143-59 (2000); Henry Kaufman, *On Money and Markets* at 282-83.

[21] Testimony of Alan Greenspan, Committee on Banking and Financial Services, U.S. House of Representatives, October 1, 1998 at 1.

[22] McDonough Testimony at 3.

Despite this profound liquidity and credit crisis, Freddie Mac purchased $288 billion in residential mortgage assets in 1998, including $6.6 billion in multifamily mortgages and securities, financing homes for 2.7 million American families. Freddie Mac acquired $150 billion in mortgage securities for our retained mortgage investment portfolio, absorbing the excess supply of mortgage securities in the market.[23] On one extraordinary day, October 9, 1998, Freddie Mac purchased a record $4 billion in mortgage securities (and press reports indicated that Fannie Mae purchased a similar amount). To support the risks on these mortgage purchases, Freddie Mac went to the equity markets and raised over $1 billion in common equity to increase our capital reserves. In light of the troubled conditions in financial markets at that time, the infusion of new common equity reflected the considerable confidence that the market and investors placed in our safety and soundness.

Freddie Mac and Fannie Mae's stabilizing effect on the U.S. housing finance market cannot be overstated. By mid-autumn, many other financial institutions that had provided lines of credit to major mortgage market investors responded to the market declines in the value of fixed income assets, including mortgage-related securities, and began to call their loans. Hedge funds were compelled to liquidate large holdings of mortgage securities to meet margin calls. As a result, a part of the market that had been an important purchaser of mortgage securities suddenly became a major seller, at a time when other factors were putting pressure on mortgage-backed securities prices.

In October, two hedge funds sold more than $2.5 billion worth of mortgage-backed securities into an already weak market. *National Mortgage News* reported, "It's just an unhealthy market and any selling pressure just makes it worse. . . .We're at a very fragile time. It's not just the mortgage-backeds, not just the hedge funds, but the whole financial structure."[24]

In the single-family housing market, consumer demand for funds reached record levels due to a strong housing market, historically low interest rates, and a surge in refinancing. Freddie Mac served as a reliable source of funds for lenders, and we increased our mortgage purchases in the midst of the liquidity crisis. In September alone, Freddie Mac and Fannie Mae together provided $84 billion in mortgage money, and in the third quarter we provided more than $230 billion.[25]

During the latter half of 1998, the difference between interest rates on conforming and jumbo mortgages rose. At the end of October, a *Wall Street Journal* article attributed this difference to Freddie Mac and Fannie Mae, noting that because mortgages of less

[23] Freddie Mac's 1998 net retained portfolio growth was $91 billion, indicating the rapid rate at which borrowers chose to refinance their mortgages to obtain lower financing costs.

[24] "MBS Hedge Funds Are Hit Again by Billion Sell Off," *National Mortgage News* (October 19, 1998), at 1, quoting George Van, president of a large hedge fund advisory firm.

[25] *National Mortgage News*, November 9, 1998 at 4.

than $227,150 [the 1998 conforming loan limit] can be purchased by Freddie Mac and Fannie Mae, "[t]heir presence helps to keep the market liquid and mortgage rates reasonable."[26] *Grant's Interest Rate Observer* was more direct: "It was the extraordinary purchases by Freddie Mac and Fannie Mae . . . that righted the . . . market."[27] During this period, the interest-rate difference between conventional, conforming mortgage rates and jumbo mortgages ineligible for our purchase, typically between 25 to 50 basis points, rose to 62 basis points. Recent research indicates that the activities of Freddie Mac and Fannie Mae "returned capital to the mortgage market. This action not only stabilized the price of mortgage-backed securities, it also stabilized home loan rates during the credit crunch of 1998."[28]

Freddie Mac also provided liquidity to a number of other residential mortgage securities market sectors, including markets for home-equity and manufactured housing mortgage-backed securities. During the crisis, financial institutions sharply reduced their supply of credit to borrowers, resulting in a severe credit crunch for segments of the residential mortgage market that rely primarily on direct securitization (sometimes referred to as "non-agency" asset-backed and mortgage-backed securities).[29] In comparison, Freddie Mac purchased nearly $9 billion in home-equity and manufactured housing securities in 1998, with approximately 75 percent of these purchases coming in the last quarter of the year, when issuers in these sectors were under extraordinary pressure to obtain outlets for their mortgage security issuances, and the usual sources of liquidity fled the market.

[26] *Wall Street Journal*, "Jumbo Mortgage Rates Haven't Fallen Very Far," p. C1, October 29, 1998.

[27] *Grant's Interest Rate Observer*, May 7, 1999.

[28] Capital Economics, "An Economic Analysis of Freddie Mac's (and Fannie Mae's) Contribution to Liquidity in the Residential Mortgage-Backed Securities Market During the Credit Crunch of 1998" (May 2000).

[29] For example, according to a report issued by the Bond Market Association, rates for home equity and manufactured housing asset-backed securities soared, with the "spreads" on 7-year home equity loan and 7-year manufactured housing loan transactions exceeding 200 basis points (2.0%) and 175 basis points (1.75%), respectively, over benchmark ten-year Treasury security rates by the first week of October, each having been as low as 60 basis points over Treasuries earlier in the year. See "The Asset-Backed Market in 1998 and the Outlook for 1999," *Research Report*, The Bond Market Association (February 1999), at 4.

Similarly, the spreads on commercial mortgage-backed securities (CMBS) (backed by residential multifamily and non-residential commercial mortgages) – an increasingly important source of mortgage financing for multifamily borrowers – also experienced significant widening. According to Moody's, securities in "Aaa-rated" classes of CMBS widened with astonishing speed from approximately 85 basis points over comparable ten-year Treasuries in mid-August to 225 basis points in mid-October. By mid-October, Aaa CMBS securities were yielding spreads on a par with those afforded by Baa classes only two months earlier. Moody's CMBS Report, at 3.

A Moody's Investors Service report noted that Freddie Mac's funding of these securities resulted in "some measure of much welcome stability for the market. This resulted in spreads tightening somewhat in the fourth quarter, although not back to the levels in the first half of the year."[30] A trade press report at the time stated that Freddie Mac and Fannie Mae

> have emerged as key buyers of 'senior tranches' of subprime securitizations, paving the way for a recovery in the battered sector. 'Thank God for Freddie Mac,' said one subprime chief executive, requesting his name not be used. . . . Their presence in the market is said to be one reason the spread between ABS (asset-backed securities) and Treasuries has dropped in recent weeks.[31]

Each of the mortgage market segments in which Congress authorizes Freddie Mac to participate benefited enormously in 1998 from actions of Freddie Mac and Fannie Mae that enhanced liquidity, stability and efficiency throughout the financial market crisis.

(b) Freddie Mac and Fannie Mae: Housing Finance Market Stability

On January 15 of this year, *Barron's* observed that "[i]f the Fed has staved off a recession, some of the credit should go to Freddie Mac and Fannie Mae. By helping to transmit the benefits of the central bank's rate cuts to the mortgage market, these agencies have done their part in cushioning the impact of the Nasdaq knockdown on the American consumer."[32] James Glassman, Senior U.S. Economist at JP Morgan Chase, supports this view: "Consumers can lock up a lower rate when the Fed cuts them, but this is another reminder that it's the innovations and new vehicles that agencies like Freddie and Fannie create that have been a windfall for consumers to do just that."[33] Consumer mortgage rate reductions also stimulate the housing sector and promote growth throughout the economy.[34]

[30] "1998 Year in Review and 1999 Outlook Home Equity Asset-Backed Securities: To HEL in a Hand Basket," Special Report, Moody's Investors Service, Inc. (January 1999), at 3.

[31] "GSEs Boosting Subprime Recovery?" *National Mortgage News,* (December 14, 1999), at 1.

[32] Jennifer Ablan, "Despite Treasury Selloff, More Fed Easing Ahead," *Barron's Online*, January 15, 2001.

[33] *Quoted in* id.

[34] See id.

4. Developments in the Financial System and the Sources of Systemic Risk

Freddie Mac and Fannie Mae are only two of the markets' several large participants. This is the fourth context in which Freddie Mac believes any study of systemic risk must be set. While OFHEO Director Armando Falcon, Jr., has correctly observed, "a financial crisis at the Enterprises could have a disruptive impact on investors and the economy,"[35] the same could be said for many other institutions throughout the world.[36] A focus only on the size or growth of financial institutions as sources of "systemic risk" misses important principles that should guide regulators who attempt to minimize such risks.

Gary Stern, President of the Federal Reserve Bank of Minnesota, points out that the increasing asset concentration and growing complexity of banking operations result in an increasing number of banking institutions with a capacity to pose systemic risk.[37] Over the period 1980 to 1998, the banking industry experienced a sustained and unprecedented consolidation. During this period, approximately 8,000 bank mergers occurred involving approximately $2.4 trillion in acquired assets.[38] The period 1994-98 showed an increase in the number of the largest bank mergers, including several of the largest in U.S. banking history.[39] The period 1998-2000 continued this trend, and all indicators, including the passage of the Gramm-Leach-Bliley Act,[40] suggest a continuation of this trend.[41]

[35] "Economic Implications of Debt Held by Government Sponsored Enterprises," Testimony of the Honorable Armando Falcon, Jr., House Budget Committee, Task Force on Housing and Infrastructure, July 25, 2000 at 5.

[36] There are at least 20 institutions in the United States alone having assets approaching $200 billion each. As of 1999, these institutions include six large complex depository institutions; five Wall Street investment banks; three insurance companies; two auto makers; a large, non-depository financial conglomerate; a pension fund; and the GSEs. As of 1999, among these 20 institutions alone, there is a concentration of approximately $8 trillion in assets.

[37] Gary Stern, "Thoughts on Designing Credible Policies After Financial Modernization: Addressing Too Big to Fail and Moral Hazard," *The Region*, (Federal Reserve Bank of Minneapolis September 2000); "Managing Moral Hazard With Market Signals: How Regulation Should Change With Banking," *The Region* (June 1999).

[38] Stephen A. Rhoades, "Bank Mergers and Banking Structure in the United States, 1980-98, Federal Reserve Board, Staff Studies, Number 174 (August 2000) at 1.

[39] Id. at 6 (Table 3).

[40] Pub. L. No. 106-102 (November 12, 1999).

[41] G. Stern, "Managing Moral Hazard," supra note 37 at 4.

Banking assets are increasingly controlled by the largest firms, which President Stern believes "has almost certainly led to more TBTF [too-big-to-fail] banks."[42] Stern reports that in 1980 there were more than 12,000 banks in the country, and institutions with assets greater than $10 billion controlled 37 percent of total bank assets. These figures had barely changed by 1990 but, by 1998, there were far fewer banks (8,910), and the 64 banks with over $10 billion in assets controlled a larger share of total bank assets (63 percent).[43]

Increasingly complex bank operations and increasing risk have accompanied these trends toward increased consolidation and concentration. Financial modernization following passage of the Gramm-Leach-Bliley Act will accelerate these trends and "has the real potential to expand the [federal] safety net, especially for the largest banks that take on new powers, and exacerbate the moral hazard problem."[44]

B. An Effective and Comprehensive Approach to the Question of Systemic Risk

The interlocking nature of our financial system and the interdependency of all significant financial institutions through shared payments systems suggests that system-wide risks will remain a concern in our global financial system.

Freddie Mac believes that the most effective approach to minimizing systemic risk is to ensure that all large financial institutions are too strong to fail. Our views mirror those of Dr. Henry Kaufman:

> [T]he only condition under which a nation can embrace market discipline without compromise – and abandon the too-big-to-fail doctrine – is when all large financial institutions are too *strong* to fail. [45]

II. Freddie Mac Is Among the Least Likely of Institutions to Pose Significant Risks

Freddie Mac and Fannie Mae are pillars of the world's best housing finance system, combining the creativity and efficiency of the private sector with the fulfillment of

[42] Id.

[43] Id. at 5.

[44] Stern, Thoughts on Designing Credible Policies After Financial Modernization," supra note 37 at 1 (June 2000).

[45] Henry Kaufman, *On Money and Markets*, supra note 20 at 226-27 (emphases in original). Elsewhere, Dr. Kaufman writes: "How could the financial system as a whole cope with the side effects of a failure of the new Citigroup? It could not. In cases like this, it will be necessary to make such immortal giants 'too *good* to fail.'" Id. at 238 (emphasis in original).

important public purposes related to housing.[46] Sustaining the world's best housing finance system requires leadership and execution by excellent management, reinforced by excellent regulatory oversight. Freddie Mac has both.

A. World-Class Financial Institutions; World-Class Supervision

In July, 2000, Moody's Investors Service, one of the premier nationally recognized statistical ratings organizations, issued a "Special Comment" on Freddie Mac and Fannie Mae.[47] Generally, Moody's sees the two companies "as well-run, world-class financial institutions with sound business profiles and substantial franchise values. In Moody's opinion, these characteristics provide enduring credit support."[48] Moody's states that:

> [Freddie Mac and Fannie Mae] are managing their credit risk exposures well through quality underwriting and the use of third-party credit enhancements, primarily mortgage insurance. The underlying risk asset of the GSEs is primarily single-family residential mortgages that have a very low risk profile and predictable risk characteristics. These two GSEs also manage very well the prepayment risk associated with mortgages through sophisticated use of callable debt and derivatives.
>
> Freddie Mac and Fannie Mae enjoy strong franchises as a result of the benefits associated with their GSE status, and through true market leadership in technology, operations and risk and product analytics. They are the leaders in the housing mortgage secondary market, and they have a solid position in technology-based business solutions related to the mortgage origination process.[49]

[46] Congress was careful to preserve the original legislative design when it modernized and strengthened our safety-and-soundness regulation in 1992. At that time, Congress reiterated that it

> created the enterprises under private ownership and management to bring the entrepreneurial skills and judgments of the private sector to bear on accomplishment of public purposes related to housing. The Committee does not mean to upset this unique structure or to encourage any government official to second guess decisions of enterprise management arrived at through the exercise of honest, unbiased judgment of what is in the best interests of the enterprise.

Senate Report No. 282, 102nd Cong., 2d Sess 25 (1992).

[47] Moody's Investors Service, "Moody's Talks With Investors About GSE Credit," Special Comment 1 (July 2000).

[48] Moody's has not hitherto provided a "stand-alone" rating of Freddie Mac's intrinsic safety and soundness (excluding external support elements).

[49] *Id.* at 3-4.

Freddie Mac has enjoyed a history of successful results, including a steady increase in earnings each year since our inception as a public company. Freddie Mac's earnings have grown in periods of low, stable, or high interest rates, increasing or decreasing interest rates, recession and expansion.

In addition, Freddie Mac and Fannie Mae are subject to stringent Congressional and regulatory oversight. Both firms are subject to continuous Congressional oversight, with extensive statutory reporting requirements to the appropriate committees, to the regulators and to the public. Congress has also exercised its oversight function vigorously, with numerous and frequent hearings.

No one understands the quantity of risk and the quality of risk management at Freddie Mac and Fannie Mae better than the examination staff of OFHEO. Depth, breadth and rigor characterize OFHEO's annual examination program that consists of ten program areas, using approximately 700 specific evaluation criteria and almost 100 distinct assessment factors. OFHEO's examination staff focuses exclusively on two companies that operate, by statutory restriction, in a single line of business.

In contrast, the examination staff of other large regulated financial institutions is less concentrated. The OCC averages approximately 12 examiners for each institution in its large bank program. The Federal Reserve examiners assigned to large bank holding companies must examine numerous lines of business in many bcations throughout the world.[50] Alone among federal financial institution regulatory agencies, OFHEO is required by law to report a summary of its examination findings to Congress (and thus to the public) every year together with any legislative recommendations designed to enhance safety and soundness.[51]

At year-end 1999, the most recent date at which examination results are publicly available, OFHEO's results and conclusions regarding both Freddie Mac and Fannie Mae were identical in each of the ten program areas examined: credit risk; interest-rate risk; liquidity management; information technology; business process controls;

[50] For example, according to Citigroup, it maintains the following business lines: global consumer services providing a broad range of financial services for consumers of all income levels, marketed through five subsidiary banking and insurance organizations, including checking and savings accounts, credit and T&E cards, student loans, mortgages, home equity loans, debt consolidation loans, personal and margin loans, IRAs, mutual funds, annuities, discount brokerage, life insurance, automobile insurance, and homeowners and personal property insurance; a global corporate and investment bank providing all the financial products, services and solutions needed by corporations, governments, institutions and individuals in 100 countries and territories including corporate and investment banking services, investment advice, financial planning and commercial insurance products; and a global investment management and private banking group, providing wealth management products and services are through two subsidiaries or divisions to institutional, high-net-worth and retail clients from global investment centers around the world. *See* "Citigroup 1999," report available on website at www.citigroup.com.

[51] 12 U.S.C. §4521.

internal controls; audit; management information; management processes; and Board governance. Freddie Mac and Fannie Mae "exceeded safety and soundness standards in all examination program areas."[52] Chairman Greenspan stated recently, "These GSEs are rather well-run institutions and they have got very good risk management procedures in and of themselves.[53]

In the Federal Housing Enterprises Financial Safety and Soundness Act of 1992, Congress recognized that Freddie Mac and Fannie Mae "have important public missions that are reflected in the statutes and charter Acts establishing" the two companies.[54] Congress found

> Because the continued ability of [Freddie Mac and Fannie Mae] to accomplish their public missions is important to providing housing in the United States and the health of the nation's economy, more effective Federal regulation is needed to reduce the risk of failure of the enterprises.[55]

The creation of OFHEO as our safety and soundness regulator, and the legislatively mandated development of its risk-based capital stress test result from that Congressional finding. Freddie Mac supports a strong and effective safety and soundness regulator. Freddie Mac has also long supported OFHEO's promulgation and enforcement of a sound and workable risk-based capital regulation as soon as possible. Indeed, Freddie Mac believes that promulgating the risk-based capital rule is by far the single most important action that OFHEO can take to achieve both of the stated objectives for its systemic risk study.

Congress also authorized OFHEO to contract with the rating agencies to review Freddie Mac and Fannie Mae.[56] In 1997, at the request of Chairman Baker, OFHEO contracted with Standard & Poors to review both companies "risk to the government." Freddie Mac and Fannie Mae each received ratings of AA-, a rating currently maintained by only five bank holding companies and by no insured thrifts.

[52] OFHEO, 2000 Report to Congress of the Office of Federal Housing Enterprise Oversight 68 (Fannie Mae), 71 (Freddie Mac) (June 15, 2000) (emphasis supplied).

[53] Federal Reserve Chairman Alan Greenspan's Semi-Annual Economic Report to Congress, July 20, 2000. Part 31 of a transcription of the question-and-answer period for Chairman Greenspan's semi-annual economic report to Congress before the U.S. House of Representatives Banking Committee on Thursday, July 20, 2000. The transcription is provided by the Federal Document Clearing Service.

[54] Pub. L. No. 102-550, 106 Stat. 3672, tit. XIII, 12 U.S.C. §4501(1).

[55] 12 U.S.C. §4501(2).

[56] 12 U.S.C. §4519.

The following discusses the credit risk, interest-rate risk, capital management and disclosure practices that place Freddie Mac among the safest and soundness of financial institutions.

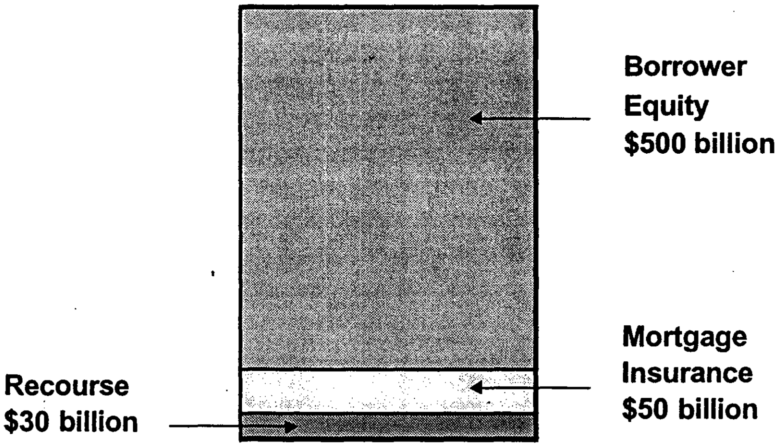
B. Credit Risk Management

By limiting Freddie Mac and Fannie Mae to the conforming residential mortgage market, Congress has ensured that not only our equity investors but also high-quality assets stand as a buffer between the two companies and the risk of default. Residential real estate is the least risky of all forms of real estate. Single-family mortgage default rates are substantially lower than default rates for education, agriculture or small business loans. In addition, the evidence indicates that homeowners often resist default even when default is in their financial best interest.[57]

If our mortgage assets default, Freddie Mac, through a combination of statutory requirements and risk management practices, benefits from extensive layers of credit risk protection. Mortgages are collateralized by the borrower's home, and our borrowers have approximately $500 billion in equity behind our mortgages, ensuring that any losses incurred are substantially below the outstanding loan balance. Nearly 60 percent of our mortgages have current loan-to-value (or LTV) ratios of70 percent or less, and only six percent have current LTV ratios above 90 percent.

In addition, Freddie Mac's charter requires us to lay off a substantial amount of the remaining credit risk for mortgages with LTV ratios at the time of purchase exceeding 80 percent.[58] Default loss protections include mortgage insurance, and recourse arrangements with mortgage sellers. Exhibit 1 illustrates the layers of credit loss protection Freddie Mac enjoys in the event of mortgage default.

Exhibit 1
Extensive Layers of Credit Protection on Mortgages



[57] OMB, *Budget of the United States Government*, Fiscal Year 1992, pt. 2 at 228 (1992).

[58] Freddie Mac Act §305(a)(2), 12 U.S.C. §1454(a)(2).

Our charter requires us to improve access to mortgage credit throughout the nation. The resulting nationwide geographic diversification of our mortgage purchases is another important factor in mitigating our credit risk exposure. Downturns in one part of the country are frequently offset by stronger performance elsewhere. In fact, an analysis of some 300,000 Freddie Mac mortgage purchases showed that if the loans had been collateralized by properties located in only one of the five geographic regions in which they were in fact dispersed, Freddie Mac would have needed two to three times as much capital to satisfy a capital standard incorporating a risk-based capital stress test.[59]

Freddie Mac's mortgage underwriting standards are a further bulwark against credit losses. Freddie Mac used our access to data on the performance of millions of loans to build the first automated underwriting service for residential mortgages, Loan Prospector® (LP). LP significantly outperforms traditional underwriting methods through its ability to identify high-risk loans and its ability to avoid misidentifying high-risk loans as having low risk. We use LP to assess every loan we purchase, and we support LP by conducting lender reviews and with rigorous quality control to ensure compliance with our underwriting standards.

Our mortgage-underwriting standards also are supported through our use and direction of high quality loan servicing standards. Excellent servicing is essential to the prevention of loan default and the mitigation of credit losses. Again, using our extraordinary access to data, Freddie Mac has created technology tools to assist our servicers in directing their resources to at-risk loans for early intervention. Our standards for servicer management of loan collections, workouts and foreclosure timelines have become the industry standard. Finally, Freddie Mac maintains a first claim on the valuable servicing asset, providing our servicers with strong incentives for optimal servicing performance.

Together, the foregoing credit risk management techniques have produced extraordinarily low credit losses. Our mortgage delinquency rates are consistently and significantly lower than the overall conventional market, and much lower than those of the FHA. Our loan charge-offs are significantly lower than those of banks and thrifts. We maintain loan loss reserves, however, that are seven times our credit losses in 2000, and hold capital against credit losses sufficient to withstand severe losses.

C. Interest-Rate Risk Management

Freddie Mac has exceptionally high standards for managing interest-rate risk. It begins with our investment management philosophy – to limit interest-rate risk and

[59] Congressional Budget Office, *Controlling the Risks of Government-Sponsored Enterprises* at 142-43 (1991) (citing John Quigley and Robert Van Order, "Defaults on Mortgage Obligations and Capital Requirements for U.S. Savings Institutions," 44 *Journal of Public Economics* 353-69 (1991).

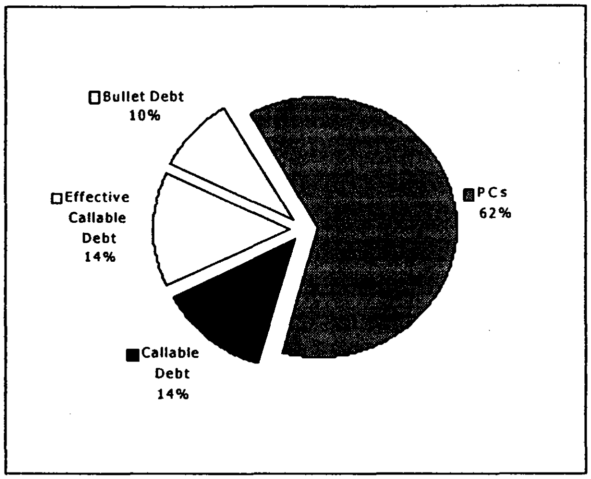
protect future investment returns. Freddie Mac has comprehensive risk measurement practices that include daily valuation and measurement of interest rate and other market risks. Additionally, we have consistently demonstrated the ability and willingness to actively manage these risks by spending fully one third of net interest income on our risk levels. Finally, both our ability and commitment to adhere to our risk management practices have been tested under adverse circumstances, and we have continuously maintained low risk exposures in all market environments.

Freddie Mac's investment management framework requires our adherence to conservative interest-rate risk limits to protect the market value of our assets. Our capital is deployed only when an investment meets return-on-equity thresholds. Our comprehensive interest-rate and market risk management strategy focuses on the entire spectrum of risk factors. In addition to changes in the level of interest rates, we focus on yield curve risk (non-parallel shifts in the yield curve such as flattening or steepening) that may affect portfolio market value; volatility risk (the risk of changes in market expectations regarding the volatility of future interest rates) that may affect portfolio market value; basis risk (the risk of changes in the interest-rate spreads between different financial instruments) that may cause changes in portfolio market value or net interest income; and prepayment model risk (the risk that modeling errors may cause errors in the projected levels of mortgage prepayments in differing economic environments) that may affect the value or future earnings of the corporation. For forecasting models, we perform periodic comparisons of actual results to forecasted results and adjust the forecast models and assumptions accordingly.

Our interest-rate risk measurement practices include the measurement each day of portfolio market value sensitivity (PMVS) to changes in interest rates (duration and convexity), as well as sensitivity to the shape of the yield curve, volatility and basis (spreads between financial instruments). PMVS (the change in portfolio market value from a 50 basis point interest rate shock (a three standard deviation event over a two-week period) is consistently below five percent. We track prepayment modeling errors each month. Finally, risk measurement is done according to a comprehensive portfolio approach that includes both off- as well as on-balance sheet assets.

As shown in Exhibit 2, our funding strategy relies on a mixture of Participation Certificates (PCs), bullet debt, callable debt and effective callable debt (employing derivative financial instruments). The emergence of the callable debt market in the early 1990s enabled the growth of our retained mortgage portfolio within conservative levels of interest-rate risk. Our use of debt and derivative financial instruments enables us to maximize our ability to re-price debt when mortgage prepayments occur more rapidly than expected.

Exhibit 2
Risks Dispersed in Global Capital Markets



We employ daily portfolio rebalancing transactions that provide both short- and long-term protection of portfolio market value. We actively manage liquidity, counterparty and operational risks. Our ongoing review of forecasting models for prepayments and interest rates include a periodic back-testing and correction process. Moreover, we maintain sufficient capital to withstand extreme interest-rate shocks.

The market value of our portfolio increased in 1999 despite rising interest rates that caused portfolio market values to fall for many other mortgage investors, and it increased again in 2000, despite a volatile interest rate environment. We adhere to our risk management discipline in all market environments including the chaotic market conditions of the second half of 1998. Interest rate movements of almost five percentage points during the 1990s did not interrupt our consistent growth of operating earnings throughout the period.

D. Distribution of Mortgage Risks

A concern has been raised that the holdings by insured depository institutions of large quantities of Freddie Mac and Fannie Mae debt may pose a potential for systemic risk due to the concentration of GSE debt in their portfolios. That concern is misplaced. Limiting banks' holdings of GSEs' debt securities would not enhance systemic stability.

Financial institution regulators routinely evaluate individual banks' investment securities holdings as part of the safety and soundness examination,[60] and require

[60] *See e.g. Comptroller's Handbook for National Bank Examiners*, § 203.1 (March 1990).

banks' to indicate the aggregate amounts of exposure to GSE debt on their quarterly condition reports. These regulators express no concerns about depositories' GSE debt holdings.

Michael Brosnan, Deputy Comptroller for Risk Evaluation, Office of the Comptroller of the Currency, has stated, "I see no risk. I can't imagine (banks) not collecting interest on time, principal in time."[61] In fact, Deputy Comptroller Brosnan explained, imposing concentration limits on bank holdings of GSE debt could impair bank safety and soundness, forcing banks to find other, probably more risky, investments. In Brosnan's view, the absence of a limit on investment in GSE debt enhances safety and soundness. He claimed that if such a limit was imposed on insured institutions "almost for sure they'll have to expand into something that has more credit risk or more optionality. There's not too much out there that's less risky."[62]

Freddie Mac and Fannie Mae securities are among the most liquid non-Treasury securities in the market. Holdings by depositories of GSE securities enhance the depositories' cash management capability. Our securities can be sold quickly and also serve as collateral in a very active repurchase agreement market. As well, an active futures market in our securities is quickly developing since contracts started trading on the Chicago Board of Trade and the Chicago Mercantile Exchange in March, 2000. The enhancement to liquidity provided by GSE securities ameliorates systemic risk.[63]

E. Capital

Since 1992, our regulatory capital requirements have incorporated both a traditional (leverage) and a risk-based capital requirement. Unlike bank and thrift minimum capital requirements, however, Freddie Mac's leverage requirement applies to both off-balance sheet and on-balance sheet assets. The minimum capital requirement must be satisfied with "core capital" This includes common stock, perpetual non-cumulative preferred, paid-in capital and retained earnings. In every quarter since its implementation of the minimum capital requirement, OFHEO has classified Freddie Mac as "adequately capitalized," the highest statutory rating category. Our recently announced commitment to issue subordinated debt in an amount that, with core capital, will equal four percent of on-balance sheet assets will enhance and support this strong minimum capital base.

[61] "Agency debt not a threat to banks—U.S. regulator," Reuters (wire), June 30, 2000, 12:46 pm EDT.

[62] Id.

[63] See generally Michael J. Fleming, "Financial Market Implications of the Federal Debt Paydown, (September 2000), forthcoming, *Brookings Paper on Economic Activity*; Michael J. Fleming, "The Benchmark U.S. Treasury Market: Recent Performance and Possible Alternatives," FRBY *Economic Review* 129 (April 2000).

In addition to minimum capital, Congress also imposed a stringent, risk-based capital requirement that requires stress testing under severe interest-rate and credit-risk conditions. Freddie Mac and Fannie Mae must hold enough capital to survive a ten-year period in which credit losses equal, on a nationwide basis, the worst actual two-year regional experience.[64] Capital must be sufficient to survive a simultaneous interest-rate shock greater than any previously experienced by the two companies. The interest rate stress scenarios require interest rates to rise or fall up to 600 basis points and remain at that level for 10 years. While the market estimates that such interest rate changes are quite unlikely, the combination of a simultaneous occurrence of the credit and interest rate stress scenarios is more unlikely still.

Finally, to mitigate management and operations risk, the statutory standard requires Freddie Mac and Fannie Mae to hold an additional 30 percent capital cushion. We must maintain 130% of the capital needed to survive a long-lasting, highly unlikely and extremely stressful economic scenario.

Our risk-based capital standard is a dynamic standard that is tailored to the specific risks of our business. Unlike bank and thrift capital requirements, our requirements are based upon quantifiable risk under hypothetical, yet concrete conditions. Unlike the traditional leverage ratios applicable to insured depository institutions, our capital requirements increase for riskier assets and funding strategies and change with market conditions. According to a comparative analysis prepared by William Seidman, the former chairman of the FDIC, "The risk based capital standard set forth in the 1992 GSE Act creates a very stringent capital standard, one that could be devastatingly stringent if applied to most other financial institutions."[65]

IPS Sendero, a consulting firm, simulated the application of our risk-based capital standard to a prototypical thrift institution. The results show that the thrift industry could not survive five years under our risk-based capital requirements, and that the thrift industry's capital would be required to increase to 27 percent of assets in order for the industry to survive the risk-based stress test scenario.[66]

While OFHEO is in the final stages of promulgating final regulations to implement the statutory standard, Freddie Mac has designed and applied its own dynamic and forward-looking stress test based on the statutory specifications. Freddie Mac has managed its capital to its own internal, rigorous stress tests for a decade, and has complied with tests that others would certainly fail. Our portfolio approach considers all of our positions and captures the dynamic interactions between both credit- and interest-rate risk.

[64] 12 U.S.C. §4611.

[65] L. William Seidman, et al., Memorandum to Freddie Mac, March 29, 2000.

[66] IPS Sendero, Thrift Industry Analysis: Implications of Risk-Based Capital Stress Test Requirements (August 19, 1999).

F. Disclosure

Recognizing the importance of transparency to market discipline and safe and sound operations, Freddie Mac discloses unusually detailed and comprehensive information. Key disclosure elements include PMVS and fair market value; debt repricing schedules; current mortgage loan-to-value ratios; the geographic distribution of the portfolio; and the parameters and results of internal stress tests. Freddie Mac follows SEC disclosure guidelines to ensure that investors and the public can determine changes in Freddie Mac's risk exposure.

Last year, Freddie Mac requested that PriceWaterhouseCoopers (PWC) perform a comparison of Freddie Mac's public risk disclosures with those of selected financial institutions generally recognized to be providing best-in-class risk management disclosures.[67] PWC found that our risk management disclosures "are among the best of the risk management disclosures provided by the recognized best-in-class group included in this study."[68] PWC considered our disclosures "above average" in all risk management categories, including specifically market risk, credit risk, capital management and derivatives.[69] Finally, PWC concluded that Freddie Mac (voluntarily) satisfied all the applicable disclosure requirements specified not only by the SEC, but also by the Financial Accounting Standards Board (FASB) and other regulatory bodies.[70]

Freddie Mac believes that our combination of credit and market risk management discipline, capital management and comprehensive, best-in-class disclosure practices render Freddie Mac among the least likely of all large financial institutions to pose systemic risk to the financial system. Freddie Mac's record of success has been possibk through its consistent and conservative management discipline.

Summary

Freddie Mac's expert credit-risk, interest-rate risk and capital management; its distribution of risks among a diverse investor base; and its comprehensive disclosures combined with superb supervisory oversight make Freddie Mac among the least likely of financial institutions to pose systemic risk.

[67] PWC, "Freddie Mac: Risk Disclosure Benchmarking Study" (May 15, 2000).

[68] Id. at Appendix 2, p.4.

[69] Id. at 5.

[70] Id. at 4.

III. Exceeding Standards for Capital, Supervisory Oversight and Market Discipline

Freddie Mac is committed to remaining at the forefront of excellent risk management practices. Because of our vital role in the housing finance system, our safety and soundness is a matter of the utmost public importance. Last year, Congress held a series of oversight hearings concerning our safety and soundness. We responded to these concerns in a serious and proactive manner.

Freddie Mac is already at or near the "best in class" for almost all types of risk management and disclosure practices. After carefully examining the statements of financial regulators, we developed a set of new financial management and disclosure commitments that would unequivocally demonstrate that we maintain "best practices" in financial management standards.

On October 19, 2000, we appeared with Representative Baker, the Chairman of our oversight subcommittee, to announce that we are implementing a series of commitments regarding financial operations that will strengthen capital adequacy, transparency and market discipline. These commitments include enhancements to our periodic public disclosures that will improve the timeliness and quality of the financial information available to the public about Freddie Mac. These commitments will ensure that Freddie Mac's risk management and disclosure standards remain the best.

Core Principles for Risk Management

In considering the appropriate scope, design and components of our voluntary commitments, we applied core principles drawn from the "three pillars" capital framework set forth by the Basel Committee on Banking Supervision in its June, 1999 consultative paper,[71] recently reissued in a second and more comprehensive set of consultation documents.[72] The 1999 Basel Consultative Paper and the 2001 New Basel Capital Accord propose a capital adequacy framework to replace the 1988 Capital Accord for U.S. bank capital standards. Much of the 1988 Accord was rejected, including reliance on simple ratios to set capital standards, as the framework did not accurately align capital requirements to the actual risks incurred by regulated institutions.

The framework of both the 1999 Basel Consultative Paper and the 2001 Basel Accord rests on "three pillars":

[71] *A New Capital Adequacy Framework*, Consultative Paper on Capital Adequacy No. 50, Basel Committee on Banking Supervision (June 1999) (the "1999 Basel Consultative Paper").

[72] *The New Basel Capital Accord,* Consultative Document, Basel Committee on Banking Supervision (January 2001) (the "2001 Basel Accord").

- Capital requirements[73] consist of a definition of regulatory capital, measures of risk exposure, and rules specifying the level of capital in relation to those risks.[74]

- Supervisory review of capital adequacy is explicitly recognized as an integral and critical component of the capital framework and a complement to both the capital requirement and market discipline pillars.[75]

- Market discipline consists of greater transparency through public disclosure, imposing strong incentives on institutions to conduct their business in a safe, sound and efficient manner and to maintain a strong capital base as a cushion against potential future losses arising from risk exposures.[76]

[73] The Basel Consultative Paper and the 2001 Basel Accord referto this pillar as imposing "minimum capital" requirements. Because the Companies' statutory capital requirements also include a minimum capital concept, to avoid confusing the terms, we are referring to the First Pillar requirement as used by the 2001 Basel Consultative Paper simply as the "capital requirement."

[74] 2001 Basel Consultative Paper, Part 2.

[75] *Id.* at Part 3. The Board of Governors of the Federal Reserve System shares this view of the role of supervisory examination in the overall risk management framework. Chairman Greenspan, in his very recent address on "Banking Supervision" before the American Bankers Association, stated that "We are moving toward a system in which we judge how well [banks'] internal risk models are functioning and whether the risk thus measured is being appropriately managed and offset with capital. And we are moving toward a system in which public disclosure and market discipline are going to play increasing roles, especially at our large institutions, as a necessity to avoid expansion of invasive and burdensome supervision and regulation." Remarks by Chairman Alan Greenspan, Washington, D.C. (September 18, 2000). Governor Laurence Meyer has elaborated on similar themes:

> [I]t will, I think, be increasingly the job of the supervisor to evaluate and test systems and to evaluate and criticize the accuracy and helpfulness of the information banks disclose about their own risk profiles. I antic ipate that market discipline at the complex banks will play an important role as a supplement to the evolving supervisory paradigm. Internal systems and public disclosure are the real first line of defense in the safety and soundness of our banking system.

"The Roles of Banks, Supervisors, and the Market in Advancing Risk Management," Remarks by Governor Laurence H. Meyer, at the Risk Management Planning Conference, Chicago, Illinois (June 1, 2000).

[76] *Id.* at Part 4. Both Chairman Greenspan and Governor Meyers, in their recent remarks, have referred to market discipline as our "first line of defense" of the safety and soundness of financial institutions. Chairman Greenspan told the American Bankers Association in his remarks on banking supervision that "private counterparty s upervision remains the first line of regulatory defense. . . . The speed of transactions and the growing complexities of these [financial] instruments have required federal and state examiners to focus supervision more on risk-management procedures than on actual portfolios. Indeed, I would characterize recent examination innovations and proposals as attempting both to harness and to simulate market forces in the supervision of banks."

The third Basel pillar – market discipline – has been a particular focus of federal financial regulators. The U.S. Department of the Treasury has concluded that market discipline can do much to mitigate systemic risk,[77] a position strongly endorsed by OFHEO itself. In its most recent annual report to Congress, OFHEO stated:

> Market discipline of Fannie Mae and Freddie Mac is a potentially important complement to safety and soundness regulation of the Enterprises. If creditors have accurate and timely information on the financial risks of Fannie Mae and Freddie Mac and believe that they are exposed to material risk of loss if the Enterprises get into financial trouble, they will take steps to ensure that the Enterprises strike an appropriate balance between risk and return. By enhancing market discipline, greater transparency has the potential to limit the systemic risk that Fannie Mae and Freddie Mac may pose to the financial system.[78]

Freddie Mac and Fannie Mae's voluntary commitments employ the specific recommendations of financial regulators for actions that will reduce systemic risks. By adopting standards as rigorous as these, they provide significant comfort that the risks of the two companies are well-managed.

Summary of Components of the Voluntary Commitments

The components of Freddie Mac and Fannie Mae's commitments follow.

Component 1—Periodic Issuance of Subordinated Debt: Freddie Mac and Fannie Mae will issue publicly traded and externally rated subordinated debt on a semi-annual basis.[79] This subordinated debt will be issued in an amount such that the sum of core capital and outstanding subordinated debt will equal or exceed 4 percent of on-

[77] *See, e.g.,* Prepared Statement of Treasury Under Secretary Gary Gensler before the House Banking Committee Subcommittee on Capital Markets, Securities and Government Sponsored Enterprises, March 22, 2000:

> Treasury's general approach to mitigating systemic risk in capital markets emphasizes the role of the private sector. The public sector has three roles: creating an environment in which market discipline can work effectively; promoting the maximum degree of transparency; and maintaining the competitiveness of the system as a whole. For institutions where the public has a special interest – for example, depository institutions carrying federal deposit insurance – further government involvement such as on-site examinations and capital standards is appropriate. Promoting market discipline means crafting government policy so that creditors do not rely on governmental intervention to safeguard them against loss. Transparency is the necessary corollary to market discipline. The government cannot impose market discipline, but it can enhance its effectiveness by promoting transparency. Transparency lessens uncertainty and thereby promotes market stability.

[78] Office of Federal Housing Enterprise Oversight, 2000 Report to Congress at 33.

[79] For more information, see *www.freddiemac.com.*

balance-sheet assets following a three-year phase-in period. This amount of subordinated debt will be in addition to, and not a substitute for, required equity capital and will strengthen Freddie Mac's safety and soundness by providing a supplemental cushion. The terms of the subordinated debt will provide for interest payments to be suspended for up to five years under defined conditions of financial stress.

Congress and many in the financial regulatory community have identified periodic issuance of subordinated debt as a mechanism for promoting market discipline for financial institutions.[80] As Federal Reserve Board Chairman Greenspan stated in testimony before Congress, subordinated debt serves a function similar to "a canary in a mine," providing an early warning signal to the market and regulators regarding the financial stability of the issuing institution.[81]

Most recently, a joint report on subordinated debt by the Federal Reserve and the Treasury[82] found that subordinated debt issuance by large depository institutions may encourage market discipline and generate other supervisory benefits. In describing the attributes of subordinated debt that would make it a useful mechanism for imposing market discipline, the report identifies a number of attributes – for example, publicly traded debt, relatively standardized debt instruments, optimal minimum maturities and a policy of regular issuance.[83] As described above, our commitment reflects the recommended terms (*e.g.*, amount, maturity, frequency of issuance) and embodies the goals of recent regulatory and legislative proposals and studies concerning the use of subordinated debt as an instrument of market discipline. The spreads at which this debt is issued will provide a direct and quantitative market-based indication of the Companies' financial strength.

[80] *See, e.g.,* "Using Subordinated Debt as an Instrument of Market Discipline," Federal Reserve Study Group on Subordinated Debt and Debentures, Staff Study 172 (December 1999). ("A promising approach to enhance market discipline which has received considerable renewed attention of late is to adopt a subordinated debt policy.")

[81] Testimony of Federal Reserve Board Chairman Alan Greenspan in his re-nomination hearing before the Senate Banking Committee (January 26, 2000) (Asked about his view on mandatory subordinated debt proposals, Chairman Greenspan responded: "The great advantage of having vehicles on the balance sheet such as subordinated debentures is that it is something in the nature ... of a canary in a mine, that if ... some of the credit capacity of these institutions seems to be eroding at the edges, it is very much more likely to show up in the prices of liabilities which are not insured and have no collateral behind them.")

[82] "The Feasibility and Desirability of Mandatory Subordinated Debt," Report by the Board of Governors of the Federal Reserve System and the Secretary of the U.S. Department of the Treasury, submitted to the Congress pursuant to section 108 of the Gramm-Leach-Bliley act of 1999 (December 2000).

[83] *Id.*, at 50-56.

Subordinated debt issuance will have the corollary benefit of greatly enhancing Freddie Mac's overall capital position.[84] While subordinated debt will not be treated as regulatory capital, the amount of the debt, when combined with core capital, will represent four percent of the Companies' total assets following a three-year phase-in period.[85]

Component 2—Liquidity Management and Contingency Planning: Freddie Mac and Fannie Mae will comply with principles of sound liquidity management set forth by the Basel Committee on Banking Supervision[86] and will maintain more than three months' worth of liquidity assuming they have no access to public debt markets. Maintaining this liquidity will keep low the risk that the companies' operations could be disrupted during a significant financial crisis. In order to bolster existing techniques for managing liquidity risk, Freddie Mac will review these techniques in light of the principles for liquidity management in the Basel Liquidity Paper and ensure prompt implementation of any necessary enhancements. In particular, Freddie Mac is enhancing contingency plans for handling a liquidity crisis based on the assumption that Freddie Mac will be unable to access the public debt markets for a period exceeding three months.

These contingency plans will reflect a phased approach (based on a maturity ladder of cash inflows and outflows) involving use of short-term investments (primarily cash and Federal Reserve funds), settlement of outstanding short-term forward sales and reverse repurchase transactions, liquidation of non-mortgage assets, and execution of repurchase transactions using mortgage securities from the Companies' retained portfolio. In each case, the Companies will assume substantial discounts in projecting the cash to be generated by such asset sales and repurchase transactions. The three-month period to be covered by these contingency plans reflects the Companies' current assessment of what would constitute an extreme "what if" scenario.

[84] *Cf.* Speech by Federal Reserve Board Governor Lawrence Meyers before the Conference on Reforming Bank Capital Standards, New York (June 14, 1999) ("Subordinated debt issued in place of insured deposits also provides an extra 'cushion' for the deposit insurance fund...")

[85] Pursuant to the Federal Housing Enterprises Financial Safety and Soundness Act of 1992, "core capital" is the sum of the value of outstanding common stock; the value of outstanding preferred stock; paid-in capital; and retained earnings. 12 U.S.C. §4502(4).

[86] "Sound Practices for Managing Liquidity in Banking Organisations" Consultative Paper No. 69, Basel Committee on Banking Supervision (February 2000) (the "Basel Liquidity Paper"). In contrast to this "best practices" approach to liquidity, the Federal Housing Finance Board has recently proposed a minimum liquidity requirement for the Federal Home Loan Banks that is based on a five-day timeframe. 65 *Fed. Reg.* 43408, 43430-31 (July 13, 2000). This proposal appears to assume that a liquidity crisis lasting any longer than this would necessitate assistance from the Federal Reserve System, the U.S. Treasury, or the Congress. 65 *Fed. Reg.* at 43431. The Companies' liquidity contingency plans assume no such assistance.

Component 3—Interim Implementation of Risk-based Capital Stress Test: Pending final promulgation of a risk-based capital standard by OFHEO, Freddie Mac and Fannie Mae will implement a risk-based capital stress test and disclose the test outcome on a quarterly basis. Parameters, such as the interest-rate shocks used in the test, will be based on those contained in the Federal Housing Enterprises Financial Safety and Soundness Act of 1992.[87] Interim implementation does not substitute for OFHEO's promulgation of a final risk-based capital rule.

Risk-based stress testing is recognized as the most progressive and effective mechanism for capital management. In recent speeches and proposals, the Basel Committee on Banking Supervision and U.S. bank regulators have sought supplements and alternatives to current bank ratio-based capital standards in view of the acknowledged shortcomings of these standards. A March 2000 Basel Report discusses and recommends stress testing as a risk management technique and incorporation of stress testing into management decisions.[88] Federal bank regulators in the United States strongly encourage the practice of internal stress testing by large banks to assess capital adequacy and evaluate the effect of high-stress scenarios that could jeopardize the health of a financial institution.[89]

Supervisory guidance of these regulators addresses attributes of high quality stress tests such as the use of scenarios of unusual and stressful conditions; consideration of risk interaction; discounting the benefits of diversification; and integrating stress tests into the management process.[90] All of these attributes are embodied in the1992 Act's risk-based capital stress test. Moreover, the 1992 Act's test is extremely rigorous. In the event that this stringent risk-based capital stress test were applied to the thrift industry, the industry would need to increase its capital threefold or be virtually insolvent within five years.[91]

[87] Federal Housing Enterprises Financial Safety and Soundness Act of 1992, P.L. 102-550, 106 Stat. 3672 (October 28, 1992) (the "1992 Act").

[88] *Stress Testing by Large Financial Institutions: Current Practice and Aggregation Issues*, Basel Committee on the Global Financial System (March 8, 2000). (This Report discusses various types of state of the art stress tests, defined as the examination of the potential effects on a firm's financial condition of a set of specified changes in risk factors, corresponding to exceptional but plausible events.)

[89] *Assessing Capital Adequacy in Relation to Risk at Large Banking Organizations and Others with Complex Risk Profiles,* Division of Banking Supervision and Regulation, Federal Reserve Board, SR 99-18 (SUP) (July 1,1999); Federal Reserve Board, *Bank Holding Company Supervision Manual*, Section 2126.0.5.1.3 (Dec 1998); Speech by Federal Reserve Bank of New York President William McDonough before the Bond Market Association, New York (January 21, 1999).

[90] *Id.*

[91] For example, after review of this statutory stress test, former FDIC Chairman William Seidman has concluded: "The risk based capital standard set forth in the 1992 GSE Act creates a very stringent capital standard, one that could be devastatingly stringent if applied to most other financial institutions."

Component 4—New Interest-Rate Risk Disclosures: Freddie Mac and Fannie Mae will initiate public disclosure of interest-rate risk sensitivity analyses and results on a monthly basis. Monthly disclosure of interest-rate risk exceeds current best practices of financial institutions. Through this commitment, Freddie Mac will provide investors with interest-rate risk disclosure on a more frequent basis than is provided by any other financial institution in the world. Interest-rate risk will be measured by the impact on financial condition arising from both (1) an immediate adverse change in interest rates of 50 basis points and (2) an immediate adverse change in the slope of the yield curve of 25 basis points. Freddie Mac will measure and disclose interest rate sensitivity on a monthly basis, exceeding existing best practices regarding the frequency of disclosure employed by comparable financial institutions.

Today, best practices in interest-rate risk disclosure are largely embodied in the practices of Freddie Mac and leading money center banks and investment banks. The content of these disclosures conforms to present SEC requirements for quantitative and qualitative disclosures related to risk management activities, and the timing of these disclosures is on a quarterly basis, going beyond the annual disclosure requirements contained in the SEC rules.

Indeed, quarterly interest-rate risk disclosure is a standard that would be "best practices" for most institutions. The recent report providing the recommendations of the Working Group on Public Disclosure, provided to the Federal Reserve Board, the Comptroller of the Currency and the U.S. Securities and Exchange Commission by Walter Shipley, retired Chairman of Chase Manhattan Bank (the "Shipley Report"), recommends *quarterly* disclosure of interest-rate risk (moving from the industry-standard annual disclosure). Freddie Mac's interest-rate risk disclosure commitment provides for monthly public disclosure of quantitative interest-rate risk analyses, exceeding the Shipley Report recommendations, together with qualitative discussion of quantitative results and risk modeling and assumptions surpassing the Shipley Report recommendations.

In modern financial markets, interest rate and other market risk can expand and contract at great speed – for example, as with the international liquidity crisis that erupted during the third quarter of 1998. To understand the impact of rapidly changing interest rate environments and manage their investment positions, investors need current information about their risk. By committing to interest-rate risk disclosures on a monthly basis, Freddie Mac is addressing this important need for enhanced transparency and setting a standard unmatched by other major financial institutions.

Memorandum of L. William Seidman, Jacqueline Pace and David S. Chung to Freddie Mac (March 29, 2000). Similarly, a 1999 study conducted by the economic consulting firm IPS-Sendero put thrift industry data through this statutory risk-based stress test and concluded that the industry would run out of capital after five years and would need to triple its capital to survive the stress test. *Thrift Industry Analysis: Implications of Risk-Based Capital Stress Test Requirements* (August 19, 1999).

Component 5—New Credit Risk Disclosures: Freddie Mac and Fannie Mae will initiate public disclosure of credit risk sensitivity analyses and results on a quarterly basis. Freddie Mac will use a forward-looking sensitivity analysis measuring the sensitivity of the fair value of credit losses to an instantaneous decline in property values of five percent. This will provide investors with information on credit risk that no other financial institution provides. This exceeds the best practices of financial institutions.

Best practices for credit risk disclosures are reflected in the public risk disclosures of Freddie Mac, Fannie Mae and leading money center banks. The disclosures provide a thorough quantitative analysis of credit risk exposures. While these quantitative disclosures conform to present SEC requirements, they show point-in-time, historical credit exposures rather than forward-looking sensitivity disclosures that allow market participants to better evaluate future credit exposures. The Chair of the Basel Committee's Transparency Group has cited a "clear demand for more comprehensive and accurate information on credit risk" than is currently disclosed.[92]

Freddie Mac's enhanced disclosure of credit risk on a quarterly basis goes beyond existing SEC requirements, beyond the Basel Committee's recommended practices and beyond existing best practices for financial institutions. Leading money center banks publicly disclose credit exposure based on historical information and do not publicly disclose quantitative sensitivity analyses based on a decline in property values as Freddie Mac will do. Measuring the sensitivity of the fair value of credit losses to an instantaneous decline in property values of five percent is a stringent test of the credit risk of Freddie Mac. Based on an analysis of house prices for conventional mortgages that Freddie Mac has purchased, since 1975, there has never been a five percent decline in property values occurring nationally during any four consecutive quarters. Moreover, a decline of five percent has occurred at the regional level (using the Census Bureau's nine defined regions) during less than one percent of consecutive four-quarter periods since 1975.

Together with existing credit-risk disclosures, this new credit-risk sensitivity disclosure will enhance market discipline by providing investors with better information regarding credit risk than is available for any other major financial institution.

[92] *See* Basel Committee on Banking Supervis ion, Press Release, "Basel Committee Issues Credit Risk Guidance," July 27, 1999 at 2. The full quote is as follows: "'Informed investors, counterparties, and other market participants are an important element in a stable, healthy banking environment,' said Ms Susan Krause, Senior Deputy Comptroller for International Affairs at the Office of the Comptroller of the Currency of the United States and Chair of the Basel Committee's Transparency Group...'We conducted interviews with a wide range of information users as well as research into actual credit risk disclosure practices in various countries. The results demonstrated that there is a clear demand for more comprehensive and accurate information on credit risk than currently exists.'"

Component 6—Public Disclosure of Annual Rating: Freddie Mac and Fannie Mae will commit to obtain an annual rating from a nationally recognized statistical rating organization and to disclose this rating to the public. This rating provides an independent early warning signal to the public and Congress regarding each company's financial condition. Ratings will assess the risk to the government, or the independent financial strength, of each of the companies.

The chart attached as Appendix I to these comments compares Freddie Mac and Fannie Mae's new commitments to current financial institution practices. The voluntary commitments of Freddie Mac set new standards for financial institution regulation. In a special comment issued shortly after the commitments were made, Moody's Investors Service stated:

> These financial and disclosure commitments by Fannie Mae and Freddie Mac set new standards not only for them, but also for the global financial market. These GSEs' proposals rely extensively on recommendations by the Basel Committee on Banking Supervision for bank disclosure, even taking such disclosure a step further than the recommendations in some instances. . . .The leadership shown by Freddie Mac and Fannie Mae could prove difficult for other firms to ignore, and could usher in a wave of enhanced financial risk disclosure. This may prove to be one of the more important ramifications of the GSEs' initiatives.[93]

Freddie Mac is at the vanguard of evolving global capital risk management and disclosure practices. Our voluntary commitments ensure that we remain among the best managed financial institutions and among the least likely to pose significant risks.

Conclusion

Freddie Mac has long been a leader in managing financial risks. Adhering to the highest principles of safe and sound financial operations is inherent in the significant statutory purposes that Congress has given to Freddie Mac.

In the Federal Housing Enterprises Financial Safety and Soundness Act of 1992, Congress found that an important public mission is embodied and reflected in our charter; that our ability to accomplish that mission is important to providing housing in the United States and the health of the nation's economy; that we currently pose a low financial risk of insolvency; and that our public importance requires further efforts to reduce any risk of failure.[94]

[93] Special Comment, "New Freddie Mac & Fannie Mae 'Open Book' Policy: A Positive Credit Development," Moody's Investors Service (October 2000).

[94] 12 U.S.C. §4501(1)-(3).

Freddie Mac meets an essential public mission to provide a stable and liquid residential secondary mortgage market. This liquid, stable, efficient and low-cost secondary mortgage market anchors the world's best housing finance system, a system that allows millions of America's families to become homeowners.

Managing risk in the financial system is a shared responsibility. Freddie Mac welcomes public discussion with OFHEO and other regulators, with financial market participants and other groups to make the worldwide financial system as safe and stable as possible. We look forward to working with the entire range of financial institutions and regulatory bodies that are indispensable participants in any meaningful attempt to identify and mitigate sources of systemic financial risk.

Sincerely,

Edward L. Golding
Senior Vice President

Appendix I: Comparison of Components of the Voluntary Commitments

This table compares Freddie Mac's and Fannie Mae's commitments to other standards:

Component	Companies' New Standard	Current Company Standards	Current Depository Institution Standards	Result
Component 1—Periodic Subordinated Debt Issuance	• Issued in an amount such that the sum of core capital and outstanding subordinated debt equals or exceeds 4 percent of on-balance-sheet assets following a three-year phase-in period • Periodic issuance (semi-annual) with public trading and external ratings • Average maturity of at least five years • Sub debt terms provide that interest payments would be suspended and will accumulate for up to five years if (a) core capital falls below 125 percent of critical capital levels; or (b) core capital falls below minimum capital levels and, pursuant to a company's request, the Secretary of the Treasury exercises his or her discretionary authority under the company's charter to purchase the company's obligations • Subordinated debt will be in addition to, but not a substitute for, equity capital	• Neither Company currently issues subordinated debt on a periodic basis.	• Banks and bank holding companies are not required to issue subordinated debt. Typically only the largest banks and bank holding companies issue subordinated debt and most banks' subordinated debt is not publicly traded. • No bank or bank holding company has committed to enhance its disclosures and market discipline through periodic issuance of subordinated debt.	• Externally rated subordinated debt wi serve as a market barometer of the companies' financial strength • The subordinated del commitment will enhance market discipline and transparency, and go beyond current banking standards an practices. • The terms of the subordinated debt wi contractually suspen interest payments on company's subordinated debt we before insolvency.

Component	Companies' New Standard	Current Company Standards	Current Depository Institution Standards	Result
Component 2—Liquidity Management and Contingency Planning	• The companies will enhance existing qualitative controls and procedures to ensure compliance with Basel Committee's principles for managing liquidity • The companies will commit to maintain contingency plans for handling a liquidity crisis based on the assumption that they are unable to access the debt markets for a period exceeding three months. • The companies will commit to maintain at least five percent of on-balance sheet assets in a liquid, marketable portfolio of non-mortgage securities and to maintain additional, highly liquid securities in unencumbered form in order to facilitate liquidity. • Subject to continual OFHEO supervisory examination	• Each company currently maintains asset-liability management policies establishing policies and procedures designed to satisfy day-to-day corporate funding requirements and to ensure the availability of sufficient funds at all times. • The companies maintain high-quality liquid investment and contingency portfolios and have diverse sources of liquidity needed to provide stability under a broad range of market conditions.	• The Basel Committee has established 14 "best practices" principles for liquidity management at large banks. None of these recommendations are required to be implemented. Financial institution regulators assess liquidity issues as part of their overall examination process • The Committee considers four elements of liquidity management to be "crucial" for banks of any size and scope of operations: • good management information systems; • analysis of net funding requirements under alternative scenarios • diversification of funding sources; and • contingency planning.	• This will enhance market discipline and increase the ability o the Companies to survive an economic downturn without fostering any perception that governmental intervention will safeguard debt holde against loss.

Component	Companies' New Standard	Current Company Standards	Current Depository Institution Standards	Result
Component 3—Interim Implementation of Risk-based Capital Stress Test	• The companies will voluntarily implement a stress test tying capital to risk pursuant to assumptions based on the 1992 Act • The companies will disclose the parameters used in their risk models and stress test outcomes on a quarterly basis • Interim implementation in no way substitutes for OFHEO's promulgation of a final risk-based capital rule. • Subject to continual OFHEO supervisory examination under existing examination program.	• The assumptions and scenarios currently used by the companies in their internal capital stress tests are not uniform. • The companies do no currently disclose the results of their internal stress tests on a quarterly basis.	• Stress tests do not generally form the basis for setting overall capital levels, although individual banks may perform stress tests on specific lines of business (*e.g.*, those banks subject to market risk requirements must apply stress tests on their trading portfolios). • Federal bank regulators strongly encourage internal stress testing by large banks to assess capital adequacy and to evaluate the effect of high-stress scenarios that could jeopardize the health of a financial institution.	• Self-implementation and public disclosure o an interim risk-based capital stress test will increase confidence in and transparency of, tł Companies' safety anc soundness and risk management. • The stress test incorporates best practices for a high quality stress test. Unlike current bank standards, the stress te is dynamic and intend to reflect evolving risk management techniques. • The stress test will serve as an industry model for other large financial institutions an will lead the industry in adoption of the Basel Committee recommendations relating to risk- based capital stress tests.

Component	Companies' New Standard	Current Company Standards	Current Depository Institution Standards	Result
Component 4—New Best Practice Interest-Rate Risk Disclosure Standard	• The companies will provide public disclosure of quantitative interest-rate analyses on a monthly basis, exceeding best practice standards for frequency of disclosure • Quantitative disclosure will include the impact on financial condition of both a 50-basis-point shift in interest rates and a 25-basis point change in the slope of the yield curve • Disclosure to include qualitative discussion of quantitative results and any material changes in risk modeling and assumptions • Subject to continual OFHEO supervisory examination under existing examination program	• Current company practices meet SEC requirements and compare favorably with leading banks • Frequency is on an annual or quarterly basis • The companies provide substantively comparable quantitative disclosures measuring the change in portfolio market value or net asset value or projected net interest income that would be caused by immediate parallel shifts (upward or downward) in interest rates across the entire yield curve • The companies' qualitative disclosure discusses methodology underlying the quantitative disclosure; also discusses other interest rate and market risks (such as basis risk and volatility risk) and various operational risks (such as financial modeling risk)	• Currently, there are no financial institutions that commit to disclose interest-rate risk on a monthly basis	• Freddie Mac and Fannie Mae's enhance disclosures will set nev best practices standarc for quantitative and qualitative disclosures for financial institutior •Frequency of disclosure – on a monthly basis – will exceed any other financial institution's disclosure practices or commitments

Component	Companies' New Standard	Current Company Standards	Current Depository Institution Standards	Result
Component 5—New Best Practice Credit Risk Disclosure Standard	• The companies will provide public disclosure of quantitative credit risk sensitivity on a quarterly basis, establishing a new "forward-looking" best practice standard • Quantitative disclosure to include a sensitivity analysis of expected loss in net fair value of assets and liabilities from immediate decline in property values of five percent • Disclosure to include discussion of results and any material changes in risk modeling and assumptions • Subject to continual OFHEO supervisory examination under existing examination program	• Current company quantitative disclosures meet SEC requirements and compare favorably with leading money center banks • The companies' disclosure includes portfolio UPB by year of origination, original and estimated current LTV ratios and geographic concentrations	• Required disclosure shows point-in- time, historical views of credit risk exposures • Some financial institution provide slightly more information that is historical, not forward-looking	• New forward-looking sensitivity analysis showing the expected financial impact from an immediate five percent decline in property values will enhance current historical, point-in-time credit risk disclosure • Freddie Mac and Fannie Mae's enhanced disclosure exceeds Basel Committee best practices and sets a new standard for best practices for financial institutions

Component	Companies' New Standard	Current Company Standards	Current Depository Institution Standards	Result
Component 6—Public Disclosure of Annual Rating	• The companies will commit to obtain an annual rating from a nationally recognized statistical rating organization and to disclose this rating to the public • The rating will assess the risk to the Government, or, independent financial strength, of each of the companies	• Each company currently has outstanding preferred stock that is rated by both Standard & Poor's and Moody's Investors Service. Since 1996, the companies have maintained a rating of AA-/aa3 on preferred stock issuances. • In 1996, the Director of OFHEO contracted for a risk to the Government rating on the companies. The rating process resulted in a AA- rating for each Company.	• There is no requirement for banks or bank holding companies to obtain and disclose external credit ratings, either on issued securities or on a stand-alone basis. Only six U.S. bank holding companies currently maintain a rating of AA-/aa3 or better on long-term senior debt. The vast majority of preferred stock issued by banks is privately placed and not rated.	• This component provides a readily discernible measure c capital strength that promotes market discipline.