Mortgage Market Note 09-4

State of the Private Mortgage Insurance Industry

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State of the Private Mortgage Insurance Industry: Implications for U.S. Mortgage Markets and the Enterprises

I. Introduction

Like other debt instruments, residential mortgages involve credit risk. That risk arises from uncertainty over whether the borrower will perform as required by the mortgage document. Mortgage insurance provides protection against the losses created by mortgage defaults. Most mortgage insurance covers individual loans, although lenders or other investors may purchase pool policies, which protect against losses on groups of loans. The current crisis in the U.S. housing and mortgage markets has imposed large losses on the private mortgage insurance (MI) industry, which specializes in insuring conventional single-family mortgages with loan-to-value (LTV) ratios above 80 percent.

This Mortgage Market Note discusses the evolution of residential mortgage insurance in the U.S., explores recent mortgage insurance trends, reviews how Fannie Mae and Freddie Mac (the Enterprises) use private MI, and discusses the current state of the private MI industry and its need for additional capital to support new mortgage lending.

II. Evolution of Mortgage Insurance in the U.S.

The nation's MI industry dates back to the early 1900s when title insurance firms extended their business operations to provide insurance against borrower default. The industry grew rapidly during the real estate boom of the 1920s. However, conflicts of interest within the mortgage insurance industry arose. The largest conflict was that mortgage insurers were also originating, buying, and selling mortgages and mortgage pools (including an early form of mortgage securitization).[1] During the Great Depression of the 1930s, the mortgage insurance industry failed under the weight of a default rate approaching 50 percent and foreclosures exceeding 1,000 per day in 1933.[2]

The U.S. government entered the MI business in 1934 with the passage of the National Housing Act (NHA). A key feature of that act was the creation of the Federal Housing Administration (FHA), now an agency of the Department of Housing and Urban Development (HUD). FHA's role was to insure mortgages for qualified low- and moderate-income borrowers with little

[1] Jaffe, Dwight (2003). "The Monoline Restrictions on Mortgage and Title Insurance, with Special Application in California", Haas School of Business, University of California.
[2] Pennington-Cross, Anthony, and Anthony M. Yezer, "FHA in the New Millennium", *Journal of Housing Research* (Vo1. 11, No. 2, 357-372, 2000), 357-372.

savings for a down payment. FHA insurance boosted home ownership by enabling borrowers otherwise priced out of the mortgage market to acquire housing on more affordable terms. The FHA works through a network of approved lenders and commits to those lenders that if the borrower defaults on the mortgage, it will pay the lender the full outstanding balance of the loan. Most of the FHA's risk is covered by charging the borrower mortgage insurance premiums.

The Servicemen's Readjustment Act of 1944—also known as the GI Bill of Rights—provided the legal framework for loan programs for veterans returning from the war. Unlike the FHA, which insures mortgages and charges premiums that vary somewhat by credit risk, the Department of Veterans Affairs (VA) partially guarantees the lender against loss in the event of a foreclosure and charges a flat loan-guarantee fee.[3] VA guarantees are restricted to loans made to borrowers who served in the U.S. military or are on activity duty, reservists, and in some instances, the spouses of reservists and deceased veterans.

From the mid-1930s to the late-1950s, the U.S. government was the sole provider of mortgage insurance. However, as homeowners desired larger homes and prices escalated, lenders began looking for alternatives to FHA-insured loans. Unlike FHA, conventional mortgages did not have ceilings on interest rates and loan amounts were larger. However, conventional mortgages required larger down payments which made it difficult for some families to buy homes. As a result, a demand for an alternative to FHA insurance was created. In 1957, the Mortgage Guaranty Insurance Corporation (MGIC) became the first mortgage insurance firm established since the Great Depression. Between 1957 and 1973, all U.S. states passed legislation allowing for private mortgage insurance.[4] That essentially ended the government's monopoly in that segment of the nation's housing finance system. Today, private mortgage insurance is a monoline business—that is, firms in the industry provide only one type of insurance. In addition to being regulated by state insurance departments, private mortgage insurers are indirectly regulated by Fannie Mae and Freddie Mac through their eligibility, underwriting, disclosure, and financial requirements and by virtue of the Enterprises' dominance of the single-family mortgage market.

Aside from private and government insurance, there are other substitutes for mortgage insurance. Specifically, lenders may self-insure by establishing reserve funds that are available to absorb default losses on pools of loans. Piggyback loans, which became popular in the early 2000s, are also an alternative to mortgage insurance. This type of financing features two mortgages—an 80 percent first mortgage and a second mortgage for 10, 15 or even 20 percent of the purchase price. The first mortgage is sized to meet loan-limit and LTV requirements for sale in the secondary mortgage market without private mortgage insurance, while the simultaneous second lien enables the borrower to receive a larger loan with a smaller down payment. In addition to avoiding mortgage insurance premiums, which would be required if the borrower did not make 20 percent of the purchase price as a down payment, piggyback loans initially offered borrowers a tax

[3] In addition to the FHA and VA mortgage insurance and guarantee programs, Rural Development, an agency of the United States Department of Agriculture, guarantees loans for rural residents with minimal closing costs and no down payment. Those programs operate on a much smaller scale than FHA's programs and are not discussed separately in this paper.

[4] Department of Housing and Urban Development, *Evolution of the U.S. Housing Finance System: A Historical Survey and Lessons for Emerging Mortgage Markets* (Office of Policy Development and Research, April 2006).

advantage. That is, interest on the second lien was tax-deductible, whereas mortgage insurance premiums did not become deductible until the 2007 tax year.[5]

Comparison of Private and Government Mortgage Insurance and Guarantees

Historically, private mortgage insurance differed markedly from government-backed mortgage programs. However, the gap between the two has narrowed somewhat over the years, the end result being more competition between the public and private mortgage insurance sectors. Table 1 compares key features of mortgage insurance provided by private MIs and agencies of the U.S. government.

Table 1

Comparison of Private and Government Mortgage Insurance and Guarantee Programs		
Factor	**Private Mortgage Insurance**	**Government Programs**
Minimum down payment	Required by a few states.	The Housing Emergency Recovery Act of 2008 (HERA) raised the downpayment on FHA-insured mortgages from 3 to 3.5 percent. In some cases VA does not require a down payment.
Loan coverage level	Varies	FHA insures the entire loan balance; VA guarantees a percentage of the loan.
Limit on size of the mortgage insured or guaranteed	None	Pursuant to HERA, beginning in 2009, the loan limit for FHA-insured mortgages for one-unit properties is 115 percent of the local area median home price, as determined by HUD, with a floor of 65 percent of $417,000 (or $271,050) and a ceiling equal to 150 percent of the Enterprises' limit. Limits vary by geographic region and for 2 - 4 unit properties. Beginning in 2009, the VA's guarantee of loans above $144,000 is 25 percent of the new Enterprise loan limit base or the limits for the high cost areas.
Up-front mortgage insurance premium	Required; varies with loan characteristics.	Required by FHA; VA requires an up-front funding fee.
Monthly premium	Premiums vary based on the size of the down payment, type of mortgage, and amount of insurance coverage.	FHA borrowers pay an annual insurance premium that starts at .5 percent of the loan balance and declines over time. There is no insurance premium for VA mortgages.
Cancellation of insurance	Can usually be canceled when the homeowner acquires 20 percent equity in the home. Under Federal law, MI must be cancelled automatically when the borrower has paid the loan down to 78 percent of the original home value.	For FHA mortgages with terms greater than 15 years, the annual mortgage insurance cancels when the LTV ratio reaches 78 percent, provided the borrower has paid the annual mortgage insurance premiums for at least 5 years.
Deductibility of borrower-paid mortgage insurance	Yes, up to a certain income level, through the 2010 tax year.	Yes, up to a certain income level, through the 2010 tax year.
Income limits	None	No maximum income limit on FHA/VA loans.
Interest rate	Market driven	Market driven
Regulation	State regulated. Regulation extends to reserves for losses, capital, etc.	FHA and VA mortgage programs are administered by agencies of the U.S. government.

[5] Mortgage insurance premiums are tax-deductible for homes purchased or refinanced between 2007 and 2010. Deductions are subject to income limits.

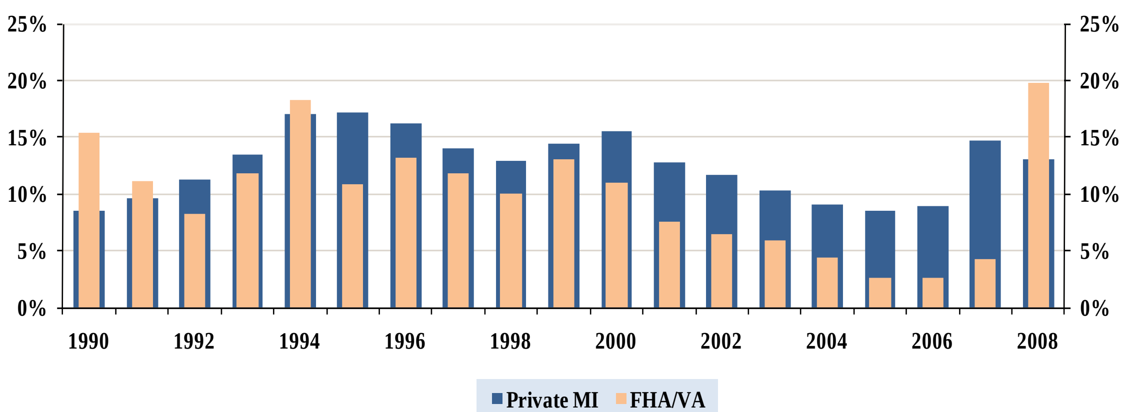
III. Recent Trends in Residential Mortgage Insurance Activity

Both public and private mortgage insurance have contributed significantly to the nation's housing market and to the rise in the nation's homeownership rate. However, mortgage insurance activity has fluctuated over time and between the public and private sectors.

The relative share of newly originated mortgages with loan-level insurance or a government guarantee has varied over the years. During the period 1990 to 2008, the share of mortgages originated that were insured or guaranteed averaged 22.5 percent—9.9 percent were government-backed and 12.6 percent were privately-insured. However, from 2001 to 2006, the share of government-insured mortgages declined rapidly and dramatically; the change in the private MI share was less pronounced (Chart 1). For instance, during the 1990s, the share of government-backed mortgages originated averaged 12.4 percent compared with 13.5 percent for the privately-insured sector. However, from 2001 to 2006, the share of government-backed mortgages originated averaged less than 5.0 percent, declining to a low of 2.6 percent in 2005 and 2006. Much of new FHA insurance in those years covered reverse mortgages. The share of privately-insured mortgage originations averaged 10.2 percent from 2001 to 2006, reaching a low of 8.6 percent in 2005.

Chart 1

Private- and Government-Backed Shares of Single-Family Mortgage Originations



Source: Inside Mortgage Finance

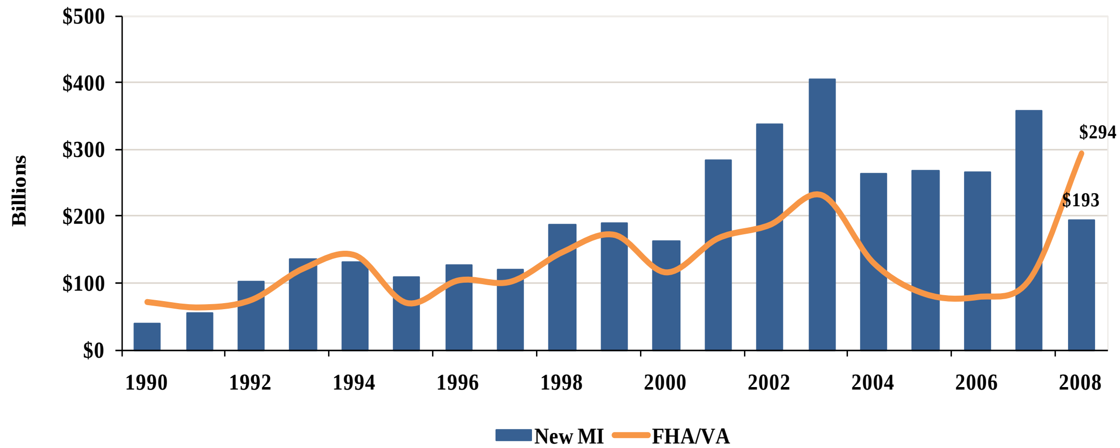
The FHA/VA share of originations surged in 2008 to 19.8 percent on a record volume of $294.5 billion.[6] The share of privately-insured mortgages came in above its 19-year (1990 - 2008), average at 13 percent or $193.4 billion (Charts 1 and 2). However, that was the industry's lowest volume of insurance written since 2000. That year was also the first time since 1990 that privately-insured mortgages accounted for less than 40 percent of total insured or government-guaranteed mortgage originations, and the first time since 1994 that the government's share of those loans exceeded the private share (Chart 3). For all of 2008, mortgages that were insured or guaranteed by a third party totaled $487.9 billion and accounted for almost one-third of the

[6] Most of the increase was due to activity at FHA.

$1,485 billion of single-family mortgages originated that year. That was the highest dollar volume of insured and guaranteed mortgages since 2003 and the largest market share for those mortgages since 1994 (Chart 4).

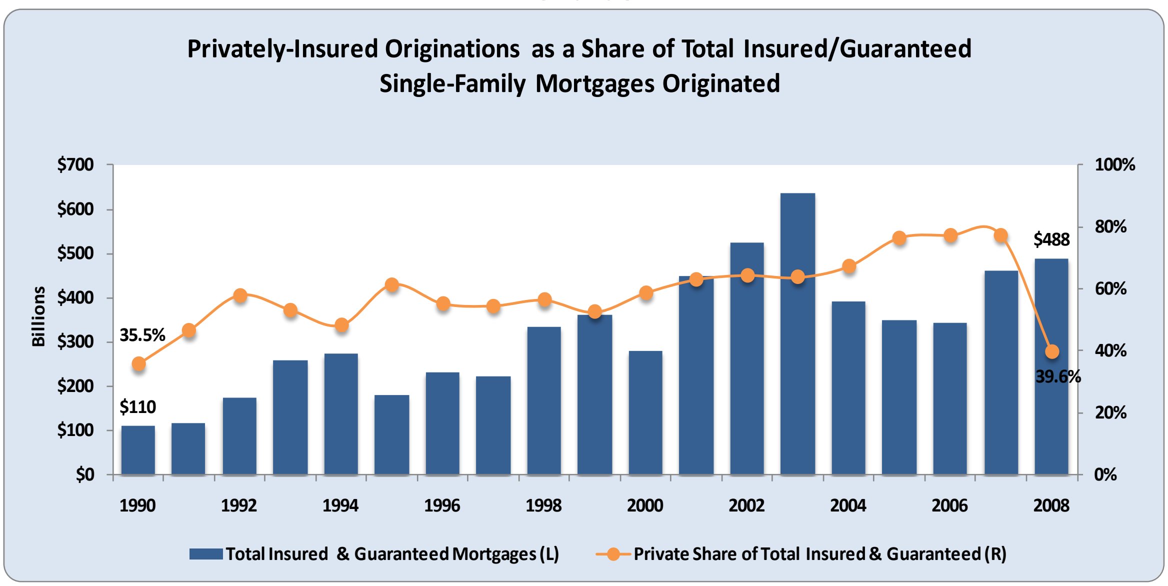
Chart 2

Private- and Government-Backed Single-Family Mortgage Originations



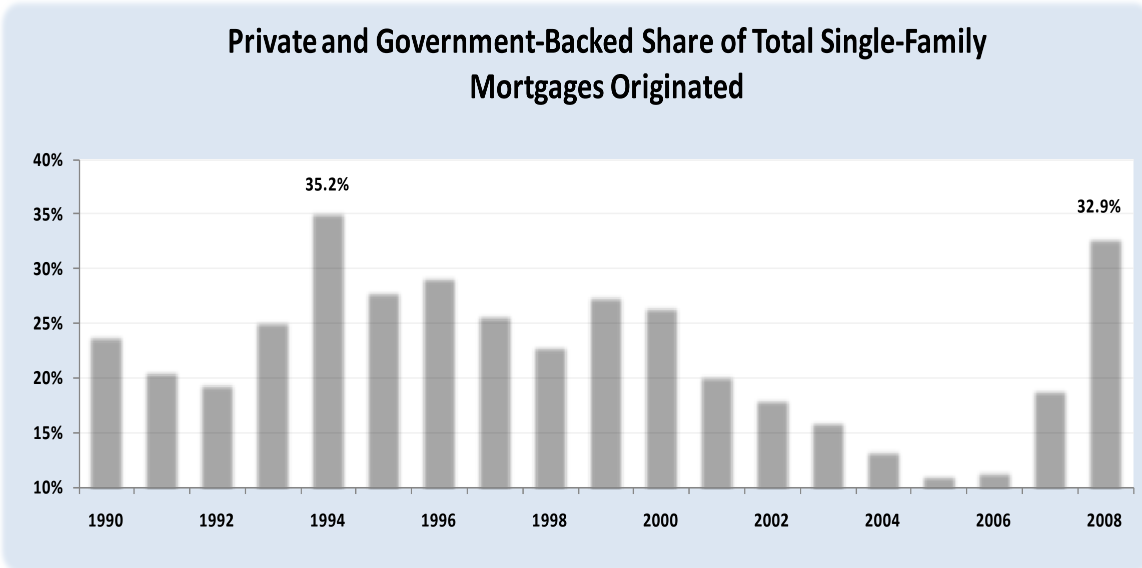
Source: Inside Mortgage Finance

Chart 3



Source: Inside Mortgage Finance

Chart 4



Source: Inside Mortgage Finance

A number of factors contributed to the decline in the share of both private- and government insured mortgages originated between 2001 and 2006. In the case of FHA/VA originations, the increased use of automated underwriting allowed the private sector to offer loans on more favorable terms to home buyers. In addition, rising home values and the rapid expansion of subprime and non-traditional mortgage lending enabled a large number of borrowers who would have otherwise sought FHA-insured mortgages to secure uninsured conventional loans or to obtain private mortgage insurance. As for private MI, the rising volume of piggyback lending, which paralleled the growth of subprime and Alternative-A (Alt-A) loan originations, helped to cause the industry's market share to fall to single-digits from 2004 to 2006. In 2003, piggyback loans accounted for 7 and 12 percent of subprime and Alt-A purchase loans, respectively. By 2006, their shares had risen to 28 and 42 percent, respectively.[7]

The increase in the FHA loan limit in 2008 made that insurance available to more borrowers and contributed to the sharp increase in the government share of insured mortgages originated that year.[8] The decline in the relative share of privately-insured mortgage originations also stemmed from the sharp decline in the volume of subprime and non-traditional mortgages originated, the FHA's broader product base, and tighter underwriting standards and capital constraints at conventional mortgage lenders and certain private mortgage insurers.

[7] Mayer, Christopher; Pence, Karen; and Shane Sherlund, "The Rise in Mortgage Defaults", *Journal of Economic Perspectives* (Vol. 23, No. 1, Winter 2009), 27-50.
[8] The Economic Stimulus Act of 2008 allowed the FHA to increase the single-family insurable limit to a maximum of $729,750 for one-unit homes in the continental U.S.

IV. Beneficiaries of Private Mortgage Insurance

Private MI is critical to the nation's housing and mortgage markets. It helps protect lenders and other investors against losses due to the default of a borrower. Private MI helps borrowers who do not meet eligibility and other requirements for government mortgage insurance or guarantees to secure housing financing. Lenders generally require private MI when the borrower puts down less than 20 percent of the total value of the property.[9] Depending on the type of policy, after the lender has instituted foreclosure and acquired title to the property, the insurer will (1) pay the entire claim amount and take title to the property or (2) pay the percentage of coverage of the total claim amount stated in the policy and let the lender retain title to the property.[10]

The operations of Fannie Mae and Freddie Mac—the nation's largest secondary market purchasers of single-family residential mortgage loans—are heavily dependent on private mortgage insurance, and the private mortgage industry is closely aligned with the Enterprises. The Enterprises' charters restrict them from purchasing conforming mortgages with LTV ratios above 80 percent without some type of credit enhancement.[11] For the Enterprises, credit enhancements must take the form of (a) primary (loan-level) mortgage insurance, (b) agreements with mortgage sellers to repurchase or replace mortgages in default (for specified periods), and (c) retention by the mortgage seller of a specified percentage participation interest in loans purchased. Of those credit enhancements, primary mortgage insurance—underwritten by private mortgage insurers—is the most prevalent used by the Enterprises for their single-family mortgage purchases. As shown in Table 2, the Enterprises' exposure to the private MI industry totaled $185.6 billion as of the end of 2008. Figures for risk in force[12] of each mortgage insurer include primary and pool policies.

[9] State regulations normally do not allow mortgage insurers to write insurance coverage of more than 25 percent on any individual loan amount. If an insurer wishes to offer coverage above 25 percent, it must reinsure the additional portion so another company holds the risk.

[10] Mortgage Insurance Companies of America, *2008-2009 Fact Book*.

[11] A conforming mortgage has a principal balance at origination equal to or less than the maximum amount that may be purchased by Fannie Mae and Freddie Mac. The general conforming loan limit is $417,000 in 2009. The Economic Stimulus Act of 2008 raised the conforming loan limit in certain high-cost areas to a maximum of $729,750 for one-unit homes in the continental U. S. Higher limits apply to two-, three- and four-unit structures, and to properties outside the continental U.S. Effective January 1, 2009, the Housing and Economic Reform Act of 2008 increased the loan limit for FHA mortgage insurance for single-family properties to 115 percent of the local area median home price, as determined by HUD, but no lower than a floor of 65 percent of $417,000 (or $217,050) or up to a cap of 150 percent of the Enterprises' conforming loan limit of $417,000 or $625,500.

[12] Risk in force is the maximum potential loss recovery under insurance policies in force. It is the aggregate dollar amount of each primary insured mortgage loan's current principal balance multiplied by the insurance coverage percentage specified in the policy.

Table 2
Enterprise Mortgage Insurance Coverage by Counterparty

Company	Risk in Force (billions)	
	Fannie Mae	Freddie Mac
Mortgage Guaranty Insurance Corp.	$ 28.4	$ 16.0
Genworth Mortgage Insurance Corp.	18.2	11.0
PMI Mortgage Insurance Co.	17.6	8.0
Radian Guaranty, Inc.	17.1	12.0
United Guaranty Residential Insurance Co.	16.1	8.0
Republic Mortgage Insurance Co.	13.6	7.0
Triad Guaranty Insurance Corp.	5.6	4.0
CMG Mortgage Insurance Company	2.0	1.0
Total	**$ 118.6**	**$ 67.0**

Sources: Fannie Mae and Freddie Mac SEC Forms 10-K, 2008

Both Fannie Mae and Freddie Mac have established eligibility requirements for mortgage insurers and guidelines on the terms under which they will conduct business with mortgage insurers with financial strength credit ratings below those set forth in the guidelines. At the end of 2008, most of the Enterprises' mortgage insurer counterparties had financial strength ratings below those required by the Enterprises to be considered qualified as a "Type 1" mortgage insurer. Failure to meet the "Type 1" eligibility requirement triggers an obligation on the part of the mortgage insurer to file a remediation plan that is acceptable to the Enterprises. Arrangements between those mortgage insurers and FHFA, as conservator of Fannie Mae and Freddie Mac, were made to allow those carriers to continue providing insurance protection to the Enterprises.

In addition to being of great importance to the operations of Fannie Mae and Freddie Mac, private MI is also important to certain activities of the Federal Home Loan Bank System. Specifically, as part of the System's Acquired Member Asset (AMA) programs, member institutions or housing associates that sell loans or pools of loans to Federal Home Loan Banks through their AMA programs are, in some cases, required to maintain supplemental mortgage insurance (SMI) on those loans in order to meet certain credit enhancement requirements mandated by regulation and the AMA programs. In general, the SMI coverage protects the Federal Home Loan Banks against credit losses to a LTV ratio of approximately 50 percent, per loan and after other credit enhancements, subject to stop-loss limits associated with the pools of loans, as applicable. Private mortgage insurers provide that supplemental insurance.

V. Current State of the Private Mortgage Insurance Industry

In recent years, the private MI industry has been hit from a number of fronts. Competition within the industry has, among other things, resulted in a reduction in the number of firms. Today, there are only seven private mortgage insurers. Of those seven, one is in run-off mode, meaning that it no longer writes new insurance.

The private MI industry has also come under considerable financial pressure due to the crises in the nation's housing and mortgage markets. Defaults rose sharply in 2008, and the cure rate registered below 60 percent in most months, falling below 50 percent in December. As defaults rose and the cure rate declined, mortgage insurers had to pay significantly more claims, resulting in heavy losses and erosion of their capital and reserves. The industry lost money in 2007 and again in 2008.

A unique feature of the private MI industry is the requirement to raise capital in a counter cyclical manner. Pursuant to state law, private mortgage insurers must maintain contingency reserves and must set aside one-half of every dollar premium earned and hold it for 10 years. Those reserves are released solely to pay claims when losses in a calendar year exceed 35 percent of earned premiums. The reserve requirement allows insurers to build reserves during good times and draw down those reserves when markets are stressed, such as in the current environment.

Notwithstanding those contingency reserves, which are a component of regulatory capital, the industry's risk-to-capital ratio, while still below the regulatory requirement of 25:1, has risen significantly in recent years, increasing from just 9:1 in 2006 to 13.5:1 in 2007 and 19:1 in 2008 (Table 3).[13] In addition to and perhaps because of their deteriorating capital levels, members of the industry have seen their credit spreads widen sharply, their share prices decline, and their ability to raise new capital seriously impaired. Members have also had their credit ratings downgraded and, in some instances, withdrawn altogether. Those and other factors have, in turn, caused some insurers to reduce their business volume—the volume of primary new insurance written dropped to $21 billion in the final quarter of 2008, less than one-third the volume written in the same period in 2007.

[13] This is an industry average. The ratios of certain insurance companies are higher than those reflected in the table.

Table 3[14]

Private Mortgage Insurers' Risk and Capital Profile ($s in Billions)	2000	2001	2002	2003	2004	2005	2006	2007	2008
Net Primary Risk in Force	$ 139.5	$ 160.6	$ 164.8	$ 138.8	$ 141.6	$ 141.3	$ 149.2	$ 185.4	$ 219.0
Net Pool Risk in Force	$ 8.3	$ 11.0	$ 12.3	$ 13.4	$ 10.8	$ 8.7	$ 8.8	$ 8.4	$ 8.7
Total Net Risk in Force	$ 147.8	$ 171.6	$ 177.1	$ 152.2	$ 152.5	$ 150.0	$ 158.0	$ 193.8	$ 227.7
Percent Change		16.1%	3.2%	-14.0%	0.2%	-1.6%	5.4%	22.6%	17.5%
Policyholders' Surplus	$ 3.7	$ 4.3	$ 3.3	$ 3.1	$ 5.6	$ 5.6	$ 3.5	$ 3.2	$ 4.8
Contingency Reserve	$ 9.5	$ 11.2	$ 12.8	$ 12.4	$ 10.6	$ 11.2	$ 14.0	$ 11.1	$ 7.1
Total Capital	$ 13.2	$ 15.5	$ 16.1	$ 15.4	$ 16.2	$ 16.8	$ 17.5	$ 14.4	$ 12.0
Percent Change		17.7%	3.5%	-3.8%	4.8%	4.1%	3.8%	-17.9%	-16.6%
Risk-to-capital Ratio	11.2:1	11.1:1	11.0:1	9.9:1	9.4:1	8.9:1	9.0:1	13.5:1	19.0:1

Source: Mortgage Insurance Companies of America

According to the Mortgage Insurance Companies of America (MICA), private primary insurance in force totaled $952 billion at the end of 2008.[15] That amount is equivalent to approximately 9.5 percent of the approximately $11.0 trillion of single-family residential mortgage debt outstanding at the end of 2008. The volume of business provided by private mortgage insurers over the years demonstrates their importance to the nation's housing finance system.

The stress being experienced by the private mortgage industry could have serious implications for the housing and mortgage markets going forward. Recently announced government initiatives to get the housing and mortgage markets on the road to recovery is most likely to succeed if all market players remain actively involved. Fannie Mae and Freddie Mac are playing a major role in those initiatives. The Enterprises' past reliance on private MI as the dominant form of credit enhancement on loans purchased from lenders suggests that the industry will be needed to play an even more important role in the recovery process. The availability of MI will also affect the ability of the Enterprises to support affordable housing.

Forecasters are projecting a rebound in the mortgage market in 2009 and 2010, with originations of single-family mortgages projected to exceed 2008's level by a substantial amount in both years due to a wave of refinancings (Table 4). Assuming a 10 percent market share, the demand for single-family mortgages underwritten with private MI could approach $230 billion in 2009. Assuming a median home price of $175,000, the volume of insured mortgages would translate into more than 1.3 million of new or refinanced mortgages in 2009 underwritten by private mortgage insurers. However, given the current restrictions on capital and expected future losses, the likelihood of the industry being able to meet that level of demand is remote.

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[14] Companies included in the most recent year's data are: AIG United Guaranty, Genworth Mortgage Insurance Corporation, Mortgage Guaranty Insurance Corporation, PMI Mortgage Insurance Company, Radian Guaranty and Republic Mortgage Insurance Company. Data for Triad Guaranty Insurance Corporation are excluded after June 2008.

[15] Primary mortgage insurance in force refers to the current principal balance of all outstanding mortgage loans with primary insurance coverage as of a given date.

Table 4

Forecasts of Total Single-Family Mortgage Originations (Billions of $s)		
Organization	**2009**	**2010**
Fannie Mae	**$ 2,544**	**$ 1,549**
Freddie Mac	**$ 2,300**	**$ 2,175**
MBA	**$ 2,074**	**$ 1,957**
Average	**$ 2,306**	**$ 1,894**

Sources: Fannie Mae, Freddie Mac, and Mortgage Bankers Association, July 2009

VI. Conclusion

The private MI industry has absorbed billions of dollars in losses due to home foreclosures. Those losses were covered with private capital, not taxpayer dollars. Private MI remains an essential building block for the return of a vibrant U.S. housing market. However, the long-term success of the industry will depend on its ability to weather the current crisis, which could be materially influenced by mortgage market and economic stabilization initiatives announced by the Federal government. Too, the fate of the private mortgage industry is, in large part, closely tied to that of Fannie Mae and Freddie Mac and the roles they will play in the mortgage markets going forward. The industry's ability to build and maintain sufficient capital to meet the insurance needs of the Enterprises over the short run without some Federal assistance or an infusion of private capital is unclear.