Exporting Mortgage Insurance Beyond the United States

by David Liu

INTRODUCTION

In 1997 when PMI Mortgage Insurance Co. (PMI) undertook a strategic planning exercise, its management decided to evaluate private mortgage insurance opportunities in markets beyond the United States. Up to that time, PMI was very focused on managing a long-established company with operations focused exclusively on the domestic U.S. mortgage market. Since then PMI has expanded into three continents and remains active in the international marketplace.

This article provides background on the U.S. private mortgage insurance industry and emphasizes those topics that will have a lasting impact on the development of mortgage insurance in non-U.S. markets. The article discusses the rationale for PMI's international expansion and describes the approach of its market studies. The article continues with an overview of PMI's accomplishments to date and concludes with key themes for local mortgage finance practitioners to consider when evaluating the use of private mortgage insurance.

David Liu is with PMI Mortgage Insurance Co. in San Francisco, California. © 2000 PMI Mortgage Insurance Co.

OVERVIEW OF PRIVATE MORTGAGE INSURANCE IN THE U.S.[1]

Traditionally, American lenders have required a downpayment of at least 20% of a home's purchase price. For most first-time homebuyers, saving money for such a sizeable downpayment is the greatest barrier to homeownership. Lenders will approve a mortgage with a smaller downpayment, however, if the mortgage is covered by private mortgage insurance. Low downpayment loans also are referred to as high loan-to-value ratio (LTV) loans, indicating the relationship between the amount of the mortgage loan and the value of the property.

Private mortgage insurance, also known as mortgage guaranty insurance, protects a lender if a homeowner defaults on a loan.[2] Lenders generally require mortgage insurance on low downpayment loans because studies show that a borrower with less than 20% invested in a house is more likely to default on a mortgage. In effect, the mortgage insurance company shares the risk of foreclosure with the lender.

The home buyer, the mortgage lender, and the mortgage insurer share a common interest in the mortgage financing transaction because they each stand to lose in the event of default. The borrower will lose the home and the equity invested in it. The lender will have a non-performing loan. And the mortgage insurer will have to pay the lender's claim on losses arising from the defaulted loan. Thus, the insurer, lender and borrower are all concerned that the home is affordable not only at the time of purchase, but throughout the years of homeownership.

Private mortgage insurance is the private sector alternative to government-insured home loans. (See the Appendix for a history of the U.S. private mortgage insurance industry.) Mortgages backed by the government are insured by the Federal Housing Administration (FHA) or guaranteed by the Department of Veterans Affairs (VA). See Figure 1 for a comparison of private mortgage insurance versus the FHA and VA programs.

Generally, home buyers must make a downpayment of at least 5% of a home's value to be considered for private mortgage insurance. The downpayment requirement can be as low as 3% for special affordable housing programs. Private mortgage insurance is available on a wide variety of mortgages, including most fixed- and adjustable-rate home loans, giving borrowers the freedom to choose the type of loans that best suit their needs.

Figure 1. U.S. High Loan-to-Value Mortgage Insurance

	Private Mortgage Insurance	*FHA*	*VA*
Type	Insurance	Insurance	Government guarantee
Coverage	Typically 12%-30% of loan amount	100% of loan amount	100% of loan amount
Loan size limit	Typically $500,000	$121,296 in low-cost areas $219,849 in high-cost areas	$203,000
Minimum downpayment	3%*	3%	None
Loan type	Fixed & adjustable rate	Fixed & adjustable rate	Fixed and adjustable rate
Loan term	Up to 40 years	15 & 30 years	15 & 30 years
Premium plan	Monthly, annual, & single premium plans	One-time initial premium plus monthly premium	One-time funding fee
Price (% of loan amount)	0.32%–0.90% annually, depending on LTV and other loan characteristics	1.75%–2.25% one-time premium plus 0.50% annually	1.25% - 3%
Share of total insured market (year-end 1999)	52.4%	33.9%	13.7%
Share of total mortgage market (year-end 1999)	14.7%	9.5%	3.9%

* In certain cases, no downpayment is required.

How U.S. Mortgage Insurance Works

The purpose of mortgage insurance is to protect lenders from default-related losses on first mortgages made to home buyers who make downpayments of less than 20% of the purchase price. Without mortgage insurance, lenders would suffer significant losses on defaulting loans with high loan-to-value ratios.

Many expenses accompany a default. Interest charges accumulate during the delinquent period, as well as during foreclosure, a period that can total a year or more. Other costs include legal fees, home maintenance and repair expenses, real estate broker fees, and other closing costs. These costs generally total 15% or more of the loan amount. Another frequent loss occurs when the foreclosed property is resold for less than its original sales price.

Private mortgage insurance companies insure against the losses associated with defaulted loans by guaranteeing payment to the lender of the top 20% to 30% of the claim amount. One of the mortgage insurer's key roles is to act as a review underwriter for credit and collateral risks related to individual loans, as well as for local, regional, and national economic risks that could increase the loss from mortgage defaults.

Recognizing the near certainty of losses on most foreclosures, the major investors who supply liquidity to the mortgage market—such as Fannie Mae and Freddie Mac—require mortgage insurance on all low down payment loans. The two agencies generally require that mortgages with loan-to-value ratios higher than 80% have insurance coverage on the amount of the loan greater than 70% of value. The insurance must be provided by an approved mortgage insurer with claims paying ability ratings of at least "AA-" from two major bond rating agencies.[3]

Private mortgage insurance is a long-term business that recognizes the cyclical nature of real estate markets. As with most insurance businesses, the insurer collects premiums and invests these funds to provide cash flow to pay for claims and operations. What is unusual about mortgage insurance versus many other insurance lines is that economic recessions can severely increase mortgage

insurance losses above expected levels. This catastrophic risk means that mortgage insurers must hold large amounts of capital and maintain substantial reserves for claims. Mortgage insurers must operate with a long-term time horizon to facilitate the collecting and investing of premiums to smooth these periods of claim stress.

U.S. regulators typically require at least $1 of capital to be held for every $25 of insured risk, which equals the loan amount times the coverage percentage.[4] In practice, rating agencies expect a higher standard of capitalization. PMI currently holds approximately $1 of capital per $15 of risk. Accordingly, mortgage insurers set prices based on loss and expense forecasts in addition to capital requirements.

The U.S. Private Mortgage Insurance Outlook

The United States continues to enjoy one of the most affordable housing markets in two decades. Interest rates remain in the single digits, many properties are available, and a wide range of financing options exists. Combined, these factors make it an opportune time for first-time home buyers to enter the market and trade-up buyers to make their move. As more people become homeowners, many will take advantage of private mortgage insurance to buy a home with a low downpayment.

Private mortgage insurers helped nearly 1.5 million families move into homes of their own in 1999. Since 1992, about a million families a year have used mortgage insurance to become homeowners. Entering the new century, the private mortgage insurance industry has focused on strengthening risk-sharing relationships with major lenders, refining risk-based capital and pricing, and addressing the "A-" and "Alternative A" borrower segments.[5] As mortgage insurers create new ways to reach out to low-income borrowers, more families should be able to access the mortgage market, opening further opportunities for growth. RFA, a Pennsylvania-based economic consulting firm, anticipates 8% annual growth in the outstanding balance of mortgages insured by the U.S. private mortgage insurance industry through 2002.[6]

WHY INTERNATIONAL?

In 1997 when PMI Mortgage Insurance Co. undertook a strategic planning exercise, its management decided to evaluate private mortgage insurance opportunities in markets beyond the United States. Up to that time, PMI was very focused on managing a long-established company with operations focused exclusively on the domestic U.S. mortgage market. The strong U.S. economy of the 1990s had rewarded the private mortgage insurance industry with better than normal loss performance and the accompanying strong profits had left PMI with a capital surplus position relative to the mortgage risk it insured.[7]

For three key reasons, PMI conducted a feasibility study to consider international mortgage insurance. First, international expansion could open significant new potential markets and sources of premiums. Second, writing insurance in new markets could diversify the geographic risk exposure in ways that no domestic program could. Additionally, with globalization of the financial services industry, American mortgage lenders were increasingly expected to venture into international markets.

The global mortgage markets vary along many dimensions, and this variety presented the initial challenge of where to begin assessing the international opportunities. Upon profiling the markets, a set of key quantitative measurements and qualitative assessments emerged. Combining this information with the status of any private or public mortgage insurance programs provided the foundation upon which to determine where to focus international expansion efforts.

For each country the key numerical data evaluated started with basic macroeconomic and demographic data to provide a framework for perspective on the mortgage market. Figure 2 summarizes these key indicators. Macroeconomic data included gross domestic product (total, per capita and growth), employment growth, unemployment rates, and foreign exchange rates. Demographic data included population (total, distribution among age groups, growth) and per capita income and consumption trends. The research then focused on the housing sector. This data included housing stock (existing, construction trends) and home price trends. Finally turning toward the mortgage market, key indicators included total mortgage stock and production, interest rates, secondary market activity, and default rates.

Figure 2. Country Attractiveness Indicators

Macroeconomic Data
- Gross Domestic Product
- GDP Growth
- Per Capita GDP
- Employment Growth
- Unemployment Rate
- Foreign Exchange Rate

Demographic Data
- Total Population
- Age Distribution
- Population Growth

Housing Sector
- Housing Stock
- Construction Trends
- Home Price Trends

Mortgage Market
- Mortgages Outstanding
- Mortgage Originations
- Interest Rates
- Secondary Market Activity
- Default Rates

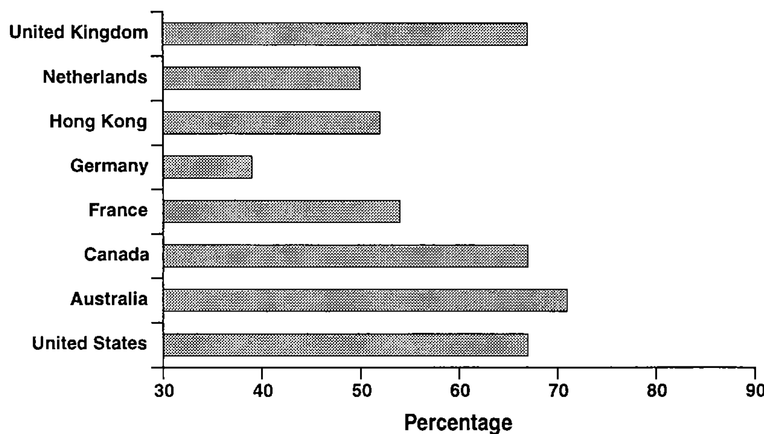
The qualitative measurements focused on political and economic stability as well as the development of the mortgage finance and insurance systems of a particular country. Desirable political attributes included a stable form of government, including an orderly mechanism for administrative transitions. Examples of positive economic indicators included stable growth rates, a diversified economic base, and global economic comparative advantages. Further, a strong history of real property rights and a business environment conducive to financial services increased attractiveness. Cultural attitudes toward homeownership and debt were also examined. Figure 3 provides a summary of homeownership rates in selected countries.

Turning to the mortgage sector, key factors to judge included integrity, maturity, and sophistication. Integrity referred to the mortgage instrument's legal reliability and stability and default remedies. Mortgage security could only exist if proper land title and lien registration systems supported efficient and timely record keeping. Also, proper regulatory oversight was needed to promote sound risk and capital management and ethical business practices. Maturity addressed the state of development of the market regarding the evolution of mortgage instruments, degree of competition, and existence of a secondary market. These characteristics could suggest the potential for mortgage lending growth. Closely related, sophistication encompassed the willingness of the market to embrace new ideas and the ability of consumers to assess alternative forms of housing finance. The degree of technology adoption by lenders in mortgage operations and availability of robust historical mortgage underwriting and performance data were key indicators.

Barring local market data, the bond rating agencies will apply U.S. catastrophic mortgage default experience from the mid-1980s in Texas to an international MBS (mortgage-backed security) to determine the required levels of subordination in structuring ratings. From that starting point, the rating agencies may invoke risk surcharges if the perceived risk of a market is higher than in the U.S.

Robust data refers to data with mortgage origination and payment history that encompasses a lengthy time span covering periods of severe economic stress. Ideally, the database should be dynamic enough to address various mortgage instruments, borrower characteristics, property types, and property locations from lenders throughout the industry. Proper data capture and management are critical to enable any market participant to add sophisticated products to improve their competitiveness. Data should be considered assets, just like customers. A key reason why mortgage insurers and lenders are successful in the U.S. is their ability to analyze abundant consumer and property data. Lacking local proof of performance, the rating agencies will revert to Texas-based, very conservative loss scenarios that raise the cost of doing business. In such situations, the value of U.S. mortgage insurance expertise may actually increase because a foreign insurer could apply its experience to the local market in a manner beyond the scope of a local lender.

Figure 3. Homeownership Rates in Selected Countries



For the insurance sector, the key considerations included the nature of regulation and the difficulty and cost of entry. Naturally, a market had to be open to foreign investment to seriously consider international expansion there.

This research template provided the basic framework upon which to evaluate the world's mortgage markets. During the research process, the ease of access to compile a country's profile actually became a simple proxy for the maturity and sophistication of the market. For example, if a country had readily available national statistics tracking home price indexes and mortgage origination volumes by loan instrument type, then the likelihood that mature and sophisticated participants competed in the mortgage finance industry increased significantly.

For markets without mortgage insurance, the research data provided a framework to

judge the need and viability of mortgage insurance. Evaluating the potential social and economic benefits from mortgage insurance would indicate the receptiveness of the local market to the idea.

For markets already with public mortgage insurance, the research data helped determine the need and viability for evolution to private mortgage insurance. Evaluating the role of the public programs would explore the need for a separate private program to reach new segments of the market.

And in large markets with existing private mortgage insurance, namely the United Kingdom, Australia and Canada, the research naturally focused on the activity of the private mortgage insurance companies to determine if there was any role for an additional competitor. Figure 4 presents a profile of the mortgage insurance industry in these major markets.

Figure 4. Major International Mortgage Insurance Markets

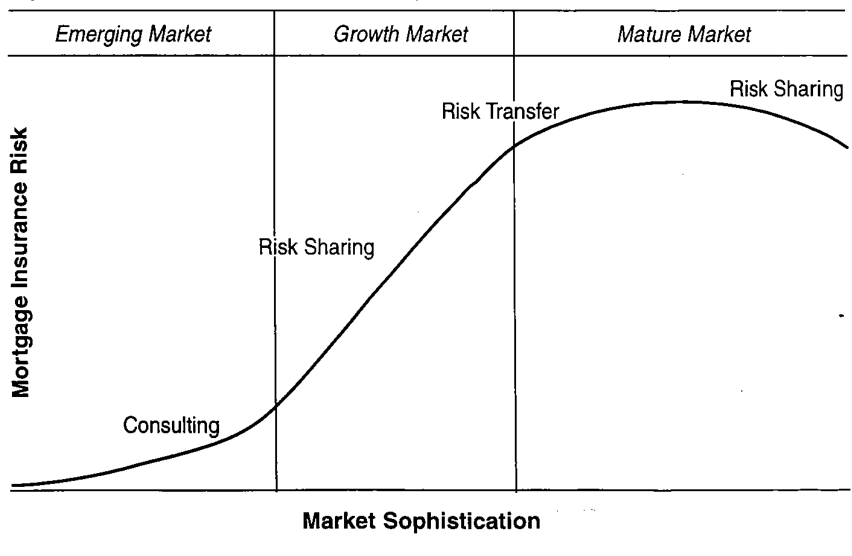
	United States	*Australia*	*Canada*	*United Kingdom*
Insured Mortgages Outstanding ($US)	$600 Billion*	$60 Billion**	$125 Billion**	$325 Billion**
Maximum LTV without Mortgage Insurance	80%	80%	75%	80%–90%
Coverage	12%–30%	100%	100%	Typical stop loss = 6%–10%
Key Private Competitors & Their Market Shares	GE Capital MGIC PMI Radian RMIC Triad UGI	GE Capital PMI Royal & Sun CGU (Commercial & General Union)	GE Capital	Royal & Sun Alliance CGU (Commercial & General Union) Capital Re Lloyd's GAN GE Capital BRIT
Key Public Competitors	FHA VA	None	CMHC (Canada Mortgage Housing Corp.)	None

* Excludes FHA and VA
** Best Estimate

EXECUTION

The research also provided a basis to suggest the best entry tactic for a particular market. As a general observation, more mature markets are more conducive for taking more risk, while less mature markets call for less risky entry methods. In mature markets, American-style high loan-to-value mortgage insurance might be totally appropriate, while in less developed markets, the focus might emphasize partnerships with local institutions to expand the mortgage market with more aggressive loan instruments in a manner that emphasizes risk management. See Figure 5 for a diagram positioning mortgage market development versus mortgage insurance risk.

Figure 5. Market Development versus Mortgage Insurance Risk



The reasons that international lenders might use mortgage insurance do not differ from those of American lenders. The demand drivers include high LTV risk management, geographic risk dispersion, MBS structuring,

regulatory capital relief, borrower market expansion, underwriting reviews, and secondary market eligibility. High LTV mortgage lending brings to mortgage lenders unique risks of default, which require specialized experience to manage. A high LTV mortgage insurer could provide that expertise and risk management ability.

A related benefit of private mortgage insurance can be the supplemental underwriting provided to assess the special risk. A local or regional mortgage lender does not have broad access to mortgage markets that facilitate the dispersion of risk over varied geographical areas. A mortgage insurer would participate on a national level and could address the lender's risk dispersion limitations. A multi-national mortgage insurer could disperse and manage the risk globally, something that few lenders could accomplish on their own.

In an emerging mortgage market where low LTV limits are not uncommon, private mortgage insurance could be appropriate to expand LTV limits to reach more borrowers. In such countries economic expansion and stability could be promoted by expanding opportunities for homeownership. By dispersing the high LTV risk, private mortgage insurance could be the appropriate vehicle to permit mortgage lenders to increase their LTV limits without adding risk to the financial infrastructure.

Without insurance, such lending might carry expensive risk and capital surcharges levied by the central banking regulator upon the mortgage institution. Additionally, these risks could compound dangerously, if unchecked, because defaults on mortgage insured loans commonly do not occur until several years after the funding of the loan. The lag occurs because the underwriting at the time of the loan origination ensures that the borrower has sufficient means to afford the loan not only at closing, but also in the near future. A default resulting in a loss to the lender typically would occur if a combination of unforeseen circumstances such as job loss or divorce arose simultaneously with significant property value depreciation. By establishing eligibility criteria for mortgage insurers, the regulatory body could ensure that only soundly capitalized and managed companies could provide risk and capital relief to the regulated banking entities.

These risk relief eligibility criteria should address the issues raised by the Alger Study in the U.S. in the 1930s and discussed in the Appendix. Specifically, the key issues—prohibiting conflicts of interest, particularly between banks and insurers; setting stringent capital and reserve requirements; and adopting sound appraisal, investment and accounting procedures—are critical to promote the integrity of a private mortgage insurance industry.

In a mature mortgage market, private mortgage insurance could facilitate the development of a secondary mortgage market. In the simplest approach, an insurer with a high claims-paying-ability rating could insure high LTV mortgages, making them eligible for resale. For an MBS solution, an insurer could provide credit enhancement on otherwise lower-rated tranches to elevate these layers of risk into a higher-rated tranche and lower the bond's overall issuance cost.

In certain markets, the privatization of a government mortgage insurance program might be appropriate, if the market has matured since the inception of the public program. Such maturity might reflect that homeownership rates have already increased significantly or that the original lending deficiencies are no longer observed in the market. Similarly, a private mortgage insurance program could be appropriate to supplement a public program. Typically, the public program would target low-income or disadvantaged families. A need for higher LTV assistance might still exist with moderate-income families and the private sector could meet this need.

PMI has acknowledged that to compete in an international market, a long-term commitment is required. A short-term market entry and exit, if possible, would send all the wrong messages to a private mortgage insurer's constituents that it was merely experimenting in new markets. Instead, to achieve proper emphasis on the importance of international expansion, PMI must carefully evaluate a market before entry, and then once committed, stay active.

PMI ACTIVITY TO DATE

Once PMI Mortgage Insurance Co. had completed the initial market research and selected target markets, PMI quickly began to execute its strategy. First in Hong Kong, PMI worked with the Hong Kong Mortgage Corp. (HKMC) to establish a mortgage insurance program that increased mortgage lending limits from 70% to 85% LTV ratio. In this program, the HKMC insures the loan exposure in excess of 70% LTV and then reinsures its entire exposure to highly-rated, qualified mortgage insurers. By establishing a Hong Kong branch early in 1999, PMI Mortgage Insurance Co. was the first mortgage insurer to qualify for and commit to the HKMC program. PMI worked closely with the HKMC to design the product and accompanying underwriting guidelines, and procedures and servicing processes.

The HKMC is wholly owned by the Hong Kong Monetary Authority through the Exchange Fund and serves a role analogous to that of Fannie Mae and Freddie Mac in the U.S. The HKMC has facilitated mortgage lending activity in Hong Kong by establishing a domestic secondary mortgage market and intends to expand its funding outlets through international sales of MBS. The role of private mortgage insurance in Hong Kong is multi-

faceted. First, it will expand the mortgage lending market by offering mortgage loans to qualified borrowers who previously could not amass the 30% downpayment in the expensive Hong Kong residential real estate market. Second, high LTV mortgage loans with mortgage insurance will be eligible for purchase and securitization by the HKMC, thereby expanding the secondary market.

In the summer of 1999, PMI acquired MGICA Ltd., the second largest mortgage insurer in the Australia and New Zealand markets.[8] MGICA had actively been seeking a strategic alliance with a U.S. partner to gain access to advanced mortgage insurance risk management, and operations technology and expertise. MGICA's prior parent company had a valuable asset which no longer fit properly within its strategy and opted for disposal. PMI gained entry into a market where it believes it can export its U.S. experience to improve local competitiveness. PMI immediately provided capital support to reaffirm the claims-paying-ability ratings and renamed the company PMI Mortgage Insurance Ltd. to promote a more uniform global brand identity.

The lenders in Australia and New Zealand will benefit from access to improved products and services, particularly in the area of technology. For example, PMI pioneered American automated mortgage underwriting in 1987 to improve underwriting consistency, efficiency and risk management. Currently PMI uses a fifth generation system, pmiAURA℠ system that utilizes credit, borrower, loan, property, and market information to consider a loan application for automated underwriting approval in a manner much more powerful than simple credit scores can provide.[9] With the proper local market data, the automated underwriting system could be adapted to a new market. Particularly in Australia, which trails only the U.S. in mortgage-backed securitization, could such an advance be extremely important.

Finally, at the beginning of 2000, PMI established a sales and marketing office in London to begin to serve the mortgage markets in the European Union. The Western European countries each feature mature mortgage markets with unique features that warrant local attention.

CONCLUSIONS

The U.S. private mortgage insurance expertise is indeed exportable. All markets, developed or not, have mortgage default risk. The underwriting experience from the U.S. actually forms the basis of how the bond rating agencies evaluate international mortgage risk. Private mortgage insurance offers specific and proven risk management solutions with potential applications in all mortgage markets.

Local markets require local solutions. To consider exporting American products without any degree of customization and expect a positive response would be foolish. Certainly the American mortgage finance system presents a formidable model with a tremendous record of success. However, this model with all of its intricacies should be studied, but not necessarily copied. The model has worked very well in the U.S. because of the particular social, legal, and economic attributes that have existed. Not unless another country features exactly or very similar conditions, should equal success be expected. More likely, product or operating concepts can be transferred, but they should be tailored for the local market practices and conditions. This approach certainly applies to private mortgage insurance and PMI Mortgage Insurance Co. intends to continue its international expansion using these principles.

APPENDIX: U.S. PRIVATE MORTGAGE INSURANCE HISTORY

The modern private mortgage insurance industry was born in the 1950s, but the industry's roots go back to the late 1800s and the founding of title insurance companies in New York. The state passed the first legislation authorizing the insuring of mortgages in 1904.

In 1911, the law was expanded to allow title insurance companies to buy and resell mortgages—comparable to today's secondary mortgage market. To make loans more marketable, companies offered guarantees of payment as well as title, thus establishing the business of mortgage insurance. In addition to insuring mortgages, companies began offering participations, or mortgage bonds. These bonds allowed multiple investors to hold a mortgage or group of mortgages.

During the 1920s, rising real estate prices allowed most foreclosed properties to be sold at a profit, and more than 50 mortgage insurance companies flourished in New York. Since mortgage insurance was considered a low-risk business, the firms were virtually unregulated and thinly capitalized. Most had little experience with sound credit underwriting. This situation went relatively unnoticed until the Great Depression.

With the catastrophic collapse of real estate values in the 1930s, New York's entire mortgage insurance industry folded. As a result, the governor commissioned a study to examine the problems that had developed in mortgage lending and insurance. The study—known as the Alger Report—recommended prohibiting conflicts of interest; setting stringent capital and reserve requirements; and adopting sound appraisal, investment and accounting procedures. The report became a blueprint for a strong post-World War II mortgage insurance industry built on new regulations and financial structures. The industry's sound regulatory and financial foundation has ensured that even during difficult economic times, lenders are able to continue making

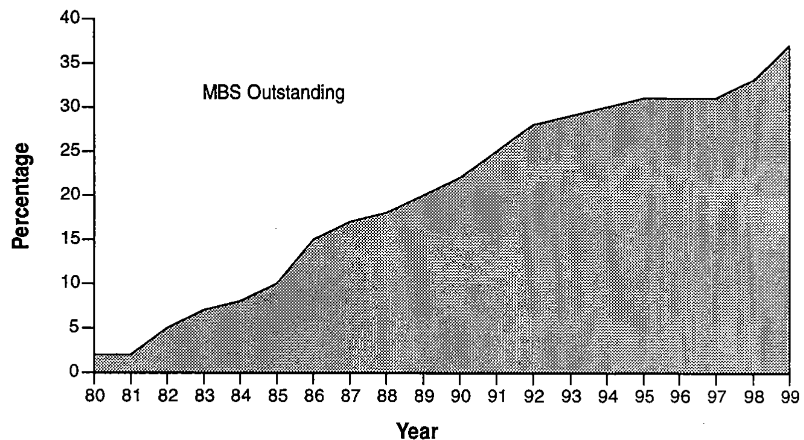
low downpayment loans backed by mortgage insurance.

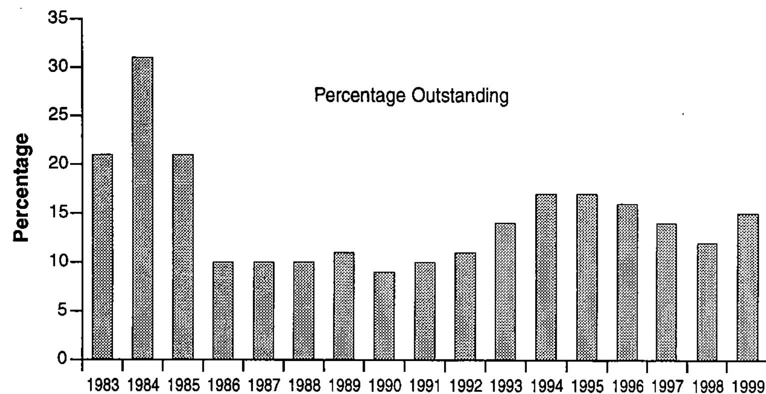
During the Depression the government entered the mortgage insurance business in 1934 with the creation of the Federal Housing Administration (FHA). With its promise of full repayment to lenders if borrowers defaulted on their home loans, the FHA home loan insurance program created new confidence in mortgage instruments and stimulated investment in housing. To direct government assistance to those most in need, the FHA imposed ceilings on the insurable loan amount for single-family homes. After World War II, the government's mortgage insurance role expanded with a Veterans Affairs mortgage guarantee program to help veterans in their transition to civilian life.

In 1957, the first modern private mortgage insurance company, MGIC, was founded by Max Karl. A regulatory structure for private mortgage insurance was established that included strong conflict of interest provisions and a monoline business structure to ensure that mortgage insurers' reserves would not be mixed with reserves for other lines of insurance. In addition, a unique contingency reserve structure and capital requirements were established to recognize the catastrophic nature of mortgage default risk and prevent companies from entering the mortgage insurance business without long-term commitments. This regulatory framework provided a foundation for establishing additional private mortgage insurance companies.

The 1960s saw expansion of the modern private mortgage insurance industry, followed by dramatic growth in the early 1970s in conjunction with the emerging dominance of the secondary mortgage market. All mortgages originate in the primary mortgage market. In the secondary mortgage market, existing mortgages are bought, sold and traded to other lenders, government agencies or investors.

Figure 6. Fannie Mae & Freddie Mac MBS as a Percentage of Outstanding Mortgage Debt





The federal government chartered two special-purpose organizations to enhance the availability and uniformity of mortgage credit across the nation. Those organizations, the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corp. (Freddie Mac), provide direct links between the primary mortgage markets and the nation's capital markets. Fannie Mae, a government-sponsored but privately owned corporation established in 1938, creates mortgage-backed securities backed by FHA, VA and conventional loans. Freddie Mac, created in 1970, is structured and operates in a manner similar to Fannie Mae. See Figure 6 for Fannie Mae and Freddie Mac MBS penetration of total outstanding mortgages.

The demand by mortgage investors for investment-quality mortgage loans expanded the need for mortgage credit

enhancement. The private mortgage insurance industry has helped fill this credit enhancement role, enabling Fannie Mae and Freddie Mac to buy and securitize low downpayment conventional loans. As a result, Figure 7 shows that high LTV mortgage insurance raised the average LTV to 80% by the late 1980s. Secondary market purchases of low downpayment loans helped fuel the tremendous expansion in home construction and sales during the 1970s and 1980s, aiding many first-time and other home buyers. Privately insured mortgage loans became an important part of the mortgage finance system and helped fuel the increase in the national homeownership rate. See Figure 8 for U.S. homeownership rate trends.

The 1980s wrote a new chapter in the history of mortgage insurance. The first challenge of the early 1980s was helping homeowners, lenders, real estate agents and builders cope with double-digit interest rates and inflation in a period of severe recession. To help qualify more borrowers, conventional low downpayment loans were paired with experimental adjustable-rate mortgages and features such as initially discounted "teaser rates," negative amortization and graduated payment increases. By 1984, more than half of all insured mortgage loans had downpayments of less than 10%, and many of these were adjustable-rate mortgages.

As economic conditions deteriorated—particularly in energy-oriented regions of the country—defaults began to rise, resulting in numerous foreclosures. The mortgage insurance industry paid more than $5 billion in claims to its policyholders during the 1980s. The recipients of these claim dollars included commercial banks, savings institutions, institutional mortgage investors, mortgage bankers, Federal Deposit Insurance Corp., Federal Savings and Loan Insurance Corp., Fannie Mae and Freddie Mac. Mort-

Figure 7. Average LTV of U.S. Existing Home Sales

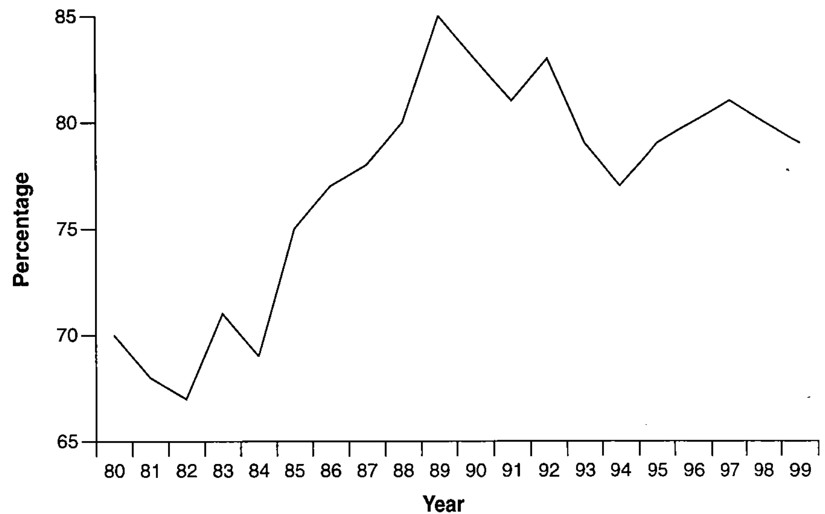
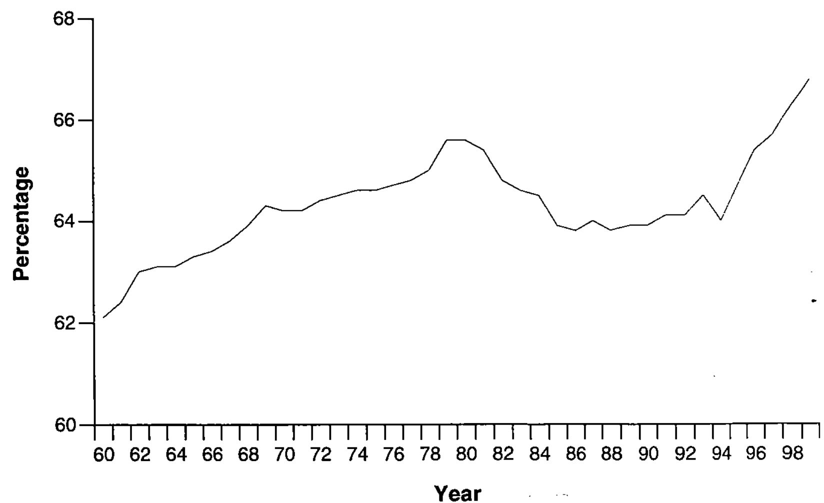


Figure 8. U.S. Homeownership Rates



gage insurance protected all these mortgage and capital providers from extensive losses on high-LTV loans.

NOTES

[1] Most of the Overview of Private Mortgage Insurance in the United States, including the History, appears courtesy of the *Mortgage Insurance Companies of America (MICA) 1999-2000 Factbook.* Founded in 1973, MICA is the trade association representing the private mortgage insurance industry in the United States.

[2] Private mortgage insurance should not be confused with mortgage life insurance, which pays an outstanding mortgage debt if the borrower holding the insurance policy dies. Also, private mortgage insurance should not be confused with mortgage unemployment insurance, which pays mortgage payments in the event that the borrower involuntarily loses employment.

[3] Acceptable rating agencies include Standard and Poor's, Moody's, FitchIBCA and Duff and Phelps.

[4] These regulations apply only to the U.S. Appropriate capitalization standards should vary by country, depending upon the risk in that country.

[5] Standard and Poor's *Creditweek*, issued October 23, 1995, published U.S. borrower grading guidelines. "A" quality refers to those borrowers with the best credit profile, generally with no more than one 30-day mortgage delinquency and no bankruptcies. "A-" refers to up to two 30-day delinquencies and two minor personal credit delinquencies. The scale continues through "B," "C" and "D" grades with progressively more frequent and serious credit problems. "Alternative A" refers to U.S. loans with reduced documentation or no documentation, or no income and/or asset verification.

[6] RFA, "The Outlook for Private Mortgage Insurance," April 2000.

[7] Despite some of the lingering effects of the California regional recession in 1991 to 1992, by 1996 the U.S. private mortgage insurance industry's loss ratio decreased below 50%.

[8] The U.S. company, Mortgage Guaranty Insurance Corp. (MGIC), founded Mortgage Guaranty Insurance Corp of Australia Ltd (MGICA Ltd.) in 1965 but exited the Australian market in the 1980s.

[9] pmiAURA℠ refers to PMI's proprietary Automated Underwriting Risk Analysis system.

PMI MORTGAGE INSURANCE CO.

PMI Mortgage Insurance Co. is the principal operating subsidiary of The PMI Group, Inc. holding company, which is publicly traded on the New York Stock Exchange under the symbol "PMI." Headquartered in San Francisco, California, PMI is a licensed mortgage guaranty insurer in all 50 states and the District of Columbia and operates a branch in the Hong Kong Special Administrative Region of the People's Republic of China. Through its subsidiary, PMI Mortgage Insurance Ltd., PMI offers mortgage insurance in Australia and New Zealand. Other affiliates of PMI offer title insurance, financial guaranty reinsurance and other lender services.

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