Monoline Restrictions, with Applications to Mortgage Insurance and Title Insurance

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1. INTRODUCTION

Monoline restrictions require that insurance firms sell only a single line of insurance, in contrast to multiline firms which may sell more than one insurance line on an integrated basis. Most states in the United States (US) impose monoline restrictions on a small number of insurance lines including mortgage, title, and surety insurance. The primary effect of these monoline restrictions is that the insurance entity's solvency depends on the adequacy of its capital alone to support claims against the single allowed insurance line.[1]

The key goal this paper is to investigate the conditions under which monoline restrictions represent sensible regulatory policy. This is an intriguing question because multiline insurance structures have the obvious diversification benefit that the firm's capital is available to support claims against any of its lines. Indeed, all states allow most casualty insurance lines, such as auto and homeowners insurance, to operate on a multiline basis. Nevertheless, the mortgage, title, and surety lines generally face monoline restrictions, raising the question what, if anything, is the special feature of these lines that warrants the restriction. In this paper, we focus attention specifically on the mortgage insurance and title insurance lines, because they are quantitatively important and because a mortgage insurer, Radian Guaranty, has recently introduced a new title insurance product that attempts to pierce the monoline restriction on the two lines.

The paper's agenda is as follows. Section 2 reviews the mortgage and title insurance industries and the nature of the insurance products they provide. Section 3 first develops the implications of the insurance literature for the monoline issue, and then applies this analysis to

[1] To be precise, most states have either explicit monoline restrictions or they require firms providing the regulated insurance lines to maintain separate licenses. In all states, insurance holding companies can own a mixture of monoline and multiline insurance entities. In this sense, insurance law parallels current banking law, where commercial banks are restricted to a narrow "banking business", while bank holding companies may carry out a much wider range of activities.

the mortgage and insurance lines, including a discussion of the new Radian product. Section 4 provides overall conclusions concerning monoline restrictions and public policy. The basic conclusion of the paper is that the monoline restrictions on both mortgage insurance and title insurance continue to serve useful economic purposes

2. MORTGAGE INSURANCE AND TITLE INSURANCE

Mortgage insurance provides indemnification against losses created by mortgage defaults that result from falling house prices or the borrower's credit risk. Mortgage insurance is typically purchased by mortgage investors, such as banks, savings and loan associations, and government sponsored enterprises (Fannie Mae and Freddie Mac). *Title insurance* provides indemnification against losses created by defective property titles.[2] Title insurance is purchased by both mortgage investors and property owners.

Mortgage and title insurers operate pursuant to the insurance laws of the respective states (we use California as an important and typical example [3]). Most states impose some form of *monoline* restriction on both types of insurance. This means that an insurer may write either mortgage insurance or title insurance but not both, and that it cannot sell any other insurance line.[4] This contrasts with most casualty insurance lines, such as auto insurance and homeowners insurance, which can be provided together by a *multiline* firm.

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[2] Possible title defects include errors or omissions in deeds, forgery, undisclosed and missing heirs, and undisclosed liens. Title insurance pays the necessary legal fees to defend a title and/or provides indemnification for the losses created by a defective title.

[3] California insurance law refers to both "mortgage insurance" and "mortgage guarantee insurance". The discussion in this paper is directly relevant to California's "mortgage guarantee insurance," but the text will refer to "mortgage insurance" for brevity.

[4] Most states also do not allow mortgage insurers to invest in mortgages and mortgage related securities.

2.1 History of Mortgage Insurance in the United States

The mortgage insurance industry has existed on an organized basis in the US at least since the early 1900s. The industry grew rapidly during the real estate boom of the 1920s, but was then entirely bankrupted by the real estate bust of the Great Depression.[5] Conflicts of interest within the mortgage insurance industry exacerbated the industry's Great Depression collapse. The largest conflict was that mortgage insurers were also originating, buying, and selling mortgages and mortgage pools (including an early form of mortgage securitization). As mortgage default rates escalated, these insurers sold additional mortgages and mortgage pools in order to raise cash to pay off insured losses, thus creating what was essentially a Ponzi game.

Real estate markets rapidly recovered following World War II, recreating the need for mortgage insurance. The US federal government had entered the mortgage insurance industry in 1934 with the creation of the Federal Housing Administration (FHA), with the goal of stabilizing real estate markets in the midst of the Great Depression. The Veteran's Administration (VA) program was added after World War II for returning veterans. Although the government programs expanded rapidly with the post-War boom, there was also an increasing need to recreate a private mortgage insurance industry. However, with memory of the dismal experience of the mortgage insurance industry during the 1930s still strong, no private mortgage insurance industry could be created. In fact, more than 30 years would pass before private mortgage insurance could again be offered in the United States. (Hereafter, all references to "mortgage insurance" will mean private mortgage insurance, and not the federal programs.)

The major breakthrough for mortgage insurance came with the passage of a comprehensive mortgage insurance law in Wisconsin in 1956, allowing the establishment of the first post-

[5] See Alger (1934) and Rapkin (1973) for descriptions of the Great Depression collapse of mortgage insurance.

Depression mortgage insurer, the Mortgage Guaranty Insurance Corporation (MGIC). California (1961) followed next with a comprehensive mortgage insurance act, and the California statute became the standard for the comprehensive mortgage insurance laws that followed in Illinois (1964), New Jersey (1968), Texas (1971), and New York (1973). Key features of the California statutes included:[6]

- Only amortizing first liens, subject to a maximum loan to value ratio, could be insured.
- A contingency reserve was required equal to half of all earned premiums for a period of at least 10 years.
- The permissible insurance exposure could not exceed 25 times the sum of capital, surplus, and contingency reserve.
- Mortgage insurance had to be ***monoline***, meaning that a mortgage guarantee insurer could write only this line of business. Therefore, the capital and reserves backing this insurance could not be shared or coordinated with other insurance lines. There were also prohibitions against other possible conflicts of interest, such as originating mortgages or investing in either mortgages or real estate.

California Insurance Code section 12640 carries the current California monoline restriction on mortgage guarantee insurance.

Figure 1 shows the expansion of the US mortgage insurance industry from 1971. The insurance in force series (right axis) shows how the industry has grown over the last 30 years, reaching about $750 billion of mortgage insurance in force by 2002. The new insurance written series (left axis) shows that there have been several significant cyclical swings in insurance sales.

[6] See Rapkin (193), page 32.

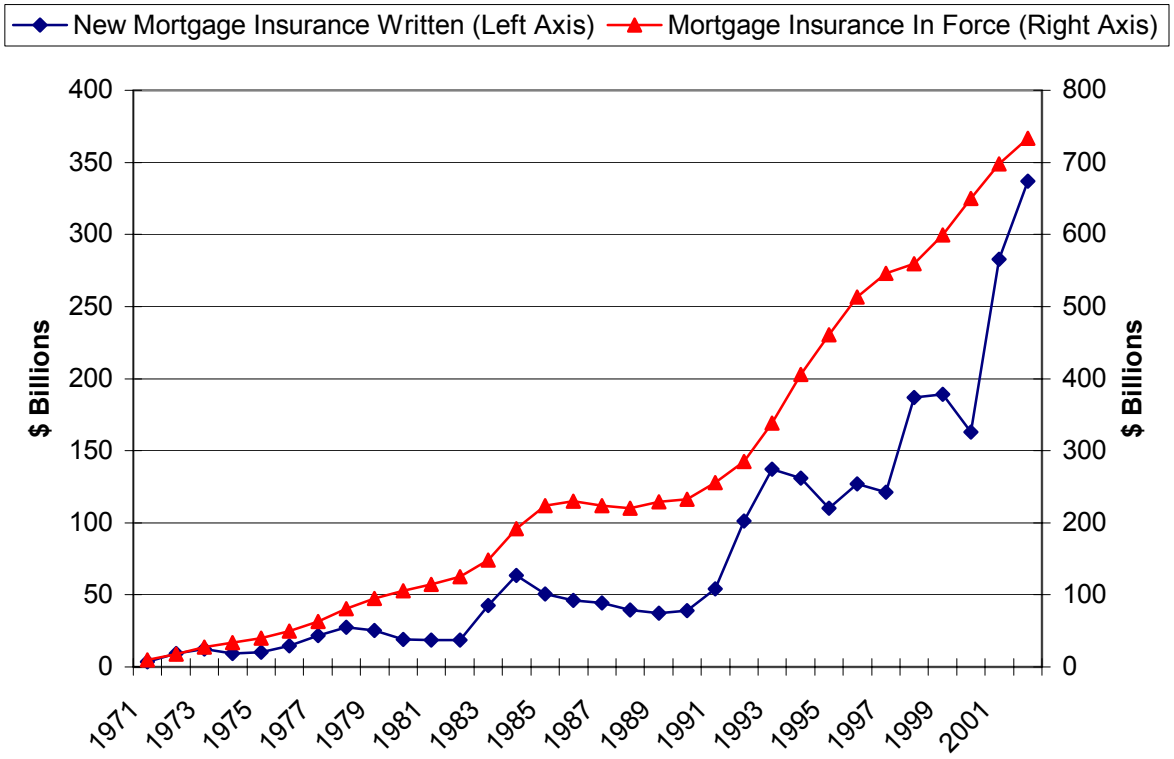

Figure 1: Mortgage Insurance in Force and New Insurance Written. Source: Mortgage Insurance Companies of America.

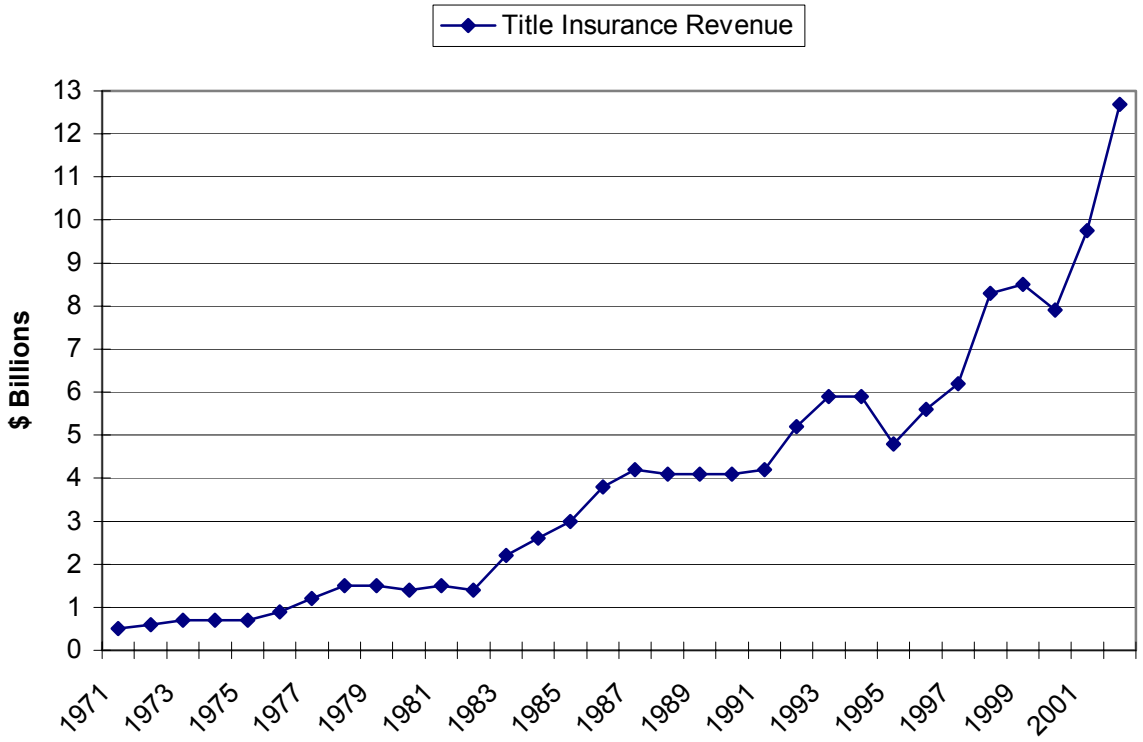

Figure 2: Title Insurance Revenue. Source: A.M. Best (2003),

2.2 The Mortgage Insurance Policy

A mortgage insurance policy indemnifies the policy beneficiary against certain losses created by the default of the mortgage borrower. The standard contract remains in force over the life of the underlying mortgage, unless cancelled at an earlier date.[7] Premiums are usually paid on a continuing basis at a level contractually set as a percent of the mortgage balance. If the borrower defaults on a required mortgage payment, then a foreclosure is initiated and the insurer reimburses the policy beneficiary (the mortgage investor) for the indemnified loss.[8]

Mortgage insurance indemnification applies only for *losses created by the credit risk* of the borrower. That is, the standard policy explicitly excludes all other factors that may also trigger mortgage defaults, such as losses created by fire, earthquakes, floods, hurricanes, and defective titles. To control for these excluded factors, mortgage lenders may require borrowers to maintain separate insurance policies against the respective risks.[9]

2.3 History of Title Insurance in the United States[10]

Title insurance was created in the United States as early as 1853 by the Law and Property Assurance Society in Pennsylvania. This insurer provided both title and mortgage insurance. By 1874, Pennsylvania had created the first statutes regulating title insurance. Title insurance expanded during the real estate boom of the 1920s, with policies often provided by the same

[7] Mortgage insurance may be cancelled by the policy owner or pursuant to the standards established in the federal Homeowners Protection Act or in applicable state cancellation law.

[8] The mortgage insurer typically has the option to purchase the mortgage from the investor at par or to settle the claim for the fixed percentage of the par amount specified in the policy.

[9] In fact, most lenders do require borrowers to maintain fire and title insurance for the life of the mortgage, with the lender named as the beneficiary.

[10] Useful reviews of the title insurance industry can be found in Lipshutz (1994) and American Land Trust Association (2002).

insurers offering mortgage insurance. These insurers were rendered insolvent during the Great Depression, due to the failure of their mortgage insurance activities.

Most states now regulate title insurance. The California statutes are typical:

- The statutory premium reserve equals 4.5% of all gross title income.
- The statutory premium reserve is released to income on a declining scale, with 10% each for years 1 to 5, 9% each for years 6 to 10, and 0.5% per year for years 11-20.
- The monoline requirement in California Insurance Code section 12360 states:

  "An insurer which anywhere in the United States transacts any class of insurance other than title insurance is not eligible for the issuance of a certificate of authority to transact title insurance in this State nor for the renewal thereof."

As with mortgage insurance, most states require title insurance to be a ***monoline*** product.

Figure 2 shows how the title insurance industry has expanded since 1971. The pattern for title insurance revenue is very similar to the pattern for new mortgage insurance written in Figure 1. This is not surprising, since both mortgage insurance and title insurance reflect derived demands based on the fundamental forces that create mortgage loan demand. Data are not available for title insurance in force for the following reason. From a practical perspective, title insurance remains in force until there is a sale or refinancing of the property, at which point a new policy is initiated, effectively retiring the orignal one. In principle, however, the original insurance remains in force indefinitely, and insurers are not typically informed that a sale or refinancing transaction has effectively ended their obligation. The result is that an insurance in force data series would have to accumulate the value of all policies ever written minus the values of those policies dominated by newer ones, a practical impossibility.

2.4 Title Insurance Compared with Mortgage Insurance

Title and mortgage insurance represent quite different types of insurance products:[11]

- Title insurance contracts are typically funded with a single up-front payment. Mortgage insurance contracts, in contrast, are usually funded by a sequence of premium payments.
- Title insurance contracts remain in force indefinitely, in the sense that a claim can be brought at any time that a title defect is discovered. Mortgage insurance, in contrast, remains in force only while premium payments are made, and in any case the coverage ends with the termination of the mortgage.
- Title insurance covers only *risks created by past events*, which means the risks can be virtually eliminated through loss prevention--that is, careful research--by the title insurer. In this sense, title insurance is a service product and the insurance policy is a form of a product guarantee. The risks covered by mortgage insurance, in contrast, are created by *uncertain future events*, in the same fashion as most other casualty insurance lines.

Loss payments relative to revenues for the title and mortgage insurance industries are shown in Figure 3. The annual loss ratios for title insurance firms have averaged under 6.5 percent since the 1970s, while loss ratios for mortgage insurers have averaged over 50 percent.[12] The title insurance industry maintains such low loss ratios because it identifies and cures most title defects prior to offering coverage. In contrast, the high and fluctuating loss ratios for the mortgage insurance industry arise from indemnification payments for losses arising from *unpredictable future events*. We next comment on the pattern of mortgage insurance losses.

[11] One shared feature of the two insurance lines is that neither industry participates in state-level insurance guarantee associations, which would otherwise compensate policy holders for losses created by insurance claims against bankrupt insurance firms.

[12] For all property casualty lines, loss ratios have averaged over 80 percent, A.M. Best (2003).

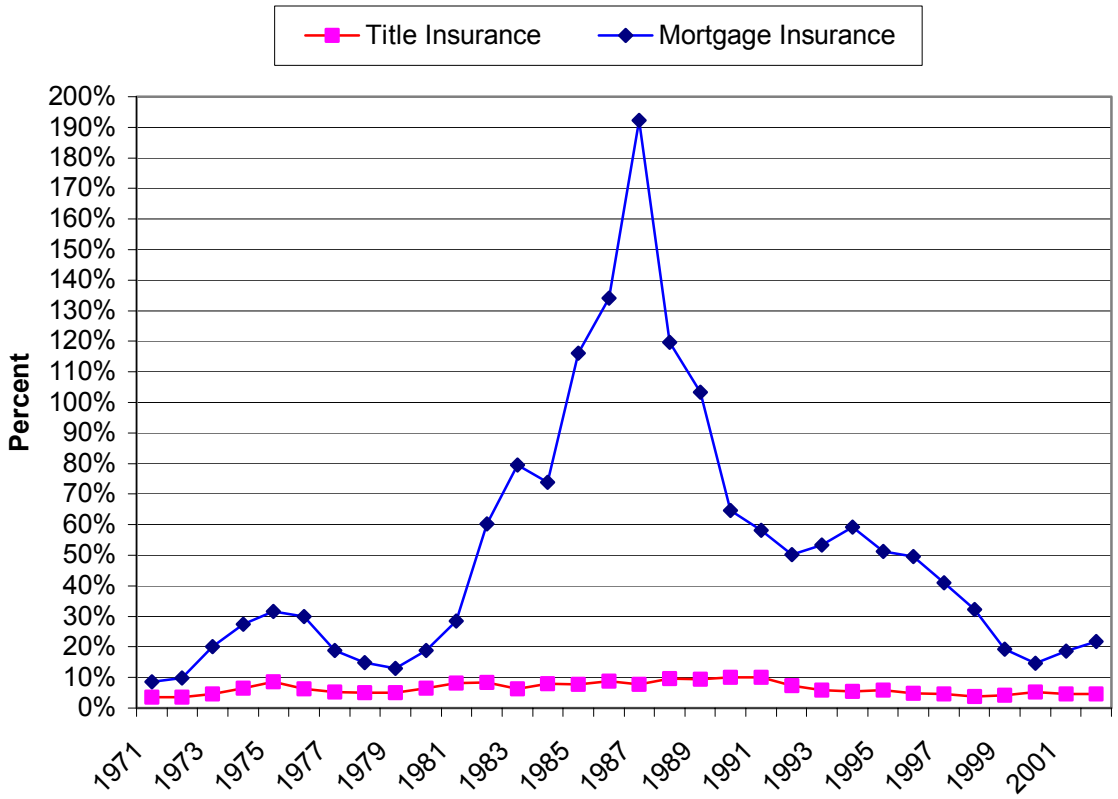

Figure 3: Title Insurance and Mortgage Insurance Losses as Percent of Revenue. Sources: American Land Trust Association for title insurance, Mortgage Insurance Companies of America for mortgage insurance.

2.5 The Risks Of Mortgage Insurance

As shown in Figure 3, the loss ratios of mortgage insurers rose rapidly during the 1980s reaching a peak rate of close to 200% in 1987. Of course, were data available back to the period of the Great Depression, the loss ratios of 1930s would have been even greater. The high and fluctuating loss ratios are the basis for describing *mortgage insurance as a catastrophe line*, in obvious contrast with the low and controllable risks associated with title insurance.

The catastrophic nature of mortgage insurance arises because falling house prices create the potential for insurance losses, and house price declines tend to affect many properties simultaneously in a geographic region, such as a city, a state, or possibly the entire country. This means that mortgage insurance claims tend to come in bunches, affecting an entire region such as

Texas and other oil regions during the 1980s, or the entire country as during the Great Depression. This pattern can be contrasted with more traditional lines of casualty insurance, such as auto insurance, where the probability of a large number of cars simultaneously crashing in one city is extremely low.

Mortgage insurers must hold especially large amounts of capital to cover the losses that might aggregate to a very large amount.[13] Raising and maintaining such large amounts of capital creates very special problems for such insurers; see Jaffee and Russell (1997). In fact, other catastrophe lines in the US, specifically earthquake, flood, hurricane, and terrorist insurance, have all required some form of government support, as private firms became unwilling to provide the large amounts of required risk capital. For example, following Hurricane Andrew in 1992 and the Northridge Earthquake in 1994, most private insurers became unwilling to continue to provide the capital necessary to support such coverage, forcing the states of Florida and California to create public and quasi-public entities to support the market for the respective insurance lines.[14] Similarly, following the terrorist attack of September 11, 2001, most insurance firms became unwilling to continue to offer terrorist insurance, ultimately forcing the US federal government to support the market under the terms of the Terrorist Risk Insurance Act, signed into law by President Bush in November 2002; see Jaffee and Russell (2003).

Private mortgage insurance continues to be provided without government support, but all states regulate the industry in special ways, reflecting the catastrophic nature of the risks. For example, in addition to reserves for reported losses, most states require mortgage insurers to

[13] In contrast, title or auto insurers generally require little capital, since the annual premium income is generally sufficient to cover their relatively predictable losses.

[14] See Jaffee and Russell (1998a) for a discussion of how the California Earthquake Authority has helped support the market for earthquake insurance in California.

create special contingency reserve accounts as well. The contingency reserve is generally equal to 50% of earned premiums, and is maintained for 10 years after the earned premium is received. This regulatory structure is not applied to most other casualty insurance lines, not even earthquake and hurricane insurance. For the same reason, the amount of capital required to be held by mortgage insurers is substantially higher than for most other insurance lines.

3. THE MONOLINE RESTRICTION ON MORTGAGE AND TITLE INSURANCE

Even with high capital and reserve requirements, the catastrophic nature of mortgage insurance creates the possibility that mortgage insurers will face losses that exceed their resources, creating an insolvency. In this event, beneficiaries under mortgage guarantee policies would receive only prorated settlements on their claims. In this section, we review the arguments, pro and con, whether this risk of insurer insolvency can be usefully mitigated through a monoline restriction on mortgage insurers, title insurers, or both. We begin with a review of how the monoline restrictions developed in the historical context. We then consider the implications of the recently developed academic insurance literature for evaluating the insolvency risk of insurance firms.

3.1 Monoline Restrictions in the Historical Context

Mortgage insurance

The monoline restriction on mortgage insurance developed primarily to protect the policy-holders of *other insurance lines* from the insolvency risk associated with mortgage insurers. The insolvency risk is created by the catastrophic nature of mortgage insurance, meaning there is a distinct chance that a severe wave of mortgage defaults could bankrupt one or more mortgage

insurance firms. In fact, mortgage insurer insolvencies can arise as a *cumulative process*, with falling house prices and insurer insolvencies reinforcing each other.[15]

This process was well illustrated during the Great Depression, in which house prices fell dramatically as banks were forced to liquidate the properties backing foreclosed mortgages in an attempt to meet the demands for deposit withdrawals. The situation was further exacerbated by the existing conflicts of interest in the mortgage insurance industry. Following the Great Depression, mortgage insurance companies could not be chartered in any state until new mortgage insurance laws were created, first in Wisconsin in 1956, then in California in 1961. Based on the historical experience, the new laws segregated and controlled the risks associated with the potential insolvency of mortgage insurance firms. Monoline restrictions, in particular, achieved three distinct and important goals:

1) A monoline structure eliminates any possibility of contagion across insurance lines. For example, the bankruptcy of mortgage insurance firms during the Great Depression also created the bankruptcy of their title insurance divisions, although title insurance firms might have survived had they existed in a monoline structure.
2) A monoline structure is easily adapted to prohibit conflicts of interest. For example, most states prohibit monoline mortgage insurers from investing in mortgages or mortgage related assets, while they do not impose such a restriction on other lines such as auto and homeowner insurance.
3) A monoline structure allows special contingency reserves to be set and enforced. For example, most states impose substantially higher reserve requirements on mortgage insurers.

[15] The cumulative process occurs because mortgage investors who fail to receive expected insurance settlements may be forced to accelerate the sale of the foreclosed properties, causing house prices to decline further, and thus inducing more mortgage defaults and more insurer insolvencies.

Title Insurance

The monoline requirement for title insurers represents just the opposite side of the monoline coin. That is, title insurance represents, arguably, the safest possible insurance line, since proper research allows the insurer to eliminate virtually any possibility for claims. However, there is one way to upset the safety of a title insurer, namely to contaminate it with the risks of another insurance line, such as by combining it with mortgage insurance in a *multiline* structure. The monoline requirements have thus been imposed to eliminate any possibility that title insurance could be contaminated by the much higher risks of other insurance lines.

In summary, both mortgage insurance and title insurance face monoline requirements, but the motivations are quite different, based on the differing nature of the two insurance lines:

- Mortgage insurers face quite a high risk of insolvency, and the monoline restriction is a means of quarantining this risk to eliminate any contagion to other insurance lines.
- Title insurance firms face very little intrinsic risk of insolvency, and the monoline restriction eliminates any possible contamination from other, higher-risk, lines.

3.2 Monoline Restrictions in the Academic Insurance Literature

Monoline restrictions appear not to have been directly studied in the academic literature. The insolvency risk of insurance companies, however, was recently studied in Phillips, Cummins, and Allen (1998), hereafter PCA.[16] In this section, we develop the implications of this paper for the monoline issue.

[16] Myers and Read (2001) also provide an analysis of the insolvency risk of insurance firms, in which they propose a method for allocating the capital of a multiline firm across its individual insurance lines for accounting purposes. Both papers conclude that the insolvency risk of a multiline firm is necessarily shared equally across all of its insurance lines. Furthermore, *accounting rules make it impossible to earmark any portion of the capital of a multiline firm to protect only the policyholders of one specific insurance line*. Thus, it is not possible to segregate the insolvency risk of any single line from the overall insolvency risk of a multiline firm.

The Phillips, Cummins, and Allen Model

The PCA paper develops a model of how the insolvency risk of a ***multiline*** insurance company would be incorporated into market determined insurance premiums. The relevant assumptions are:[17]

- The multiline insurer operates in a ***competitive and informationally efficient insurance market***. This means that policy holders are fully informed with respect to the insured hazards, the insurer's insolvency risk, and the premiums being charged.
- The insurer deals in two or more insurance lines, with possibly widely varying risks.
- The policies for all lines are initiated at the same Date 0, and terminate at the same Date 1.
- The losses for all lines are determined at Date 1 and payments are made at that time.
- The solvency or insolvency of the insurance firm is determined at Date 1, depending on whether or not its available assets (initial capital and premiums) exceed the realized losses:
    - If the firm is solvent, the policy-holders receive full payment for their indemnified losses.
    - If the firm is insolvent, then it is assumed that policy-holders receive prorated payments based on the ratio of available resources to total claims for the insurer. In particular, the proration ratio is assumed to be the same for losses across all insurance lines.

The key relevant conclusions of the PCA paper are:

- The insurance firm's insolvency probability as of Date 0--computed as the likelihood that total claims at Date 1 will exceed available resources--depends on the expected losses, the combined riskiness of the various insurance lines, and the firm's initial capital.

[17] This list highlights only the relevant ***economic*** assumptions of the paper. In fact, there is an extensive list of technical assumptions the paper makes in order to formalize the model. For example, the paper requires the standard assumptions of option pricing models such as complete markets.

- The insolvency probability is the same for all the insurance lines, since if the firm is insolvent at Date 1, this affects losses for all lines equally in terms of prorated payouts.
- At Date 0, premiums are determined for each insurance line i as follows:

  (1) Premium_i = Expected Losses_i - Firm Insolvency Risk Discount.

  (2) Firm Insolvency Risk Discount = f(combined insurance line risks, initial capital).

Equation (1) indicates that line i premiums equal line i expected losses minus the Firm Insolvency Risk Discount. The insolvency risk discount arises because policy holders anticipate that firm insolvency could create prorated claims payments, thus reducing the premium they are willing to pay. It is a distinctive feature of the model that the insolvency risk discount takes on the same value for all insurance lines, based on the assumption that the policy holders of all lines share equally in the costs of any insolvency. Equation (2) indicates that the firm's insolvency risk discount is a function of two key factors: (i) firm insolvency risk rises with the combined risk of the insurance lines; and (ii) firm insolvency risk falls the greater the initial capital.

Implications of the Model for the Monoline Issue

The model analyzes only a *multiline* insurance firm and thus does not directly address the issue of a monoline restriction. The implications for a monoline restriction, however, can be established with further analysis. The key additional factor is to recognize that a multiline firm receives *diversification benefits* which serve to reduce its overall insolvency risk. These benefits arise because all the lines are unlikely to suffer unusually high loss rates simultaneously. Thus diversification across insurance lines reduces the overall insolvency risk of the multiline firm. As a result, the market premiums for a multiline firm are generally expected to be lower than those

for a set of monoline firms providing the same coverage.[18] Thus, *taking the assumptions of the model as given*, the implication is that a multiline structure is beneficial and monoline restrictions are unnecessary.

The appropriateness of the model's assumptions must be evaluated, however, in order to apply this conclusion to real world cases such as mortgage and title insurance. We will now see that there are conditions under which multiline line structures continue to be the socially preferable form, and there are other conditions under which monoline structures may be socially preferable. This result is consistent with the real-world pattern in which monoline restrictions are imposed on some insurance lines, but not on other lines.

The two assumptions of the model that must be evaluated are:

1) *Common Dates Assumption*. The model assumes that the initial Date 0, ending Date 1, and loss determination Date 1 are identical across the insurance lines of the multiline firm.
2) *Competitive and Informationally Efficient Market Assumption*. The model assumes that the insurance market is both competitive and informationally efficient, the latter meaning that policy holders are fully informed with respect to the hazards being insured, the insolvency risk of the insurer, and the premiums charged.

The Common Dates Assumption

The common dates assumption (1) seems appropriate for insurance lines such as auto and home owners insurance, where policies are in force for relatively short-term periods such as one

[18] A simple version of this proposition is readily established for the case in which the risks of the individual insurance lines are independent of one another and the expected losses are equal in magnitude. Start by considering a multiline firm serving N different lines and holding initial capital K, from which its overall risk of insolvency and the market premiums of the individual lines can be established. Now separate the multiline firm into N separate monoline firms, each of which receives 1/N of the initial capital K. The insolvency risk of each of the monoline firms will exceed the insolvency risk of the equivalent multiline firm, and accordingly the market premiums of the monoline firms will exceed the premiums of the equivalent multiline firm.

year, and in which claims are made and losses are paid promptly within or just after the policy period. The common date assumption is thus consistent with the *multiline* regulatory structure in place in most states for lines such as auto and homeowners insurance.

The common dates assumption appears inappropriate, however, for mortgage and title insurance. The problem is that title insurance has an indefinite contract period, and claims are as likely as not to arise in the distant future, while mortgage insurance contracts remain in force for relatively short periods, that is until the loan to value ratio reaches the cancellation threshold or the loan is paid off. Furthermore, title insurance risks and mortgage insurance risks are highly asymmetric with respect to their contributions to the insolvency risk of a multiline firm in two regards. First, the title insurance line policy holders receive little benefit from a multiline structure, since there is virtually no likelihood that a wave of title defect claims might bankrupt an otherwise sound monoline title insurer. Second, there is a distinct possibility that a wave of mortgage insurance claims could bankrupt a multiline title insurer, thus eliminating the value of the existing title insurance contracts.

The implication is that monoline structures, imposed on both title and mortgage insurers, usefully protect policy holders of title insurance and other similar lines. The monoline restriction on title insurance recognizes that the particularly low risk of this line can be maintained only if it is isolated from other higher-risk casualty lines. The monoline restriction on mortgage insurance, on the other hand, quarantines the catastrophic mortgage insurance risk, not allowing it to raise the risk of other lines through consolidation.

There is a further question, however, whether monoline restrictions are actually required. That is, if a monoline structure is preferred by policy-holders, then a competitive and informationally efficient insurance market should provide this structure even in the absence of a

regulatory requirement. We thus face the issue of whether the assumptions of competitive and informationally efficient markets are realistic. We now consider these assumptions.

The Competitive and Informationally Efficient Market Assumptions

The assumptions that markets are competitive and that policy holders are well informed are reasonably satisfied with regard to many insurance markets. For example, for such lines as auto and homeowners insurance, there are many providers in most states, and the consumer is repetitively purchasing a product that is easily compared across firms.[19] Comparative information can also be readily obtained from similarly placed friends and neighbors.

The assumptions of competition and well informed consumers are much more questionable in title and mortgage insurance markets. First, there are long-standing accusations that oligopoly power exists in the title insurance market.[20] Second, consumers have limited incentive to become well informed because both title and mortgage insurance are purchased only at the time of a home purchase. Home purchase is an infrequent event, and most homeowners would not remember who provided their mortgage or title insurance. In addition, the title insurance premium is just one of a long list of closing costs associated with the home purchase, and again most home buyers would be hard put to remember what they paid for it. In fact, the condition of *poorly informed consumers* in title insurance markets is commonly accepted, and has lead to a variety of laws to protect consumers against abusive practices.[21]

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[19] Jaffee and Russell (1998b) and (2002) discuss the structure of the market for auto insurance with special emphasis on California market conditions.

[20] White (1984) argues this position and points out that such market power is the likely source of the so-called abusive practices such as reverse competition and controlled business that occur in this market.

[21] For example, the federal Real Estate Settlement Procedures Act (RESPA) has numerous clauses that attempt to protect consumers against abusive practices that may arise while purchasing title insurance. Similarly, most state laws make title insurance fee rebates illegal, as in California Insurance Code Section 12404.

Implications for Monoline Restrictions on Title and Mortgage Insurance

The failure of title insurance markets to be competitive and informationally efficient, together with the low-risk character of title insurance products, can motivate a monoline restriction on *title insurance*. That is, title insurance policyholders may be harmed when insurers combine title insurance with other, higher-risk, insurance lines in a multiline structure:

1) Informational inefficiency implies that the policyholders may be unaware of the higher risks associated with their title insurance when it is offered through a multiline structure.
2) Non-competitive markets may preclude policy holders from receiving the lower premiums that would otherwise be associated with purchasing title insurance from multiline firms with higher risks of insolvency.

The failure of competitive and informationally efficient insurance markets can also motivate a monoline restriction on *mortgage insurance*. Here the concern is that the catastrophic risks of the mortgage insurance will be imposed on the policyholders of a safer line without appropriate compensation. We next consider a recent case in point.

3.3 Radian Lien Protection, An Example

Radian Guaranty Inc., a mortgage insurance company, recently introduced an innovative product, called Radian Lien Protection (RLP), that offered the option to add title insurance coverage as part of a mortgage insurance policy.[22] This provides the opportunity for a case study of how the analysis of this paper sheds light on the regulatory application of the monoline restriction for title insurance.

The two key and relevant aspects of the Radian RLP product are:

[22] The product is intended for sale to lenders on refinanced mortgages and home equity loans. More complete descriptions of the product can be found on the Radian web page at http:/www.radiangroupinc.com .

1) Radian RLP *title insurance* policyholders face a higher level of insurer insolvency risk than they would if purchasing the same title insurance product from a monoline title insurer, since they will also face the insolvency risk created by Radian's mortgage insurance policies.
2) Radian's *mortgage insurance* policyholders could also face a higher level of insurer insolvency risk than they would if purchasing the same mortgage insurance product from a monoline mortgage insurer, to the extent that Radian tends to lower its mortgage insurance underwriting standards in order to gain market share for its new title insurance product (and thereby gain access to the excess profits available in this imperfectly competitive market).

Of course, the additional risks posed for Radian policyholders, for both their mortgage insurance and title insurance products, must be considered against any benefits these policyholders may receive in the form of lower insurance premiums. Nevertheless, given the possibility of informational inefficiency among the firm's policyholders and the possibility of contagion from the failure of one mortgage insurer to others, an economic case certainly exists for maintaining the monoline restrictions that separate title and mortgage insurers.

The Radian RLP product in fact faced legal challenges in California and other states that it violated the monoline restrictions on mortgage and title insurance. In a typical conclusion, the California Commissioner of Insurance, John Garamendi, ruled on July 22, 2003:

> "Although Radian and some of the parties that submitted briefs on its behalf argue the Lien Protection Policy is less expensive and therefore better for consumers, I am satisfied that this product falls within the definition of title insurance as established by the Legislature. Therefore, unless the [monoline] law is changed, I am obligated to uphold it by prohibiting the sale of these policies." [23]

[23] See "Garamendi Issues Final Order Prohibiting Sale of Radian Lien Protection Policy," News Release, the California Department of Insurance, July 22, 2003. Summaries of the litigation in other states can be found on the "Mortgage Impairment" section of the American Land Trust Association web page, at http://www.alta.org/mortgage/mortgage.htm .

4. CONCLUSIONS

The first basic question addressed in this paper is whether there is an economic basis for the mortgage and title insurance industries to adopt a monoline structure? The answer developed here is yes, but the motivation is quite different for the two insurance lines.

For mortgage insurance, the primary motivation for a monoline structure is that the insurance line bears a catastrophic risk, so there is a distinct chance that an extreme wave of mortgage defaults will bankrupt firms in this industry. Thus, if a mortgage insurance line is placed within a multiline structure, there is a distinct chance that the excess losses of the mortgage guarantee insurance line could render the entire firm insolvent, imposing high costs on the policy holders of the firm's other lines.

For title insurance, the motivation for a monoline structure is that the insurance line is extraordinarily safe, since with careful research a title insurer can eliminate virtually any chance of significant losses due to defective titles. Furthermore, title insurance has an indefinite duration. Thus, the major risks for title insurance policy holders do not come from the insured hazard, but rather from the possibility that a multiline insurer could be rendered insolvent due to extreme losses that arise from one of the insurer's other insurance lines.

Given that a monoline structure is economically desirable, the second basic question addressed in this paper is whether this structure will arise naturally within a market economy, or whether there is a basis for imposing a legally binding monoline requirement on the industry? If insurance markets are considered competitive and informationally efficient, then there may be no need to impose a legally binding monoline requirement. There are, however, serious questions regarding both of these assumptions with respect to the trust insurance market. First, there are long-standing accusations that the title insurance market is not competitive. Second, there is

compelling evidence that components of the title insurance market may not be informationally efficient. In particular, homeowners transact in this market very infrequently, and when they do their attention is focused on the much larger financial implications of the underlying home purchase. To the extent that the assumptions of competition and informational efficiency are not valid, there is a compelling case for enforcing the monoline structure through legal requirements.

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