

**THE ECONOMIC IMPACT OF A SOLVENCY
CRISIS IN THE INSURANCE INDUSTRY**

**The Congress of the United States
Congressional Budget Office**

NOTES

Unless otherwise indicated, all years are calendar years.

Numbers in the text and tables of this report may not add to totals because of rounding.

Cover photo: Pleasure boats in South Carolina wrecked by Hurricane Hugo in September 1989 (Reuters/Bettmann).

Preface

With the savings and loan crisis and the problems of the banking industry fresh in its mind, the Congress has focused its attention in recent years on the financial problems in the insurance industry. The House Banking Committee requested that the Congressional Budget Office (CBO) examine what would happen to the economy in general and the financial system in particular if the insurance industry experienced a solvency crisis. This study addresses those issues.

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Summary

During the past decade, the savings and loan crisis and the problems of the banking industry have focused the public's attention on the financial problems in the insurance industry and their implications for the overall economy. The life insurance industry suffered from some of the same competitive forces that hurt the savings and loan and banking industries. The property and casualty insurance industry experienced heavy losses on its underwriting activities. As a result, the number and size of insurance insolvencies have multiplied.

The financial problems of the insurance industry are now considerably smaller than those that existed in the savings and loan industry during the 1980s. Nevertheless, policymakers worry about what would happen to the economy in general and the financial system in particular if the financial problems of the insurance industry were to mushroom into a solvency crisis.

What is a solvency crisis--as opposed to the solvency problems that typically occur in a given year? The best way to answer this question is by referring to the extent of the damage to overall economic activity. Routine solvency problems do not have a significant impact on the overall economy. They are small in number and size, and state guaranty funds are able to fulfill their obligations to the policyholders of the insolvent insurers. A solvency crisis would have to be much more serious than that. It would have to swamp the capacity of the state guaranty funds and be large

enough to disrupt established patterns in financial markets, thus harming the overall economy, as did the solvency crisis in the savings and loan industry.

This study considers the likely impacts to the overall economy if a solvency crisis arose in the insurance industry. It does not evaluate the likelihood of such a crisis. It hypothetically assumes a crisis and then lays out what the resulting overall economic impacts might be. The focus is not on the economic impacts of the event that precipitated the crisis in the first place, such as a natural disaster, but on the additional impacts that may arise solely from the solvency crisis itself. Not least, the study reviews some options for reducing the major risks of a solvency crisis.

Events That Could Precipitate a Solvency Crisis in the Insurance Industry

A solvency crisis in the insurance industry could arise only as a consequence of an extraordinary set of events or circumstances. Analysts differ over whether the deterioration of the insurance industry's finances in the past decade threatens a crisis, but they do agree that the industry faces risks of a solvency crisis from other sources. Those sources include catastrophic increases in claims for losses

from, say, natural disasters; collapsing asset markets; runs on life insurers; and the underwriting cycle in the property and casualty industry. Because the financial health of the insurance industry has deteriorated in the past decade, even events or circumstances of a smaller scale could push some companies into insolvency or give them an incentive to adopt risky business strategies that would make a growing solvency crisis even worse.

Catastrophic Increases in Claims by Policyholders

The most likely cause of a solvency crisis in the property and casualty industry is a catastrophic increase in claims by policyholders. Insured losses on property from catastrophes amounted to more than \$38 billion in the past few years, mostly the result of Hurricanes Hugo, Andrew, and Iniki. These losses dealt a severe blow to the finances of the industry and forced more than a dozen small insurers into insolvency. The losses from a particularly catastrophic earthquake in California could amount to as much as \$60 billion. Claims for environmental damage could amount to more than \$100 billion in certain worst-case scenarios. Given that the capital and surplus of the whole property and casualty industry amounted to \$163 billion at the end of 1992, such calamities could wipe out a significant portion of the net worth of the property and casualty industry.

A Collapse of Markets for Assets Held by the Insurance Industry

In contrast with the property and casualty industry, the life insurance industry is more susceptible to a solvency crisis arising from a collapse of asset prices. Life insurers, like savings and loan associations and banks, responded to increased competitive pressures during the 1980s by taking greater risks in their investments, and the collapse of the junk bond and commercial real estate markets during the late 1980s came close to creating a sol-

vency crisis in 1991. As a result, regulators have imposed stricter limits on investments and are phasing in stronger capital requirements, but some insurers may still be susceptible to the weakness in the commercial real estate market.

Runs on Life Insurers

Life insurers, whose liabilities are generally more liquid than their assets, are particularly vulnerable to runs by policyholders. A report that an insurer has suffered large losses, such as happened to the Mutual Benefit Life Insurance Company in 1991, is the most likely cause of a run. Such news would raise fears among the insurer's policyholders of losing the portion of their assets not covered by the state guaranty funds or of having their assets frozen for some time should the state insurance regulator take over the insurer.

Consequently, some policyholders would try to protect themselves by canceling their investment contracts and policies, withdrawing their cash values, and asking for policy loans. If left unchecked, a run can drain liquid assets and turn into a solvency crisis as insurers are forced to sell other assets at a discount.

Thus far, state insurance regulators have been sensitive to signs of a run and have stepped in to protect besieged companies by preventing policyholders from redeeming their policies and taking out loans until the threat of a continuing run had subsided. Nevertheless, insurance regulators may be overwhelmed if runs occur at a greater frequency. Moreover, because the Federal Reserve does not deal directly with the life insurance industry, it is not clear how quickly and effectively it could move to exercise damage control on a run in the industry.

The Underwriting Cycle in the Property and Casualty Industry

The underwriting cycle refers to the periodic rise and fall in the net underwriting income of

the property and casualty industry. The number of insolvencies in the industry varies inversely with this cycle--rising when income falls and vice versa. The cycle gets its name from the fact that swings in net income from underwriting activities--rather than swings in the income earned on asset holdings (net investment income)--create the cycle. In recent years, the industry's underwriting cycle appears to have changed: the periods of falling net income seemed to have lengthened, while those of rising net income appear to have shortened. Moreover, the industry has lost money on its underwriting activities since the late 1970s and has relied on investment income to remain profitable.

The shift in the sources of income has exposed the industry to greater risks. Large underwriting losses indicate that this insurance is underpriced; in other words, the property and casualty industry charges too little for the risk it assumes. At the same time, the industry's reliance on investment income for profitability has increased its exposure to risks in asset markets. These greater risks are reflected in the drop in the industry's profit rate during the 1980s, which has resulted in the recent increase in insolvencies of property and casualty insurers. Continued low profitability could lead insurers to undertake even greater risks in hopes of returning to profitability, and thus result in additional insolvencies.

Economic Impacts of a Solvency Crisis in the Insurance Industry

A solvency crisis in the insurance industry could harm the overall economy, particularly in the short run. It would reduce the supply of insurance, thereby raising the price of insurance, and could shift the burden of paying for the losses from the insolvent insurance companies to others. A solvency crisis would also interrupt the normal flow of funds through insurance companies and perhaps other finan-

cial markets, raising the cost of borrowing for some and lowering the return on saving for others. Such impacts could lower output and income both directly and indirectly as they spread throughout the economy.

In most cases, the economic impact of a solvency crisis probably would not be particularly burdensome for the economy as a whole, though some individuals and businesses could suffer greatly. However, widespread insolvencies in the insurance industry could overwhelm regulators and force them into a policy of forbearance, which contributed to the large costs of the savings and loan crisis.

Although it is difficult to identify the economic effects of the collapse of financial intermediation by the industry, they are likely to be small. The funds that were once provided by insurers would be provided by other lenders, and the insurance industry would eventually regain its financial health.

Impacts from a Higher Price for Insurance

A solvency crisis would at least temporarily reduce the capacity of the industry to write insurance, thereby raising the price of insurance. The industry's capacity to write insurance depends on its capital and surplus, or net worth. When abnormal losses reduce capital and surplus, the industry must reduce the amount of insurance it writes, as occurred in Florida in the wake of Hurricane Andrew. The price of insurance will then rise, and less profitable lines of insurance may be dropped. Such disruptions would force policyholders to assume greater amounts of risk or pay a higher price for insurance, both of which raise business costs and hurt consumer budgets and welfare.

Although a higher price of insurance would clearly harm social welfare, its impact on economic activity is more difficult to predict, but is likely to be small and short lived except in extreme cases. A higher price of insurance

would raise business costs and lower the overall supply of output in the short run. Resources would move out of risky activities that were no longer profitable under a higher price of insurance and into less risky activities. If the abandoned risky activities earned greater average returns than the less risky activities, then the overall level of output could be further reduced temporarily.

These short-run impacts could be relatively large if risk were a large component of costs for businesses. Nonetheless, available evidence suggests that the cost of risk is, on average, a small fraction of their costs. A higher price of insurance could noticeably hurt small businesses and those engaged in risky activities: they face a higher cost of risk, and small businesses have fewer opportunities to spread risks in other ways.

Higher prices for personal lines of insurance would also affect the level and composition of consumer spending. For example, available evidence suggests that consumers would reduce their purchase of insurance if its price rose. To the extent that businesses and consumers reduced their insurance coverage, they would need to increase their saving in low-risk assets in order to cover their greater exposure to risk.

Impacts from Shifting the Burden of the Losses

A solvency crisis could also shift the burden of the losses that created the crisis. The groups that bear the burden of an insolvency include the owners of the insolvent insurance company, the policyholders of the insolvent insurer, and either the policyholders of the remaining solvent insurers in the state or state taxpayers. The latter two parties can share in the loss because insurers can pass the assessments by the guaranty funds on to policyholders through increases in premiums or to state taxpayers through future credits against their premium tax liabilities, depending on state law. If a solvency crisis were too large for the

guaranty funds to handle, however, then the burden of the losses could be spread in different proportions because state taxpayers do not legally stand behind the guaranty funds.

One possibility is that insured losses might not be paid in full. Large and visible losses to the policyholders of the insolvent insurers would raise uncertainties in other policyholders' minds about the security of their insurance assets. These other policyholders might decide to lower their spending and increase their saving in order to reduce their chances of being wiped out by the possible failures of their insurers. Moreover, large losses could reduce the opportunities of the policyholders of the insolvent insurers to borrow--either to maintain their spending on consumption or to replace the losses on property formerly covered by the insolvent insurers.

If the state guaranty fund system does not collapse, however, the near-term decline in spending probably would be much smaller. Most likely, the guaranty funds would have to borrow from credit markets in order to indemnify the policyholders of the insolvent insurers. Those policyholders would receive payment for their losses up to the limits prescribed by the guaranty funds. They could then spend the money on current needs as well as on repairing or replacing their damaged property. Because the other policyholders and taxpayers would not begin repaying the borrowed amount until later, they would not reduce their spending by much.

How quickly the economy recovers the losses would also depend on who bore the burden of the losses. The recovery probably would be quicker if current policyholders bore the losses, rather than future policyholders and taxpayers. Although the near-term decline in spending would be greater, shifting the burden to current policyholders would spur additional saving and lower real interest rates, thereby promoting a quicker recovery of the lost capital than if the burden was shifted to future policyholders and taxpayers.

Impacts from Upsetting Financial Markets

A solvency crisis could upset the flow of credit through the insurance industry, which could raise the cost of borrowing for those businesses and state and local governments that rely on insurers as a major source of their borrowing. It could also lower the prices of bonds and commercial mortgages and the returns to policyholders who save with life insurers. If a solvency crisis harmed the confidence of policyholders, runs on life insurers could occur, which, if left unchecked, would surely magnify the economic impacts in the short term.

Credit Supply Problems for Some Borrowers. Even if the credit markets experienced no disruptions, insolvencies of insurers could lead to credit problems for businesses and governments that rely on insurance companies as an important source of funds. Credit problems might occur because a solvency crisis could interrupt and destroy financial relationships that were established over time and could temporarily reduce the flows of funds to credit markets through insurance companies. Fewer funds could flow through the insurance industry if sales of insurance fell, especially those life insurance products with savings features. The same effect would occur if pension funds and businesses chose other intermediaries to manage their assets.

Higher borrowing costs for some borrowers would be temporary, however. Eventually, the funds that insurers once provided would reach the credit market through other channels. Businesses that once placed funds with insurers might insure themselves by placing funds in their own reserves to cover expected losses or by forming captive insurance companies. Individual policyholders could switch from saving with insurers to saving with depository institutions and mutual funds. Furthermore, those borrowers normally serviced by insurers would eventually obtain credit from other financial intermediaries, or directly from credit markets.

Nevertheless, the rechanneling of funds would not occur immediately. Borrowers who rely quite heavily on insurers could face temporary credit problems, forcing them to postpone their planned expenditures. At the same time, less risky borrowers could gain greater access to funds.

Capital Losses on Bonds and Commercial Mortgages. The financial repercussions of a solvency crisis could include capital losses on bonds and commercial mortgages, which could also reduce the amount of economic activity in the economy. These assets are important investments not only for insurers but also for many other individuals and institutions.

Large sales of such assets to meet large claims by policyholders or to liquidate insolvent insurers could push the prices of these assets down and force at least some of the asset holders to cut back their spending. For example, "fire sales" of commercial mortgages and real estate in the weak real estate market of the early 1990s could have been particularly damaging to banks, thrift institutions, and other insurers that were already struggling to recover from losses on these assets. Additional losses for these lenders could have forced them to scale back even further their lending for those and other risky loans until their capital positions had improved.

Options for Reducing the Risks of a Solvency Crisis in the Insurance Industry

Although the risks of a solvency crisis in the insurance industry and their associated economic impacts can never be eliminated, they can be significantly reduced by appropriate policies. One important approach is to improve the effectiveness of solvency regulation. In recent years, analysts have criticized many aspects of the solvency regulation of the insurance industry, which is done entirely at the

state level. The states are working to strengthen their solvency regulations. However, some analysts believe that the states will never be able to fill all of the gaps and create a uniform system of minimum solvency regulations nationwide. Consequently, some policymakers have proposed larger roles for the federal government in regulating the solvency of insurers. Deciding on larger federal roles will require a careful balancing of the benefits and drawbacks of the various proposals.

Keeping solvency regulation and guaranty fund protection entirely at the state level has one important benefit: improvements would build on the existing system, which appears to have worked adequately for many years. Society would avoid the extra costs of adding and maintaining a second regulatory system. By keeping regulation on the state level, the federal government might also avoid assuming an implicit contingent liability to cover payments by the guaranty funds to policyholders should a solvency crisis in the industry occur. Nevertheless, some analysts would argue that the liability already exists.

The chief drawback to staying with the state system is the possibility that the states will not adopt a uniform set of minimum standards for effective solvency regulation. Weak insurers may fall through the cracks of an uneven state system, which would lead to greater losses than if the insurer's finances were corrected promptly. Some insurers may try to be chartered in states with weak solvency regulations in order to take advantage of the system. Some states may skimp on solvency regulation because they know that other states will help pay for some of the costs of the insolvency of a multistate insurer or because they believe that the federal government would pick up the pieces if a solvency crisis took place. Unfortunately, the magnitude of these risks is unknown.

The chief benefit of the proposed federal roles is that they would erase any doubt about the national uniformity of minimum solvency regulations for insurers and the provisions for

guaranty funds. As with any regulatory system, however, doubts about the adequacy of these standards and provisions and their enforcement would remain.

A number of the proposals would create an extra layer of solvency regulation, which could paradoxically heighten the risk of a solvency crisis. An extra layer would remove the incentive for the states to regulate insurance premiums with an eye to the financial health of insurers; the states could set premiums, and the other regulator would have to handle any resulting solvency problems. The extra layer could also raise the costs of solvency regulation for society by adding at the very least administrative overhead and at the most a new regulatory system. These costs, of course, would be offset if insurers were able to reduce costs by complying with a single set of federal regulations.

Because even a sound insurance industry may be unable to cover catastrophic increases in claims arising from natural and other catastrophes, some proposals call for the federal government to help spread these risks. Property and casualty insurers do not hold sufficient reserves to cover truly catastrophic amounts of claims, and such claims would account for a significant fraction of the capital and surplus of the industry. Some proposals call for new, federally sponsored insurance, reinsurance, and mitigation programs. Although these programs might improve the way the risk of catastrophic losses is spread, other, less ambitious options may also achieve these benefits.

Finally, strong solvency regulation and the availability of temporary liquidity from the Federal Reserve could strengthen the ability of the life insurance industry to withstand runs. Moreover, life insurers could create a liquidity pool or market from which they could borrow when they face extraordinary demands by policyholders. A dangerously risky option would be a national guaranty fund backed by the full faith and credit of the federal government.