by creating an interstate commission to establish and administer a uniform system for the administration of insolvencies of insurers. The commission would also oversee and coordinate the activities of the existing state guaranty funds or create and administer a national guaranty fund. Although the proposal addresses an important need to coordinate better the resolution of insolvent, multistate insurers, it does not go as far as it could in establishing and enforcing uniform standards for regulating solvency nationwide.

Empower the NAIC. This proposal would have the federal government empower the NAIC to act as a national regulatory body. The states would then be compelled to adopt all of the standards of the NAIC, removing all doubt about the uniformity of minimum standards for solvency regulation and guaranty funds nationwide. Of course, doubts might remain about how well the states would enforce the solvency regulations and resolve multistate insurers that were financially impaired. GAO questions the practicality of this option both because it feels that the option would create a conflict of interest by making the insurance commissioners accountable to both state and federal authorities and because the option may be unconstitutional.[14] Nonetheless, others disagree with this view.

Create a Self-Regulatory Organization. The proposal for a self-regulatory organization (SRO) would create an organization of insurers to set and enforce its own solvency regulations that the federal government would oversee. It would be similar to other SROs such as the National Association of Securities Dealers. Like other SROs, it might set tough standards as a way of distinguishing its member companies from other insurers and attracting customers. However, just how this SRO would handle financially impaired insurers and whether it would create its own guaranty fund is not at all clear.

The chief benefit of this proposal is that it would establish uniform, and presumably tougher, standards for solvency regulation for its members. However, in doing so, solvency regulation would be independent of other regulations imposed by the states on the SRO members. The SRO would regulate the solvency of its members, and the states would regulate the solvency of the remaining insurers and the business operations of all insurers.

A potentially important drawback of this proposal is that it could create a conflict between the SRO's solvency regulations and states' efforts to regulate insurance premiums. If the SRO were responsible for resolving its members that become insolvent, the states would have an incentive to hold down premiums with little regard for the financial health of the members of the SRO. If carried to the extreme, this conflict could create solvency problems in the industry.

Another drawback of this proposal is that it could raise the cost of solvency regulation. Members of the SRO might be forced to finance both the SRO and the state system; or if the members of the SRO were exempt from supporting the state system, the total costs of both systems might increase if economies of scale in the cost of the state system were lost. Because the costs of supporting these systems for solvency regulation are expenses for tax purposes, taxpayers would bear a small portion of any additional costs. These costs would be at least partly offset if insurers could reduce costs by complying with a single set of regulations.

Set Standards for Federal Solvency Regulation. All states would have to use the same set of minimum standards for solvency regulation under this proposal. The states would enforce these standards and regulate other busi-

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14. These questions were expressed in "Insurance Regulation: Assessment of the National Association of Insurance Commissioners," statement of Richard L. Fogel, Assistant Comptroller General, General Government Programs, Government Accounting Office, before the Subcommittee on Oversight and Investigations of the House Committee on Energy and Commerce, May 22, 1991. The NAIC's written views are given in testimony by the National Association of Insurance Commissioners before the Subcommittee on Policy Research and Insurance of the House Committee on Banking, Finance and Urban Affairs, July 29, 1991.

ness practices of insurers, such as premium rates, as they do now. A federal commission would certify state insurance departments as meeting these minimum standards. This proposal contains a powerful incentive for the states to maintain their certification: a state needs federal certification to license domiciled insurers to write insurance in other states. If a state lost its certification, all domiciled insurers would be prohibited from writing business outside the home state. This proposal would also create a national guaranty fund that would be financed by federally certified insurers, but how the fund would operate is not clear because those details would be left up to the fund's board of directors.

The chief benefit of this proposal is that it would establish a uniform set of minimum standards for regulating solvency nationwide, although the adequacy of the provisions is unclear because the details are not specified in the proposal. The proposal, however, suffers from two potentially serious drawbacks. One problem is that the states would not have to deal with any insolvencies that resulted from strict regulations on premiums. The existence of a national guaranty fund could therefore give the states an incentive to ignore solvency issues when regulating insurance premiums.

The second drawback is that it may be difficult for the federal government to limit its liability to protect all policyholders in the event of a collapse of the national fund. Although the proposals do not back the national guaranty funds with the full faith and credit of the federal government, greater participation in solvency regulation may create an implicit contingent liability for the federal government to cover the costs of both the national and state guaranty funds in the event of a solvency crisis in the industry. Some analysts would argue that the implicit liability already exists given the federal government's past responses to national catastrophes, but that is far from clear.

The proposal could also raise the costs of solvency regulation for society by adding an extra layer of oversight and possibly another guaranty fund if the state funds were not phased out. Although the proposal requires insurers to pay the costs of the commission and the guaranty fund, taxpayers would bear part of these costs because they would be expenses for tax purposes. As with all efforts to regulate solvency, this proposal is not immune to inadequate standards and enforcement mechanisms.

Add a Federal Regulatory Agency. Two different proposals would add a federal regulator to state systems of solvency regulation. One would create a federal agency to regulate only alien insurers and reinsurers. These insurers would need to be federally certified to conduct business in the United States, and U.S. insurers would not be allowed to take credit for any reinsurance from alien reinsurers that did not have federal certification. Although the proposal does not specify whether alien insurers would continue to pay into the state guaranty funds, it does require them to maintain a capital reserve with the federal agency to secure the payment of claims by U.S. policyholders.

The benefit of this proposal is that it offers the potential to strengthen the oversight and regulation of alien insurers and reinsurers, though many details remain to be worked out. A potential drawback is that it could create an unlevel playing field for domestic and alien insurers. The proposal could give aliens a cost advantage by subjecting them to only one solvency regulator, or it could give domestic insurers the advantage if alien insurers were subjected to particularly strict and costly solvency regulations.

A second proposal would create a new federal agency to regulate alien insurers and reinsurers, U.S. multistate insurers, and all U.S. reinsurers. U.S. multistate insurers could be licensed and regulated at either the state or the federal level but would be required to meet the same set of solvency regulations in either case. Insurers that write policies in only one state would be licensed and regulated by that state, which could use a different set of solvency regulations for these insurers. Companies that only write reinsurance (professional reinsurers) would be regulated solely at the federal level. All insurers would remain subject to other state provisions governing the state insurance market, such as rate regulations, unless those provisions interfered with the federal solvency standards.

This proposal would also create two nonprofit, self-regulatory corporations: a national guaranty fund, and a board to license insurance agents, brokers, and consultants to operate nationwide. All federally chartered insurers would be required to be members of the national guaranty fund, which would be refunded, but assessments by the fund would not be required to be risk-based. The licensing board would be funded by assessments paid by its members.

The chief benefit of this second proposal is that it would establish a nationwide, uniform set of solvency regulation standards for multistate insurers, with particular attention to both domestic and foreign reinsurers. Because the details of these provisions have not been settled yet, the adequacy of the standards remains in question.

An important drawback to this proposal is that it may create an implicit contingent liability for the federal government to cover the costs of a solvency crisis. Moreover, it does not give the states a strong incentive to account for the impact of their rate and other regulations on the solvency conditions of federally chartered insurers. Because it creates a full-blown federal regulatory agency, the costs of this system and the potential conflict with state efforts to suppress insurance premiums would probably be greater than for the systems created by either the SRO or the federal standards proposal. Moreover, as with all efforts to regulate solvency, this proposal could be susceptible to inadequate standards and enforcement over time.

Reform the Guaranty Funds. Several proposals have been made to protect policyholders from losses associated with the insolvency of their insurers. One that appears to have widespread support would limit the coverage of commercial policyholders while protecting third-party claims on these policyholders. The main benefit of this proposal would be to reduce the moral hazard in the guaranty fund system because commercial policyholders would have greater incentive to monitor the financial condition of insurers. Another proposal simply calls for making the coverage of guaranty funds uniform among the states to eliminate what some people view as the inequity of a system of different coverages.

Other proposals call for more radical changes to the system. One would prefund the state guaranty funds using assessments based on the risk of insolvency posed by the insurers. This proposal would expand the capacity of the system to the extent that sufficient reserves could be built up. More important, proper risk-based assessments would help to control the moral hazard problem by forcing insurers to balance the expected benefits of riskier business activities with higher assessments by the guaranty fund. The insurance industry may be somewhat wary of guaranty funds that require building reserves before insolvencies occur because state legislatures may be tempted to expropriate the reserves during periods of budgetary crises, as happened in New York State during the early 1970s.

Some insurers may also worry that insurance regulators would waste the funds by supporting weak insurance companies that eventually fail. But the stronger, better managed firms in the industry should welcome a more efficient allocation of the costs of the guaranty fund system.

As noted in the previous section, other proposals would do away with the state funds and create a national guaranty fund supervised at the federal level. A national system, of course, would standardize the amount of protection given to policyholders nationwide. It would also effectively expand the capacity of the system. Although multistate insurers might not pay any more in assessments than they do in the state system, policyholders would not be restricted to receiving payments based on the assessments collected solely by their states but could draw from a national reserve.

Nevertheless, the system would be vulnerable to the moral hazard problem and the high costs that plagued the federal deposit insurance system if the premiums were not risk-based and if the solvency regulation of insurers--in particular, capital requirements--were inadequate. Moreover, federal taxpayers could be left holding the bag in the event of a collapse of the national fund. The system would also temporarily impose extra costs on insurers because at least one proposal requires insurers to pay into the system until a to-be-determined amount of reserves are raised.

Options for Limiting Solvency Problems Arising from Natural Catastrophes

Record levels of losses from natural catastrophes in recent years have created sizable losses for the property and casualty industry, the insolvency of a number of small insurers, and large amounts of federal disaster assistance. The potential losses arising from a truly devastating earthquake or hurricane in a highly populated area are even greater and could create a solvency crisis in the property and casualty industry. Consequently, policymakers have examined a number of proposals aimed at expanding the nation's capacity to pay for these losses and do so more efficiently. The more ambitious proposals combine:

- A primary insurance program run by the federal government to cover losses on residential property from natural catastrophes; and

- A federal reinsurance program for property and casualty insurers to cover the bulk of their losses from natural catastrophes in excess of a threshold amount; with

- A broader federal program to encourage the private sector to mitigate the damage from natural disasters.

The primary insurance and mitigation programs attempt to improve the allocation of the risks of natural catastrophes. Currently, because many property owners do not adequately insure against these risks, federal taxpayers pay some of these losses through federal disaster assistance. This approach spreads the losses widely, but taxpayers facing small risks from such natural disasters are subsidizing other taxpayers who are facing large risks. The subsidy gives property owners in high-risk areas an incentive to underinsure and ignore ways to mitigate losses from these disasters, which increases the potential losses from these disasters and the cost to taxpayers. These programs attempt to reduce the value of this subsidy by encouraging property owners to purchase catastrophe insurance and undertake mitigation efforts, thereby better allocating risk and resources in the economy.[15]

Although these proposals could achieve a better allocation of the risks and costs of natural catastrophes and expand the availability of reinsurance, it might be possible to achieve these important benefits without full-scale federal programs. It is difficult to determine how successful the proposals could be because they do not specify the exact terms of the insurance and reinsurance programs and the requirements of the mitigation program. A risk of these proposals is that they could increase the amount of losses from natural catastrophes that the federal government bears if the insurance and reinsurance programs are not

15. Improving the allocation of the risks of natural catastrophes would also improve the ability of society to recover the losses from these catastrophes more quickly. Under current fiscal policies, a portion of federal disaster assistance typically adds to the federal deficit, which tends to raise interest rates and lower other investment. These federal proposals would help to make these impacts temporary because they require the insurance programs to be self-financing.

priced properly and if the mitigation program proves to be ineffective. To the extent that they do reduce the chance of such a solvency crisis, they do so by shifting many of the risks of catastrophic losses from insurers to the federal government.

Establish a Federal Primary Insurance Program

Recent proposals for a federal primary insurance program vary in scope and in the requirements for participation. One proposal--H.R. 2806, the Earthquake Hazards Reduction Amendments Act--would only cover losses from earthquakes. It would require all homeowners in earthquake-prone states holding a federally related mortgage (which includes loans provided by federally insured financial institutions, those insured by federal agencies, and loans eligible for purchase by the Federal National Mortgage Association, the Government National Mortgage Association, or the Federal Home Loan Mortgage Corporation) to purchase the insurance from a private insurer or the federal government. Another proposal--H.R. 2873 and S. 1350, the Natural Disaster Protection Act--would extend the coverage to include losses from volcanic eruptions, though it would not require any homeowners to purchase the insurance. A third proposal--H.R. 935, the Earthquake, Volcanic Eruption, and Hurricane Hazards Insurance Act--would go even further and include coverage for losses from hurricanes. Like the first proposal, it would require homeowners holding a federally related mortgage to purchase the insurance from private insurers or the federal government.[16] All of these proposals require the federal insurance program to be self-financing and would allow the programs to borrow temporarily from the Treasury if their reserves were insufficient to cover their losses.

16. This proposal is similar in spirit to a proposal called "all-risk," "all-hazard," or "comprehensive disaster" insurance, which is discussed in Jean K. Rosales, "All-Risk Insurance" 92-348E (Congressional Research Service, February 28, 1992).

Although commercial property would not be covered, the proposals go some way toward expanding the purchase of this insurance by homeowners. Two of the proposals require many, but not all, homeowners in risk-prone areas to purchase the insurance. The other--H.R. 2873 and S. 1350--relies on an indirect incentive to expand the purchase of the insurance. It requires private insurers to provide the federal primary insurance or comparable private insurance to their policyholders in risk-prone areas in order to be eligible for the excess reinsurance program, which could be very attractive, as described below. Many insurers are likely to respond to this incentive and include the natural disaster insurance in their basic coverage for residential property, which many homeowners would probably buy.

With greater participation by homeowners, the program could improve the nation's capacity to handle these risks more efficiently. Currently, the cost of private earthquake insurance in particular is high partly because few homeowners buy this insurance, and the ones that do are mostly those facing the greatest risk of loss. When more homeowners buy it, the risks can be spread more widely, and the cost of the insurance can be reduced. A lower cost, in turn, encourages additional purchases of the insurance by homeowners facing lower risks.

The insurance program might, however, end up increasing the costs of natural catastrophes to the federal government. Unlike federal disaster assistance, the program puts the federal government on the hook to cover specific losses, and the exposure to risk increases with greater participation in the program. If the insurance is underpriced, perhaps because the terms of the insurance and the mitigation program fail to control the moral hazard that the insurance would create, the federal government may feel obligated to cover some of the losses, through either the program or federal disaster assistance. The potential underpricing problem also exists because the proposals give insurers selling the federal insurance little incentive to make sure that homeowners have undertaken the appropriate mitigation efforts.

Establish a Federal Excess Reinsurance Program

Proposals for this program are designed to increase the capacity of the reinsurance industry to cover risks from natural catastrophes. Analysts consider it likely that that capacity has fallen in the wake of the historic catastrophic losses that took place between 1989 and 1992. These proposals would attempt to remedy this problem by having the federal government sell reinsurance to property and casualty insurers and reinsurers. The reinsurance would cover 95 percent of the losses that arise from specified natural catastrophes in excess of a threshold amount but less than a cap. H.R. 935 and H.R. 2806 express the threshold amounts and caps as a percentage of the industry's and a single firm's net premiums written; H.R. 2873 and S. 1350 do so in terms of the industry's and a single firm's surplus. Premiums in all proposals would be actuarially based.

An important characteristic of all the proposals is that the program would cover the risks of related losses resulting from natural catastrophes, such as those from fire, and from workers' compensation. As discussed in Chapter 2, related losses can amount to a significant percentage of the total losses from a natural disaster.

However, it is not clear why a federal reinsurance program is necessary. Insurers and reinsurers may simply have underestimated the likelihood of natural catastrophes. Now that the industry has a better idea of that likelihood, it will price policies to cover losses in the long run, and the problem should eventually disappear. To argue that a federal program is desirable, one must show why a properly regulated private market for catastrophe reinsurance cannot provide sufficient capacity on its own.

Some observers might argue that the catastrophic losses in worst-case scenarios are simply too large for the insurance industry to handle. If this is true, then it would be more efficient for the federal government to insure those risks directly rather than reinsure them through the private sector. Given the high caps on losses covered by the reinsurance--200 percent of an insurer's surplus in the case of H.R. 2873 and S. 1350--the program is essentially insurance against insolvency arising from natural catastrophes. As a result, the program lowers the chances of a solvency crisis in the event of a natural catastrophe, but at the expense of reducing the incentives for the private sector to insure these losses efficiently, because the federal government would assume many of the risks.

Another potential problem with the reinsurance program, as with any insurance program, is the possibility of moral hazard. Once insurers have the reinsurance, they would have some incentive to avoid diversifying their risks completely or underwriting their risks carefully. Even policyholders would have less incentive to undertake mitigation efforts and monitor their insurer's financial strength when they know that their insurer has this reinsurance. This outcome would raise the risks of a solvency crisis in noncatastrophe situations.

As with the federal primary insurance program, this program could leave the federal government on the hook to cover large losses. The combination of a large catastrophe and underpriced federal reinsurance could make the federal government feel obligated to cover losses for which it has no reserves. Or federal disaster assistance might be provided, which would undercut future efforts to shift the risks to the beneficiaries.

Establish a Federal Mitigation Program

Mitigation efforts are an important complement to the insurance and reinsurance programs because they can limit the moral hazards that raise the potential losses created by natural disasters. All of the proposals, however, only include provisions to strengthen building codes, although they allow the states to adopt other measures, such as retrofitting existing structures, as they see fit.

The major problem that a federal mitigation program faces is obtaining compliance from state and local governments and private property owners. Mitigation efforts can be costly, particularly for preexisting structures, and state and local governments are already strapped for funds. All of the proposals allocate a fraction of the premiums from disaster insurance to pay for mitigation efforts by state and local governments, but it is not clear that these funds would be adequate.

Moreover, the incentives built into the programs may not be adequate to achieve the necessary compliance. H.R. 935 and H.R. 2806 contain a strong incentive for many homeowners--federally related mortgages cannot be made on property that does not have the necessary mitigation standards in place. H.R. 2873 only disallows mitigation funds to states that do not comply, raises the premiums on the primary insurance for policyholders in noncompliant states, and prohibits federal assistance to any new federal building or certain new federal leased, assisted, or regulated buildings. S. 1350 includes those provisions of H.R. 2873 and bans federal disaster assistance to local communities that have not adopted the building codes required by the proposal.

Other Options for Better Allocating the Risks of Natural Catastrophes

Other options short of a comprehensive federal program of primary insurance, reinsurance, and mitigation may also be able to allocate the risks of natural catastrophes. For example, it may be possible to restructure federal disaster assistance to increase the incentives for buying insurance against natural disasters and undertaking mitigation efforts. The degree of assistance, for instance, could be contingent on specific measures that property owners take to mitigate risk and purchase the appropriate insurance. This option is likely to cost less than the proposal for a comprehensive federal program.

Another option to encourage mitigation and the purchase of insurance against natural disasters is to make the payment of claims for losses not directly caused by the disasters conditional on mitigation efforts and the purchase of such insurance. Japan uses this approach for earthquake hazards. Homeowners can collect claims for fire and other nonshaking damage as a result of an earthquake only if they have earthquake insurance.

An option to encourage property and casualty insurers to hold more reserves against catastrophes is to allow them to treat additions to reserves to cover future catastrophes as tax-deductible expenses. Under current policy, these insurers can reserve only for losses and related expenses that have, or are likely to have, already occurred--a policy that reflects a desire to prevent insurers from using additions to reserves as a means of avoiding taxes. But some experts believe that the policy may discourage the industry from holding sufficient reserves to cover catastrophic levels of losses.[17] Changing this policy would encourage the industry to build additional reserves, thereby reducing the chances of a solvency crisis. It could lower the cost of natural disaster insurance.

Capacity problems in the reinsurance industry are being partly resolved by the new futures and options market for catastrophe risks at the Chicago Board of Trade. The market opened in December 1992 and volume has grown steadily, according to the board. At present, only large insurers and reinsurers appear to be using the market, but reinsurance brokers are likely to eventually pool together

17. Robert E. Litan, "Earthquake! Planning and Paying for the 'Big One'," *The Brookings Review* (Fall 1990), pp. 42-48.

smaller firms to spread their risks in this market.

Offering homeowners low-cost loans for mitigation efforts would encourage such efforts and reduce the potential losses from natural disasters. For low-income families, special subsidies could be offered.

Options for Limiting Solvency Problems Arising from Runs on Life Insurers

The run on the Mutual Benefit Life Insurance Company in 1991 dramatized the threat of runs that life insurers face. Analysts agree that the threat of withdrawals by policyholders imposes a useful, market-based discipline on the operations of an insurer. However, massive withdrawals by policyholders can hurt the insurer's remaining policyholders if the regulator must shut the company down in order to stop the run. A greater danger is the possibility that a run could spread and hurt other insurers and policyholders and disrupt financial markets.

The vulnerability of the life insurance industry to runs has spawned proposals to create a backup source of liquidity, but buttressing the existing mechanisms could reduce this vulnerability. Because a run on an insurer typically begins when its policyholders learn that it has suffered a debilitating financial loss, a key policy option for reducing the chances of a run is to strengthen the solvency regulation of insurers.

If a run occurs, the Federal Reserve already has the authority to lend to insurers in its role of lender of last resort to prevent the run from spreading out of control. Insurers, however, must be sufficiently capitalized and have the necessary collateral to be eligible to tap this source. To be effective, the Federal Reserve would need to establish the necessary guidelines, procedures, and sources of information for this lending.

Another source of liquidity for insurers is available through membership in the Federal Home Loan Bank (FHLB) System, which extends collateralized loans called advances to its members. Insurers have been able to join the system since its founding in 1932.

Because the mission of the FHLB system is to promote home ownership, members must participate in the market for home finance. An insurer is eligible to become a member of the system if, among other things:

- It originates or purchases long-term home mortgage loans, which can include, for example, mortgage-backed securities;
- The characters of its management and its home-financing policy are consistent with sound and economical home financing; and
- The insurer has mortgage-related assets that reflect a commitment to housing finance, as determined by the Federal Housing Finance Board, which regulates the FHLB system.

Insurers face several other requirements as members in the system. They, like other members, must purchase stock in their FHLB, equal to at least 0.3 percent of their total assets or 1 percent of their home mortgage loans, whichever is greater. They may need to increase their holdings of FHLB stock from time to time depending on the amount of their outstanding advances; if they hold less than 65 percent of their total assets in housing-related assets, their stock requirements are greater than those of members holding at least 65 percent, who are known as qualified thrift lenders. Insurers must also meet the Federal Housing Finance Board's community-support requirements to maintain their access to long-term advances.

Two restrictions on advances, however, may limit the ability of the FHLB system to provide enough short-term liquidity to contain runs against life insurers. First, the total amount of advances held by an insurer cannot exceed the total amount of its assets financing residential housing. Second, the total amount of advances in the whole system to all members that are not qualified thrift lenders cannot exceed 30 percent of the total amount of advances in the system.

Another option would have the life insurance industry create an explicit liquidity mechanism that insurers could tap. The mechanism could be a pool of liquid assets established and maintained by only the large insurers, or by pro rata shares from every life insurer, and used only during severe liquidity problems. A more appealing mechanism in this regard would be a market in which life insurers borrow and lend funds among themselves for a set period of time, similar to the federal funds market for banks. If this option increased the overall liquidity of the industry, it would supplement the recent efforts by solvency regulators to do so. Nevertheless, it would still need to rely on the Federal Reserve to provide emergency liquidity if this source were tapped out.

A common, and perhaps unavoidable, problem with the non-market-based options is that they increase the risk of magnifying the costs of insolvencies. The difficulty with any such liquidity arrangements is in distinguishing a liquidity crisis from a solvency problem. Lending to a company with a fatal solvency problem may only increase the eventual losses when the company later fails. Policyholders and taxpayers would probably cover much of these extra losses through the guaranty funds. The existence of a liquidity pool would also tempt regulators to use forbearance because the liquidity would handle the immediate crisis, although without addressing any underlying financial problems.

A potentially disastrous option to prevent runs by policyholders would be to create a national guaranty fund backed by the full faith and credit of the federal government, similar to federal deposit insurance. This option would prevent runs because it would eliminate the risk of large losses for policyholders. However, such insurance would give weak insurers an incentive to adopt riskier business strategies, particularly if the assessments were not risk-based. This potential could create a catastrophically large liability for the federal government, as in the savings and loan crisis. Even without the backing of the full faith and credit of the federal government, as mentioned earlier, a national guaranty fund leaves open the question of who backs up the fund when it cannot pay, and could unintentionally make the federal government serve that role.

Conclusion

Policymakers have a variety of options to reduce the chances of a costly solvency crisis in the insurance industry. Perhaps the most important, all-purpose option is stronger solvency regulation. Does the state system need to be strengthened? All analysts agree that it does. Is a larger federal role necessary to strengthen the solvency regulation of insurers? Here the answer is less certain. The danger of an expanded federal role is that it could create an implicit contingent liability for the federal government to cover the costs of a possible solvency crisis. The federal government would have the greatest justification for taking a larger role if it was already implicitly liable. At this point, however, it is not clear that the federal government is liable.

Even a strong insurance industry may be unable to cover catastrophic increases in claims arising from natural disasters and other sources. Current proposals call for federal insurance and reinsurance programs combined with a federal mitigation program. Although this program could improve the allocation of the risk of losses from natural catastrophes, other, less ambitious options may also achieve these benefits.

Finally, other policy options could strengthen the ability of the life insurance industry to withstand runs without suffering large losses by selling assets at a discount on short notice. An important option is to strengthen solvency regulation and employ the existing authority of the Federal Reserve to make emergency liquidity loans. Alternatively, life insurers could create a market for short-term loans of liquidity. In either case, guidelines for distinguishing liquidity problems from solvency problems would need to be developed.