40. Disaster Assistance and Government Insurance

Congress should

- require federal government insurance programs to use private-sector underwriting and risk classification techniques,
- authorize tax-deferred treatment of private insurers' catastrophe reserves, and
- reduce the scope of current government insurance programs and not launch any new federal reinsurance schemes.

Earthquakes, floods, hurricanes, droughts, and other weather-related events since the late 1980s have led to large government outlays for disaster assistance and higher premiums for disaster insurance. By one measure, federal taxpayers provided more than $7 billion a year in disaster assistance payments from 1977 to 1995. Such perennial claims on taxpayers are not simply uncontrollable "acts of God" waiting to happen. It takes a Congress to authorize such fiscal disasters.

Government-provided programs for crop insurance and flood insurance, as well as other interventions in private disaster insurance markets, often are justified as necessary to overcome the failure of private markets to offer adequate and affordable disaster insurance. Defenders of government insurance programs claim that they reduce dependence on "free" disaster assistance and promote efficient risk management by property owners and farmers.

But government policies are the cause of, not the cure for, the limited supply and narrow scope of private-sector disaster insurance. Demand for private coverage is low in part because of the availability of disaster assistance, which substitutes for both public and private insurance. Moreover, a government that cannot say no to generous disaster assistance is unlikely to implement an insurance program with strong incentives for risk management.

The subsidized rates and limited underwriting and risk classification of federal government insurance programs aggravate adverse selection, discourage efficient risk management, and crowd out market-based alternatives.

Federal tax policy reduces supply by substantially increasing insurers' costs of holding capital to cover very large but infrequent losses. State governments also intrude on insurance markets by capping rates, mandating supply of particular types of insurance, and creating state pools to provide catastrophe insurance or reinsurance coverage at subsidized rates.

By reducing both the supply and the demand sides of private insurance protection, government intervention leads to greater reliance on politically controlled disaster assistance and higher costs for taxpayers. A clear outcome is larger government.

Disaster Assistance vs. Government Insurance

The federal government seems unable to withhold disaster assistance from persons who fail to buy private or government insurance. Politicians enjoy exercising their charitable impulses—with taxpayers' money—and many taxpayers are sympathetic to helping disaster victims. Moreover, many property owners and farmers strongly resist cutting disaster assistance because that would increase their risk and reduce their property values.

Consider Congress's backpedaling on mandatory crop insurance and disaster assistance for farmers. Legislation enacted in 1994 required farmers to pay a nominal fee for compulsory coverage of catastrophic crop losses. Compulsory coverage was dropped in 1996, when farmers were allowed to opt out if they agreed to be ineligible for disaster assistance. That restriction was then eliminated in the 1998 farm bill, which provided $2.4 billion in disaster assistance to farmers for weather-related losses (as well as large payments for "market" losses). Farmers who had purchased federal crop insurance were eligible for larger disaster payments than were uninsured farmers.

The twin goals of the crop insurance program—high participation rates of farmers and limited subsidies—are fundamentally incompatible. The willingness of many farmers to pay for crop insurance is low because of the magnitude and availability of disaster assistance and alternative methods of managing yield risk.

Congress's long history of breaking its commitments not to fund ad hoc disaster aid has undermined the incentive for farmers to pay for crop insurance. When the 1998 appropriations were made, Congress ignored the fact that many farmers had signed statements saying that they would no longer be eligible for disaster aid. The central message that flows from past congressional action is that subsidies for taking risks increase, and, when things get bad, Congress provides still more free aid. Unless and until Congress reverses its course, a large increase in crop insurance participation rates will remain improbable without additional subsidies or compulsion.

Federal crop insurance premiums already are heavily subsidized. The federal government pays those direct subsidies as percentages of premiums collected—that is, the greater the risk, the greater the subsidy. The government also pays the expenses of private insurers who issue and service policies on behalf of the government.

Not surprisingly, the federal crop insurance program is a perennial money loser. From 1981 to 1999, the average loss ratio (indemnity payments divided by premiums collected from farmers, i.e., booked premiums less the federal premium subsidy) was 189 percent. The average excess of indemnities over net premiums paid by farmers in constant 1999 dollars was $592 million; the aggregate deficit was approximately $11.3 billion.

Federal flood insurance has a similar troubled history. Since 1973 the federal flood insurance program has required coverage of properties that are located in specified flood zones and financed by federally insured loans. However, that requirement has been flouted consistently. Many policyholders have dropped coverage soon after obtaining a mortgage. Tighter enforcement began in 1994 after passage of the National Flood Insurance Reform Act. That act imposes penalties on lenders who fail to ensure that flood coverage is procured, but lender compliance remains mixed.

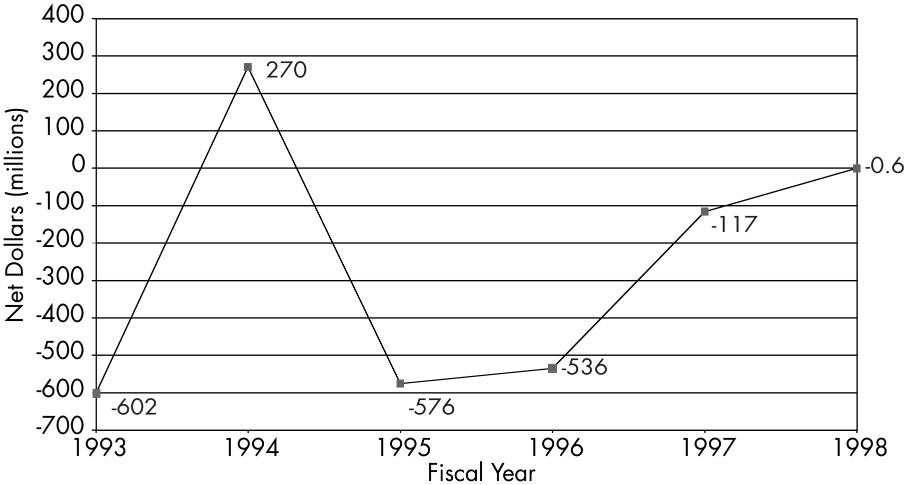
Cross-subsidies *within* the federal flood program aggravate problems of inadequate participation. Properties that existed when the program was created in 1968 are heavily subsidized. Those properties, which represent roughly one-third of all properties insured under the program, receive an average discount of about 60 percent from actuarial rates. Thus, the owners of lower-risk properties have been subsidizing the owners of higher-risk properties by paying higher premiums than necessary. Those higher premiums have reduced demand for coverage of lower-risk properties. That could help to explain why only a fourth of eligible homes have flood coverage, and why it has been necessary to mandate coverage for properties purchased with federally insured loans.

Although the flood insurance program largely has been self-supporting on a year-to-year basis since the mid-1980s, cumulative operating losses to the program from 1993 through 1998 totaled about $1.56 billion. On balance, the flood program collects insufficient premium income and still fails to build adequate reserves to meet expected long-term flood losses. By congressional design, it remains actuarially unsound.

As Figure 40.1 shows, in five of six recent years, the program incurred operating losses ranging from about $600,000 in fiscal year 1998 to $602 million in FY93.

When subsidized insurance, with its certainty of coverage and payment, is more attractive than disaster assistance, it can encourage new property development or crop production in hazardous areas. Although subsidized flood insurance is linked to community participation in flood plain management programs, that linkage does not ensure against inefficient development. If Congress could credibly commit to the withholding of disaster assistance, eligibility for assistance could be linked to flood plain manage-

Figure 40.1
Net Financial Status of the National Flood Insurance Program



SOURCE: National Flood Insurance Program Flood Insurance Rate Review, as cited in U.S. General Accounting Office, "Flood Insurance: Information on Financial Aspects of the National Flood Insurance Program," GAOT-RCED-00-23, October 27, 1999, p. 5.

ment, and the benefits of flood plain management could be achieved without federal insurance.

Subsidies could be reduced if persons who failed to buy insurance were to forfeit their eligibility for disaster assistance. The expansion and enforcement of coverage mandates also could reduce subsidies. But neither approach has overcome political resistance thus far.

For example, historically, about 36 percent of all flood insurance program claims are for *repeated losses.* The General Accounting Office estimates that about 40,000 buildings currently insured under the federal program have been flooded on more than one occasion, resulting in $2 billion in claims payments.

The Federal Emergency Management Agency recently decided that properties that have sustained repeated, large losses should no longer have subsidized coverage; instead, the agency will buy the properties or pay to relocate them. By contrast, in a private market, where the price of coverage would be related to risk and coverage might not be renewed, property owners would have a strong inducement to take loss-limiting measures or to relocate at their own expense.

Government Failure in Insurance Markets

Government insurance might be seductive to some efficiency-minded economists because, unlike free disaster assistance, it should encourage property owners and farmers to reduce risky activities and take loss-limiting measures. In practice, however, the same political pressures that make disaster assistance inevitable prevent the government from offering insurance at prices that reflect the full costs of coverage. Given low demand, government disaster insurance must be subsidized heavily or coverage must be compelled.

By subsidizing high-risk properties, adopting loose underwriting and risk classification rules, and continuing to make disaster assistance widely available, the federal government discourages efficient risk management. The "stick" of withholding disaster assistance from communities that do not undertake flood plain management and from farmers who plant crops in marginally productive and disaster-prone regions repeatedly has been dismissed as politically untenable. The expedient political alternative has been to offer a potentially sweeter "carrot"—subsidized insurance—and then to give free disaster assistance to most of the parties who decline coverage.

Would taxpayers' costs rise or fall if the government simply eliminated insurance subsidies and gave free disaster assistance? If the scope of insurance coverage were relatively narrow and the total cost of subsidies were small, government insurance would reduce costs. But, as coverage and subsidies increase, there is a point at which the total cost of a subsidy-and-assistance program exceeds that of an assistance-only program. It is not obvious that an assistance-only program would cost more.

In any case, subsidized government insurance programs and free assistance often go together, particularly in the case of crop insurance, where the insurance program is heavily subsidized *and* disaster assistance has been granted to both insured and uninsured farmers. The consequences are less clear in the case of flood insurance because (1) the program is less heavily subsidized and (2) flood insurance proceeds usually reduce the amount of disaster assistance granted to a property owner.

The scope of losses covered by subsidized government insurance is probably much greater than the scope of losses covered by disaster assistance because government insurance pays for idiosyncratic losses, for example, damage to basement equipment and appliances following heavy rains. Such losses often would fail to qualify for disaster assistance. Similarly, an unlucky or careless but insured farmer who loses crops as the result of untimely or inappropriate application of pesticides is eligible for crop insurance payments, even though such a loss is unlikely to be covered by disaster assistance.

Expanding the Supply of Private Disaster Insurance

Given the past failures of Congress to exercise self-restraint and resist political demands for more subsidized government insurance, a more fruitful reform strategy should focus on expanding the supply of prefunded capital reserves that stand behind private insurance—both to strengthen the role of insurers as efficient risk managers and to serve as a necessary "buffer" against the risk of insurer insolvencies. Congress should reexamine in particular the counterproductive impact of federal tax policy on the availability of private insurance coverage for low-probability, high-cost events—so-called "catastrophic natural disasters."

Federal corporate income taxes increase insurers' costs of holding capital and, in turn, the premiums they must charge for a given level of disaster coverage. Because private insurers cannot set up tax-deferred reserves, they must increase premiums by enough to cover the taxes on investment income in order to generate returns equivalent to those that investors could earn elsewhere. This tax disadvantage is especially pronounced for disaster insurance because insurers must hold huge amounts of capital to pay claims that have a low probability of occurrence. Moreover, premium increases to cover taxes on investment income result in higher expected before-tax income, thus further increasing expected taxes and premiums. Loss carry-back and carry-forward provisions in the tax code result in high taxes in years when disaster claims are low but yield limited deductions in years when claims are high.

The tax loading on premiums is inversely related to the probability of loss. The tax code significantly increases the premium rates for large disaster losses that have a low probability of occurrence. Although there are several ways in which insurers and reinsurers can reduce the tax loading in disaster insurance premiums (e.g., purchase reinsurance from non-U.S. insurers, substitute debt financing for equity financing), the tax code nonetheless materially increases the price of coverage for relatively rare but potentially large losses.

Given high costs and low demand, private insurers will tend to hold smaller reserves than needed to cover risks. Smaller reserves will have severe short-run consequences in the event of a large disaster, namely, increased insolvency, greater price increases, more cancellations and nonrenewals, and pressure for more government intervention. The risk that a catastrophe will lead to more government intervention reduces insurers' incentives to serve disaster-prone areas or requires insurers to charge even higher prices.

Tax-Deferred Catastrophe Reserves Expand Private Insurance; Federal Catastrophe Reinsurance Crowds It Out

For several years, Congress has considered a different and fundamentally flawed approach to natural disaster insurance issues: proposed legislation, such as the Homeowners Insurance Availability Act, would authorize the secretary of the treasury to sell "excess-of-loss" reinsurance contracts for insured natural catastrophe losses on residential properties. Contracts would be sold directly to state catastrophe insurance programs and auctioned to private and state entities.

There is no need for such a federal reinsurance program. Homeowners' insurance coverage traditionally has been regulated and financed at the state level. Private reinsurance capacity has expanded substantially since the early 1990s. Private insurers covered losses from Hurricane Hugo, Hurricane Andrew, and the Northridge earthquake with few insolvencies and limited assessments on state insurance guarantee funds, even though insurers were surprised by the magnitude of several of those events. Moreover, the development of new financial instruments to fund catastrophe coverage has further expanded the supply of private catastrophe insurance and reinsurance since the early 1990s.

The proposed reinsurance program threatens to crowd out much private-sector coverage. The coverage thresholds that would trigger federal reinsurance payments are far too low in comparison with current private-sector capacity. Such legislation also would encourage creation of state insurance programs, which could negotiate deals directly with the Treasury, thus further crowding out the private sector and distorting resource allocation. The federal government also inevitably would extend its reach to the pricing and underwriting of individual policies backed by federal reinsurance. As with federal flood and crop insurance, it seems likely that pressure would build for artificially low prices and program expansion—with similar results: less private coverage, higher costs for taxpayers, and poorer risk management by property owners.

Conclusion

Government intervention undercuts private markets and thus creates pressure for expansive government programs. The predictable result is less economic efficiency and more government spending. We can see the pattern at work in disaster assistance. Parties engage in behavior or activities that produce loss. Losses spill over onto other parties, in part because of government policies and in part because of the desire to help persons in need. Insurance is viewed as a means of reducing spillover costs and encouraging efficient behavior. The government provides coverage or intervenes in private insurance markets to increase the number of persons covered by subsidizing coverage or making it compulsory. Intervention creates dependence on the government; limits private-sector prerogatives; and does little, if anything, to encourage efficiency or contain cost.

The inability of the government to withhold disaster assistance and the perverse effects of federal tax policy on the private supply of disaster insurance create pressure for government insurance at subsidized rates. In theory, such insurance might promote better risk management and reduce taxpayers' costs. In practice, government insurance invariably entails subsidies (especially to higher-risk buyers) and limits underwriting and risk classification, which discourages efficient risk management and increases taxpayers' costs—probably without significantly reducing the cost of disaster assistance.

A government that cannot restrict disaster assistance is unlikely to design and implement insurance programs that lead to better risk management and less government spending in the aftermath of natural disasters. Although it might be politically difficult to reduce disaster assistance, Congress could take several steps to make disaster insurance more effective: First, enable private insurers to offer more affordable coverage by allowing them to establish tax-deferred reserves for catastrophic risks. Second, encourage better risk management by requiring current federal government insurance programs to use private-sector underwriting and risk classification techniques; increase private-sector risk bearing; and, if necessary, target any remaining premium subsidies more narrowly.

Suggested Readings

Davidson, Ross Jr. "Toward a Comprehensive National Strategy for Funding Catastrophe Exposures." Paper presented at Competitive Enterprise Institute conference, Rethinking Insurance Regulation, April 13, 1998.

Goodwin, Barry K., and Vincent H. Smith. *The Economics of Crop Insurance and Disaster Aid.* Washington: American Enterprise Institute, 1995.

Harrington, Scott E. "Rethinking Disaster Policy." *Regulation* 23, no. 1 (2000).

______. "Taxes and the High Cost of Catastrophe Insurance: The Case for Tax-Deferred Reserves." Competitive Enterprise Institute Insurance Reform Project, October 1999.

Pasterick, Edward T. "The National Flood Insurance Program." In *Paying the Price: The Status and Role of Insurance against Disasters in the United States.* Edited by Howard Kunreuther and Richard Roth. Washington: Joseph Henry, 1998.

Skees, Jerry R. "Agricultural Risk Management or Income Enhancement." *Regulation* 22, no. 1 (1999).

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