Government Insurers Study Note

May 2006

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INTRODUCTION

Greene [14] and Weining [33] provide an excellent introduction to government insurance including the five main reasons for government insurance, which are summarized in this study note.

Both the federal and state governments are involved in insurance as regulators of insurance companies and as insurers. As insurers, they participate in a number of insurance programs either as the sole insurer, in partnership with insurance companies or in competition with insurance companies. Several major programs that are discussed elsewhere in the syllabus include the National Flood Insurance Program, Social Security, Guaranty Funds, FAIR plans, and the Maryland State Auto Plan. In this study note, we will discuss state and federal involvement in Workers Compensation Insurance, Crop Insurance, Unemployment Insurance, Pension Benefit Plans, Catastrophe Funds, and the Terrorism Risk Insurance Act of 2002 (TRIA) and extension.

Is government participation in insurance necessary? According to Greene and Weining, there are several reasons for government participation in insurance:

- Filling insurance needs unmet by private insurance
- Compulsory purchase of insurance
- Convenience
- Greater efficiency
- Social purposes

Filling Insurance Needs Unmet by Private Insurance

According to Greene [14], one justification for government participation in insurance is the residual market philosophy, with governments offering insurance in markets unserved by private insurance; either because of unavailability or unaffordability. One implication of the residual market philosophy is that government requirements for insurability are different from private insurers' requirements. A government may step into situations in which private insurers do not because the government has the financial capacity to subsidize losses, either by directly taxing taxpayers for the insurance program (TRIA), even those who do not benefit from the program, or indirectly by charging less than the actuarial cost of providing insurance coverage for the exposure and making up the

difference through government-provided funds (crop). There are strong arguments, both pro and con, as to whether a government should provide this type of subsidy.

Begun in 1968, the Federal Crime Insurance Program was intended to provide coverage for homeowners and small businesses located in neighborhoods with high crime rates, primarily because private insurance for burglary or robbery was not available at affordable rates for these risks. With proper loss prevention methods, this insurance was available from the private market at rates less than the government rates and the Federal Crime Insurance Program expired in 1995.

Crop insurance and Flood insurance are available and affordable only because of subsidies from the federal government.

Compulsory Purchase of Insurance

Government may require individuals or businesses to obtain insurance to meet social responsibilities. A driver who causes an automobile accident is responsible for repairing the damage or injury caused by the accident. Many people would not have the financial resources to meet this obligation without insurance protection. An employer is deemed responsible for injury to an employee regardless of fault. Again, without insurance protection an employer may not be able to meet this obligation. Without a compulsory insurance requirement, some persons who have suffered injury or loss may not have the costs of repairing the damage to their property or their medical costs covered by the person responsible for these costs.

Since purchase of insurance such as workers compensation or automobile insurance may be compulsory, some state legislatures felt obliged to offer the insurance to individuals who could not find a private market [14]. The workers compensation state funds established in several states and the Maryland State Auto Plan are examples of this philosophy. Another reason why some federal and state legislators believe that government should provide compulsory insurance is that private companies should make only limited profits, given the government guaranteed market. A government program would operate as a not-for-profit entity and the cost of the compulsory insurance would be lower than if offered by a for-profit insurer. In other non-insurance government mandated programs such as highway construction contracts, private organizations often service the program and this has been shown to work for insurance. Within a purely competitive market excessive profits cannot persist in the long run. Private insurance seems to work for most states in supplying the vast majority of the public with compulsory insurance such as workers compensation and auto insurance.

While workers compensation insurance is administered by a monopolistic state fund in several states, most states have private companies that offer workers compensation insurance, sometimes in competition with state-run funds that will provide coverage to anyone who applies for coverage to the fund, sometimes referred to as “take all comers.” For those states without a state fund there is usually some other form of residual market

that provides coverage to those who are unable to find the required coverage with a private insurer.

For compulsory auto insurance, government insurance is normally not the answer; so provisions are in place to make auto insurance available for those unable to buy insurance on the open market. Sometimes these alternate sources also provide the coverage at costs below the actuarial cost of providing the coverage. In these situations, insurers, other insureds or taxpayers subsidize part of the cost of the coverage for high risk drivers. Hamilton and Ferguson [15] discuss these provisions, which include assigned risk plans, reinsurance facilities, and joint underwriting associations depending on the state. Maryland has the only state-owned auto insurance company.

Convenience

Some government insurance programs are established because it appears to be easier for the government to set up a program quickly as a legislature can appropriate funding for the new program, whereas the private market may take longer to find the necessary funding [15]. A government program may also be already set up to provide certain types of services needed by the insurance program. These services include loss mitigation development and funding, as the Florida legislature did when establishing the Florida Hurricane Catastrophe Fund.

Using government insurance programs only for convenience may not be justified if the private market is willing and able to provide a reasonable market.

Greater Efficiency

One argument in favor of government insurance is that there is greater efficiency than in the private market [14]. Some government insurance programs may be established because of the belief that government can provide the service at a lower cost than the private market. However, the costs of providing insurance, including the costs of keeping records, providing consumer education, issuing policies and paying claims, exist even in government insurance programs. Services such as explaining coverages, keeping records, and handling claims questions are still provided by customer service representatives (who must be compensated). The cost savings claimed for government insurance programs might be overstated because other government departments may perform services on behalf of the government insurance entity that are usually performed by insurance companies, including appraising property, administering claims, or making investments.

Social Purposes

The use of government insurance to achieve social purposes may be the main reason for government insurance programs [15]. Some feel that these social purposes can only be fully achieved within government-owned insurance programs. For example, rehabilitation and vocational training of injured workers are important goals of a workers compensation

system and requirements for loss mitigation in catastrophe insurance plans may be more easily accomplished under government insurance programs. Can private insurance programs accomplish the same goals? If Social Security benefits were made available through a welfare program for the truly needy elderly and disabled while pension plans, 401(k)s, life insurance and disability insurance were to be used to fill the needs of others, would adequate protection for retirement and the disabled be available? If building codes and zoning requirements could be altered to prevent construction in flood-prone areas would private insurers be willing to provide flood coverage? In this scenario, government flood insurance would still be needed for existing buildings in the flood zones, but the need for government flood insurance on new construction would be reduced.

Evaluation of Government Insurance Programs

How well have the federal and state governments performed in providing insurance? According to Greene [15] the questions to be asked are:

- Is the provision of the insurance by the government necessary or does it achieve a social purpose that cannot be provided by private insurance?
- Is it insurance or a social welfare program? Social welfare is designed to provide benefits to qualified people based on demonstrable need for assistance without any payment or contribution by those receiving assistance. These benefits are usually financed by general tax resources. The public welfare programs are an example of social welfare.
- Is the program efficient, is it accepted by the public?

Based on experience in 2004 and 2005, how is the Federal Flood Insurance Program performing? The rates don't seem to be actuarially sound; insurance is usually only purchased if required by law or mortgage companies; people who do not buy flood insurance seem to be getting federal disaster assistance. With appropriate rates, enforceable building codes, up-to-date flood maps, and available reinsurance could private insurance companies provide flood insurance?

In the following sections, we will discuss several government insurance programs, how they work, their origin and purpose, and their effectiveness.

CROP INSURANCE

The Federal Crop Insurance Program is operated by the Federal Crop Insurance Corporation (FCIC), a wholly owned corporation of the U.S. Department of Agriculture (USDA). In 1996 the USDA created the Risk Management Agency (RMA) to operate and manage the FCIC [31]. The RMA subsidizes the cost of the insurance program that provides protection to farmers against losses to their crops caused by natural disasters such as drought, hail and flood, as well as against market risks. Insurance policies are sold and serviced by private insurers and the losses are reinsured by the federal government. According to the Congressional Budget Office [10], because the risks are

not shared proportionally, the private insurers generally have realized underwriting gains while the federal government has realized underwriting losses. Eldon Gould [12], Administrator of the RMA and manager of the FCIC, estimated that insurers would have an underwriting gain of $850 - $900 million in 2005, a return on retained premium of approximately 30%. This would follow gains of $700 million in 2004 and $380 million in 2003 and an underwriting loss of $46 million in 2002.

In addition to reinsuring the losses, the RMA subsidizes the premium paid by the participating farmers and reimburses the participating insurers for their administrative costs. The RMA hopes that the subsidies will induce large numbers of people to buy the insurance and thus protect themselves and thereby protect society from the loss of their vital contribution should disaster strike.

In spite of the existence of some form of federal crop insurance since 1938, the federal government has periodically had to pass disaster bills. From 1994 – 1999, the federal government spent an average of $1.5 billion per year in crop subsidies. Farmer participation in the crop insurance program increased during these years, but not enough to reduce the need for disaster assistance. Many farm groups felt that the crop insurance program did not provide adequate coverage when natural disasters occurred. Opponents of the federal crop insurance program felt that the subsidies provided by the government encourage overproduction [8]. In 2000, the Agricultural Risk Protection Act (ARPA) overhauled the federal crop insurance program to address these concerns. ARPA increased the portion of the premium paid by the federal government and improved the coverage available to farmers affected by multiple years of natural disasters.

Prior to the passage of the ARPA, many agricultural producers maintained crop insurance coverage only at the catastrophic level or coverage that would indemnify a farmer for only 27.5% of the value of a total loss. To encourage higher levels of coverage, the ARPA increased premium subsidies. The level of crop insurance coverage purchased is a percent of the expected crop production, as determined by the RMA. For example, if a farmer purchases insurance at the 70% coverage level, and the actual crop production is less than 70% of the expected level, the farmer receives an indemnity payment. At this level of coverage, the premium subsidy under ARPA is 59%. Prior to ARPA, the premium subsidy was 24%.

The increase in subsidies appeared to accomplish one of the goals of increasing participation in the program at higher levels of coverage. In 2002, over 50% of the insurable acreage was insured at 70% or higher compared to 9% coverage in 1998 [21].

The increase in subsidies contributed to better coverage as catastrophic coverage, which accounted for 21% of the crop insurance program's liability in 2000, and was down to 16% of the program's liability in 2005. Catastrophic coverage is available to farmers at no premium charge, just an administrative fee [8]. During this same period, from 2000 to 2005, the number of in-force policies dropped but the number of covered acres increased.

The experience of the crop insurance program has improved in recent years. The program's average loss ratio for 1981 to 1990 was 153% and has fallen to 93% from 2001 to 2005.

In 2005, RMA revised the reinsurance agreements to lower the reimbursement rate to insurers for administrative and operating expenses and a rebalancing of the risk shared by the government and private insurers. Whether the lower reimbursement rate will affect the financial results of private insurers or if they will simply decide to write less crop insurance remains to be seen.

While there has been improvement in the experience of the crop insurance program, the RMA continues to look for ways to make the program more efficient and less reliant on disaster payments. According to March 2006 testimony provided by Eldon Gould [12] before the House Agriculture Subcommittee on General Farm Commodities and Risk Management, in recent years congress appropriated $10 billion in disaster assistance covering six crop years. Therefore, the 2007 budget includes a proposal to link the purchase of crop insurance to other farm program benefits. Under this proposal, in order to receive farm program benefits a participant would need to purchase crop insurance protection for at least 50% of the expected market value.

WORKERS COMPENSATION INSURANCE

With the advent of the industrial revolution, new technology and machinery resulted in more industrial accidents. The only recourse an injured worker had was to sue their employer in court; a long, expensive process with an uncertain outcome. Workers compensation benefits evolved as a means by which employees who were injured on the job would be certain to have their injuries adequately taken care of by their employer without having to sue. Employers, as well as employees, benefited from the new system as the employer also exchanged an uncertain, potentially large payment, for a certain guaranteed benefit system.

Governments, both state and federal, participate in workers compensation insurance programs in a variety of ways. In some states, workers compensation insurance is only available through private insurance companies, while in other states it is only available from a state fund, an entity established by law to provide workers compensation insurance. In some states, a state fund may compete with private insurers. In all states, government and private insurers cooperate in providing workers compensation insurance as the benefits are defined by law, either state or federal, and unless there is an exclusive state fund, private insurers provide the insurance coverage.

Workers compensation programs covering most employees are enacted and administered at the state level in all fifty states, the District of Columbia and the five U.S. territories. Federal government employees and certain categories of workers, such as longshoremen, are covered by federal workers compensation programs.

A) Federal Workers Compensation Programs

Various federal programs compensate certain categories of workers for disabilities caused on the job and provide benefits to dependents of workers who die of work-related causes. The federal government works to ensure these programs perform well under the U.S. Office of Management and Budget and Federal Agencies. The following are some major federal programs:

1) The **Federal Employee Compensation Act (FECA)** provides compensation benefits to non-military, federal employees for disability due to personal injury sustained while in the performance of duty and for employment-related disease. It is administered by the Office of Workers' Compensation Programs (OWCP) in the U.S. Department of Labor.

The Act is the exclusive remedy for federal civilian employees who suffer occupational injury or illness. There is some claimant overlap with other federal programs. However, regulations generally bar the receipt of dual benefits for the same injury/illness and mandate the reduction in benefits to offset other sources of compensation.

The program's purpose is to return individuals to work while containing the costs of the system. Designed as a non-adversarial system (i.e., no judicial review and limited employer ability to contest claims), the program limits administrative and litigation costs, which may account for a substantial share of payout in some systems.
The program is efficient relative to comparable state-administered systems in that administrative costs were about 4.6% of total program obligations in FY 2002. In contrast, administrative costs in comparable state systems were as much as 16.6%. Cost per claim filed ($698) is also low [25].

2) The **Longshore and Harbor Workers' Compensation Act of 1927** [30] requires employers to provide workers compensation protection for longshore, harbor, and other maritime workers who are injured or suffer occupational diseases while working on or near navigable water in the United States. These benefits are provided by employers by either procuring insurance coverage from private insurers or by qualifying to self-insure. In some special circumstances, such as second injuries or default in payment of claims by insurers or employers, benefits are paid by a special fund administered by the Department of Labor Employment Standards Administration, Division of Longshore and Harbor Workers' Compensation (DLHWC). The DLHWC [32] is responsible for adjudicating disputed claims and ensuring that employers and carriers pay benefits.

The Act was created to provide workers' compensation coverage for categories of workers who were not seamen and were injured while working on or near navigable water in the United States and for which no state act coverage applied. Since the enactment of the Act, there have been questions regarding when coverage under the Act ends and state act coverage begins, particularly when the injury occurs "near" navigable water. In 1984 the scope of the program was amended in an attempt to clarify the extent to which shoreside coverage applied. However, about 40 states allow concurrent receipt of state and longshore benefits. The Act provides for the offset of compensation paid to individuals under any other workers compensation law for the same disability or death.

The possibility of an injured worker pursuing either longshore benefits or state act benefits is an issue that employers need to be aware of so that they have adequate insurance protection for their exposure.

Because the claims handling process is the responsibility of the insurer or the self-insured employer, the DLHWC does not collect data to monitor the efficiency of the service provided by insurers and employers. However, the DLHWC does monitor its own dispute resolution process and they have exceeded their performance goals for quickly and efficiently resolving disputed claims every year since 2003 when the long-term goals were established [26].

3) The **Black Lung Benefits Act** provides wage-replacement and medical benefits to coal miners who are totally disabled due to pneumoconiosis (black lung disease) and to eligible survivors.

The program was established in 1969 because state workers compensation systems rarely assisted victims of black lung disease. While Federal respirable dust control standards and advances in dust suppression technology have helped to reduce the prevalence of occupational black lung disease, it remains a problem. There are anecdotal data suggesting that state coverage of black lung disease remains inadequate. In cases where an individual receives both state and federal benefits, the federal benefit is reduced by the full amount of the state benefit.

The program is financed partly by federal general revenues and partly by the Black Lung Trust Fund which is financed by coal mine operators through a federal excise tax. While excise tax revenue is now sufficient to cover the current cost of benefits and administration, the Black Lung Disability Trust Fund must borrow more each year to service its debt from prior years [27].

B) State Workers Compensation Programs

The state government can act as a partner with private insurers, a competitor of private insurers, or an exclusive insurer.

Partnership with Private Insurers

State programs vary concerning who is allowed to provide insurance, which injuries or illnesses are compensable, and the level of benefits. State laws prescribe workers compensation benefits, but these laws assign to employers the responsibility for providing benefits. Employers can obtain workers compensation coverage to provide benefits to their employees by purchasing insurance from a private carrier or a state workers compensation fund, depending upon the options available in their state. They can also use self-insurance in almost every state if they demonstrate the financial capacity to do so by meeting certain requirements.

Private insurers are allowed to sell workers compensation insurance in all but a few states and territories that have exclusive state funds. Where private insurers may sell workers compensation, a public-private partnership exists since the benefits are established by state law, but insuring those benefits is the role of private insurers.

State Funds

With enactment of state workers compensation laws, the need for workers compensation insurance created its own set of problems, while solving others. Employers feared they would be forced out of business if refused coverage by insurance companies. They were also fearful that insurance carriers might impose excessive premium rates that would be a financial burden. High premium rates could negatively affect a state's economy and ultimately limit opportunities for employment. Another fear was that because the mandatory nature of the coverage reduces elasticity of demand, insurance rates might soar, enabling insurers to reap unfair profits. Some state legislators addressed these concerns by establishing state workers compensation insurance funds to provide a stable source of affordable insurance coverage.

Washington was the first state to adopt the state fund approach in 1911 and by the end of 1916, thirteen states had established state funds [4]. As of 2003, a total of twenty-six states have state funds that provide workers compensation insurance.

In general, state funds are established by an act of the state legislature, have at least part of their board appointed by the governor, are usually exempt from federal taxes, and typically serve as the insurer of last resort – that is, they do not deny insurance coverage to employers who have difficulty purchasing it privately.

Among the 26 states that have state workers compensation funds, five[1] have exclusive state funds and 20[2] have competitive state funds. South Carolina state fund is neither an exclusive fund nor a competitive fund, because it is the required insurer for state employees and is available to cities and counties to insure their employees, but it does not insure private employers. Sources for this include papers by Lencsis [19], a paper by the National Academy of Social Insurance [34], and the American Association of State Compensation Insurance Fund [4].

[1] States with exclusive funds are North Dakota, Ohio, Washington, West Virginia, and Wyoming. U.S. territories Puerto Rico and the Virgin Islands also have exclusive workers compensation funds. (In 2006, West Virginia's state-owned fund was privatized and will remain the exclusive source of workers compensation coverage for West Virginia employers until mid-2008 at which time all insurers will be able to write workers compensation insurance in West Virginia.)

[2] States with competitive funds are Arizona, California, Colorado, Hawaii, Idaho, Kentucky, Louisiana, Maine, Maryland, Minnesota, Missouri, Montana, New Mexico, New York, Oklahoma, Oregon, Pennsylvania, Rhode Island, Texas and Utah.

Competitive State Funds
In states with competitive state funds, state funds sell workers compensation insurance, at least theoretically, in competition with private insurers in insuring and administrating the workers compensation laws. In some states, Oklahoma is one example, the state fund is not permitted to refuse coverage to an employer, no matter how undesirable the risk, so long as past and current premiums are paid. In this regard they are referred to as "insurers of last resort" and they take the place of an assigned risk plan or pool. In other states such as Oregon, the state fund does not operate as the insurer of last resort. The mission of the state fund is set out in the Oregon statute that authorizes the existence of the state fund. This mission is to "make insurance available to as many Oregon employers as inexpensively as may be consistent" with protecting the integrity of the Industrial Accident Fund and sound principle of insurance [22].

Exclusive State Funds
In states with exclusive state funds, North Dakota, Ohio, Washington, West Virginia (until mid-2008), and Wyoming, private insurers are not permitted to provide workers compensation insurance and state funds enjoy the exclusive right to sell workers compensation insurance. All employers are required to procure their workers compensation insurance from the state fund, or, in some jurisdictions, an employer may also self-insure.

C) Evaluation of Workers Compensation Insurance

Private carriers remain the largest source of workers compensation benefits. In 2003, they accounted for 52.3% of benefits paid in the nation. Yet, the state funds have created significant competition in the workers compensation insurance business in the states where they operate. State funds have a significant market share in virtually every state where they are located. The share of benefits provided by state funds accounted for 18.9% of benefits paid in 2003 in the nation. Exhibit 1 shows that the benefits paid by the twenty state funds and various federal agencies remained almost constant, about 25%, from year to year.

Exhibit 1

Workers Compensation Benefits Paid, by Type of Insurer, 1987-2003
(From Table 4 and Table 5 of "Workers Compensation: Benefits, Coverage, and Costs, 2003" [34]

Year	Private Insurers	State Fund	Self Insured	Federal Program
1999	56.4%	15.1%	22.2%	6.3%
2000	55.8%	15.6%	22.3%	6.3%
2001	54.8%	15.9%	23.1%	6.2%
2002	54.4%	17.3%	22.3%	5.9%
2003	52.3%	18.9%	22.9%	5.8%

Exhibit 2 provides information for 2003 on the ratio of benefits paid by state workers compensation funds to total workers compensation benefits paid to workers from all sources. The data shows that state funds pay about half or nearly half of the total in six states – Arizona, Idaho, Montana, Oregon, Rhode Island, and Utah. Funds were less important in other states.

Exhibit 2

Workers Compensation Benefits Paid by Type of Insurer, 2003, for States with Competitive Funds
(From Table 8 of "Workers Compensation: Benefits, Coverage, and Costs, 2003" [34])

State with Competitive Funds	Private Insurers	State Funds	Self-Insured
Arizona	30.2%	50.7%	19.1%
California	47.6%	23.8%	28.7%
Colorado	35.8%	38.5%	25.6%
Hawaii	61.9%	6.4%	31.7%
Idaho	44.0%	49.5%	6.4%
Kentucky	59.6%	9.4%	31.0%
Louisiana	56.2%	21.7%	22.1%
Maine	41.7%	29.5%	28.8%
Maryland	54.7%	27.4%	17.9%
Minnesota	62.2%	12.9%	25.0%
Missouri	68.9%	8.9%	22.2%
Montana	34.9%	47.3%	17.9%
New Mexico	49.8%	14.3%	35.9%
New York	50.7%	24.5%	24.9%
Oklahoma	46.4%	32.7%	20.8%
Oregon	44.3%	46.3%	9.5%
Pennsylvania	71.0%	7.0%	22.0%
Rhode Island	38.8%	46.6%	14.5%
Texas	72.1%	8.4%	19.5%
Utah	27.3%	58.8%	14.0%
Total	52.9%	21.8%	25.3%

Proponents of state funds argue that because the state funds are specialists in workers compensation they can be expected to offer more intensive levels of rehabilitation and other services than some private insurers whose workers compensation plan is only one of several types of coverage offered. However, there are private insurers who also specialize in providing only workers compensation coverage and may offer the same level of service and expertise as the state funds.

State funds are, by law, designed to be self-supporting from their premium and investment revenue. Overhead expense ratios of both exclusive and competitive funds may be lower than expense factors for private carriers in part because of absence of some administrative costs such as agency commissions and other marketing costs. As nonprofit departments of the state, or as independent nonprofit companies, they are able to return dividends or safety refunds to their policyholders, just as some private insurers do. This further reduces the overall cost of workers compensation insurance both for the state fund as well as the private insurer that offers these types of programs [14] [4]. While lower administrative costs for state funds may reduce the cost of providing workers compensation coverage, the fact that more states have not created state funds suggests that private insurers are also able to provide this coverage in an efficient manner.

Since 1991, several states have created or organized new competitive state funds [19], while others have privatized their state funds or moved from an exclusive state fund to a competitive fund.

The evidence suggests that both state funds and private insurers are able to provide workers compensation coverage in an efficient manner.

UNEMPLOYMENT INSURANCE

Unemployment insurance is a government insurance program that has no private insurance counterpart. The insurance industry considers unemployment insurance to be uninsurable because of the catastrophic nature of the exposure. Depressions or a less robust economy can put large numbers of employees out of work, and this exposure to loss cannot easily be predicted.

The Federal-State Unemployment Insurance Program provides unemployment benefits to eligible workers who are unemployed through no fault of their own and meet other eligibility requirements as determined under state law. The system was established by the Social Security Act of 1935. The benefits are intended to provide temporary financial assistance to unemployed workers. Each state administers a separate program within guidelines established by federal law. Benefit amounts and durations are determined by state law. Premiums are paid in advance through employer taxes on wages earned in the prior year.

In most states, funding is based solely on a tax imposed on employers. A federal tax is levied and 90% of the revenue returned to the states; the remaining 10% is used to finance program administration through grants to states and to make loans to states when

liquidity problems arise. A key federal requirement is that taxes must be experience-rated, meaning that the tax rates move in tandem with a firm's layoffs and unemployment insurance benefit charges. When experience rating operates without restriction it acts to stabilize employment. However, tax rate maximums, minimums, and time lags in tax adjustments weaken the response.

To become eligible for unemployment insurance, a worker must earn a certain amount of wages or have worked a certain amount of time during a one-year time period. Workers must be unemployed through no fault of their own and must be actively seeking work.

To continue eligibility for unemployment insurance, the worker generally files weekly claims and reports any earnings from work during the week and any job offers or refusals of work during the week. States have increasingly viewed the administration of unemployment insurance as simply a disbursement function and have increasingly failed to satisfy the "actively seeking work" requirement, which results in payment errors in which unemployment insurance benefits are paid to people who do not meet the criteria to receive them.

Generally, benefits are based on a percentage (usually 50%) of an individual's earnings over a 52-week period subject to a state maximum amount and a state minimum amount. During times of high unemployment, additional weeks of benefits may be available in the form of temporary federal programs. Unemployment insurance benefits are subject to federal income taxes.

There are four factors to consider in evaluating the results of unemployment insurance, which intends to partially replace lost earnings for workers who meet certain criteria. First, in the second half of the twentieth century, unemployment insurance replaced one-third of lost wages, on average, among those who qualified for benefits. Second, research has suggested that unemployment insurance payments slightly prolong unemployment spells and has prompted strategies to improve reemployment incentives with job search workshops and self-employment assistance. Third, since the focus of the unemployment insurance system has been on prime-age, full-time workers, proposals have been made to permit payment of benefits to parents who have chosen to take parental family leave and to part-time, contingent, and self-employed workers. Lastly, even among those eligible for benefits, only about two-thirds bother to collect, which raises questions about social adequacy and weakens the counter-cyclical potential of the federal-state unemployment insurance system.

CATASTROPHE FUNDS

Florida Hurricane Catastrophe Fund

The Florida Hurricane Catastrophe Fund (FHCF) is a state trust fund to maintain insurance capacity. Established by the Florida legislature in 1993 following the wake of Hurricane Andrew, the FHCF is another example of government and private insurer cooperation as private insurers are used to sell and service the policies.

All authorized insurers that write covered policies are required by statute to participate in the FHCF subject to a retention. Covered policies are any policies that insure residential property in the state for the wind peril except for reinsurance and excess and surplus lines insurance. Contents and additional living expense are covered but fair rental value, loss of use, and business interruption are not. Insurer retention is determined as a company "multiple" (determined annually by the FHCF) times the amount the company contributes to the fund (reimbursement premium). The multiple is calculated as the projected maximum claim paying capacity of the FHCF (currently $15 billion) divided by estimated FHCF premium (currently about $708 million). Reimbursement premiums are based on actuarial indications by zip code, deductible, construction, type of coverage, and other factors.

The FHCF has a variety of financial obligations. First and foremost, the FHCF pays claims from the balance in the fund, from any reinsurance purchased by the fund, and from the issuance of revenue bonds, which are secured by premiums from insurers. Besides the payment of the fund's obligations to insurers, the fund may pay for the cost of procuring reinsurance, debt service on any revenue bonds issued, costs of administration of the fund, and costs of a mitigation program. The mitigation program receives a minimum of $10 million each year from the FHCF to support programs to improve hurricane preparedness, improve the wind resistance of residences and other facilities, educate the public about loss mitigation including structural upgrades, and protect local infrastructure from potential hurricane damage.

The effectiveness of the FHCF in preserving insurance capacity in Florida is difficult to evaluate. For a number of years it contributed to a relative stabilization of the Florida residential property insurance market. However the severe hurricane seasons in 2004 and 2005 have significantly reduced the balance in the fund from $6.1 billion on 12/31/2004 to $3.1 billion on 12/31/2005. This represents the first decline since inception of the Fund. Increases had previously averaged $600 million per year for the prior decade. The FHCF's obligation to participating insurers could be jeopardized by such a reduction in assets. Should the FHCF be unable to provide hurricane coverage, it is unlikely that private reinsurance would assume this exposure without a significant increase in price.

It is likely that the FHCF's accomplishments, which rely upon mandatory contribution from state insurers, would not have been achieved in such a relatively short time period without the supporting government authority. In that regard, the FHCF can be viewed as successful cooperation between the government and private insurers. In addition, since the FHCF is exempt from federal income tax, funds that would be paid as taxes have been diverted instead to hurricane loss mitigation.

California Earthquake Authority

The California Earthquake Authority (CEA) [6] was established as a result of the 1994 Northridge earthquake. Since the California Insurance Code [7] requires insurers to offer earthquake coverage to homeowners policyholders, insurers after Northridge began non-

renewing existing or not writing new homeowners policies because of concerns about the impact of future large earthquakes on insurer solvency.

In response, the California legislature established the CEA in 1996. The CEA is a public instrumentality of California, but it receives no operating funds from the state general fund nor does it contribute premium tax to the state general fund. Policies issued by the CEA are not subject to California Insurance Guaranty Association protection. If the CEA cannot pay claims due to insolvency or some other reason, the state of California cannot help pay claims out of the general fund or the insurance guaranty fund but the State Treasurer may sell bonds to fund the CEA.

An insurer issuing homeowners policies in California may meet its obligations to offer earthquake coverage by electing to participate in the CEA. Only participating insurers market and service CEA policies; the CEA does not issue policies directly to consumers. The CEA currently has 18 participating insurers that provide an initial capital contribution to the CEA.

In addition to the initial capital and the collection of insurance premiums, the CEA is authorized to purchase reinsurance, enter into capital market contracts, and issue bonds to help it meet its financial obligations. The CEA is required to maintain a capital balance of $350 million, and can assess the participating insurers when there is a capital shortfall. The CEA is also authorized to set aside funds to establish an Earthquake Loss Mitigation Fund.

The CEA earthquake policy is regarded as the industry standard. The CEA issues approximately two-thirds of California earthquake policies. The rates for a CEA earthquake policy are required to meet the usual standards that rates not be excessive, inadequate or unfairly discriminatory. CEA rates consider factors of insured property such as location, soil, construction, and age as well as the presence of earthquake hazard reduction factors.

Evidence varies as to the success of the CEA. Considering that the purpose of the CEA is to provide protection to insurers by allowing private insurers to continue providing homeowners coverage in California, then the CEA has achieved its purpose. However, considering that the purpose of the CEA is to increase the level of earthquake insurance protection to homeowners, then the CEA has not achieved its purpose. While California law requires homeowners insurers to offer earthquake coverage, it does not require that homeowners purchase this coverage. Currently, less than 15% of California homeowners purchase earthquake insurance. Recently, the CEA has provided a combination of consumer education and rate cuts to entice more homeowners to purchase earthquake insurance. These rate cuts could affect the future solvency of the CEA.

PENSION BENEFIT GUARANTY CORPORATION

The Employee Retirement Income Security Act of 1974 (ERISA) created the Pension Benefit Guaranty Corporation (PBGC) to insure certain retirement plans so that

employees would receive the benefits from these plans even if the employer terminates the plan. Sources of information include Greene [14] and PBGC Web Site [24].

Pension plans are categorized as either qualified (meaning that they meet conditions imposed by ERISA for tax-deferred treatment) or non-qualified. Qualified plans are either defined benefit plans or defined contribution plans. Under a defined benefit plan, the employee receives a fixed amount or sequence of payments upon retirement. This amount is determined as a function of such characteristics as the number of years of service the employee has worked, earnings level at retirement and the employee's age. Under a defined contribution plan, the employee receives whatever benefits are payable at retirement from a fund to which the employee contributes. The employer may also contribute to this plan. Plans such as 401(k) and 403(b) are examples of defined contribution plans. Only defined benefit plans are guaranteed by the PBGC.

The PBGC takes over plans when the employer shows that it lacks the resources to fund the plan, and that being required to fund the plan would place the employer in financial jeopardy. The PBGC may also act directly to terminate a pension plan in order to protect the plan participants or to protect the interests of the PBGC by preventing the plan from promising additional benefits that the PBGC would be forced to deliver.

The PBGC was created to meet the social purpose of safeguarding the retirements of thousands of employees, which met a need not satisfied in the private insurance marketplace. Currently, thousands of employees under defined benefit plans are protected by the PBGC from the risk of their plans becoming insolvent and unable to pay the promised benefits. It is sometimes suggested, however, that employers could or should be encouraged to switch to defined contribution plans. This would make the PBGC unnecessary as there would be no pension plans for it to insure. The American Academy of Actuaries has argued that defined benefit pension plans should be encouraged in preference to defined contribution plans. The defined benefit plans offer various advantages to employees including reduced investment risk, elimination of the risk of outliving the retirement benefits, and a reduction in the risks of spending savings prior to retirement or too quickly during retirement. They also point out that defined contribution plans create incentives for employees to retire based on the performance of the stock market. Employees would tend to retire early when the stock market is doing well, and tend to delay retirement when the stock market is performing poorly. According to Academy Alerts [1], by removing this incentive, defined benefit plans increase the predictability of future retirements which makes business planning easier.

The PBGC's protection of defined benefits plans is a form of social insurance. The benefits are paid from premiums charged to the plan providers; however, in some cases these premiums may not be adequate.

There is some dissatisfaction with the current system, but it is still considered essential. The accounting rules are considered to be excessively complex and to have some perverse incentives. Currently, the PBGC has a large deficit, leading to discussions of reforming the PBGC [13].

TERRORISM INSURANCE ACT OF 2002 AND EXTENSION

The events of September 11, 2001, in which four commercial jetliners were hijacked and crashed, destroying the World Trade Center in New York and part of the Pentagon in Washington D.C., dramatically indicated the level of loss that could be caused by acts of terrorism. Insurers and reinsurers responded by attempting to exclude coverage for terrorism losses where possible and by substantially increasing prices where coverage could not be excluded, e.g. workers compensation insurance and fire insurance. Reinsurers were able to restrict coverage quickly as most renewals took place in January and as reinsurance pricing and coverage are largely unregulated. Primary insurers were not able to restrict coverage as rapidly due to regulatory constraints; however 45 states, Puerto Rico and the District of Columbia had approved a broad ISO terrorism exclusion by February 22, 2002. Furthermore, the "large risk" rule of many states allowed insurers to restrict coverage without needing regulatory approval for those policyholders that met the conditions of the rule. Hillman from the GAO issued several statements on terrorism [16] [17].

Policymakers were concerned about the impact on the economy and on individual businesses if terrorism coverage continued to be restricted. Without terrorism coverage, numerous construction projects would be delayed or canceled. The owners or lessors of airports or other large properties might have difficulty meeting legal or contractual obligations, such as lease or mortgage agreements that require the property to be fully insured. The restricted terrorism coverage market could also affect investing activity as many types of securities are backed by collateral assets that would no longer be insured for the terrorism risk [16]. In the event of an actual terrorism event, the impact would be borne by commercial businesses and individual citizens. As in most recent disasters, the federal government could be expected to act to mitigate the loss, however, the government would need to create the claims handling infrastructure in order to respond to individual losses. This would result in a substantial delay compared to the claims handling process that insurance companies already have in place.

Because of these concerns, Congress passed the Terrorism Risk Insurance Act (TRIA) of 2002 [29]. This act creates a federal reinsurance program that works in partnership with private insurance companies.

Under TRIA, insurance companies writing property-casualty insurance are required to offer coverage for acts of terrorism on the same terms and conditions as relates to other perils. For certified terrorism losses, the government reimburses each insurance company subject to the conditions that (1) the insurer paid at least $5,000,000 in loss, (2) the insurer paid more than its deductible, where the deductible is a percentage of earned premium that varies by year and (3) the insurer retains 10% of the losses exceeding the deductible. In the event that the aggregate insured losses from all insurers reaches $100 billion in one calendar year, insurers are released from paying any losses beyond their deductibles, and Congress is required to determine how such excess losses will be paid. The Treasury Department is required to recoup part of the federal share of terrorism

losses if the sum of the insurers' retention is less than the insurance marketplace aggregate retention amount. This retention is an amount that increases for each year of the program. The recoupment is accomplished by placing a surcharge on all property-casualty policies in force. Insurers collect the surcharge and remit the proceeds to the Treasury Department. As written TRIA was set to expire on 12/31/2005, however, it has since been extended to 12/31/2007 with some changes [2].

TRIA, as originally written, applied to all commercial lines of property and casualty insurance except federal crop insurance, mortgage guaranty, financial guaranty, medical malpractice, flood insurance, and reinsurance. Health insurance and life insurance were also specifically excluded.

Under the extension of TRIA, approved by Congress in December of 2005, the program is extended until 12/31/2007, with some minor modifications. The trigger for reimbursement was increased from $5 million to $50 million for 2006 and to $100 million for 2007, and the insurance marketplace aggregate retention amount was substantially increased for 2006 and 2007. Also, certain lines of business that were covered under the original TRIA are no longer covered.

TRIA was passed for two of the reasons mentioned by Greene [14] and Weining [33]. It fulfills a need unmet by private insurance, and it serves a social purpose. After September 11th, insurers and reinsurers concluded that terrorism risks were essentially uninsurable because of the difficulty in estimating the likely frequency and severity of terrorism events. At the same time, there was a large increase in the demand for coverage from the terrorism peril in order for individuals and business to manage their risks, to obtain financing for projects, and to meet contractual obligations in leases and mortgages [11]. TRIA was also passed in order to avoid economic disruptions seen as immanent if terrorism coverage was not available and affordable. .

In the debate on whether to extend TRIA beyond the sunset date of 12/31/2005, there was some dispute over whether TRIA was needed any longer. A report released by the Congressional Budget Office [9] suggested that the private market could supply the required coverages. They further suggested that TRIA may tend to create an indifference to loss control where the terrorism exposure was concerned. Lastly they proposed catastrophe bonds as potential means of supplementing the private insurance market for terrorism coverage. Also, the demand for terrorism coverage is not as great as initially expected. Fewer than half of the commercial policyholders chose to purchase terrorism coverage even though insurers were required to offer it.

Conversely, the Property-Casualty Insurance Association of America has strongly disputed the CBO's findings [28] [5]. In particular, they dispute the claims that the private insurance market is equipped to provide terrorism coverage. They also claim that the market for catastrophe bonds is too small to provide the capacity that the insurance industry is not able to provide. Also, the Government Accounting Office [17] found that terrorism insurance availability had improved substantially under TRIA.

Although the program is typically described as insurance, it has some characteristics of government indemnity programs. In particular, insurers do not pay premiums prior to incurring losses. The government may recoup some of the losses that it pays, but otherwise, the insurers are simply reimbursed for a portion of their costs.

TRIA has been subject to some criticism both within the insurance industry and outside of it. There is concern about the amount of time that may be required to certify an event and to distribute payments under TRIA. Insurers are concerned that the time between when they pay claims and when they receive reimbursement could cause cash flow problems. Insurers are also concerned that domestic terror events, such as the Oklahoma City bombing in 1995, are not considered certified terrorism events by TRIA. According to Becker [5], TRIA has also been criticized for not covering personal lines and for not covering chemical, nuclear, biological or radiation losses. The low percentage of commercial policyholders who opt for terrorism coverage might also imply a lack of public acceptance.

Most of these criticisms, however, are not directed to the existence of a federal program, but rather to the limitations on the coverage provided. The Property-Casualty Insurance Association of America argues that TRIA is still necessary, that the insurance industry lacks the financial capacity to provide terrorism coverage, and that it might be desirable to provide coverage for additional lines of business such as homeowners and group life insurance. The chair of the House of Representatives Financial Services Committee, Michael Oxley [1], described TRIA as a "resounding success" in arguing for its extension.

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