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## SPDAs and GICs: Like Money in the Bank?

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When I invested my hard-earned money 10 years ago, Executive Life was a health[y] company, rated tops in security in the industry. . . . Well, we know what happened in the meantime. The management of Executive Life took a lot of risks. They invested in things I would never have touched, they gambled, effectively, with my money. I would have just as soon as taken it to Las Vegas myself. Meanwhile, nobody let me know what they were doing. I trusted, perhaps foolishly, the manager of that company, and even worse, I trusted my Government to watch over their actions for me, expecting them to be mindful of those who abuse their power over ordinary citizens. No one told me a thing until April 2, 1991. . . . On April 11, 11:30 a.m., the State took over Executive Life and stopped all annuity checks. Mine included. . . . I now stand to lose everything.

This testimony by Donn C. Sigerson (U.S. Congress 1991a, pp. 212–13) could have been given by many of the thousands who invested with what they thought were healthy, well-regulated insurance companies. In 1991, regulators took over not only Executive Life of California and New York but also three other large life insurance companies.<sup>1</sup> All these companies had grown rapidly in the 1980s through the sale of tens of billions of dollars worth of investment-oriented products. These products, mostly single premium deferred annuities (SPDAs) and guaranteed investment contracts (GICs), differ from what insurance companies have traditionally offered customers. They are sold on the basis of their high fixed rate of return and have more in common with bank certificates of deposit than with other insurance products.

Contrary to what Donn Sigerson implies, however, very few of those who bought these new products from since-failed insurers will lose everything. Many have lost their right to withdraw money before maturity through so-called policy surrenders, but even in the worst case, as their investments mature these investors will be treated as general creditors and will receive a share in their failed company's liquidated assets. In fact, many are likely to fare much better than this, for all 50 states now have state-mandated guaranty funds to at least partially protect life insurance customers from the failure of their insurer.

Nonetheless, the experiences of investors like Donn Sigerson have prompted both Congress and the financial press to examine public policy toward the life insurance industry. The prevailing view among those in Congress and the press seems to be that the recent life insurance failures show that the country needs both stronger regulation of life insurance companies and also stronger, more uniform government guarantees for those who purchase either insurance or investment-oriented products from insurers.

We believe this prevailing view leads policy in the wrong direction. As the recent record of deposit insurance at banks and S&Ls illustrates, stronger guarantees can easily lead to excessive risk taking. The guarantees allow aggressive insurers to attract a large volume of funds quickly by promising high rates of return to investors. The protection offered by government guarantees creates *moral hazard*: that is, since these investments are insured by a third party, those who do the investing have no incentive to care about what is done with their money. Moral hazard encourages insurers to invest funds in risky ventures, recreating the kind of heads-I-win, tails-others-lose situation associated with guarantees of the deposit liabilities of banks and S&Ls. Strict regulation can curtail this tenden-

cy, but experience in the insurance as well as in the banking industry suggests that successful regulation is difficult to sustain and is costly not only in terms of the actual resources used in regulation but also in the way it can stifle socially useful innovations.

We think policymakers should consider moving in the opposite direction. That is, they should consider eliminating all government guarantees of SPDAs, GICs, and other investment-oriented insurance products and should consider requiring that insurance companies disclose to their investment customers the nature of the products they are buying.

### **The Changed Nature of the Insurance Industry**

"In 1980 the life insurance industry was 150 years old. In 1990 . . . [it] was ten years old." This is how Gary Schulte (1991, p. 88), a Senior Vice President of Executive Life of California, summarized the impact on the life insurance industry of the growth in investment-oriented products in the 1980s. At the beginning of the decade, investment-oriented products were a promising sideline in an industry whose main product was still insurance against abnormally early or late death. By the end of the decade, the industry was probably generating over half its annual revenue from investment-oriented products, which typically featured high fixed or quasi-fixed rates of return and little or no insurance aspect.

The products that were the vehicle for this change were statistically grouped with traditional annuities, although, as we will see, this is a misleading label. In any case, until the 1970s annuities of all kinds were a relatively small part of the U.S. life insurance business: the annual total of premiums paid to U.S. life insurance companies for life insurance was about six to nine times larger than total annuity premiums from 1945 to 1970 (American Council of Life Insurance 1991, p. 34). After 1970, however, income from various annuity products grew rapidly. As the chart shows, by the late 1980s annuities in total had become the dominant source of income for life insurance companies. Precise data are not available, but industry sources suggest that most of this fast-growing annuity category now consists of investment-oriented products, chiefly SPDAs and GICs.

The purchaser of an SPDA typically pays a single premium up front in return for a promise of something later. Contrary to what the name implies, however, the something to be returned later (usually 5 or 10 years later) is not in any important sense an annuity but is rather a sum of money equal to the original premium plus interest earned at the rates specified in the contract. (See the box titled "Are SPDAs Insurance?") In most cases, these interest rates either are fixed or follow a formula that prevents them from varying as much as short-term interest rates. That is, the typical SPDA is essentially a long-term, quasi-fixed-rate certificate of deposit. Like a certificate of deposit, the SPDA contract also imposes a penalty for early withdrawal.

GICs lack even the trappings of an insurance contract. Like SPDAs, they also are essentially certificates of deposit. The guarantee referred to in their name is just the insurance company's promise to pay a fixed rate of interest for a specified period on funds invested at or after the signing of the contract. After the first year the interest rate adjusts, to some extent, according to a market-based for-

mula for each subsequent year until maturity, which is usually in three to seven years. Unlike SPDAs, however, GICs are not sold to individual investors. Instead, they are typically bought by a pension fund on behalf of employees contributing to a defined-contribution pension plan. The contract is thus between the insurance company and the pension fund, not between the insurance company and the individuals contributing to the pension fund, even though the pension fund does little more than pass money between its contributors and the insurance company. GICs are therefore known as *unallocated* contracts, which means that the liability of the insurance company selling a GIC is not assigned to specific individuals. This liability feature becomes significant when insurance companies fail and policyholders attempt to collect on their state guaranty funds.

Special factors may partly explain the rapid growth of SPDAs and GICs in the 1980s. The growth of GICs was especially strong in the early 1980s. The annual flow of savings into GICs and other so-called group annuity products rose from next to nothing in 1980 to over \$57 billion in 1986 and to \$75 billion in 1990 (American Council of Life Insurance 1991, p. 35). The especially rapid growth in the early 1980s was accompanied and probably partly caused by changes in the laws and regulations governing pension plans, which purchase GICs for groups of employees. (See the box titled “Pension Plans and the Rapid Growth of GICs.”) In the case of SPDAs, the combination of high marginal tax rates and high nominal interest rates in the early 1980s may have significantly enhanced their tax advantages. This is probably not the whole story, however, for the flow of savings into SPDAs and other individual annuities doubled—from \$26 billion in 1986 to \$54 billion in 1990—even after marginal tax rates and nominal interest rates fell in the mid 1980s (American Council of Life Insurance 1991, p. 35).

We believe that another important factor in the growth of SPDAs and GICs was the public’s perception that these products were in some sense guaranteed. As discussed below, many states instituted explicit guarantees of life insurance policies, including SPDAs and sometimes GICs as well, in the 1970s. Ad hoc bailouts, such as the one arranged for investors who bought SPDAs from Baldwin-United before its 1983 collapse, reinforced the impression of safety created by the explicit guarantees. When combined with the high yields on SPDAs and GICs, the clear movement of public policy in the 1970s and early 1980s toward guaranteeing the safety of those products helped make them popular.

Whatever its causes, an important implication of the new preeminence of SPDAs and GICs is that the life insurance industry now has the ability to grow very rapidly. The industry’s growth is no longer constrained by the relatively slow expansion of the total demand for life insurance. Instead, investment-oriented products give the industry the potential to grow rapidly by attracting savings previously held in other forms. The industry’s growth also is no longer constrained by the practice of selling products through its own agents. Instead, SPDAs and GICs are now widely sold through brokerage houses as well, magnifying the life insurance industry’s ability to attract savings previously held in other forms.<sup>2</sup> To us, these enhanced capabilities for rapid growth underline the importance of public policy concerning guarantees of SPDAs and GICs.

## The Ambiguous Nature of Insurance Company Liabilities

Insurance companies promise holders of SPDAs and GICs fixed returns on their investments. However, as we all know, and as Donn Sigerson learned, there are promises and there are promises. So what really lies behind the promises made to holders of SPDAs and GICs? It’s not easy to answer that question. But in a general sense, two things back such promises: the claim of the policyholder on the assets of the company that issued the policy and a system of explicit and implicit guarantees by both the insurance industry and the state guaranty systems. However, as we now explain, it’s difficult for holders of SPDAs and GICs to judge the value of their claim on the assets of the company that issued their policy, and the very existence of the system of guarantees weakens their incentive to try.

Like bank depositors, holders of claims on insurance companies get little information about what the insurance company will do with their money. In contrast, someone who asks a broker about buying shares in a mutual fund will receive a prospectus that explains the fund’s basic investment strategy. The mutual fund investor knows ahead of time whether his or her savings will be used to buy hog futures, commercial real estate, U.S. government bonds, or shares traded on the Kuala Lumpur stock exchange. Holders of claims on insurance companies have no such prior knowledge. Each of them in effect buys a share in the life insurance company’s total portfolio of assets. Despite that, these claim holders have no commitment from the company on its future investment strategy, beyond the fact that insurance laws and regulations rule out certain forms of investment. Within these legal and regulatory boundaries lies a range of assets with widely varying degrees of risk. As Donn Sigerson’s experiences indicate, these boundaries do not seem to prevent life insurers from adopting investment strategies far riskier than their policyholders realize or would approve.

Since claims on insurance companies are not explicitly tied ahead of time to specific parts of the insurance company’s portfolio, the safety of these claims depends on the overall financial strength of the life insurance company. However, as Donn Sigerson also indicates, judging the strength of life insurance companies is not easy. Several companies that specialize in the financial rating of life insurers rated Executive Life highly up until little more than a year before the company failed. The company’s auditor also gave it a fairly clean report a year before it failed, and only four months before the company failed an internal memo by the National Association of Insurance Commissioners (NAIC) declared that the company was “in no imminent financial danger” (U.S. Congress 1991a, p. 116).<sup>3</sup> Furthermore, a survey of state insurance departments conducted in early 1992 showed that the information they give consumers about individual life insurers is generally unhelpful and often misleading or wrong (U.S. Congress 1992, pp. 127–32).

Perhaps most unsettling of all is that even accurate information about an insurer’s financial strength may be useless to a consumer. This stems from insurers’ practice of transferring books of business. In effect, what this means is that an insurance company can get out of a contract by substituting a different insurer in its place (Sherrid 1992). A reform movement is gathering steam, but in most states this is legal even without the prior consent of

the insured individuals. Their subsequent approval is required, but it is often held to be implied if they send a check to the new company or fail to voice opposition to the transfer. Peter Kerr (1992) of the *New York Times* gives the example of an insurance company that decided to reduce its SPDA business. It “sold” a block of such policies to another company, which “sold” them to yet another company, and so on. The policies finally ended up with a failed insurer. Some policyholders were unaware of the transfers until they tried to get their money out of the failed company. The effective implication of this transfer practice is that an individual policyholder is not investing in a specific insurance company but rather in some company-to-be-named-later, as if all companies should be interchangeable from the consumer’s point of view.<sup>4</sup>

The notion that consumers should view all life insurance companies as interchangeable, at least with regard to their financial safety, is strongly reinforced by the current system of government regulation and guarantees of life insurance contracts. Not only do all 50 states now have laws mandating guaranty funds to cover some or all of the obligations of failed insurers, each state also has an insurance commissioner whose staff is charged with regulating insurers doing business in the state. The mere existence of these regulators contributes to the perception that insurance companies are safe, and that perception is bolstered by the tendency of state governments and life insurance companies to arrange ad hoc bailouts to supplement the protection explicitly offered in advance by the state guaranty funds. This explicit and implicit promise that government and the life insurance industry will somehow protect consumers from significant financial loss increasingly resembles the situation in the banking and S&L industry. In that industry, deposit insurance has absolved depositors from almost all responsibility for worrying about the safety of their investments.

The explicit life insurance safety net now consists of 50 state-mandated life insurance guaranty funds.<sup>5</sup> This is different from the banking industry, where the Federal Deposit Insurance Corporation (FDIC) is, as its name implies, a federally supported program. State life insurance guaranty funds are not as old as the FDIC. The oldest state fund was begun in New York in 1941, only a few years after the FDIC was created, but for three decades it was the only life insurance guaranty fund. Then a rash of insurance company failures in the late 1960s, mainly among property and casualty insurers, rekindled legislators’ interest in state guaranty funds. The NAIC responded by proposing model legislation, and many states gradually adopted modified versions of that model legislation. Still, in 1990 when the major rating services began to express concern about the financial safety of some large life insurers, several states, including California, Colorado, Louisiana, and New Jersey, did not have a life insurance guaranty fund.

Nor, despite some convergence in recent years, is state guaranty fund coverage uniform. Most states have adopted a version of the current NAIC model law, under which policyholders are covered by the guaranty fund of the state where they live rather than the guaranty fund of the state where their insurance company is headquartered (provided the insurer is licensed to do business in the insured’s state). Versions of an older model law, which reversed this rule, are still on the books in a few states, however. Since coverage is not uniform and since some fail-

ures occurred before all states had enacted guaranty funds, the issue of which fund, if any, covers a given policyholder can get rather arcane (U.S. GAO 1992b, p. 25). This lack of uniformity can also be costly for policyholders of failed insurers. Currently, 15 states follow the NAIC model law and cover individuals’ annuities up to \$100,000 and death benefits up to \$300,000, with a limit of \$300,000 on total guarantees to an individual. In the other 35 states, limits are higher, lower, or unspecified, and some states impose deductibles or copayments (U.S. GAO 1992b, p. 27). California’s recently enacted law, for example, covers only 80 percent of the funds due to policyholders, up to the given limits. (See the Appendix for state-by-state information on guarantees of SPDAs and GICs.)

The biggest differences among state laws governing life insurance guaranty funds, however, relate to GICs and similar group or unallocated contracts. In 17 states the fund laws follow the NAIC model and explicitly cover GICs, at least to some extent, and in 2 other states, the courts have ordered GICs covered even though the law is silent on the issue. In 14 states, neither the guaranty fund law nor the courts say whether GICs are guaranteed or not. Puerto Rico and 17 of the states have laws that explicitly deny coverage to GICs.

Even where GICs are explicitly covered, individuals will receive varying levels of protection. Recall that GICs are usually contracts between a life insurance company and a defined-contribution pension plan. The states that cover GICs mostly impose a \$5 million limit on the total amount of the guaranty that a given pension plan can receive, regardless of the number of separate GIC contracts it holds with the failed company and regardless of the number of employee contributors or the total amount due to them. Again, the limit is lower in some states and potentially higher in New Jersey, where the \$2 million limit is per GIC contract rather than per pension plan. Since the number of employees enrolled, as well as the value of their claims, will vary significantly from one pension plan to another, the implicit coverage per person or per dollar invested will also vary significantly, even among the plans in a given state.

Unlike the FDIC, most state guaranty funds do not assess premiums to build up a reserve in anticipation of future failures. Instead, when a life insurance company fails, the state fund assesses the surviving life insurers licensed to do business in the state to cover the payments due to policyholders. In most states, the law limits the annual amount of these assessments to no more than 2 percent of annual life insurance premium income, although the limit ranges from 1 percent in some states to 4 percent in others. When the volume of claims on the fund exceeds the legal maximum the fund can assess state insurers per year, guarantee payments may be stretched out over several years. When this happens, or when there is a delay in liquidating or restructuring the failed company, even fully covered individuals may have to wait an extended period to gain access to their funds. In the aftermath of the failure of Executive Life, for example, the California guaranty fund temporarily cut monthly annuity benefits to 70 percent of their stated value and cut off access to the cash value of whole-life and SPDA policies by suspending policyholders’ rights to surrender or borrow against their policies.

As with FDIC insurance, the ultimate burden of funding life insurance guaranty funds extends to consumers

and taxpayers. For insurers, fund assessments are a full or partial credit against most states' taxes. Regulators in some states also make allowances for fund assessments when deciding whether to approve a company's request to increase insurance premiums (U.S. Congress 1991a, pp. 94–96; 1991d, pp. 75–106).

The state guaranty fund system is not the only potential safeguard consumers can look to, however. Each state, as part of its regulatory function, conducts periodic financial examinations of the life insurance companies licensed to do business within its borders. The purpose of these exams is, in part, to judge whether the companies are investing their premium income in accordance with regulatory guidelines designed to limit their risk of insolvency. To some extent, the mere fact that each state has this responsibility encourages investors like Donn Sigerson to assume the government is keeping an eye on their insurance company for them. That is, even without a state guaranty fund, investors might conclude that if a company passes their state's insurance exam it must be safe enough.

The general impression that any insurance company product is a safe investment also has been fostered by the willingness of insurance companies and state legislators and regulators to arrange ad hoc consumer bailouts in some cases. When Baldwin-United, a major nationwide supplier of SPDAs, failed in 1983, thousands of policyholders had no explicit guaranty fund coverage. Thousands more around the nation were explicitly protected only by the state guaranty fund of Indiana, which did not have adequate financial resources to pay them all. Nonetheless, state regulators and several major life insurance and brokerage companies reached an agreement that made many of these individuals whole (or nearly so) while spreading the costs broadly across the insurance and brokerage industries (NAIC 1985, Fitzgerald 1988). When Executive Life's problems became apparent in 1990, the California legislature quickly passed a bill setting up a life insurance guaranty fund, and some have suggested that state regulators may have deliberately refrained from closing the company until after the fund was up and running.<sup>6</sup> In 1991, when the sudden decline of Mutual Benefit of New Jersey took state regulators by surprise, the legislature acted to create a state guaranty fund on the very day the company failed. Later, in support of an arrangement under which the insurance industry promised to pay off Mutual Benefit policyholders in full, the New Jersey legislature took up a bill that would make retroactive changes in the state's bankruptcy law to favor policyholders (and thus indirectly their guarantors) relative to the general creditors of Mutual Benefit (Spiro and Weber 1992, pp. 66–67). In sum, the collective actions of life insurers, regulators, and state legislators in these and other cases contribute to the impression that the guarantees on life insurance products extend well beyond the explicit limits of the guaranty fund laws.

### Moral Hazard and Its Potential Effects

Gary Schulte (1991, p. 30) gives a curious but revealing description of the corporate financial strategy of the man he worked for, the head of Executive Life, Fred Carr:

During the four years that Fred took the corporation's bank debt from \$14.6 million in 1973 to \$1.6 million in 1977 and subsequently \$0, he developed his well-publicized aversion to debt. For a dozen years, until 1988, Fred would lecture in his annual reports and in other forums on the evils of debt.

He would shout, "We have no debt at First Executive Corporation [the holding company for Executive Life]. No long term debt. No short-term debt. None." "No debt" was a central theme in his corporate philosophy.

This description is curious because it fails to recognize that most insurance policies are a kind of credit instrument and most policyholders are thus creditors. Clearly, Fred Carr did not hope to build a major insurance company by avoiding all forms of debt. What Gary Schulte really means is that Fred Carr sought to avoid debts to those who would have either imposed restrictions on Executive Life's investment strategies or demanded interest rates commensurate with the risks of its portfolio. The statement is therefore also revealing because it suggests that Fred Carr did not consider policyholders to be troublesome lenders. Apparently they were viewed instead as docile lenders who would not ask hard questions. Thanks in part to the system of explicit and implicit guarantees we've described, this view was borne out for many years. From 1974 to 1990, Fred Carr's Executive Life companies were able to raise billions of dollars from hundreds of thousands of docile lenders like Donn Sigerson—people whose money was then invested, often without their knowledge or consent, in risky bonds.

The uncritical lending of policyholders derives from what insurers themselves call *moral hazard*. As we mentioned earlier, moral hazard refers to the fact that someone who is insured against the bad consequences of an event has little incentive to try to prevent that event from occurring. This can be a problem if the event is not an act of God but is to some extent subject to influence by the insured. A classic example is if someone's personal property is fully insured against theft, they may tend to become careless about locking the door. In the context of financial intermediaries, moral hazard refers to the fact that creditors who think their investments are guaranteed by some third party become careless about whom they lend money to. Like insurance policyholders, they don't ask hard questions—about the borrower's financial strength or about how the borrower is going to use their money—because they assume the guarantees will compensate them for any adverse consequences arising from their lack of vigilance. Executive Life seems to be an example of a company that took advantage of moral hazard. When trusting, uncritical policyholders in effect left their financial doors unbolted, Executive Life began to operate like the many banks and S&Ls that had funded risky investments with money from insured depositors who also asked no questions.

To clarify the nature of the moral hazard created by guarantees on SPDAs and GICs, first consider what happens when a firm tries to issue 10-year bonds in the bond market. For every dollar of bonds sold, the firm would promise to pay back  $(1+r)^{10}$  dollars 10 years later, where  $r$  is the annual rate of interest promised. To back up this promise, the firm would have to issue a prospectus. The prospectus would make additional promises, called *covenants*. First, the prospectus and its covenants would make clear what debts would have prior claims on the firm's assets if the firm were unable to pay all its debts, and it would clarify whether the bondholders' claims would come before any claims arising from subsequent borrowing by the firm. Second, the prospectus would explain how the firm's existing assets are invested, whether the

firm plans to reallocate them significantly, and how the proceeds of the bond sale would be invested.

Potential bondholders would demand such a prospectus because they would know that, despite its promise to pay back principal and interest, the borrowing firm's liability to bondholders is limited. If the firm's investments do not yield enough to pay back all of its creditors, the firm is bankrupt. In bankruptcy, the bondholders and the firm's other creditors would queue up for shares of the bankrupt firm's assets. Debtors whose claims predate the bond issue described in the prospectus would come before, or be senior to, the bondholders. If the firm's assets suffice to satisfy the claims of the preexisting creditors, then it would be the bondholders' turn. If their claims can be satisfied from the remaining assets, then the junior creditors who had lent to the firm after the bond issue would have access to any residual assets. It's thus to the bondholders' advantage if the firm makes investments that are safe in the sense that they have a high probability of yielding enough to pay back the bondholders' principal plus the stated rate of interest. It's also to the potential bondbuyers' advantage if the firm has a large cushion of conservatively invested shareholder equity and few debt obligations that would be equal or senior to the bondholders' claims in the event of bankruptcy. If the firm plans risky investments, has little shareholder equity invested, or has large equivalent or prior commitments to other debtors, the bondholders would want a high interest rate to compensate them for the greater odds that the firm would not be able to pay them.

Generally, the commitments the firm makes to the bondholders in the prospectus are binding constraints on its behavior. To see this, consider a simple economy in which there are only two types of investments, safe and risky. For every dollar invested, safe investments return \$1.15 in good times and \$1.00 in bad times. Suppose that the odds that times will be good are 80 percent. Then, on average, safe investments return \$1.12 ( $0.8 \times \$1.15 + 0.2 \times \$1.00$ ). Risky investments have the same average return but greater variance, returning \$1.40 in good times but nothing at all in bad times. Let's examine the situation facing a firm in this economy with \$8 of initial equity invested by shareholders, no existing debt, and a prospectus to sell \$100 of 10 percent interest bonds with covenants stipulating that the bonds and the equity will both be invested in the safe investment and that subsequent debt, if any, will be junior to the bonds. Under this arrangement, the bondholders will receive \$110 in good times and \$108 in bad times (\$100 from the return of principal on the bondholders' money plus \$8 from the investment of shareholders' initial equity in the safe asset). The firm will make a net profit of \$6.20 in good times ( $\$108 \times 1.15 - \$110 - \$8$ ) and will go bankrupt in bad times. Shareholders' net rate of return, or net profit per dollar of equity, thus will be 77.5 percent in good times and -100 percent in bad times. This implies that the expected net rate of return is 42 percent ( $77.5 \times 0.8 - 100 \times 0.2$ ).

This analysis of the bondholders' situation presumes that the prospectus guarantees that any debt the firm might issue later would have a lower priority than the bonds in the event of bankruptcy. If not, the bondholders stand to lose. Suppose that after completing the bond issue the firm is able to break its commitment, and it finances another \$100 of safe investments by borrowing \$100 from a bank whose claim is made equal to the claims of the

bondholders. Then, the bondholders still receive \$110 if times are good. If times are bad, however, the bondholders no longer have sole claim on the gross returns on the investment of the firm's \$8 of initial equity. They must instead split these returns with the other creditor, for a total payoff to bondholders of \$104 in bad times. By taking on additional debt of equal priority, the firm has thus hurt the bondholders.

The firm's own position, and thus its motives for issuing additional debt with equal priority, will depend on the interest rate it had to offer the bank. Assume for now that the bank is promised 14 percent interest. Then, in good times the firm will make a profit of \$7.20 ( $\$208 \times 1.15 - \$110 - \$114 - \$8$ ) for a 90 percent return on equity. In bad times, as before, the firm goes bankrupt, implying again a -100 percent rate of return on equity. Overall, shareholders' expected net rate of return rises to 52 percent. In fact, as long as the firm can promise the bank less than 15 percent interest, shareholders gain from additional borrowing.

It turns out that the firm would be able to get the bank to agree to less than 15 percent, and thus enhance its shareholders' position, if it could make the bank's debt equal in priority to the bonds. Under these circumstances the bank would get \$104, the same as the bondholders but more than if it made the safe investment itself, if times were bad. The bank would thus be willing to accept something less than \$115, the return on the safe investment, in good times. However, if the bank's debt was junior to the bonds, then the bank would require at least a 15 percent rate of interest on its loan to the firm. With junior debt, the bank gets \$98 in bad times ( $\$208 \times 1.00 - \$110$ ) and  $\$100 \times (1+R)$ , where  $R$  is the interest rate on the bank's loan, in good times. Since the return in bad times is lower than the bank would get by making the safe investment itself, it would require a return of more than 15 percent in good times as compensation.

Thus we see that if the firm could get out of its commitment to make subsequent debtors junior, it could enhance its own rate of return while hurting bondholders. In effect, the firm would not be paying the full cost of the additional borrowing but would instead be shifting some of the cost to the bondholders. Covenants that make subsequent debt junior protect bondholders by making the firm face the full cost of its subsequent borrowing. They are one way that bondholders seek to prevent the firm from retroactively lowering the odds that they will receive their promised returns.

Similarly, the firm's commitment to follow a specific investment strategy also protects the bondholders. Because of stockholders' limited liability, there is again a sense in which the firm would like to renege on this commitment. To see this, use the simple economy described above to imagine that the firm can break its commitments by investing both its borrowed funds and its initial equity in the risky investment instead of the safe one. Bondholders will still get \$110 in good times but now will get nothing in bad times, so they are worse off. The firm, however, now will make a profit of \$41.20 ( $\$108 \times 1.15 - \$110$ ) in good times and will still go bankrupt in bad times. Shareholders' net rate of return now will be 515 percent in good times and still -100 percent in bad times, implying an expected net rate of return of 392 percent. Clearly, the shareholders are better off. If the bondholders had known that the firm was going to pursue this risky strategy, they

would have demanded much higher interest rates or possibly not have lent at all. Breaking its commitment to invest in the safe asset would thus also allow the firm to avoid the full cost of borrowing.

Most important, our example is chosen so that if the firm either issues no debt or is forced by its creditors to commit itself to an investment policy, then it will choose not to undertake any risky investments. It chooses only safe investments because the average return on the risky investments is no higher than on the safe investments. Not investing in the risky asset is also desirable from society's point of view; additional risk without compensation in the form of a higher average return should not be undertaken. However, if the commitment to an investment strategy can be broken, then it is in the interest of the stockholders to undertake the risky investment. From society's point of view, such risky investments are the main cost of the moral hazard created by a guarantee system.

The actual economy is much more complicated than this simple one, of course, but the essence of the problem is the same. Limited liability creates a conflict of interest between shareholders and bondholders. Recognizing that the firm might want to promise them safe investments and later undertake risky ones, bondholders require the firm to precommit to an investment strategy. Recognizing that the firm might wish to dilute the value of existing bondholders' claims in the event of bankruptcy, bondholders require covenants to make subsequent debt junior. Also note that it is implicit in the bond contract, and taken for granted by bond market participants, that the issuing firm cannot transfer its obligation to repay the bondholders to another firm without the bondholders' informed consent. All these restrictions force the firm to face the full cost of borrowing and can even place limits on how the firm invests its own shareholders' equity. Borrowing in the bond market thus restricts and disciplines the management of a firm, and this is one reason why executives like Fred Carr prefer less demanding creditors than are found in the U.S. bond market.

As Fred Carr and other life insurance executives discovered, the insurance industry's aura of safety turned policyholders into relatively undemanding creditors.<sup>7</sup> They lent their money to companies like Executive Life by buying bond-like SPDAs and GICs. Yet they did not ask for prospectuses. In particular, they did not ask the company to guarantee that subsequent creditors, buying other SPDAs and GICs, would be made junior, and they exacted no commitments from the company about how their money would be invested or about how the company's other assets would be invested. They did not even ascertain that the company would stand behind its product by not transferring their policy to another insurer. In short, they were the docile, trusting lenders aggressive insurers were looking for.

### **Moral Hazard at Work**

By offering high interest rate SPDAs and GICs, whose safety was perceived to be assured by state guaranty funds, regulators, and the life insurance industry collectively, Executive Life and several other insurers found that they could attract billions of dollars from docile creditors. These insurers, therefore, had a huge incentive to minimize shareholders' initial equity and to maximize risk in their portfolio. Only state insurance regulators stood in the way. Acting on behalf of the uncritical policyholders, the

regulators' job was to try to make sure that insurers invested somewhat conservatively and maintained minimal levels of shareholder equity. However, in the rapidly changing financial and regulatory scene of the 1980s, this task proved difficult for even the best staffed and trained state insurance departments.

The major insurance companies that failed in 1991 all engaged in financial strategies that put their ability to pay claims at substantial risk. As did Executive Life, First Capital and Fidelity Life invested heavily in high-yield, high-risk corporate debt, commonly known as *junk bonds*. Junk bonds comprised over 60 percent of the asset portfolio at Executive Life and about 40 percent at Fidelity Bankers and First Capital (U.S. GAO 1991a, p. 5). Through mortgage lending and direct investment, Mutual Benefit Life of New Jersey was heavily exposed to risky commercial real estate ventures. Finally, many companies in the 1980s, including Executive Life, engaged in complicated reinsurance schemes which had the effect of meeting regulatory requirements for equity capital without actually providing a cushion of safety for the policyholders.

Though smaller in overall scale, the 1991 failures of Executive Life, First Capital Life, Fidelity Bankers Life, and Mutual Benefit Life closely parallel the pattern of failures in the S&L industry in the 1980s. Due to the moral hazard created by the perception of explicit or implicit guarantees on deposits and policies, both the S&L and the life insurance industry had access to vast sums of credit from uncritical lenders. The regulators of both industries tried to limit the consequences of this moral hazard but were unable to prevent aggressive risk taking on a large scale. In both industries, it was thus only a matter of time before a wave of insolvencies would cause the uncritical creditors to look to their real or perceived guarantees for relief.

The failure of these insurers does not by itself establish that the vague system of guarantees was responsible for the failures. Nor, more importantly, does it establish that the vague system of guarantees led to a substantial misallocation of real investment toward risky ventures. It is conceivable that what happened in the 1980s was that consumers directed their savings through new channels—SPDAs and GICs—but to the same ultimate investments—real estate and corporate debt—they would have sought through other means. We are doubtful that this was the case mainly because such a view requires that most policyholders ignored guarantees and were aware of the kinds of junk bond investments that their investments were financing. We, instead, are rather inclined to believe that most were like Donn Sigerson. If most were, then the growth of SPDAs and GICs was accompanied by a shift toward riskier real investments.

### **Extending Guarantees and Regulation**

As Executive Life and other major insurance companies active in the SPDA and GIC market crumbled and finally fell during 1990–91, the public, the press, and Congress began to analyze what had gone wrong and what needed to be done about it. The woes of Donn Sigerson and hundreds of thousands of other policyholders were documented. Blame was attributed to the current mix of fuzzy and inconsistent guarantees, financial innovations, moral hazard, and, especially, an overmatched regulatory system. The unsurprising result was that many proposed solutions

involve more complete guarantees for policyholders combined with more effective regulation of insurers.

Congress and the press documented the many gaps and inconsistencies in the current state-by-state system of life insurance guaranty funds. We have described some of the ways these gaps and inconsistencies affected SPDA and GIC owners and have noted that sometimes the guarantees are paid out slowly. Experts have also raised the concern that a few more failures of large life insurers would exhaust the life insurance guaranty system funding mechanism (IDS 1990, pp. 38–42; U.S. Congress 1991a, pp. 12, 257).

Several proposals address these problems by attempting to create a stronger and more uniform guaranty system. One proposed option is to reduce inconsistencies across the states by having either the federal government or the NAIC set clear minimum standards and provide strong incentives for states to comply.<sup>8</sup> With regard to the inconsistent coverage that can exist even for policyholders within the same state, there have been suggestions that all insurance products, including GICs, be covered in all states (U.S. Congress 1991d, pp. 8, 49, 74). To speed up the payment of guarantees when insurers fail, there are proposals to convert to a trust fund system with prepaid premiums, similar to the FDIC (Spiro and Weber 1992, p. 67). To strengthen the ability of the funds to handle a series of large failures, proposals have been made for cross-state pooling or lending of guaranty fund assessments (U.S. Congress 1991d, p. 5; A. M. Best 1992, p. 134). Finally, discussion of a possible federal regulatory role (U.S. Congress 1991c, p. 1; 1991d, p. 1; Wildstrom 1992, p. 49) has raised the issue of federal backing, either through a claim on federal tax dollars (IDS 1990, p. 48) or, in the case of liquidity crises similar to bank runs, through access to the Federal Reserve System's discount window (U.S. Congress 1991d, p. 1).

We are not the only ones to assert that strengthening the life insurance guaranty system in these ways would exacerbate the moral hazard problem that leads insurers towards risky debt leverage and risky investments. So not surprisingly, proposals for stronger guarantees are often coupled with proposals for stronger regulation. Again, proposals have been made that the federal government or the NAIC set minimum standards for the states (IDS 1990, pp. 46–47; U.S. Congress 1991a, pp. 106–8; 1991d, p. 5). These might mandate uniform standards and policies for the following: the staffing and qualification levels of state insurance regulatory departments; the frequency of insurance company examinations and the type of information to be collected in the exams; the amounts of the various types of assets that insurers would be allowed to hold; the guidelines used to rate the riskiness of those assets; and the approval of reinsurance arrangements. Some proposals address the issue of whether state regulators were too slow to act when life insurers got in financial trouble. One suggested reform under these proposals would be uniform standards that would mandate early regulatory intervention to preserve the assets of troubled insurers before they become insolvent (U.S. Congress 1991a, p. 194; 1991c, pp. 9–50; 1991d, p. 1). To directly reduce moral hazard, there are proposals that either the amount of surplus capital that a life insurer is required to hold or the amount of the premium it would pay into a pre-funded guaranty fund should be directly linked to the riskiness of its investment portfolio.<sup>9</sup> The federal government's role could involve

aiding the states in the regulation of insurance holding companies or foreign reinsurance companies (U.S. Congress 1991c, p. 13), and there has also been discussion of the federal government simply taking over insurance company regulation from the states (Wildstrom 1992, p. 49).

The combination of more dependable guarantees and tougher regulation is logically balanced. It recognizes that more generous guarantees increase moral hazard but attempts to limit the potentially negative consequences of increased moral hazard by means of tougher regulation of insurers. In that sense, it avoids the cart before the horse policy that was applied to the S&L industry in the 1980s, when increased deposit insurance coverage was combined with looser regulation (Kareken 1983).

### **Defects of Extending Guarantees and Regulation**

Despite the logic of combining tighter regulation with any increase in SPDA or GIC guarantees, the results could easily be disappointing. On the one hand, regulators might be able to limit SPDA and GIC interest rates as well as to channel the premiums into investments that always yielded enough to repay policyholders. The result in this case would probably be nearly useless products, ones that merely duplicated the kind of investment options consumers already have. On the other hand, even enhanced powers might not be enough to help regulators keep up with the financial innovations that insurers would create in their attempts to circumvent regulation. If insurers stayed one innovation ahead of regulators, then moral hazard problems would reappear and again lead to resource misallocation and financial crises.

How might regulators succeed in virtually eliminating the moral hazard associated with guaranteed SPDAs and GICs? One way would be to require that SPDA and GIC premiums be invested very conservatively and that their interest rates be correspondingly low. Under this alternative, these investments would not be particularly attractive or useful to savers, who already can get safe low yields from government bonds. Another way would be to let the insurance company offer higher interest rates on SPDAs and GICs and invest the premiums more aggressively but then to require the company to maintain a large reserve of conservatively invested capital. (According to some suggestions, the amount of this capital reserve would depend on just how aggressively the premiums were invested.) Under this alternative, the insurance company would probably not be an attractive investment for shareholders. Either way, eliminating moral hazard leads to an unattractive product that would probably disappear from the marketplace (except to the extent that it might arbitrarily be granted tax advantages over equally good or inherently superior substitutes).

Note that effective regulation of SPDAs and GICs, in the process of reducing them to a possibly useless product, would also impose costs. As recent congressional testimony clearly implies, effective regulation would require considerable resources for boosting the number and average skill level of insurance examiners. Furthermore, as has been recognized by some regulators (Lennon 1991; U.S. Congress 1991a, p. 156; 1991c, p. 225), tough regulation tends not only to prevent abuse but also to stifle legitimate progress and innovation.

That is not to say that ineffective regulation would be an improvement, given the moral hazard inherent in in-

creased guarantees. And yet, ineffective regulation is a real possibility. Although there are many talented and hardworking insurance examiners, the reality is that even in well-funded insurance departments like New York's the average levels of salary and financial expertise tend to lag behind those of the companies they are regulating. Furthermore, the politics of the regulatory process often subverts the efforts of even highly competent regulators. (See the box titled "The Politics of Regulating Moral Hazard.") Thus, even if enhanced regulation initially converted SPDAs and GICs into plain vanilla products, the regulators would probably lose control eventually and a reincarnated Executive Life would arise.

The history of the Baldwin-United (BU) affair and its aftermath lends plausibility to this scenario. The complex of insurance companies under the BU umbrella grew rapidly in the late 1970s and early 1980s through the sale of high-yield SPDAs. By 1983, however, BU's strategy of financing short-term investments with long-term fixed-rate liabilities was undone by a decline in interest rates. The company was broke and unable to meet its billions of dollars of obligations to its thousands of SPDA policyholders nationwide. Its collapse stimulated congressional hearings, an ad hoc bailout, and a life insurance industry reform movement reminiscent of the current movement. Guarantees were expanded, and the NAIC drafted a series of model laws to plug the regulatory gaps that had allowed BU to slip through (NAIC 1985). Five years later, in 1988, an insurance industry expert (Fitzgerald 1988, p. 305) concluded his analysis of the BU affair by stating that "perhaps the lessons learned from this case will guide regulators in the future in preventing an insurer insolvency and protecting the public." By that time, Executive Life was already far along its new and different route to insolvency, and despite some good efforts by the New York Insurance Department, regulators put up little effective resistance.

## Conclusion

Concern is widely expressed that the insurance industry today is embarked on the same risky course that 10 or more years ago led much of the S&L industry to a massive financial collapse (U.S. Congress 1991a, p. 116). Because of the moral hazard created by guaranteeing investments in SPDAs and GICs, we share this concern and see clear parallels between the life insurance industry today and the S&L industry of the late 1970s and early 1980s.

In the late 1970s, the S&L industry still appeared to most analysts to be financially strong, but the seeds of its future problems were being sown by policy shifts toward higher deposit insurance guarantees and looser regulation. Today, some analysts claim that only a few life insurance companies are in trouble and that industrywide data show that on average the life insurance industry remains well capitalized and conservatively managed (U.S. Congress 1991a, pp. 2-7, 34-66, 86-99). However, guarantees on life insurance products have created moral hazard, and current proposals to increase those guarantees would only increase moral hazard. SPDAs and GICs, like the jumbo certificates of deposit of the 1980s, are potent vehicles for exploiting this moral hazard. So policymakers should not take too much comfort from evidence that the financial condition of the overall life insurance industry may still be healthy. Instead, they should adopt strategies for reducing moral hazard before aggressive competitors take the in-

dustry further down the path of Executive Life, First Capital, Fidelity Bankers Life, and Mutual Benefit Life.

One such strategy is increased guarantees accompanied by tougher regulation. However, an obvious alternative exists which seems not to suffer from the problems of increased guarantees and regulation noted above. State and federal governments could make it clear that they neither insure SPDAs, GICs, and similar investment-oriented products of life insurance companies nor mandate guarantees funded (nominally, at least) by the life insurance industry itself. Governments would still enforce criminal statutes against fraud and embezzlement, but they would not encourage policyholders to think that some third party would bail them out if a risky financial strategy caused their insurer to go broke.

One likely effect of this policy change would be that the insurance industry would discover that SPDAs and GICs without guarantees simply aren't viable. In this case, they would just disappear. Investment in some of the assets that SPDAs and GICs funded, such as junk bonds and speculative commercial real estate, might also decline. If so, this would just reflect the end of the subsidy to these investments—and the resulting misallocation of society's resources—that was created by the existence of explicit and implicit guarantees on SPDAs and GICs. Another likely effect is the increased use of *variable* policies. These are mutual fund-type policies for which issues of safety and guarantees do not arise because such policies are backed by earmarked assets and not by the general assets of the issuing company.

Would eliminating guarantees on SPDAs and GICs really work? In fact, we do see some problems in eliminating guarantees on SPDAs and GICs while guarantees on other life insurance products, such as whole-life policies, are maintained. The existence of guarantees on these more traditional products would mean that insurance companies would still have to be examined and regulated under something similar to the existing supervisory system. As we have argued above, the mere existence of government regulation of life insurers can easily lead consumers to the belief that the government is certifying the financial health of the industry and that consumers can thus invest in its products—even its nominally unguaranteed products—without worrying about their safety.

The possibility that guaranteeing some life insurance products would imply guarantees of all insurance products, including SPDAs and GICs, raises another question that some readers may already have asked themselves: Doesn't the logic that argues against guarantees for SPDAs and GICs apply to all life insurance products, including whole-life and term insurance? If guarantees turn whole-life policyholders into uncritical creditors, couldn't a company offer low whole-life premiums, grab a large share of the market, and then invest its premiums in risky assets? From a policy standpoint, wouldn't this manifestation of moral hazard be as undesirable as a company that exploits guarantees on SPDAs or GICs? As far as we can see, the short answer to these questions is yes.

Nonetheless, we feel justified in singling out SPDAs and GICs for immediate attention. These products have few, if any, life insurance characteristics, so we question why they should come under the umbrella of a guaranty system originally designed to protect life insurance customers. SPDAs and GICs are primarily ordinary investments sold on the basis of their high yields, not just by

insurance agents but also by brokerage houses. As such, they can attract enormous amounts of savings very quickly. This fast growth alone makes them a more potent vehicle than traditional life insurance policies for exploiting moral hazard, and as such they deserve the prompt and serious attention of policymakers.

## Appendix Are You Covered?

This appendix provides a state-by-state breakdown of the guaranty fund coverage referred to in the preceding paper. Coverage for unallocated annuities in general, and GICs in particular, ranges from nothing to \$5 million in some states. Two states, Indiana and Minnesota, have been ordered by the courts to cover GICs. New Jersey is unique in that its limits of coverage apply to each contract a pension fund holds. With the exception of Maryland, which has unlimited coverage, all other states that cover GICs simply have a total per pension fund limit rather than a per contract limit.

<sup>1</sup>First Capital Life, Fidelity Bankers Life, and Mutual Benefit Life of New Jersey were the other large insurers to fail.

<sup>2</sup>The rapid growth of Executive Life, for example, would have been very unlikely if the company had been limited to selling whole-life policies by the painstaking route of building up a field network of insurance agents who in turn would have had to convince individuals or companies on a one-by-one basis to switch their whole-life policies to Executive Life.

<sup>3</sup>On these issues, see Senator Bryan's summary (U.S. Congress 1991a, pp. 113–16), as well as the testimony of John Garamendi (p. 144), Martin D. Weiss (p. 161), Benjamin J. Stein (p. 290). See also the testimony of Richard L. Fogel of the GAO (U.S. Congress 1991c, pp. 11–15).

<sup>4</sup>The laws governing transfers of books of business could easily be reformed. When an insurer wishes to withdraw from part of the insurance market, it must find another insurer to take over administration of its existing policies in that market segment. However, the administration of a policy can be separated from final liability for payment. Thus, any insurer that transfers administration of a book of business to a second insurer should be legally required to retain residual financial liability. That is, it must honor the claims of the holders of transferred policies in the event that the second insurer subsequently becomes insolvent.

<sup>5</sup>Puerto Rico also mandates a fund. At the time we write, the most populous U.S. jurisdiction without a life insurance guaranty fund is the District of Columbia. These funds also usually guarantee health insurance policies, since many life insurers also offer health care coverage.

<sup>6</sup>See U.S. Congress 1991a, p. 256, and 1991c, pp. 76–77. See also George K. Bernstein's (U.S. Congress 1991d, p. 10) prepared testimony on the subject of whether state guaranty funds encourage regulators to be lax.

<sup>7</sup>In our discussion of moral hazard we have used examples of hypothetical shareholder-owned insurers. In such stock companies, as they are sometimes known, the shareholders are generally viewed as the *residual claimants* on the firm: they get whatever is left over after all other claims (to workers and creditors, for example) are met. Many life insurers are instead organized as mutual, or policyholder-owned, companies. It is less clear in this case whether the residual claimants are the policyholders or the company's management. Nonetheless, moral hazard would still arise if SPDAs, for example, were guaranteed. The policyholders could buy SPDAs with normal, fully guaranteed interest rates, and then the firm could make risky investments. The high expected rates of return associated with this strategy would be split, somehow, between the policyholders and the management.

<sup>8</sup>See IDS 1990, p. 47; U.S. Congress 1991b, p. 6; 1991c, pp. 156, 164–66; 1991d, pp. 5, 48–49, 74; and A. M. Best 1992, p. 134.

<sup>9</sup>See Lennon 1991, p. 101, and the testimony in U.S. Congress 1991a, pp. 233, 254; 1991d, pp. 7–9. See also Wise 1991, p. 235.

## References

- A. M. Best Company. 1992. Best's insolvency study, life/health insurers, 1976–1991: Executive summary and recommendations. *Best's Review* (June): 18–24, 130–34.
- American Council of Life Insurance. 1991. *1991 life insurance fact book update*. Washington, D.C.: American Council of Life Insurance.
- Fitzgerald, John F. 1988. Regulatory lessons learned from Baldwin-United Corporation. *Journal of Insurance Regulation* 6 (March): 285–309.
- IDS Financial Services Inc. 1990. Will the U.S. life insurance industry keep its promises? Solvency issues in the 1990s. Position paper, March. Minneapolis, Minn.: IDS Financial Services Inc.
- Ippolito, Richard A. 1992. The proliferation of defined contribution plans. Manuscript. Pension Benefit Guaranty Corporation. Washington, D.C.
- Kareken, John H. 1983. Deposit insurance reform; or, deregulation is the cart, not the horse. *Federal Reserve Bank of Minneapolis Quarterly Review* 7 (Spring): 1–9. Reprinted 1990. *Federal Reserve Bank of Minneapolis Quarterly Review* 14 (Winter): 3–11.
- Kerr, Peter. 1992. Insurers faulted on transfer of policies within industry. *New York Times* (April 22): A1.
- Lennon, Terence. 1991. Discussion of paper: The structure, conduct, and regulation of the life insurance industry, by Kenneth M. Wright. In *The financial condition and regulation of insurance companies: Proceedings of a conference*, ed. Richard W. Kopcke and Richard E. Randall, pp. 97–103. Conference Series 35. Boston: Federal Reserve Bank of Boston.
- National Association of Insurance Commissioners (NAIC). 1985. The Baldwin-United Corporation bankruptcy: Its significance for insurance regulation. Kansas City, Mo.: National Association of Insurance Commissioners.
- National Organization of Life and Health Insurance Guaranty Associations (NOLHGA). 1992. Report on state life and health insurance guaranty laws and limits of liability. Enclosures from an August 13 letter to the author.
- Schulte, Gary. 1991. *The fall of First Executive: The house that Fred Carr built*. New York: HarperBusiness.
- Sherrid, Pamela. 1992. A troubling insurance policy: Your insurer may have unloaded you when you weren't looking. *U.S. News & World Report* (August 10): 61–63.
- Spiro, Leah Nathans, and Weber, Joseph. 1992. Finance/insurance: This rescue is raising more questions than cheers: Can states really handle insurance failures like Mutual Benefit's? *Business Week* (July 27): 66–67.
- U.S. Congress. 1991a. Senate. Committee on Commerce, Science, and Transportation. Hearings: Insurance company solvency. 102nd Cong., 1st sess., February 27 and May 7, 9, and 23. S. Hrg. 102-127.
- \_\_\_\_\_. 1991b. Senate. Committee on the Judiciary, Subcommittee on Antitrust, Monopolies and Business Rights. Hearing: How insurance laws are made: The NAIC and state adoption of NAIC model laws. 102nd Cong., 1st sess., April 9. Serial J-102-12.
- \_\_\_\_\_. 1991c. House. Committee on Energy and Commerce, Subcommittee on Oversight and Investigations. Hearing: Insurance company regulation. 102nd Cong., 1st sess., May 22. Serial 102-57.
- \_\_\_\_\_. 1991d. House. Committee on Banking, Finance and Urban Affairs, Subcommittee on Policy Research and Insurance. Hearing: Resolution of troubled insurance companies and the role of state guaranty associations. 102nd Cong., 1st sess., September 26. Serial 102-71.
- \_\_\_\_\_. 1992. Senate. Committee on Banking, Housing, and Urban Affairs. Hearing: Causes and implications of insurance company failures. 102nd Cong., 2nd sess., February 18. S. Hrg. 102-568.
- U.S. General Accounting Office (GAO). 1992a. Insurance regulation: The failures of four large life insurers. Testimony before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate. GAO/T-GGD-92-13, Washington, D.C.: U.S. General Accounting Office.
- \_\_\_\_\_. 1992b. Insurer failures: Life/health insurer insolvencies and limitations of state guaranty funds. Report to the Chairman, Subcommittee on Antitrust, Monopolies and Business Rights, Committee on the Judiciary, U.S. Senate. GAO/GGD-92-44, Washington, D.C.: U.S. General Accounting Office.
- Wildstrom, Stephen H., ed. 1992. Washington outlook: Capital wrapup: Insurance. *Business Week* (February 17): 49.
- Wise, Warren R. 1991. Discussion of paper, Public policy and life insurance, by Gerard M. Brannon. In *The financial condition and regulation of insurance companies: Proceedings of a conference*, ed. Richard W. Kopcke and Richard E. Randall, pp. 231–38. Conference Series 35. Boston: Federal Reserve Bank of Boston.

## Are SPDAs Insurance?

Single premium deferred annuities (SPDAs) can have a minor life insurance component and generally include an option to buy an annuity at the maturity date. The life insurance component consists of a small death benefit payable in the early years of the contract. The annuity option simply states that instead of receiving cash in a lump sum on the maturity of the contract, the policyholder can instead receive fixed monthly payments until death. Of course, the policyholder could always take the lump sum payment and use it to buy an annuity without any help from the company that issued the SPDA. In what sense, then, is the option insurance?

To answer this question, let's contrast options to buy life insurance with options to buy annuities. An option to buy life insurance on terms fixed in advance, without being subject to a medical exam when the option is exercised, is insurance against an individual experiencing an *increased* risk of death. Is an option to buy an annuity, without being subject to a medical exam, insurance against an individual experiencing a *decreased* risk of death? It would be, if it were standard practice to subject people who want to buy annuities to medical exams and to turn them down if they were too healthy. Since that seems not to be the practice, the annuity option in SPDAs is not insurance against the individual experiencing a decreased risk of death (that is, an increased risk of living long).

So what does this option provide? It's only insurance against unfavorable changes in the terms at which people in general can buy annuities—changes which would come about primarily because of unanticipated declines in long-term interest rates or, perhaps less importantly, because of unanticipated increases in average longevity. There may also be tax advantages to being paid in the form of an annuity as opposed to being paid in cash. Neither of these aspects of the annuity option in SPDAs provides traditional annuity insurance—namely, insurance for the individual against the risk of greater than average longevity. That is why we claim that an SPDA is much more like a typical financial instrument than it is like an insurance policy.

## The Politics of Regulating Moral Hazard

The moral hazard that arises from guarantees on the investment returns offered by life insurers and other intermediaries shifts the responsibility for evaluating investments from investors towards regulators. If regulators take this responsibility seriously, they are likely to come into conflict with managers and shareholders of those intermediaries that pursue risky investments. These conflicts sometimes spill over into the political arena. For example, federal regulators who sought to restrain the risky investment strategies of aggressive S&Ls sometimes found that politicians sympathetic to the S&L industry would discourage or even block their regulatory efforts.

Insurance regulators have had similar problems. At the state level, regulators' efforts to limit the junk bond investments of Executive Life and other life insurance companies became politicized, in part because the regulators did not have clear authority to impose junk bond limits and therefore sought such authority from state legislatures. The following accounts from New York and California are examples of the sort of powerful political opposition regulators encountered.

### New York

Terence Lennon (1991, p. 100), Assistant Deputy Superintendent and Chief Examiner for the New York State Insurance Department, described political reaction to the Department's efforts to limit life insurers' junk bond holdings this way:

The early bird does not always get the worm. The first year that ELNY [Executive Life of New York] was up to about 19 percent in junk bonds they were called in and told that junk bonds were a new investment vehicle and 19 percent concentration seemed too high. . . . The next year ELNY increased their junk bond concentration to about 33 percent. We called ELNY again with concern over the high concentration and were told not to worry. ELNY said they knew how to manage their finances and were probably not going to acquire much more. The following year their concentration reached the high 40s and we decided not to call them in, having already heard their presentation.

At that point we began drafting legislation to limit life insurance companies' concentration in junk bonds. It was 1986, in the heyday of junk bonds. Drexel Burnham had a very powerful lobby and the legislators heard something entirely different from them than they heard from us. When it was quietly suggested that we do it as a regulation, we proposed one. Then we were called to a hearing by the Legislature and excoriated for proposing the limitation as a regulation. By the time the regulation was promulgated in 1987, ELNY had increased its concentration in junk bonds to about 70 or 75 percent of assets.

### California

In his 1991 testimony to Congress, Tom Sutton, Chairman and CEO of Pacific Mutual Life Insurance and spokesperson for the American Council of Life Insurance (U.S. Congress 1991a, p. 259), posed the question, "Why was Executive Life allowed to take the actions which led to its demise?" The following experience was part of his answer:

Executive Life, together with others in the Milken daisy chain, had substantial lobbying power in Sacramento. For example, last year I testified in favor of a legislative limit on below-investment grade securities [junk bonds] before the California assembly insurance and finance committee. Intense lobbying by those opposed to such a limit led to only 4 affirmative votes out of a committee of more than 20. Could we have done more at the time? Perhaps, but the combination of financial euphoria and political clout would have made success extremely difficult.

## Pension Plans and the Rapid Growth of GICs

One proximate cause of the rapid growth of GICs was the rapid growth of defined-contribution pension plans. In these plans, individuals fund their own retirement. They make contributions during their working life, and these are invested in their name. Upon retirement, individuals draw on the results of their own investments, whatever they may be. This is in contrast to the traditional defined-benefit pension plan in which a company promises fixed future retirement benefits that are not explicitly linked to the investment results on intervening contributions to the pension fund.

GICs were tailor-made for defined-contribution pension plans. By guaranteeing a prespecified rate of return on all funds invested during a prespecified interval, they allowed pension fund managers to offer one fixed rate of interest on

all employee contributions received during the prespecified interval. Thus the pension manager could, for example, give employees simple statements like “the interest rate on the fixed income option in your 401(k) plan this year will be 9 percent.” Such statements were also attractive to the employees. Within a short time, GICs accounted for between a quarter and a third of all funds in employer-sponsored defined-contribution pension plans (U.S. Congress 1992, p. 46).

Given that GICs are closely linked to defined-contribution pension plans, a deeper analysis of the growth of GICs must also consider why defined-contribution pension plans expanded rapidly in the 1980s. Prominent among the factors cited for their expansion are delayed effects of the Employee Retirement Income and Securities Act (ERISA) of 1974 and the laws and regulations that brought 401(k) plans into existence in 1981 (Ippolito 1992).

### Basic Provisions of State Guaranty Funds for SPDAs and GICs

Jurisdiction	Scope of Coverage	Maximum Liability of Guaranty Funds		Jurisdiction	Scope of Coverage	Maximum Liability of Guaranty Funds	
		SPDAs	GICs			SPDAs	GICs
NAIC model law	Residents only	\$100,000	\$5,000,000	Nebraska	Residents only	\$100,000	0*
Alabama	All policyholders	300,000	0*	Nevada	Residents only	100,000	0
Alaska	Residents only	100,000	5,000,000	New Hampshire	All policyholders	300,000	0*
Arizona	Residents only	100,000	0*	New Jersey	Residents only	500,000	\$2,000,000
Arkansas	Residents only	100,000	1,000,000	New Mexico	All policyholders	300,000	0*
California	Residents only	100,000	0	New York	Residents only	500,000	1,000,000
Colorado	Residents only	100,000	0	North Carolina	Residents only	300,000	not specified
Connecticut	Residents only	100,000	5,000,000	North Dakota	Residents only	100,000	5,000,000
Delaware	Residents only	100,000	1,000,000	Ohio	Residents only	100,000	1,000,000
Florida	Residents only	300,000	0	Oklahoma	Residents only	300,000	0
Georgia	Residents only	300,000	5,000,000	Oregon	Residents only	100,000	0
Hawaii	Residents only	100,000	0	Pennsylvania	All policyholders	300,000	0*
Idaho	Residents only	300,000	0	Rhode Island	Residents only	100,000	0*
Illinois	Residents only	100,000	5,000,000	South Carolina	All policyholders	300,000	0*
Indiana	Residents only	300,000	—**	South Dakota	Residents only	100,000	0
Iowa	Residents only	300,000	1,000,000	Tennessee	Residents only	100,000	0†
Kansas	Residents only	100,000	0	Texas	Residents only	100,000	5,000,000
Kentucky	Residents only	100,000	0	Utah	Residents only	100,000	5,000,000
Louisiana	Residents only	100,000	0†	Vermont	All policyholders	300,000	0*
Maine	Residents only	300,000	0*	Virginia	Residents only	300,000	0‡
Maryland	Residents only	no limit	no limit*	Washington	Residents only	500,000	5,000,000
Massachusetts	Residents only	100,000	0	West Virginia	Residents only	300,000	0*
Michigan	Residents only	100,000	5,000,000	Wisconsin	Residents only	300,000	0*
Minnesota	Residents only	300,000	—**	Wyoming	Residents only	100,000	0
Mississippi	Residents only	100,000	5,000,000	District of Columbia	None	0	0
Missouri	Residents only	100,000	0	Puerto Rico	Residents only	300,000	0
Montana	Residents only	300,000	0*				

\*Guaranty fund law neither includes nor excludes GICs.

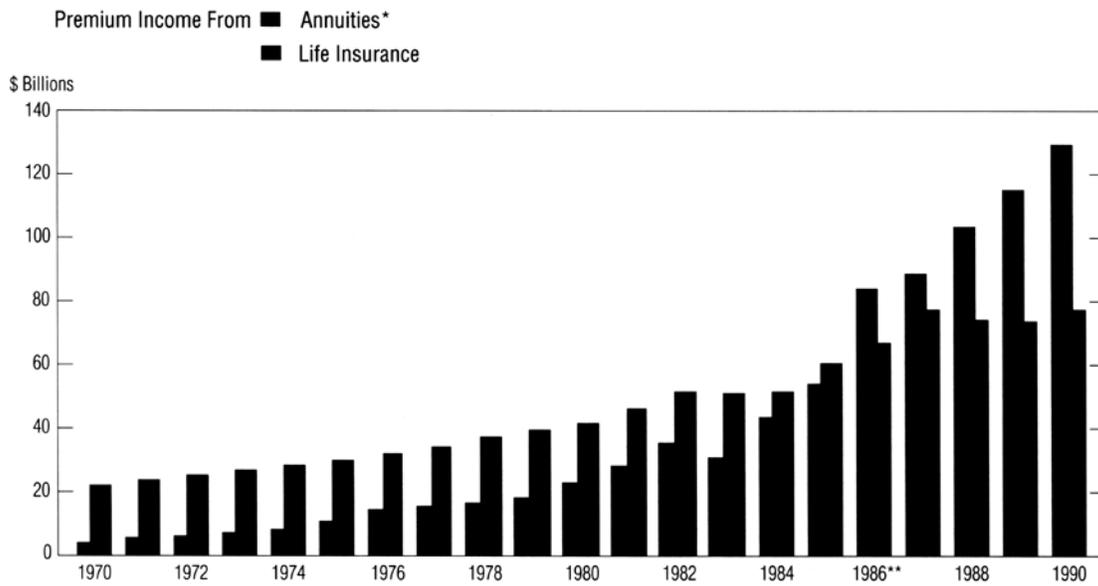
\*\*Guaranty fund coverage was ordered by court decision.

†According to the NAIC, GICs are covered only if they qualify under provisions of the Employee Retirement and Income Security Act (ERISA).

‡According to the NAIC, GICs are not covered except for amounts guaranteed to individual insurers.

Source: U.S. GAO 1992, pp. 42–45, with updates from NOLGHA 1992

The Growing Dominance of Annuities in Life Insurers' Premium Income  
Annually, 1970–90



\*This category includes not only traditional annuities but also investment-oriented products like SPDAs and GICs.

\*\*The 1986 jump in annuity premiums partly reflects improved data collection on GICs, which some companies had not been previously reporting.

Source: American Council of Life Insurance 1991, p. 34