

1986 VALUATION ACTUARY  
SYMPOSIUM PROCEEDINGS

SESSION 5

THE VALUATION ACTUARY AND INSOLVENCIES

(JOINT SESSION)

MR. HERBERT S. WOLF: The description of the topic to be covered in this session, as outlined by the committee planning the symposium, reads as follows: "The speakers in this session will examine real life case studies of recent insolvencies to test whether the concept of the Valuation Actuary would have prevented insolvencies or reduced the losses resulting from insolvencies. The speakers will make some observations relating their finding to the present state of the valuation actuary concepts."

A panel was formed in order to study some of the recent insolvencies and to make a report to this symposium. This panel gathered the data presented here. Rick Fisher will discuss the scope of the investigation. Lew Nathan will summarize the findings, and Bud Friedstat will draw some conclusions.

It is important that you have an understanding of the environment in which we gathered the very limited factual information we are reporting to you. An insolvency is clearly a disruption in the normal working relationships of an insurance company. A receiver, or someone with a similar title, is appointed; this person, in one way or another, has complete power over the future running and disposition of the insurance company. It is the job of the receiver to protect the interests of the policyholders and claimants under the in-force policies to the exclusion of the management of the company, the owners of the company, and creditors other than claimants.

The event of the appointment of the receiver stops all normal financial reporting functions of the insurance company. The emphasis is on obtaining a reasonable balance sheet that will determine the shortfall. The in-force business is generally divided into the business that, by the terms of the underlying policies, can be canceled or nonrenewed, and the business that has renewal guarantees. Efforts are made to find an insurance company willing and able to assume the latter in-force business. To this purpose, bids are solicited. These bids may have the net effect of requiring a reinsurance premium less than or greater than assets available, dependent on the value assigned the business to be taken over. The only accounting that is made subsequent to the inception of the receivership is any accounting required by the supervising court.

You can appreciate the fact that once the regulatory authority asserts that an insolvency indeed exists, that assertion alone virtually guarantees a self-fulfilling chain of events that is virtually certain to result in a liquidation. Thus, shareholders will often seek to assess blame and bring suit to recover losses against actuaries; auditors; and, in some cases, the regulatory authority.

Those companies that appear to have sufficient equity value to cover a shortfall are placed under supervision without the appointment of a receiver. In many instances, the public is not aware of the difficulties. This is actually an absolute necessity to save the company in a marginal equity value situation.

In this environment, it is difficult to establish the financial facts that led to the insolvency. This is the environment in which we had to work. For this reason, our findings are largely anecdotal and not financial.

It is important for the valuation actuary, if he is to be effective, to understand the forces and factors leading to insolvency. For this reason, our report is important. In order to obtain some of the information and background going into the reports being made to you, pledges of confidentiality had to be given. For this reason, an effort is made to not identify any company, and no total picture of any one company is presented. In some instances, suits are going through the courts relating to the insolvency. In relation to some of these insolvencies, there have been criminal prosecutions.

You will hear that the insolvencies that we examined are by no means all the insolvencies that occurred during the period studied. We studied those that had no equity or insufficient equity to cover the shortfall. There are a greater number that had equity, and the insolvency resulted in the takeover of the business in force or the company itself by other insurance companies. It may even be that the latter category is a more fruitful area of study to determine the role of the valuation actuary.

You will hear mentioned the existence of surplus relief reinsurance agreements present prior to the insolvency. These were largely no-risk reinsurances. The effect of these reinsurances is to transfer the equity in the underlying business from the ceding company to the reinsurer. No assets are transferred at inception of the agreement or subsequently, other than the small fee paid to the reinsurer. The only source of cash to meet the obligations under the presumably reinsured policy is the cash flow of the ceding company. In the absence of the assumption of any risk by the reinsurer, these agreements are designed for the ceding company to realize and capitalize, as part of its surplus, the underlying

equity in the in-force business without the transference of any risk. For some of you, this may be difficult to visualize. The simplest example is in relation to a block of accident and health business. Individual accident and health business will often have a first-year commission of 50 to 60 percent. The writing company is required to maintain unearned premium reserves equal to 100 percent of the premiums paid. Thus, with reduced first-year claim ratios, the company has a large equity in the unearned premium reserve. The reinsurance agreement, in this case, will provide a ceding commission approximately equal to the commission paid to the agent. The premium, in fact, is not paid to the reinsurance company, but carried as a liability to the reinsurance company, and the unearned ceding commission is carried as a receivable. The reinsurance agreement will limit the liability of the reinsurance company to the net amount due the reinsurer.

Also remember that the insolvencies studied deal with the past. None of these companies, because of the timing, had interest-sensitive life insurance in force. A very small number of interest-sensitive annuities were involved. The dominating forces influencing the period studied are the prior high interest rates and the high medical claim costs.

Transactions between affiliated parties played a role in some of these insolvencies. Affiliation can occur through common ownership of more than one insurance company or through one insurance company owning one or more other insurance companies. For the purpose of statutory accounting, each insurance company is looked at separately. For financial reporting purposes to shareholders, the financial statements of these insurance companies would be

consolidated. Consolidation in these situations should be required in one form or another. The valuation actuary should make reference to transactions with affiliates and form an opinion of how these transactions influence the company for which the actuary is responsible.

I believe it is important for the future education of the valuation actuary, and to aid in the evolution of the techniques to be used by the valuation actuary, that future insolvencies be studied and reported to the profession. The standards established for the valuation actuary must be considered fluid and subject to change. In order to serve the profession and to make these changes on an informed and timely basis, it will be necessary to have a continuous review system. To this end, in any insolvency subject to regulatory action, an automatic review process of the work of the valuation actuary should be instituted. This process should not be a disciplinary process, but purely a professional review process. The insolvencies studied should include both the types we studied and the types resulting in a takeover. To accomplish this, I believe one of the actuarial organizations should form a committee whose charge is to make such studies and to report its findings.

MR. RICHARD F. FISHER: I will discuss the scope of the research conducted by our panel. First, we were faced with a determination of which companies to include in the study. We decided to look at insolvencies that occurred in the years 1983, 1984 and 1985. We decided to study only those companies for which assessments were voted by state life and health guarantee associations. This was to avoid any subjective election process, because there are many companies in various stages of insolvency, as I will explain shortly. Second, we eliminated

casualty insurance companies. These were companies that were in the life and health guarantee association because of their health insurance business, but they were primarily casualty insurance companies. The result was a study of 16 companies.

We did not study companies with difficulties in states where there is no guarantee fund. We did not study companies that were statutorily insolvent but economically viable and could, through merger or reorganization, solve their problems without an assessment's resulting. In the state of Illinois alone we know of three companies that were merged or reorganized and thus avoided insolvency. And we did not study companies that were under supervision or protection by the regulators but had not been remanded to the guarantee association for action or for whom no assessment had yet been taken. In other words, we were looking at the tip of an iceberg. It is interesting to note the various stages a company with difficulty can go through. Our study was of companies that had serious enough difficulties that they had gone through all stages. In other words, we studied the most severe cases.

To obtain information, our panel contacted people at the state guarantee fund associations and state insurance departments. We also tried to contact officers of the insolvent companies and consulting actuaries who were involved. We gathered data from Best's Reports and read articles in the trade publications about the insolvencies.

Some of the information was obtained on the promise that the companies to which the information related would not be specifically identified, and the

source of the information would not be identified. These pledges of confidentiality were necessary in order to obtain the limited amount of information we received. Since we could not identify companies, it was not possible to provide a cohesive picture of a given company. This placed a great deal of restraint on the report.

The information we obtained was, for the most part, anecdotal and not quantitative. It was mostly information obtained from telephone interviews.

One interesting problem is that once a company is declared insolvent, there are no more financial statements prepared. The amount of data is scarce, as there is no final accounting made. A state does not prepare a final statement to file with itself. If it did prepare a statement, stock company shareholders might sue the regulator, alleging that there was no proper cause for action leading to the takeover. This is why our study had to be anecdotal.

Nonetheless, the anecdotes may provide more insight than any data would. Some of the more interesting negative comments made were as follows: "Chief executive officers are usually not financially oriented"; "Many would not believe a valuation actuary's report"; "Even if an insurance department knew there were problems, things would drag on, and facts would be concealed"; and, finally, "You can't legislate morality."

Our panel collected the information, met several times and discussed the similarities of the various companies, identified factors and nonfactors leading to insolvency, and tabulated the results for presentation. Lew Nathan will report on the results that we obtained.

Before he does, I will briefly provide a profile of a typical company. It was very interesting to me how these companies might appear to be very healthy on the outside a short time before insolvency. For example, a typical company may have been an old established company with a plush home office, a very high surplus ratio (although, for small companies, this is simply a result of minimum requirements for statutory surplus and capital), very rapid sales growth and an actuarial signature on its last annual statement. All would appear very good on the surface.

However, once you looked beneath the surface in a typical company that runs into difficulties, you might find the following: a short-term management team, even though the company is old; assets of questionable value; loans taken with the assets as collateral (this is a way of liquefying an asset without realizing a loss); the existence of no-risk surplus relief reinsurance contracts producing the high surplus ratio; an underpriced product that is driving the high sales growth; a company that is living on its cash flow, that is, one that is not actuarially aligned; and bad data and records that permit the problems to go unnoticed. Thus, all is not as it appears on the surface. Also, the demise can be very rapid.

MR. LEW H. NATHAN: The following is a discussion of the observations that this group made about the 16 insolvent insurance companies. Although we are all interested in the details behind each insolvency, the information that follows is summarized, since it is anecdotal in nature. There can be many opinions as to why an insolvency occurred or how it may have been prevented. The data presented here are somewhat subjective in nature and are based on discussions or, at times, inferences with respect to each company. The most important part



of this discussion will be the conclusions that can be drawn with respect to the valuation actuary concept. These will be presented by Bud Friedstat.

Before we discuss specific attributes, let's discuss several summary statistics associated with these insurance companies. As Rick Fisher mentioned, these companies looked healthy on the outside, but underneath the surface all was not necessarily well. Several examples follow to illustrate this point.

The annual premium volume for these companies ranged from under \$1 million to \$38 million. The company that reported \$38 million in its last full calendar year prior to insolvency sold major medical coverage with a \$1 million limit in the small group multiple employer trust (MET) market. Premiums were thought to be inadequate, and this company experienced rapid premium growth, from \$12 million to \$35 million over year. This growth resulted in processing backlogs and created difficulties in monitoring experience and establishing reserves. The positive cash flow was used to cover a higher-than-appropriate expense level. Reserves were initially set as a percentage of paid claims, which was not appropriate for this rapidly growing book. Auditors had to rely on statements regarding the unprocessed items in order to determine if the appropriate liabilities had been established. By March of the next year, a reserve deficiency was discovered, and shortly thereafter, the company was declared insolvent.

The amount of admitted assets for these companies varied from under \$1 million to a high of \$30 million. The company that had \$30 million of admitted assets was selling a single premium deferred annuity product at first-year guaranteed interest rates of 11-3/4 to 14 percent. The premium volume for these individual

annuities grew rapidly, and reserves more than doubled over the last calendar year prior to insolvency. One of the reasons cited for this insolvency was that the guaranteed interest rates were set at higher-than-market levels and in excess of the rates earned by the company's investments. One of these investments was a \$1.4 million nonnegotiable note in the parent company that was in default in the same year this company was declared insolvent. The parent company had few assets other than the capitalized value of its two affiliate insurance companies, both of which were insolvent.

The surplus ratio, which is the ratio of capital and surplus funds to admitted assets, varied for these companies from a negative position of 48 percent to an unusually high positive position of 84 percent. The company with the 84 percent ratio was authorized to write both life and casualty lines in one state only. The company filed two statements, one for its life business and the other for its casualty business, and apparently listed total company surplus in each statement. The 84 percent is based on the ratio of the total surplus of the company as a whole to the sum of this total surplus plus the life assets. The life statement, prior to insolvency, had \$72,000 in premium income, and the life business was incidental to the casualty operation. The casualty lines written included fire, automobile, and workers' compensation. The casualty side eventually went insolvent and resulted in the insolvency of the life side.

The company with the negative surplus ratio of 48 percent was a pure assessment life insurance company that was chartered before the adoption of the insurance statute in its state of domicile. This company wrote various forms of individual accident and health, hospitalization, medical, and surgical policies in this one

state. Because of its charter, this company was not required to maintain reserves, and its net gain from operations was essentially based on its cash flow. With a series of net losses from operation, this company was placed in conservatorship by the state of domicile.

The age at insolvency of these companies ranged from about year to 103 years. One company was incorporated in 1981, had no income in 1982, and started selling underpriced Medicare Supplement business in 1983. Rapid growth led to the insolvency of this company later in 1983 with a deficit at that time, as estimated by the insurance department, of about \$8 million.

The company that had been in business for 103 years had more severe problems. This company was licensed in 47 states (non-New York) and wrote primarily health care coverage in two states, State A and State B. In State A, a third-party administrator (TPA) was used and apparently given responsibility for underwriting, rating, and claims payments. Business quadrupled in this state during this company's last year prior to insolvency. Although 90 percent of this business was to be reinsured with a TPA-owned reinsurer, one infers that there was insufficient capitalization in the reinsurer to provide relief. In the other state, State B, this insurer underwrote three METs. Premiums totaled \$38 million in this company's last year prior to insolvency, split about equally between these two states. When this company was declared insolvent at the end of February of the next year, it was estimated that \$6 million to \$9 million of the total negative surplus position was attributable to the last 2 months alone.

The duration of current management for these companies varied from 1 to 12 years. Fifteen of these 16 companies were stock companies. Over half of these 15 had new management within 3 years of the declaration of insolvency. At times, the new management came on board with the purchase of the insurance company and brought a new perspective into the marketing of accident and health, SPDA, or other lines of business as well as additional expenses and affiliate company financial transactions. The success or failure of any new marketing and financial approach is dependent on any number of factors and cannot always be forecast in advance.

Let's turn our attention to a more general discussion of several specific attributes of these companies. A look at the assets of these companies revealed several problems. A few companies had affiliate bond and stock holdings. Several of these investments eventually were written down due to the essentially poor financial condition of the affiliate.

Other companies experienced net cash outflows at a point in time when the market value of the assets was less than the book value. One company, rather than sell assets, borrowed from a bank and collateralized the loan with securities from its portfolio. As the financial condition of the insurer deteriorated, the bank became increasingly nervous about policyholders' liabilities' taking precedent over the bank loan and called in the loan, which compounded the cash flow problem.

Party-at-interest transactions were also a problem. Allegations have been made of excessive fees paid to parent companies or affiliates for consulting,

management, administrative, or computer services. Interest-free loans were apparently made to officers and directors. Parent companies sometimes had the reputation of spending lavishly for plush offices or executive perks.

Defalcation also was mentioned as a factor. Two companies each experienced a \$3 million fraud. One company had the money allegedly embezzled by two employees, and the other company had an agent who allegedly wrote business and kept the premium.

Reinsurance treaties also played a role. At times, these treaties appeared to have been entered into for the primary purpose of providing temporary surplus relief to the ceding company. Apparently, it was not uncommon for the terms of these contracts to not effectively provide for any reasonable transfer of risk to the reinsurer or indemnification to the ceding company. Comparisons of the outstanding surplus relief provided by these reinsurance transactions to the capital and surplus of the ceding companies were not available.

One risk associated with reinsurance is whether the reinsurer has sufficient capital and surplus to support the risk associated with the business it is reinsuring. This risk may have affected one of the companies we observed; in any event, it is a point worth noting.

The most common risk, as illustrated by some of the earlier examples, was said to be the underpricing of the insurer's accident and health business.

MR. CHARLES D. FRIEDSTAT: I will first try to reach some conclusions based on the results presented by Lew Nathan and answer the question. Would the valuation actuary requirements have prevented insolvencies or reduced losses resulting from insolvencies? I will then discuss how regulators can play a more important role and work together with the valuation actuary to reduce the number of insolvencies that do occur. In addition to items already present in various "early warning tests," key indicators will be given that call for more careful investigation into company affairs. I will conclude with a discussion of some of the additional side benefits of the cash flow analyses conducted by the valuation actuaries in areas unrelated to company solvency.

Would the valuation actuary concept by itself have prevented the insolvencies or significantly reduced the losses resulting from insolvencies in the cases we examined? In general, no. The valuation actuary places greater emphasis on the C-1 and C-3 risks involving asset values and interest rates. The cash flow analyses to be performed by the valuation actuary will be important in dealing with interest-sensitive products and developing investment and pricing strategies to deal with these products over a period of years. This will aid in the determination of management strategies for long-term contracts.

Our studies indicated that C-3 risk was only a minor contributing factor in a few of the insolvencies. C-1 risk was a key factor in a few cases involving intercompany investments. The major causes of the insolvencies we examined involved the C-2 risk (with particular emphasis on the adequacy of premiums for accident and health business) and the C-4 risk dealing with management issues. In most of these cases, the problems developed in less than year (between

year-end certifications) or involved events beyond the control or knowledge of the actuary.

If this is the case, how can these types of insolvencies be prevented or the amount of losses reduced? One possibility is for the state regulators to play a key role and communicate more often and more effectively with company actuaries. The actuary should not play the part of a regulator. His primary responsibility remains to the management of his company. However, by altering the current relationship between insurance department auditors and actuaries and the company actuaries, and by establishing tighter review requirements and monitoring procedures, potential insolvencies can be reduced. Some states have taken action in this area but this is not true in all states, and even in the more heavily regulated states, our review indicates that further requirements and controls may be necessary.

The area of "required surplus" in addition to statutory reserves is one that has received a great deal of attention in recent years in an internal management reporting context. This represents the degree of risk surplus required to protect a company against plausible fluctuations in experience. Although the formulas and amount of surplus involved vary by company, even for those writing similar products, the amount of surplus usually is related to a percentage of assets, premiums, or net amount at risk, depending on the particular type of product or line of business involved. A. M. Best and possibly other organizations also have formulas designed to measure the adequacy of total company surplus in relation to the types of business being written. In several cases we found companies able to produce significant amounts of premium income in volatile lines of business

with low amounts of capital and surplus as a buffer. Increased capital and surplus requirements, varying with the type of business written and the premium volume, should receive closer consideration in all states.

Increased communication between the regulators and the company's valuation actuary could be a significant factor in preventing future insolvencies. It was a bit disturbing to find that in some of the situations we examined, actuaries had communicated with state regulators well in advance of a company's entering into rehabilitation/liquidation, and no apparent action was taken. We realize that this is a very sensitive area and that even a rumor of being under state scrutiny can have a material effect on the retention of agents and existing business. In a few instances, the people we spoke with felt that the states acted too quickly to put the company in rehabilitation status and that through working with the state, the company might have survived. Also, possibly as part of the state's annual certification of reserves, the state actuary should be required to have a discussion with the company actuary. Since this would involve an on-site visit to the company and a preestablished checklist of questions to ask concerning controls, procedures, experience studies, etc., it would provide more information than would merely reading the actuary's report to management. The use of this approach and others used by CPA firms in their audits of insurance companies could prove most valuable in a determination of companies that should be placed on a "watch list" or reviewed more carefully. Further, there must be counterparts to the valuation actuary in the state insurance departments who can understand and interpret the reports prepared by the companies.



The need to closely monitor companies writing material amounts of new health insurance business was discussed by the other speakers. In order to write this type of business, appropriate underwriting and claims practices must be in place, and valid claims experience and exposure data must be available for claim reserving and rating purposes. This information can also be ascertained during the state actuary's visit to the company. Along with the actuarial pricing memorandum, at least a subjective determination can be made of the company's ability to manage and control the block of business. The cyclical nature of this business makes these controls and monitoring procedures even more imperative.

Surplus relief treaties have also been mentioned, and our review supports the efforts by certain states to control carefully this type of reinsurance. As various industry people have noted, the states must also develop standards to permit companies enough flexibility to use surplus relief reinsurance in appropriate circumstances.

Our study indicated that small, younger companies are the ones more likely to become insolvent. This presents a real dilemma, because from a cost standpoint, it is these same companies that will be less willing and able to perform the detailed valuation actuary analyses and establish the necessary monitoring procedures and controls. This has been a frequently discussed item among the different committees reviewing the valuation actuary concept, and I will not deal with it further in this presentation.

One concern we have as a result of our review is that the tremendous emphasis on cash flow analyses of interest-sensitive products will tend to deemphasize the

need to establish controls and monitoring procedures to manage other volatile lines of business effectively. It appears that unless there is an extremely sudden unexpected jump in interest rates, the majority of near-term insolvencies may still relate to the noninterest-sensitive products.

We also found several key indicators at many of the companies we reviewed that should serve as red flags to require further review. These include the following:

- o Rapid growth in new business may have occurred for several reasons. In some cases involving accident and health insurance and group business, the product was underpriced. In some cases, this may have resulted from higher compensation paid to agents, which may or may not have a positive effect on future profits from the product and company solvency. While different people have different feelings concerning establishing limits on a company's growth (assuming adequate surplus and appropriate reinsurance is in place), the reason for any extraordinary growth should be reviewed.
  
- o We have already covered surplus relief reinsurance, but there should also be careful review of the operations of all reinsurance treaties, as well as the financial stability of all reinsurers. Just look at the property/casualty reinsurance environment for an example of the potential problems.
  
- o Relationships and transactions with affiliated life, casualty, and non-insurance companies require more careful review. We found several

situations ranging from transfer of assets among companies all the way to alleged criminal activities and siphoning of assets from the unprofitable companies into the other companies or into the pockets of key officers.

- o Borrowed funds in and of themselves may not be a sign of financial instability. However, in at least two situations, banks got nervous during periods of rising interest rates and called the loans. This led to an almost impossible cash flow problem, with assets having to be sold at depressed market rates and eventual insolvency. In the opinion of attorneys with primary knowledge of these cases, if the loans had not been called, the companies might have survived.
  
- o In several instances, management contracts appeared providing for payments at levels in excess of those appropriate for the level of services rendered. These contracts must be carefully reviewed to ensure that they are not being used improperly to get funds out of the company.
  
- o A more thorough investigation should be required of the major owners and key officers of stock life insurance companies. We found situations where certain individuals were involved in more than one current or prior insolvency and may have had prior criminal indictments. Appropriate experience in running an insurance company is

essential. Further, qualification standards for the valuation actuary must be carefully developed to emphasize a combination of both education and experience.

Is the valuation actuary concept going to be helpful? The answer is an emphatic yes. It should have a positive impact on the future solvency of companies writing those long-term interest-sensitive insurance products. The concept already has been a positive influence even though these cash flow studies are not yet required in most states.

It is my observation that with our current stable interest rate environment, many companies would not have begun to implement certain procedures without the near-term likelihood of this valuation actuary requirement and the increased attention to solvency. Many companies had not previously given much thought to asset segmentation, asset liability matching, or the appropriate investment strategy for a product under different interest rate conditions.

With the possibility of valuation actuary requirements being in place for 1987, appropriate action is being taken in many companies. The impact on product development and financial reporting has been significant. How many of the companies that developed universal life products until recently (and it may still be true today) did much more than use a traditional life insurance profit study approach based on paying the target premium each year with a level interest-crediting rate based on an assumed fixed investment spread between earned and credited interest? While there may have been some sensitivity testing of the significance of maintaining the investment spread, adverse mortality and lapse

experience, and the effect of premium cessation, the product development process today is significantly more sophisticated than in the past. Also, the greater communication needed between the product development actuaries and investment and financial personnel has been facilitated by the valuation actuary concept. As a result, more key individuals of different disciplines within the company have a better idea of the mechanics of these products.

Management information procedures have also benefited from this emphasis on the valuation actuary concept. Companies now have a better idea of what their actual spread is between earned and credited interest. Today, we are much more likely to see that a company knows the actual and expected levels of mortality gains and has begun to look more closely at source-of-profit analysis in both the design of the product and the measurement of financial results. More sophisticated investment strategies have also been developed to help achieve desired profit levels.

Finally, by and of itself, the research done in this area has been excellent and has produced many important by-products.

In summary, based on our limited analysis of companies over a limited period of years, it appears that the valuation actuary concept may not serve to reduce significantly the number of insolvencies in the near term that do not involve interest-sensitive products. This concept, however, should have a positive impact over the long term in preventing the larger potential insolvencies of companies writing interest-sensitive products. In addition to increasing the emphasis on company solvency, the valuation actuary concept has already led to

significant strides in terms of managing and monitoring interest-sensitive products. We have also offered some observations on how regulators can work more closely with actuaries, as well as some key things to monitor or investigate more closely as a prelude to reducing the likelihood of future insolvencies.