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IMMEDIATE ANNUITIES AND STRUCTURED SETTLEMENTS

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- o Structured Claim Settlement Process
- o Recent Developments in Taxation
- o Substandard Underwriting
- o Sources of Mortality Information
- o Administration and Investments
- o Valuation
- o Risks and Profit Margin

MR. ROGER F. HARBIN: I'm with SAFECO Life Insurance Company which has been offering annuities for structured settlements since 1980. 1980 was a significant year in the history of settlement annuities because it marked the end of the developmental stage of this business. Before that, growth was slow while innovation was taking place. There was also uncertainty over aspects of annuity taxation for claim settlements. A 1979 tax ruling clarified some of the issues involved and triggered a period of rapid growth. In 1984 an estimated \$2 billion in premiums were written in settlement annuities.

This is an industry which a few firms dominate. The largest fifteen brokers in this business probably write 75 percent of the premium, and a similar statement could be made for the largest fifteen life companies offering annuity products. In addition to rapid growth, the period between 1980 and 1985 has experienced steadily eroding profit margins. This trend will probably continue beyond 1985. In addition, there are some new challenges facing the industry in federal income taxation.

Mr. Mark R. Perry will discuss the process of negotiating a structured settlement and funding it with an annuity contract sold by a life insurance company. He will also discuss the history of federal income taxation of settlement annuities and certain recent developments in that area.

*Dr. Butz, not a member of the Society, is Vice President and Medical Director of SAFECO Life Insurance Company.

**Mr. Perry, not a member of the Society, is a manager of the Structured Settlements Company.

Dr. Roger H. Butz will discuss the techniques of underwriting the substandard case. This will include sources of information about the mortality expected for impairments common to settlement annuities. He will also contrast structured settlement underwriting with the underwriting of life insurance cases.

Mr. Michael Fedyna, Vice President and Actuary of INA Life Insurance Company, will discuss valuation of settlement annuities, financial reporting, profit analysis and administrative concerns.

MR. MARK R. PERRY: "\$2,350,000 Settlement for Leg Amputations"! "Widow to get \$18,000,000 in Wrongful Death Suit"! These headlines are no longer rare as judgements and cash settlements often pass the million dollar mark.

When the size of cash awards began escalating in the early 1970s, it became apparent that a system was needed to resolve catastrophic injury and wrongful death claims with something other than a lump-sum payment. A program of payments called a structured settlement was then developed. This program fit the needs of the injured party or the survivors in a wrongful death action and also had a much broader appeal to insurance carriers, attorneys, and judges.

A structured settlement is virtually any settlement calling for payment of benefits other than as a single lump-sum. A program is designed for the injured party that pays out a specific schedule of benefits as an alternative or companion to the traditional method of a lump-sum settlement.

The program can be funded in many ways, but the most popular is an annuity policy purchased from a Best's A+ rated life insurance company. Its security, flexibility and financial return offer distinct advantages. Annuities are also preferred because life companies are closely regulated and have an excellent history of above average long term investment results to meet substantial obligations well into the future.

The first structured settlements were completed as early as 1972. The two cases involved injured children, then ages three and twelve, who suffered extensive brain damage resulting in retardation and quadriplegia. In each case a monthly income, compounding on an annual basis, was required to cover anticipated rising costs of institutional care. In addition, some cash was paid upfront to the parents and the attorneys. In one case, the attorney fee was paid over a ten year period. By the time these children reach age sixty-five they will have received benefits of \$21,000,000 and \$26,541,832, respectively. The cost of each program is around \$700,000.

Since these initial structured settlements were made, an industry has developed which serves the casualty insurance industry, self-insureds, and the defense bar in the settlement of virtually any size claim. The number of cases brought to a successful settlement by this method has increased to approximately 10,000 per year. In addition, the success of

the industry can be measured by the many cases which settle for a lower amount of cash in a shorter time period because of the introduction of structured settlements into the negotiations.

It is impossible to estimate the amount of money that has been saved by the insurance industry and self-insureds through structured rather than lump-sum cash settlements. What we can state is that in 1984 close to \$3 billion in settlements were structured. Probably two-thirds of that amount was paid in cash to cover immediate needs with the other one third providing for future benefits. It is believed that more than 2,500 companies now use structured settlements in settling their bodily injury and wrongful death claims.

Each structured settlement is unique. It is tailored to meet the needs of a claimant's specific situation and to provide an equitable solution for the casualty company or self-insured. There are, however, some common elements which are often used to structure a settlement. These include the following components.

1. An amount of immediate cash is provided to cover the claimant's initial wants and needs. This might include items such as house renovation, a down-payment on property, or a specially fitted vehicle to meet the needs of a handicapped individual. At least part of the plaintiff's attorney fee and payment for outstanding liens or incurred medical bills usually comes from this initial payment.
2. A periodic income, generally payable either monthly or annually, is provided to satisfy the ongoing expenses of the claimant. This may represent long-term maintenance for a disabled claimant, income replacement for a claimant or for survivors in a wrongful death action, or reimbursement for pain and suffering payable over a period of time. The flexibility of the annuity contract used to fund the settlement allows for the payments to continue for the lifetime of the claimant or for a specified number of years only, but with or without a guaranteed amount being paid. In addition, the monthly or annual payments can either remain level during the payout period or regularly increase at a predetermined rate.
3. Additional lump-sum amounts are provided at specific future dates, to hedge against inflation or to fund things such as a future house purchase, retirement or a future estate. Additional deferred payments can be arranged to cover monthly or annual needs during a specified time, such as income for college tuition and living expenses when a child reaches eighteen.

Since the industry began, structured settlements have proved very successful in handling bodily injury and wrongful death claims. There are advantages to all the parties involved in the settlement.

One of the primary factors which makes structured settlements so attractive is the tax-free nature of the payment received by the claimant. From the claimant's perspective, there is a greater economic

benefit than if the case settles for cash, since it would take a sophisticated investor to attain an equivalent after-tax return on invested funds. There is also a guarantee as to the future receipt of benefits which is not possible with other investments. With a structured settlement, the claimant cannot prematurely dissipate the funds, and all benefits are received income tax free.

The casualty company or self-insured will save money, usually in the range of 15-20 percent over a cash settlement, due, in part, to the attractiveness of a tax-free flow of income to the claimant. The actual level of savings cannot be measured because it is not possible to know what would have been paid had the case gone to trial or settled for cash. The uniqueness of the structured settlement negotiation process enables settlement of cases that might otherwise go to trial and thus risk a runaway verdict. The carrier also provides a responsible moral and social solution which best suits the needs of the claimant.

The plaintiff's attorney also benefits from the use of a structured settlement. The case is settled in a more timely fashion and avoids the risk of a verdict for the defense if a case goes to trial. Plaintiff's attorneys have expressed great concern that their clients may dissipate a large cash award. The use of a structured settlement frees them from that worry. In many cases the plaintiff's attorney can choose to receive his fee in a personally tailored way which would be to his financial benefit.

There have been objections to using this structured settlement form of closing a case. The defense team has had concerns about the long-term obligation to make future payments and the administrative responsibilities inherent in handling a structure. Much of this concern has been answered by the Periodic Payments Act of 1982 which will be discussed later.

The claimant has no control over the funds and is not able to make any adjustments to the structure once the agreement is in place. It is actually this restriction that helps to provide for the tax-free payment of benefits.

Many plaintiff's attorneys find it more difficult to negotiate a structured settlement than a cash settlement because they are accustomed to dealing with lump-sum cash amounts rather than the claimant's specific benefits. There is also the fear that the attorney will receive a lower fee than if the case settled for cash or went to trial. There is also the fear that the fee is inappropriate in view of the present value of the structured settlement.

One of the primary factors which makes structured settlements so attractive is the tax-free nature of the payments received by the claimant. The passage of the Periodic Payments Act of 1982 has served to codify this tax-free status, but such was not always the case. Section 104(a) of the Internal Revenue Code previously stated that payments received as compensation for injury or sickness, whether by suit or agreement, would not be includable in gross income. The Code did not differentiate between a settlement for cash and one for a

structured settlement. In 1975, following extensive research, the accounting firm of Coopers & Lybrand issued a formal letter of opinion stating that, if correctly arranged, the tax status of a structured settlement would be the same as a cash settlement; that is, the payments would be received by the claimant tax free.

The Coopers & Lybrand letter formed the basis for the operation of the industry until 1979. In that year, the Internal Revenue Service issued two revenue rulings (79-220 and 79-313) which upheld the statements made in the original letter of opinion. Briefly, these rulings set out guidelines for structuring a settlement: as long as the claimant has no right to the discounted present value of the settlement and has no control over accelerating or changing the payments in any way, the income will be received tax free. In addition, the claimant must not be named in the annuity contract in any capacity other than as the "measuring life" to determine the cost of the benefits.

The passage of the Periodic Payments Act of 1982 (Public Law 97-473), which was signed into law by President Reagan in January 1983, accomplished two things. The first part of the law codified the tax-free status of periodic payments in personal injury settlements by changing the wording of Section 104(a)(2) of the IRS Code from "whether by suit or agreement" to "whether by suit or agreement and whether as lump sums or periodic payments." The second part dealt with the tax position of a third party assignee who accepted the obligation of guaranteeing the future payments specified in the settlement agreement.

In the past, when an insurance carrier, either a casualty company or self-insured, settled a case with a structured settlement, the funding of the benefits promised in the settlement agreement was usually provided by the carrier through the purchase of an annuity contract from a life insurance company. The claimant was not a party to this contract. If the life insurance company paying the benefits failed to perform in the payment of such benefits, the carrier would still be under the obligation to make the payments to the claimant. While a structured settlement did allow it to virtually close its file for administrative purposes, it was never without any future legal obligation. The claimant was always considered to have the rights of a general creditor of the carrier.

The Periodic Payments Act of 1982 sets forth guidelines which will allow a casualty company or self-insured to transfer to a third party assignee the obligation they had previously retained. If the obligation is transferred, payments would still continue tax-free to the claimant.

In order to facilitate the transfer of obligation, the insurance industry has developed vehicles which will provide the carrier with a true release. Several methods are currently available. The complexity of the method and the cost to the carrier vary tremendously depending on the size of the case and the method used. Consequently, it is important for a carrier to utilize the services of a structured settlements expert in developing its plans and in providing the means for an effective and legal transfer of obligation, if necessary.

The Tax Reform Act of 1984 was signed into law on July 18, 1984. Section 461(h)(2)(C) of this new tax law, which deals with accruals of future payments, is a cause for concern among organizations which are self-insured for casualty losses.

At issue is how a self-insured should handle the tax deduction of the cost of an annuity used to fund a structured settlement. The question causing confusion: Can the cost be deducted in full in the year the annuity is purchased?

As of today the regulations which will govern Section 461 (h)(2)(C) are still being finalized and have not been issued. In the meantime, in order to utilize the benefits of structuring a settlement, a self-insured should use the transfer of obligation to a third party assignee (as allowed under Section 130 of the Internal Revenue Code).

A structured settlement should be considered any time a case involves one or more of the following circumstances:

- o A wrongful death action.
- o Any action involving a minor.
- o Any action involving reduced mental capacity and/or ongoing care.
- o Any action where there is need to compensate for extended inability to perform normal occupational functions.

Once a case has been identified as having the potential for a structured settlement and a value has been established, it is time to involve a structured-settlements specialist. You will need to provide him with the following pertinent information regarding the case:

- o Claimant's name, sex, birthdate and medical condition (the medical information on the claimant is often important in reducing the carrier's cost or increasing the claimant's benefits).
- o Type of claim, such as medical malpractice or product liability.
- o Codefendants or other insurers, if any.
- o Plaintiff's demand and defense valuation of the case.
- o Time schedule for settlement.

Generally the most advantageous time to settle a case with a structured settlement is when a realistic value has been placed on the case and when the trial date is drawing near. It is extremely important that the structured offer be made in person to the plaintiff's attorney/claimant and not by telephone or letter which can be easily ignored.

Equally important is to include the structured settlements specialist at the settlement conference. The presence of the specialist at the settlement conference is vital for a number of reasons: it interjects a third party who is not a direct participant in the adversarial relationship; it offers the defendant an extra set of ears to listen for what is important to the plaintiff/claimant; it affords the ability to make on the spot changes to the offer in order to keep the negotiation moving to a mutually beneficial solution. In addition, the specialist is equipped to handle any objection the plaintiff or his attorney may have to a structured settlement.

Professional structured-settlements specialists charge no fee for the negotiation or plan design services. They are compensated by the life insurance company which provides the annuity contract to fund the benefits agreed to in this settlement. Even if the case ultimately settles for cash, there should be no charge.

In the early days of structured settlements, the mere introduction of the concept usually was enough to settle a case and afford significant savings to the carrier. Many creative individuals contributed to the growth of the industry by developing plans, concepts, and ideas to further meet the needs of the claimant while also working for the benefit of the casualty carriers. The legislation which was researched and subsequently passed into law during this time period served to solidify the commitment of insurance carriers to find better ways to meet the needs created as the result of a catastrophic injury or wrongful death.

With the advent of the Periodic Payments Act of 1982 and its guidelines for transferring the financial obligation, came additional security for claimants and a total release of future commitments of casualty carriers. With the wide-spread acceptance of the concept and the growth in the number of cases settled in this manner, the skills of the structured settlements negotiator are often vitally important in settling the case for the benefit of all parties involved. A personally designed plan for the plaintiff and a settled case with a cost savings for the defense. It's a concept that works.

DR. ROGER H. BUTZ: From my knothole in the fence it appears that the underwriting of substandard annuities for structured settlements has literally burst upon the scene in the last several years. Five years ago there were but a handful of companies doing a significant volume of underwriting of substandard annuities. Today, dozens of companies are involved in this business and more are joining the group every day.

It is important to recognize that the underwriting of substandard annuities is not simply an extension of the decades of experience and techniques which the life insurance industry has had with life underwriting even though the goals are similar. Fundamental

differences exist which add interest and excitement to underwriting substandard annuities. Let us examine four differences which require careful consideration:

1. The mix of impairments seen in applications for substandard annuities is entirely different from that experienced with life insurance applicants. Brain and spinal cord injuries make up the majority of the annuity applicants, and the more traditional problems of obesity, elevated blood pressure, diabetes, heart disease, and so on, make up a very small portion. Exhibit 1 demonstrates the distribution of cases which we have sold, by impairment. Brain injuries account for 39 percent of the total cases, with 25 percent due to trauma and 14 percent due to anoxia, i.e. lack of oxygen to the brain such as a birth injury or an anesthetic accident. Spinal cord injuries account for another 33 percent of the total cases, with 22 percent being quadriplegia and 11 percent paraplegia. Twelve percent of the cases are made up of a variety of medical conditions which include some of those seen in life underwriting. Another 12 percent are made up of physical injuries and the remaining 4 percent are a miscellaneous group of unusual cases.

Key issues related to this unusual mix of impairments are:

- A. The life insurance industry has no experience with mortality for individuals with these particular impairments.
- B. The clinical literature is poor and scanty concerning mortality for these impairments. Some clinical research becomes available on an occasional basis, and I collect this by simply perusing current medical journals. Reference is often made to the spinal cord injury mortality experience available from clinical literature and from the Lyndhurst study which was sponsored by Manufacturers Life. However, even this material is far short of ideal for drawing presumptions about future mortality experience. The cases studied in the Lyndhurst group were accumulated beginning nearly forty years ago. Any projection of mortality experience beginning nearly forty years ago and projecting into the future for several decades, as would be expected with the cases we are currently underwriting, suggests that one can make mortality assumptions spanning a period of fifty to seventy-five years, which is ludicrous.
- C. Significant "shopping" makes underwriting comfort difficult to achieve. In many cases the applications are submitted to ten, twelve, or even fifteen different companies. The chances of actually placing a case on a competitive underwriting basis are so slim that one must wonder if the placed cases don't represent the occasional errors that might be made in the underwriting process. This uncertainty calls for a review of one's underwriting posture and for an assessment of one's

position, both in regard to the competitive marketplace and to some reflection of what might be realistic expectations for future mortality experience. One approach to this assessment is demonstrated in exhibits 2, 3, and 4, which compare the portion of various impairments among cases that are actually sold to those which are quoted in an attempt to bid for the business. If there are significant or persistent disproportions between the relationships then one would wonder if the underwriting of the particular impairment might not be out of line.

Life underwriting manuals obviously are useful and life insurance mortality studies are helpful in those minority of cases representing pure medical impairments approximating the conditions seen in life insurance underwriting. However exhibit 4 demonstrates that in my own underwriting experience, I have not been able to place a proportionate volume of these cases as compared to the volume quoted (which raises conjecture about our underwriting posture in general).

2. The materials provided for underwriting these annuities are of a variable quality and volume and not subject to the wishes of the underwriting department, as would be the requirements for life insurance underwriting. In general, the information for the annuity is submitted by the broker based upon whatever medical information has been accumulated in the course of preparing the case for trial and may be woefully incomplete or obsolete. The brokers we work with are very professional and realize the materials needed for underwriting and clearly do an excellent job of accumulating the necessary materials but are imperfect in their ability to achieve optimal files as would be anyone in this circumstance. Materials may be obsolete, as in a recent case I examined where the most current medical examination was done in 1968, more than fifteen years prior to the date of underwriting. The material may be very limited, as in a recent case where I was given only two pages of notes prepared by a physical therapist concerning projected needs for rehabilitation. From the scattered comments about the injury and the extent of complications, I was forced to arrive at some underwriting projection. On other occasions, the information may be so diluted that only brief items of information can be achieved while leafing through pages and pages of depositions, including legal arguments and other issues of no interest to the underwriter.

The good news is that, despite variable and sometimes poor underwriting materials, some offer is always possible in these cases, and one can provide a standard annuity quote at the very worst.

3. The underwriting technique and the ability to assess outcome are significantly different. In underwriting annuities we adjust the age upon purchase to reflect the biological or physiological age of the individual, not the chronological age. The pricing is then done by entering the rate table at the new age assigned.

A significant problem is the delay that will be experienced before a realistic assessment of mortality outcomes can be achieved. Many of the conditions do not result in an immediate elevation of mortality. In life insurance underwriting, the goal is to avoid antiselection at early durations, with much of the underwriting effect "wearing off" within five years and nearly all the effect "wearing off" by the end of ten or fifteen years. Thus, it is possible to determine mortality experience on any underwritten block of life business within a relatively short period.

An example of the difference for annuity underwriting would be the spinal cord injury of quadriplegia in a twenty year-old motorcycle rider. Here is an individual who has a healthy, athletic body who suddenly becomes quadriplegic and will experience accelerated degeneration of pulmonary and urinary systems as time passes. However, one would not expect immediate deterioration of mortality to the degree which might reflect the final anticipated outcome. Assessment of the accuracy of underwriting will be delayed considerably.

In addition, the situation is complicated in the case of annuities because with annuities the benefit becomes progressively more significant with time because an inflating payment schedule is often part of the contract. Thus, errors in underwriting become greater with the passage of time. With life insurance the anticipated benefit remains stable (or has actually been paid off in cheaper dollars because of the effect of inflation).

4. As exhibit 5 indicates in about half the cases of substandard structured-settlement annuities, it doesn't really matter whether the underwriting is accurate or not because the final contract has a benefit which is period certain only, with no life contingency. But the underwriter does not know at the time of underwriting if there will be a life contingency or not, or if a particular case will be placed (since many companies exhibit relatively small placement ratios in the competitive market). The underwriter has no grasp of the possible size that the case may eventually be. With life underwriting, the requirements necessary to reach a comfortable underwriting position can be altered based on the significance of the case in terms of eventual risk, but with these substandard annuities one has no idea at the time of underwriting whether the case may be as small as \$25,000 or as large as \$2.5 million. Low placement ratios are the rule and this obviously raises the concern of structural antiselection.

In presenting the underwriting of substandard annuities, I have suggested that the risk is significant though the realization of outcomes is delayed a great deal. I have also pointed out that the data is often incomplete, and that underwriting may be an exercise in futility in about half the cases. The competition is severe and placement ratios tend to be low. Why then would the market be growing rapidly and companies be interested in joining the group of underwriting facilities? First, the product is valuable for all concerned, and this represents one of the most interesting and worthwhile social contributions of the insurance industry in some time. In addition, as exhibits 6 and 7 demonstrate, a lot of cash is transferred at the time of the sale. The average size of a case in our experience has been about \$250,000 with the distribution of cases showing nearly 90 percent under \$500,000, by item count.

Successful companies will spend the time and expertise necessary to develop rational underwriting standards and document these in a manual which assures consistent handling and adjustments as more information becomes available. It is necessary to develop a good impairment coding system and a tracking system for regular assessment of mortality experience by impairment as time passes. Of course, one must humbly recognize that the underwriting impact upon profitability is far smaller than that of the investment experience.

MR. MICHAEL W. FEDYNA: Settlement annuities are a highly capital-intensive product. Depending upon the interest-rate scenario and the reserving methodology employed, as much as 15-20 percent of the settlement annuity premium can be "strained" at issue of the contract. This means, for example, an annuity company writing \$100 million of gross premium in a year at a 15 percent surplus strain must have a capital pool of at least \$15 million available to put the business on the books. Under a level-issue scenario, this situation should eliminate itself after three or four years as existing business generates statutory profit sufficient to offset the drain from new issues. However in a scenario of rapidly increasing new business this situation may exist for ten or more years. Consequently, management committed to writing settlement annuity business must be prepared to provide sufficient capital to fund the business.

Another financial consideration concerns reserves. There are three issues involved in setting reserves for settlement annuities. The first involves determining the size of the surplus strain for a given scale of gross premiums.

In 1980, 1981, and 1982, states enacted the 1980 amendments to the Standard Valuation and Standard Nonforfeiture Laws (SVL & SNL). This effectively enabled companies to use more realistic interest rates in their statutory reserve for annuities than those allowed by prior laws.

The interest rate which may be used is tied to a moving average of Moody's Corporate Bond Yield Average. The 1980 amendments to the SVL did not, however, eliminate surplus strain. As an example, assume a settlement annuity guarantees \$3,000 per month with payments increasing 3 percent each year to a thirty-year-old male. Using 1984's maximum interest rate allowed under the SVL (11.25 percent) and 1971 Individual Annuity Mortality (IAM), the reserve at issue on this contract would be approximately \$151,000.

During 1984 there were periods when twenty-year treasury bonds hit 14 percent. If a company developed a pricing formula which used T-bonds minus fifty basis points for twenty years and 6 percent thereafter (assuming 1971 IAM mortality, no commissions, expenses, and premium taxes for simplicity), the gross premium would be \$137,000. Thus, even under the 1980 amendments to the SVL we still have a 10 percent capital strain at issue.

A second issue concerns the mechanics of calculating the reserve. During the past several years, regulators have become concerned that settlement annuities may be "taking advantage of the new law" by setting up extraordinarily low reserves on increasing payments due many years into the future. For example, a "bullet" (or lump-sum) payment of \$200,000 attached to the previously described annuity, due in the year 2005 and valued at the rate of 13.25 percent (which was the actual rate allowable for 1982), would be carried on the books today at only \$17,000.

The regulators feel that this situation was not envisioned when the law was enacted. They maintain that the law was enacted primarily for contracts where the reserve decreases over time; not where the reserve dramatically increases. Consequently there is activity within the NAIC to increase the standards for the type of contracts sold in the settlement annuity market. For example, assume our hypothetical settlement annuity provides \$3,000 per month increasing at 3 percent annually with a bullet payment of \$50,000 due in five years, and a bullet payment every five years thereafter for the next twenty-five years increasing by \$50,000 each time a payment is made. Under current interpretations, this contract could be viewed as one contract and all benefits, (whether they are normal periodic ongoing benefits or lump-sum benefits) would be valued on the most favorable interest rate basis. Under some proposals being considered, the contract would have to be severed. The normal ongoing payments would be subject to the high interest rates available under the 1980 amendments. However, all of the bullet payments would be valued using rates as if they were stand-alone endowment contracts.

The benefit package described would cost \$265,000 using the same assumptions described before. Under current reserving methods, the company could set up approximately \$299,000 as the reserve. Under the new proposal, the company would be forced to set reserves in the neighborhood of \$361,000. This is an increase in the strain percentage from 13 percent to 36 percent. For a company writing \$100 million of settlement annuities, an additional \$23 million of capital would be tied up if the new proposal is enacted. This change was supposed to be

discussed at the NAIC meeting in December of 1984; however, it does not appear to have been acted upon at that time. The likelihood exists that such a proposal will surface and could be effective for reporting in 1985.

The third reserving issue concerns substandard annuities. Substandard annuities are common in the settlement annuity business. Companies in this business generally follow the practice of "rating-up-in-age" an annuitant. This means that the premium charged for the risk is predicated upon an age higher (sometime as much as forty years higher) than the true chronological age of the annuitant. There are a number of practices currently in use for valuing substandard annuities, ranging from holding reserves on a rated-age basis, to using multiples of standard tables, to developing special tables for certain types of impairments. The methods selected can influence the level of the initial reserve, the incidence of reserves released, and the reported profits in renewal years.

The NAIC Standing Technical Actuarial Task Force has been studying this issue for the past several years. There is now a requirement to disclose what the reserves on structured settlement business would have been using true chronological age and not rating-up of mortality. There has not been any prescribed method adopted by the NAIC. The matter is under continuing review.

Moving away from reserves, there are other financial considerations. One is the premium tax consideration. Due to the retaliatory nature of state premium taxes, a company writing settlement annuity business must be careful to write it in a legal entity which minimizes premium taxes. A state which imposes a premium tax on nonqualified annuity premiums places a company at a distinct disadvantage in writing settlement annuity business. California, for example, imposes a 2.35 percent premium tax on annuity premiums. States which otherwise do not tax premiums for settlement annuities will tax settlement annuity premiums at 2.35 percent for California companies writing business in their state. This is in retaliation for California imposing that tax on companies domiciled in other states. This becomes a factor in pricing the products.

There are also major GAAP accounting issues facing the settlement annuity business. In 1982 and 1983, due to all the publicity surrounding the Baldwin-United situation, the American Institute of Certified Public Accountants (AICPA) undertook a study to determine how best to report earnings on single premium deferred annuities. As this project moved on, all annuity business (and universal life as well) was encompassed. In late 1984, the AICPA came to the conclusion that no profit was to be recognized at issue for annuity contracts. This was essentially the conclusion reached for single premium deferred annuities. However, the AICPA Task Force applied it across the board to all annuities. This has substantial implications for settlement annuity writers.

Assume for a moment that a company wrote settlement business and explicitly priced for a 3 percent of premium profit over and above the

margins in the GAAP reserves. If this company wrote \$100 million of settlement annuity business, it would ordinarily be free to release \$3 million as reported earnings after establishing a reserve equal to the present value of future benefits. However, under the rules currently being promulgated by the AICPA, the company must spread its profit reporting over the life of a contract (twenty or more years). Instead of \$3 million of reported earnings our fictitious company will report something in the neighborhood of \$200,000 of earnings for the year. Considering the amount of capital tied up in the business, management must begin to question whether the relatively small initial return on the income statement justifies the amount of capital which is tied up in settlement annuity business. The AICPA proposal is currently being reviewed by the Financial Accounting Standards Board (FASB). Promulgation in 1985 for 1985 financial reporting is a fifty-fifty proposition.

These accounting issues naturally lead into pricing considerations. Pricing considerations will be discussed by examining the various risks being assumed by the company in writing settlement annuities and how the risks are managed by the companies writing this business. The investment considerations will be included within the pricing consideration portion of this presentation.

A major risk with the settlement annuity business is the investment risk which the company takes by having a set of rates "on the street." Due to the reluctance of brokers going back and telling clients that the gross premium for a policy has changed after the case has been sold to all parties involved in the settlement, a "sufficient" lead time is required for changing rates. The "industry standard" appears to be something in the vicinity of a two-week stale date from the time the broker is notified that the rates are changing until the time that the gross premium on the old rate scale must be presented to the company.

From the company's point of view, those two weeks can be the longest fourteen days in its financial year. It is not uncommon to have swings in interest rates of 50-100 basis points over a one to two week period. A company which made an assumption of investing at 12 percent can get "stuck" with significant sums of money to invest at a time when the most they can achieve is 11 percent. The company will incur a loss on that money of approximately 7 percent of premium on a present value basis. Again using a hypothetical company with \$100 million of premium, if this premium were all to come in during a two-week stale date period (not impossible), the company would absorb a \$7 million loss.

Companies attempt to minimize this risk in several ways. A number of companies make various investment commitments such as private placement securities, mortgages, and other investments of that type to lock-in the rate. Locking-in, however, does have negatives associated with it. A company can impair its competitive position. The company locking-in is in essence saying that it believes interest rates will either remain at their current levels or decline. Should interest rates actually rise competitors with no forward commitment positions will be able to lower rates while those with committed positions must hold the line at

their current rates in order to fund the investment commitments. Locking-in can also be harmful even if interest rates decline. If, due to a forward commitment position, a company delays raising its gross premiums when interest rates are falling, it could find that the premiums which it receives are more than its commitment position.

Other methods to limit this "on the street" risk include dealing only with a limited number of brokers (with or without specific aggregate limits on the amount of premium which will be accepted), shrinking the fourteen day period, and requiring prior approval of quotes in excess of a specified amount. These methods (other than shrinking the fourteen day period) generally are not effective in controlling this risk. This phenomenon is arguably the single most difficult element of financial management for the settlement business.

Another element of investment risk associated with settlement annuities is the reinvestment risk. This risk takes at least two forms. The first form of this risk is the pure reinvestment risk, that is, the risk that if the book of business has positive cash flows, one cannot invest them at the rate assumed in the pricing formula. On the other hand, if there are negative cash flows, the assets available to fund the negative cash flows are not equal to the book value of those assets. Since settlement annuities are nonsurrenderable annuities (with the exception of commutable death benefits to a beneficiary under a settlement annuity contract with guaranteed payments), both of these risks can be effectively minimized by standard immunization techniques. A simple example would be a settlement annuity that provides for payments of \$100,000 each year for twenty years certain. It is possible to fund this annuity with the purchase of a series of zero-coupon bonds each maturing on the date of the payments. Liabilities and assets would match 100 percent. There are brokerage houses which offer funds consisting of zero-coupon bonds to various state insurance departments to fund lottery annuity benefits. An insurance company writing settlement annuity business could use exactly the same techniques. The negative to a completely matched portfolio is that rates charged by this insurer would tend to be higher over time than the rates charged by an insurer who is continually "taking a position" in the market.

The zero-coupon bond example is too simplistic for a company writing large amounts of settlement premiums. On a broader scale, one way of managing this risk is to closely monitor the settlement annuity business for a desired mix of annuities. The desired mix would be determined by modeling a typical settlement annuity distribution. In this model, you would expect a number of annuities which begin payments immediately after issue. There would be a number of annuities where payments increase over time, and there would be annuities where payments are deferred for a number of years. The model would give the projected payments over the next thirty to forty years. A model of the typical assets purchased by the company to back up its settlement-annuity business would also be built. The cash flow patterns of the assets purchased by the company would then be compared to the payment patterns of the corresponding liabilities. By modifying its mix of assets, a company would then be able to match its liabilities to its assets.

The difficulty in financial management would then be to ensure that the actual flow of settlement-annuity business into the company conformed with the theoretical mix which is being assumed by the portfolio manager. Obviously, at any point in time mismatches will occur, requiring a company to modify the duration of the assets which it is purchasing to conform to the actual pattern of liabilities which is emerging as the business comes into the company. Generally in any true asset-liability matching program, the greater the extent of immunization, the less competitive the rates will be, particularly if the competition does not view the business as you do. A company may then decide it is a prudent business risk to not match 100 percent of the assets to the liabilities for competitive reasons. Obviously this determination should be made in the context of how much surplus a company has and how much profit it expects from this line of business.

A more hidden form of the reinvestment risk occurs within the investment portfolio itself. Let's assume for a moment that we have a completely matched portfolio of assets and liabilities. If the assets in this portfolio consist of typical insurance company assets (for example bonds with call provisions, bonds with sinking-fund provisions, mortgages with various prepayment provisions) a company could find itself in the situation where it is theoretically 100 percent matched under immunization techniques, yet the underlying asset base could be changed involuntarily if external conditions make it profitable for the borrower to do so. For an example, let's assume in a given year an insurance company funds its settlement annuity obligations primarily with publicly traded bonds which typically contain call provisions for five and ten years. If the average coupon rate is 12 percent and the bond is callable at 110 in five years, then the prevailing interest rates on similarly situated instruments only have to decrease to slightly less than 11 percent in order for it to be economically justifiable for the borrower to call the bonds.

Now let's assume that interest rates go not only down as low as 11 percent but go down to 10 percent or 9 percent. While it is true that the insurance company received a premium when the bonds were called or when the mortgages were prepaid, as rates keep falling the insurance company can find itself in the position of not being able to invest the proceeds from the call or the prepayment at a rate high enough to support the reserves. This risk increases as external interest rates rise and the concurrent pricing assumptions rise.

Companies can address this risk through purchasing assets which are not subject to prepayment, such as government securities or noncallable private placement bonds. It is important to note that discount securities achieve the desired call protection only if the general level of interest rates remains above the coupon rate on the securities purchased. This results in a difficult decision for an investment manager who has to determine what coupon on a bond is low enough so that it will not be subject to call over various economic cycles that could exceed twenty years.

Extremely close coordination is needed between the actuarial personnel pricing the settlement annuity contracts and investment managers for the settlement annuity portfolio. An investment manager must be creative in his asset selection. Additionally, a company must have adequate surplus to ensure that it can accept some measure of interest rate volatility.

Let me turn now to mortality assumptions. Because settlement annuities are considered non-self-selected annuities, it is common for companies writing this business to assume some type of population mortality table for the standard risks which it insures in the settlement annuity business. Since population mortality has no margin in it for adverse deviations or self-selection this assumption will lower the gross premiums charged for settlement annuities by 5 percent or more for a straight life annuity compared to a life annuity computed using 1971 IAM mortality. There is the risk that the relatively small segment of the population on whom settlement annuities are written could exhibit markedly different mortality patterns than the population as a whole. A company must be prepared to increase its reserves over time, should some of these mortality assumptions turn out to be overly optimistic.

Dr. Butz covered in detail aspects of substandard underwriting practices employed by settlement annuity writers. Suffice it to say that should a company, which in 1985 said that its average thirty year-old for substandard purposes was really age sixty, discover in 1995 that the actual mortality pattern is closer to that of a forty-five year old, it then would be forced to increase its reserves by as much as 25 percent. (A recent paper by Robert T. McCrory entitled "Mortality Risks in Life Annuities" (TSA XXXVI) gives more insight into theoretical considerations involved in determining appropriate mortality assumptions for annuities.)

Measuring profit for settlement annuity business can be divided into two areas. The first area would be the absolute profit margin. The present value of future profits for a typical settlement annuity issued in today's marketplace has something in the neighborhood of 3 percent to 5 percent of premium as the present value of future profits. This amount is spread over the lifetime of the contract as reported earnings.

Determining the absolute level of profits to build into the settlement annuity contract is difficult. One of the major risks in the settlement annuity business is the risk of initial investment. This risk is indigenous to all settlement annuity contracts. However there are other risks in some settlement contracts which are nonexistent in others. For example, obviously an annuity certain does not possess a mortality risk. A standard annuity does not possess the degree of mortality risk associated with a substandard issue. Substandard issues also contain a markedly higher degree of "small numbers risk" or the lack of a large enough number of annuitants to achieve a credible statistical base. For example if someone is a quadriplegic, that already puts that individual into a very small class of individuals from a mortality measurement point of view. If a company is in the substandard annuity business and issues contracts on quadriplegics on only 1 percent of its cases, then it

may not have a sufficient number of these individuals to assure that the average experience is that which would be predicted by the underlying mortality table.

There are ways to minimize some of these risks. For example, the evolution of the business from predominately substandard to predominately standard issues has gone a long way toward eliminating the small number risk. Should a small subsegment of the in-force business experience adverse mortality, experience on the block as a whole may provide some margin. The inclusion of long certain periods in both the standard and substandard life contingent issues has also served to eliminate some of the mortality risk. The upshot of this, however, is that a case can be made for different profit margins for standard business, for substandard business, for annuities certain, and for annuities where the payments increase. However there appears to have been movement away from some of this kind of "risk-reward," profit margin setting due to both competitive pressures and the need for consistency in gross premiums. For example if you have different profit margins on your annuities certain and your life contingent annuities, you could have a situation where the cost of an annuity certain is X, the cost of a life contingent annuity deferred for the same number of years as the certain annuity is Y, yet on a consolidated basis the cost of a life annuity with the same period certain will not be X+Y. This is an area where research is needed in the industry.

The second measure of profitability is return on capital. The capital tied up in the business (assuming a stock life insurance company writes the policy) can be defined as the sum of the net statutory to GAAP adjustment plus the required surplus on the contract. To illustrate let's assume that a company issues a settlement annuity contract for \$1 million. Let's also assume that this \$1 million is net of commission and expenses and also is used for the GAAP reserve.

Due to the more stringent statutory reserve requirements the company will probably be required to set up a reserve in the neighborhood of \$1.1 million. Additionally the company will be expected by regulators to have some surplus backing up this liability. Let's assume in our case that 5 percent of the premium is needed as surplus in order to meet regulatory standards. This means that a total surplus of \$150,000 (that is, the excess of the statutory reserves over the GAAP reserve plus the required surplus) is now tied up by the settlement-annuity business. The company does not have the \$150,000 available to invest in other businesses, to pay as dividends to shareholders or to use for any other legitimate purposes for which corporations use capital. Therefore one could measure the profitability of the settlement-annuity business by determining the after-tax GAAP profit of the settlement annuity business and dividing it by the amount of capital which the company has tied up in the business. This views after-tax earnings as the return on investment. Following through on our example, let's assume by writing the \$1,000,000 case, the company reported \$10,000 of post-tax earnings. That means, that we had a return on capital of \$10,000 divided by \$150,000 or approximately a 6 percent return on capital.

Obviously, if the reported earnings for the year had been \$20,000, we would have something in the vicinity of 13 percent return on capital, and if the post tax profit had been \$30,000, we would have had something in the vicinity of 20 percent return on capital. Since the denominator of the fraction, namely capital is fixed at issue, in order to demonstrate an adequate return on capital only the numerator of the fraction can change. Thus if corporate standards for return on capital are 15 percent but you have only priced your contract to provide the \$20,000 figure, you must somehow increase your margins in the product to produce an additional \$2,500 of post-tax earnings in order to produce the 15 percent return on capital. This means higher gross premiums to the ultimate purchasers of the settlement annuity contracts.

This return on capital measure is the measure which a number of corporations generally use in order to compare product proposals for various lines of businesses. You can have situations where a product may have a much higher absolute level of profitability than a competing product. Yet it ties up a higher amount of capital than the competing product such that, on a return on capital basis, this product with the lower absolute profit level is the better proposal from a corporate point of view. Return on capital profit measurement can make it difficult to follow the competitive pressures in a settlement annuity market, especially in times of rising interest rates since, in general, as interest rates rise, the amount of capital tied up in the business also rises.

For federal income tax purposes, settlement annuities are generally not treated differently than life insurance contracts. However, one of the items in the new tax law is that annuities certain are now taxed differently from life contingent annuities. The tax reserve assumptions for annuities certain are now defined to be the interest assumptions used in pricing the benefits. Thus, to the extent that the statutory reserve assumptions are lower than current pricing assumptions (thus producing higher reserves) there will be no current tax credit helping to reduce the surplus strain at issue. This means both a bigger surplus commitment to write the business and lost net investment income on the taxes currently paid to the government. On a return on capital basis this should lead to higher margins to maintain an adequate return. This is an area which all major writers of settlement annuities will investigate in 1985, and it could lead to some differences in prices for annuity-certain contracts versus annuities that ultimately contain some form of life contingency.

The foregoing discussion of profit measurement concentrated on considerations for a stock company reporting earnings on a GAAP basis. Pricing considerations for a mutual company would be similar. Instead of a GAAP equity approach a mutual company would probably use a more traditional Anderson method analysis in setting the rates. Additional requirements would be appropriate contributions to surplus over the life of the contract consistent with the requirements for other long-term asset-building contracts. A mutual company also considers the impact of the settlement annuity business on its tax planning, particularly as it relates to the so called "equity tax" provisions of the Deficit Reduction Act of 1984.

To summarize my comments on profitability, the settlement-annuity business is in a state of shrinking profit margins. Due to the positive publicity surrounding the settlement annuity business and the growth of the market over the past five years, new entrants have been attracted into the marketplace with the expected results of intense price competition. Following the market will be difficult, particularly if a new entrant underprices in order to establish a foothold. Extreme caution must be exercised to ensure that a competitive rate scale produces an adequate return on equity.

Let me turn briefly to some administrative considerations concerning settlement annuities. When a life insurance company enters the settlement-annuity business, generally it has a life insurance processing system already in place. Additionally, there usually exists some system for generating a check for single premium immediate annuities, supplementary contracts, and pension payouts. This system tends to be relatively rigid, that is, the assumption is that the benefit payments will not vary. The addition of a settlement annuity product line causes several problems for life insurance companies with the typical processing system described. First and foremost, because each settlement annuity is unique in terms of benefit payment patterns, a system which does not have provisions for automatic benefit payment changes will lead to processing nightmares within a very short time. A system must be developed which can handle routine changes in payout patterns (for example, annuities where payments increase by a percentage, and annuities which increase by a constant amount). The system must also have the flexibility to generate the lump-sum or bullet payments that are a part of a typical settlement annuity contract. This necessitates a relatively sophisticated system.

A related issue to check cutting is the valuation of these contracts. Unlike typical payout annuities with level benefits for life or for periods certain, the unique benefit pattern of settlement annuities renders a commutation function valuation system useless. The solution to this problem is a basic value type valuation system which uses the file which carries the future benefit payment stream (hopefully the same file that is used to cut the checks) as input. Both the check cutting system and the valuation system are complex to develop. There is at least one software vendor who has developed a system for handling these kinds of annuities.

Another administrative issue is data control. Since benefit payments are unique and tend to be very large, substantial control over the flow of data into the payment and valuation systems is necessary. Without an integrated processing system (by that I mean a system which has computerized policy issue, accounting, and payment file creation all linked together), the potential for errors is great. Data input must be constantly checked. For example, the reserve at 11.25 percent for a \$10,000 payment due the year 2015 is only \$409 today. Obviously, the reserve for a \$100,000 payment due in the year 2015 would be \$4,090. While numerically one is ten times the other, if the \$10,000 payment was part of a contract which was generating a \$400,000 or \$500,000 total reserve, putting that payment on the payout system erroneously at \$100,000 would not allow the incremental reserve to stand out in most

normal consistency and reasonableness checks. Constant review of the data going into the system and various internal controls (such as counter-signature requirements and periodic file checks on contracts that have payments over some threshold amount) are needed to ensure that large dollar errors are not made in this business.

A further administrative consideration is the handling of the peak-and-valley-type business flow. Because rate changes occur which require deadlines for receipt of money, it is not unusual, given today's volatile interest rates, for a company to experience periods of relatively flat, predictable, cash flow punctuated by periods during which the company receives significant sums of money. These peak periods are caused by stale date requirements during rate changes. It is not impossible to receive as much as 50 percent or 60 percent of the premium for a year in two or three relatively concentrated periods. This requires trained personnel to push the peak-load business onto the system, while simultaneously ensuring that you are not running at overstaffed levels for nonpeak periods. Handling these peak-load periods would be extremely crucial for rate changes which would be implemented around the end of any quarterly financial reporting period and, of course, especially around the end of the year.

Finally, in setting up administrative and operating procedures for the settlement annuity business, extreme care must be taken to ensure that the operation complies with state licensing, policy form, premium tax, and other laws and regulations. A settlement annuity may involve several property and casualty companies domiciled in different states. The claimant or claimants may reside in another state. The event causing the claim could have occurred in a third state. The claims negotiations process can be taking place in still another state. Care must be taken to ensure that the situs for the contract is justifiable, that the proper agent licenses and forms are used, and that the proper premium tax is paid.

MR. ROBERT JORDAN: You mentioned the predominance of standard settlements. Could you give us some idea of what they are like or what causes them?

MR. FEDYNA: I believe you find a lot of them in wrongful death suits; a lot of them are workers compensation where someone has a skeletal problem which does not allow them to work at their usual occupation or something that has no influence whatsoever on mortality. In addition standard settlements would be made for an amputation of the arm or something that would not really require a substandard rating.

MR. LARRY MOEWS: You mentioned the call risk which is a very important risk to analyze in this product. Could you estimate what basis points you might be willing to give up to obtain a twenty year, private placement commercial mortgage or bond versus a twenty year publicly traded bond that might be callable in ten years? Have you done much work on that? I realize a lot of this work is new.

MR. FEDYNA: Probably, twenty-five to fifty basis points; that's generally what the investment department feels they are giving up when they buy deep discounted securities. That number is almost a given in our operation as it is almost exclusively what we use.

MR. BOB DREYER: Would you comment on the possibility that what we're considering to be substandard lives might just turn out to be super standard because of the reduced risk of accident and other hazards and also the possibility they will be getting continuing excellent medical care through the funds of these structured settlements?

DR. BUTZ: Both of those considerations have got to enter into your projection of mortality in these cases along with other things such as the ability to transplant brains or spinal cords in the future or to repair severed spinal cords, which to date is not possible but most certainly doesn't stretch the imagination too far.

MR. DAVID WELSH: What happens if the casualty company that's involved in one of these cases buys an annuity to deal with a claim against its insured? Suppose the casualty company gets into financial trouble. What happens then?

MR. PERRY: The position that our industry has taken (and from the law itself it's clear) is that when the case is settled, the claimant is the general creditor of the original obligor or the assignee, that being the casualty company or another named party. The life insurance contract is there to make the payments on behalf of the assignee or the original casualty company or self-insured. Thus far, it hasn't been tested; however, it is very clear that the claimant is a general creditor. It could go either way. I certainly would not want to answer that specifically.

FROM THE FLOOR: Would you comment on the proper GAAP treatment when a casualty insurer covers a loss by purchasing a structured settlement from a life affiliate?

MR. FEDYNA: I understand that the big eight accounting firms had taken the position that on a consolidated basis the transaction was to be reversed as you went up the financial reporting line. In 1984, a decision was made that this no longer had to be done because of the existence of numerous third parties in the process such as the judicially mandated settlements and the existence of outside settlement annuity brokers.

MR. MARV FINEMAN: At various times in the past, there has been a lot of call for surplus relief reinsurance, but I wonder if anyone here knows about mortality reinsurance being sought on structured settlements.

MR. FEDYNA: No.

MR. FINEMAN: Do the courts take any particular interest in the pricing or in the solvency of the company chosen for carrying the structured annuity?

MR. PERRY: That is becoming more and more of a concern today. The size and strength of life insurance companies are important, but what many do not understand is that the claimant is the general creditor of the original casualty company, the self-insured, or the assignee. So if you have a strong assignee, it's the assignee I'm concerned about and not so much the life insurance company. It is a big factor and you can't deny that. An A.M. Best A+ rating with a size class of XV is an issue that continues to come up.

MR. CRAIG LIKKEL: Dr. Butz mentioned the long term run out of the mortality risk in substandard annuities, and I would agree with these statements in general. A question comes to mind that once you develop a large enough block of this business there is an element of expected mortality each year. I'm wondering if you are doing anything in terms of monitoring the actual to expected ratio on these types of life annuities for the short term.

MR. HARBIN: Because the amount involved in these annuities varies so much from contract to contract often times monitoring mortality in terms of dollars is not particularly meaningful. But monitoring in terms of number of deaths expected, is probably being done by most companies that are writing this business. Presently the number of deaths expected is so low that the statistical credibility is not particularly great, and in some cases we're expecting increasing levels of mortality, so don't expect to have meaningful numbers to look at for a while.

MR. CHARLES TROWBRIDGE: I have absolutely no experience on these settlement annuities, but I recognize a similarity with a different kind of "settlement annuity" that dates back a time. Those of you who followed the ordinary pension business in the late 50s, 60s and the 70s know that commonly a block of pensions was laid off to an insurance company in the form of a single premium annuity, for a block of lives. Single premium annuity business arises from a transfer of assets into an insurance company because sometimes a plan is being terminated and because sometimes a plan that otherwise is not insured wants to be insured. The first single premium annuities that I am aware of took place in the 1950s, and there has been a certain amount of them ever since. From an insurance company point of view, the single premium annuity business has many of the same characteristics as the substandard annuity business. In the beginning there were very few companies in the single premium annuity business and they were all on very sharp nonparticipating quotes. The company that got the business could be assured that they had the sharpest pencil but also worried that they had made a mistake (and they did sometimes). Inadequate information was often a problem too. A lot of times you really didn't know what was being proposed. The investment problems were the same as they are today: immunization, cash strain, statement strain, and accounting problems. The underwriting aspects on an

individual substandard basis are the only unusual differences from the single premium annuity business. In general, you could assume in the pension cases that at least a block of business was pretty standard. The pricing was much less affected by the mortality compared to how it was affected by the interest. Now in those days, interest rates were a good deal different than they are now. We sold some of these cases on a 3 percent interest basis in 1950s. The company with which I was associated has been in this business almost continually since that time. Some years they have made a lot of money and some years they have not made much money; some years there have been only certain companies competing. This business has been profitable simply because interest rates over that period have gone up and the annuity rates that we quoted in those days look ludicrously high now. They were on a nonparticipating basis, and the profits were fairly immense, because interest rates have been on a rising trend until recently. As far as I know my company tried to compute how well they were doing on this block of business by just keeping account of all these cases thrown together. I haven't any idea of how that looks today but it must be in a fairly positive condition simply because those cases were sold a long time ago at low interest rates. I suggest you might check with companies that have been in the single premium annuity business from the pension side to see what you can learn from them. The only real difference between that business and substandard annuities is the underwriting.

MR. HARBIN: Thank you for that perspective on what we are doing. We sometimes like to think it is new and unique and need to be reminded that things don't change as much as we sometimes think they do. The companies that were writing single premium annuities in the 1950s using 3 percent interest pricing assumptions are probably, as you said, doing fairly well on that block of business today. I would guess companies writing the business today, if interest rates in the future should fall back to the 3 percent level, will not find themselves quite so fortunate.

MR. WELSH: Whether or not you do well when interest rates are rising would depend upon whether the reserve on the business was rising or falling off. If your liability is dropping off you are going to have to be liquidating investments to pay off the obligation that you have. I would think that if interest rates were rising under those conditions you might be hurt when you were liquidating investments. Primarily I was interested in the idea that perhaps 90 percent of lump-sum settlements would be dissipated within a five-year period. Does Mr. Perry know the origin of that notion? I've seen literature on it, but I've never seen it attributed to anyone who knows whereof he speaks.

MR. PERRY: The reference is to a firm back east which did some substantial studies and it is in the library at some university.

MR. DAVE HILBRINK: Continuing Mr. Trowbridge's pension analogy, do any of the panelists think that there would be a significant market

among the casualty companies for a participating settlement option vehicle like an IPG or something of that sort?

MR. HARBIN: One of the conditions that Revenue Ruling 79-220 imposed upon the business was that benefits must be scheduled and fixed permanently into the future to the plaintiff. As to the casualty insurance company, I believe their primary objective is to get the case settled for a determined sum and to go on about their business. So to my knowledge the market for a participating product of some sort does not appear to be positive. Maybe some of the other panelists have a different perspective.

MR. LARRY WARREN: It seems to me that the injured party as pointed out becomes a general creditor to the defendant Property and Casualty Company (P&C) The plaintiff's attorney would obviously be very concerned about the financial status of that defendant P & C company and might seek out a stronger P & C company if necessary. In addition, the P & C defendant company itself would be happy to close its claim files on the case. Therefore, it would be advantageous for both sides to transfer the obligation. My understanding is that the so-called assumption assignment certificate is the typical vehicle that is used. Generally speaking, what percentage of the settlement agreements would typically require such an assumption assignment certificate, and what would be a reasonable price that one would pay for such a vehicle?

MR. PERRY: The experience in our firm is about 40-50 percent of the cases now are being transferred to a third party assignee, usually because there are codefendants or it may involve Lloyd's of London. I can't answer the price question. It varies substantially.

MR. WARREN: For the numerical example which illustrated the return on GAAP equity, (roughly 6.5 percent), the premium was a million dollars, the present value of profit was \$10,000 on the GAAP basis, and the required GAAP surplus was \$150,000. It seems to me that in the calculation of the apparent GAAP equity that the \$10,000 would be one component. Nevertheless if \$150,000 of surplus is being allocated to this, then the investments associated with that surplus should be reflected, and the total of the investment income on that surplus as well as the \$10,000 would then be taken as the percentage of the \$150,000.

MR. FEDYNA: You are correct.

UNKNOWN QUESTIONER: How big is the market and how much is written by stock companies versus mutual?

MR. FEDYNA: The market I believe is about 2 to 2.5 billion dollars. My guess would be 80 percent stock company, 20 percent mutual.

MR. HARBIN: I believe in the past that was partly influenced by tax considerations. The federal income tax reporting by mutual companies has changed somewhat lately, and there is less reason for taxation to favor stock companies now.

FROM THE FLOOR: You had mentioned that the return on investment (ROI) in your calculation narrows. I was wondering if there is a pattern by duration as it emerges in GAAP accounting. Does the ROI rise over the life of the contract? Is it level? Can you give me some feeling as to the discount for substandards over a fully standard annuity that is typical in the market? I guess this would also increase your surplus strain correspondingly.

MR. FEDYNA: Your second question would depend upon how you computed your substandard reserve; whether you were using rated ages or mortality tables. In answer to your first question, it really varies all over the lot. It could be as little as 1 percent or 2 percent or as much as 30 percent or 40 percent of the premium depending on the medical evaluation.

DR. BUTZ: From an underwriter's viewpoint, a child with brain damage, for example, could be anything from standard to an adjusted age of eighty-five at infancy. Obviously, it would be tremendously dependent on the individual characteristics of the case.

MR. MIKE BELL: A casualty company comes to us with a proposed settlement. We come up with a good price, so they purchase it from us. A few years down the road it's determined by the plaintiff's attorney that the settlement was not proper, so they want to reopen the case. What type of liability might we incur as the annuity company in terms of providing this annuity? Can we be instructed by the courts to change in some way?

MR. HARBIN: I never cease to be surprised by exactly the kinds of things that you can be ordered to do by a court. I would guess that being ordered by the court to change the settlement in some way is not outside the realm of possibility. I think that this underscores the reason for dealing with professionals when designing the case from the beginning to make sure it is properly put together and that the problems don't surface after a few years just in the way you described.

MR. BELL: We have heard of a situation where one had been reopened. Are you familiar with any having been reopened?

MR. PERRY: Cases can be reopened. Since the settlement agreement is the operative document, the casualty company has agreed to make payments as described in the settlement agreement. They purchased a contract to fund the obligation. That's their property. If anything, they would have to buy an additional contract to make more payments. I can't answer the legal questions as far as that's concerned. I have no experience with a contract having to be surrendered because of a court decision.

MR. DREYER: Would you comment on the need or use of a broker or a third party negotiator where the casualty company and the life company issuing the annuity are related?

MR. HARBIN: There have been instances where casualty companies have used independent brokers to provide a third party influence in the settlement negotiation process, and the annuities have been written by an affiliated life company. Apparently, there are some circumstances where a casualty company feels that the third party presence is of enough value to do that.

MR. DREYER: We've been told by a broker that if we wanted to negotiate a settlement between our own companies we'd be better off working with a broker and shouldn't try to negotiate within our own staffs. I'm wondering what is the prevalence of this within the industry?

MR. PERRY: Obviously, I support that since I am an approved current specialist in this field. We believe our participation in the case, and whatever role we play, is vital. We're an additional ear involved; we're equipped to move numbers and not have to be concerned with the liability of the case but only with what the plaintiff's demands are and what the value of the case is at the time. The claims person is trying to do one thing. The defense attorney is trying to do something altogether different, and again, we have a specialized field for being there as well. Any other large broker in the business that's successful believes that if they are involved in the case, they will assure a savings somewhere between 10 percent and 20 percent. If there isn't going to be a savings, then that broker has a responsibility to walk away from the case.

MR. DREYER: Does the broker make it easier for the case to be settled within the two affiliated companies as opposed to putting it out to an unrelated party?

MR. FEDYNA: Yes, if for no other reason than the large educational benefit that the broker gives to a claims organization. Bear in mind, we are talking about a business which has evolved only over the past ten years and in terms of substantial numbers has evolved since 1980. I think a bigger volume of cases, leading to more revenue for the life operation and concurrently to greater claim savings in the P & C operations, would be obtained by using professional brokers. Our companies feel strongly that the brokers involved add real value to the whole process.

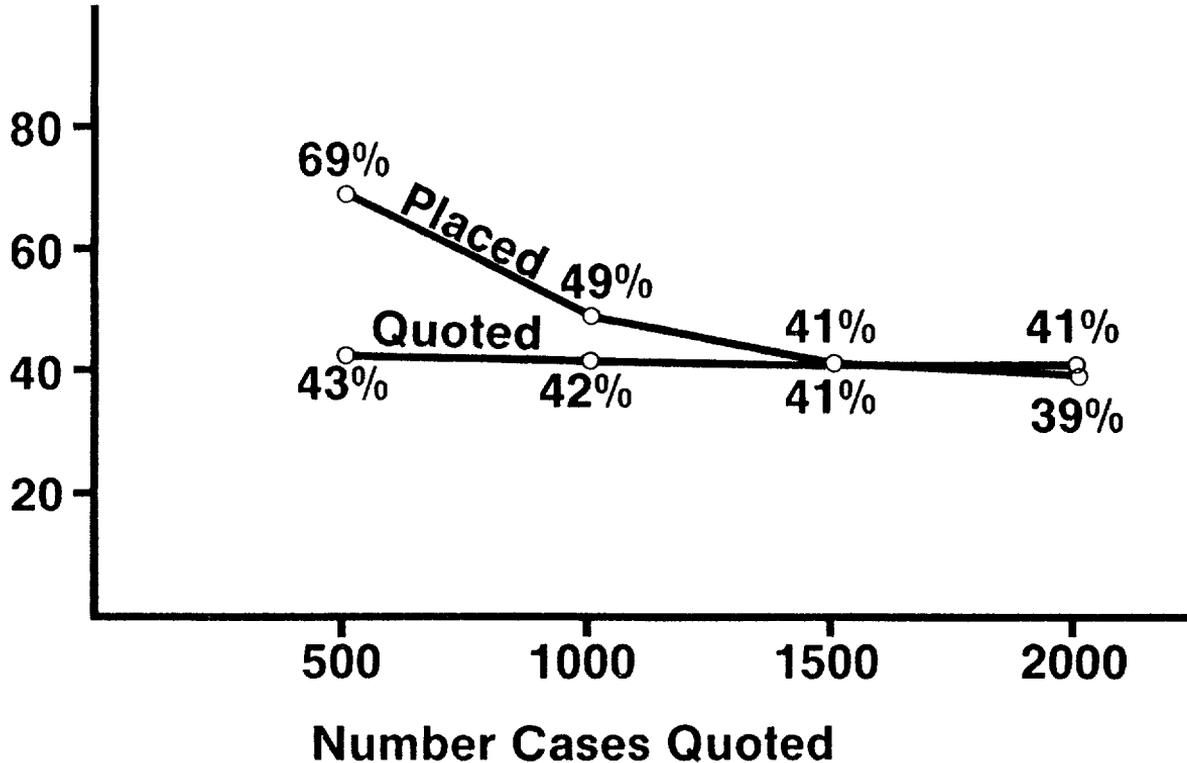
DR. BUTZ: From an underwriter standpoint I can more effectively and quickly reach a decision from the materials presented to me by a professional broker than I can from a claims person from our own company. The brokers know what we need and do it better.

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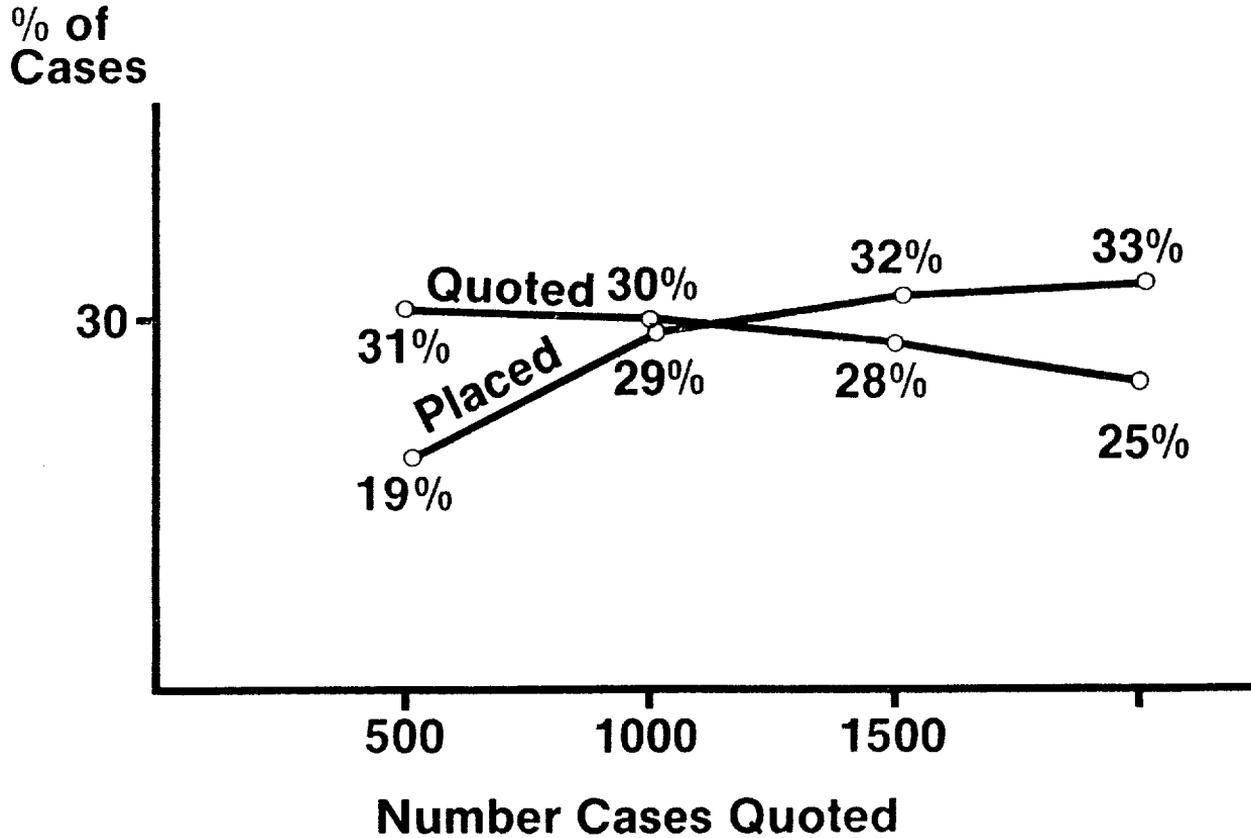
<u>Impairment</u>	<u>% of Placed Cases</u>
Head/Brain Injury	39%
Traumatic —	25%
Anoxic —	14%
Spinal Cord Injury	33%
Paraplegia —	11%
Quadraplegia —	22%
Medical Conditions	12%
Various Injuries	12%
Mental Retardation	2%
Others	2%

Brain Injury

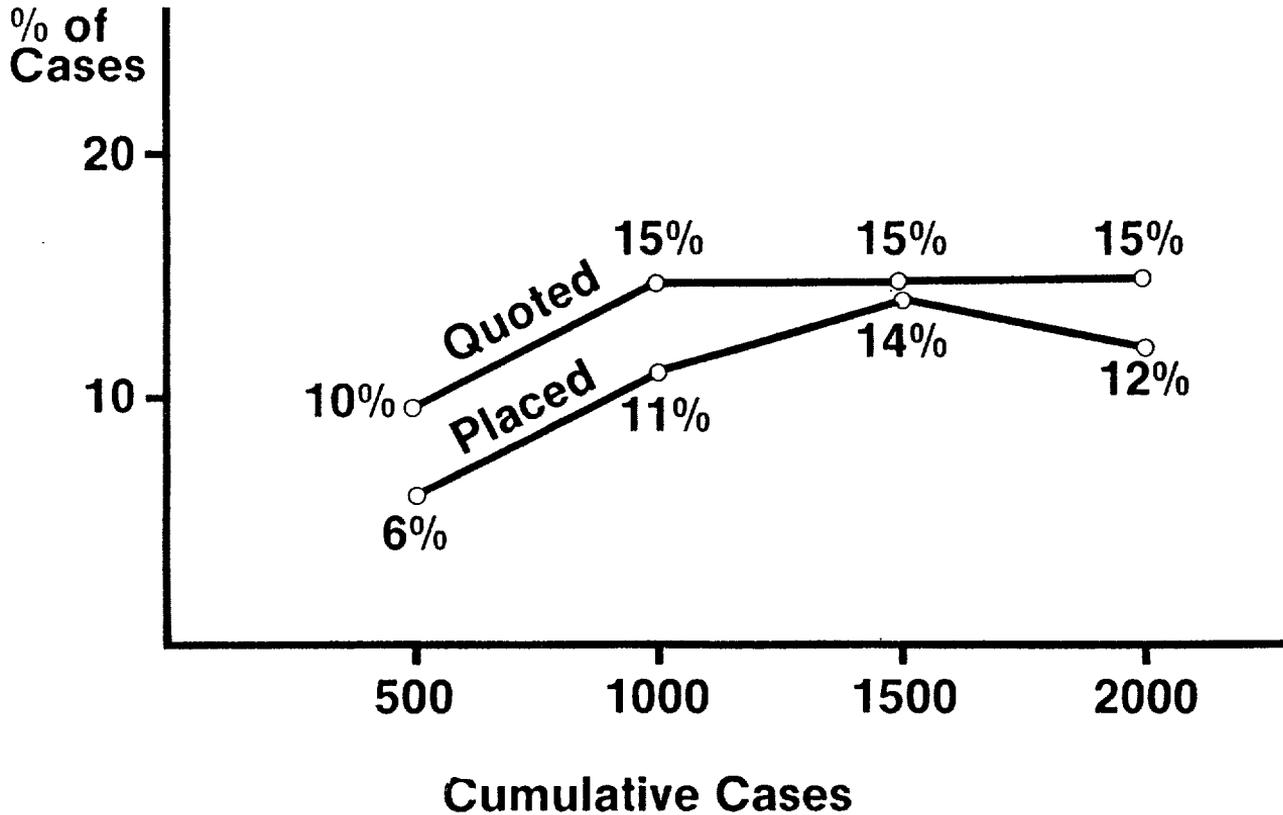
% of Cases



Spinal Cord Injury

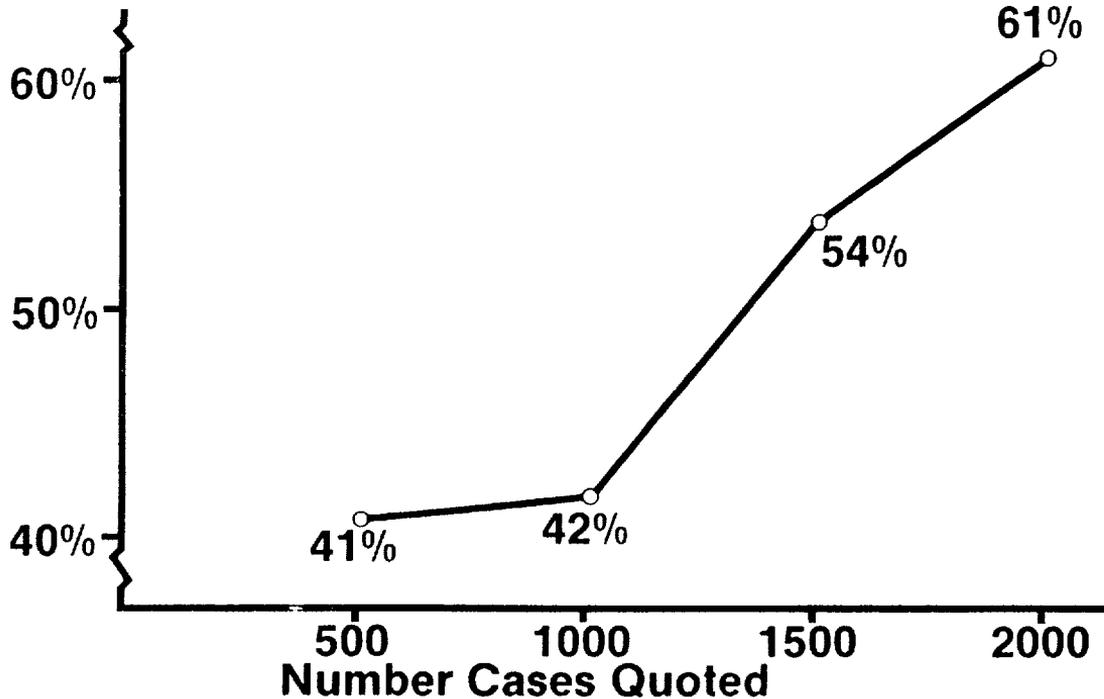


Medical Conditions



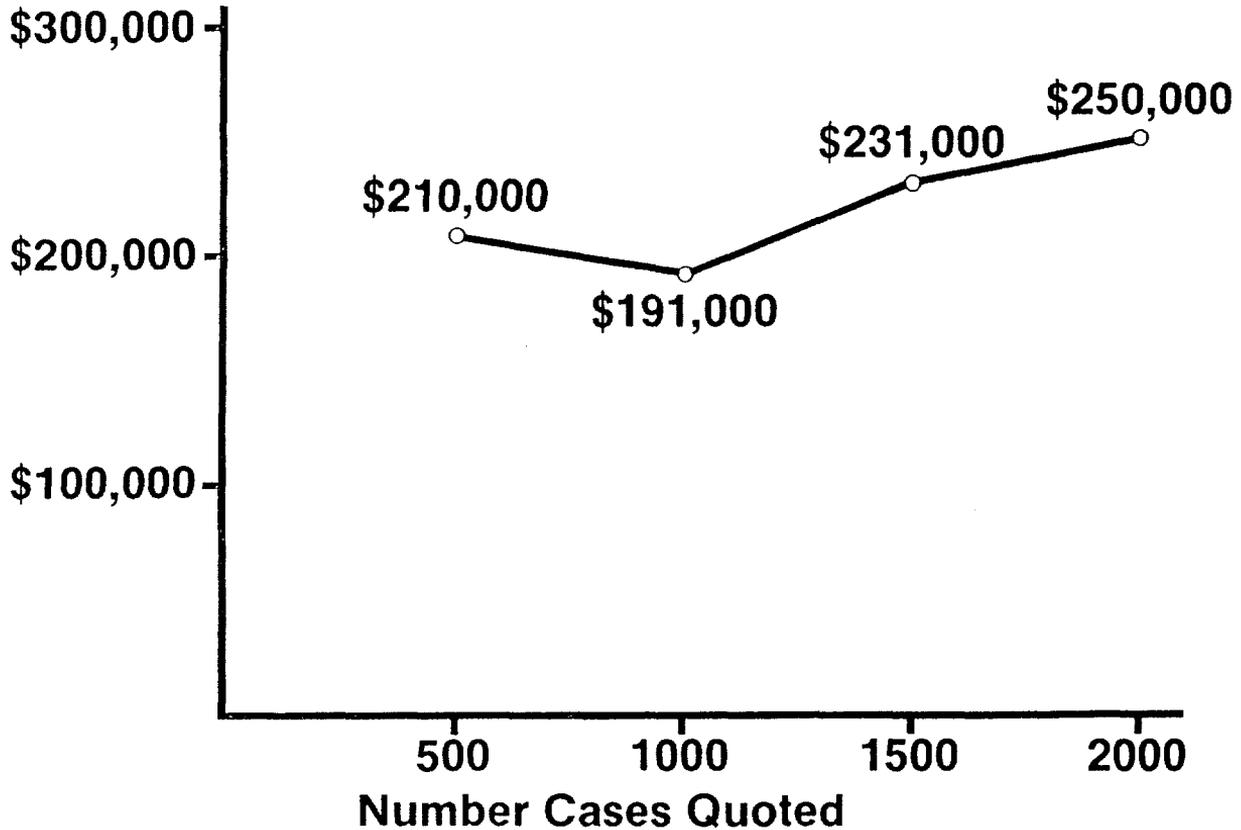
Life Contingency

**% of
Placed Cases
with Life
Contingency
(Cumulative)**



Average Size

Average Premium
Deposit (Cumulative)



Structured Settlement Annuities (Substandard)

520

<u>Size</u>	<u>% of Placed Cases</u>
Under \$100,000	43%
\$100,000 — \$500,000	45%
\$500,000 — \$1,000,000	9%
Over \$1,000,000	3%