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CURRENT ANNUITY TOPICS

Moderator: MICHAEL WINTERFIELD. Panelists: JOHN M. LENSER, G. THOMAS MITCHELL, CATH-ERINE R. TURNER. Recorder: TREVOR WALKE

- . Trends in annuity product design
- Marketing and agents' compensation
- Competition with other financial institutions, including banks
- Investment strategies
- . Establishing separate accounts for annuity lines
- Regulatory issues including TEFRA, state requirements, and the SEC
- . Replacement problems/persistency
- . Annuitant mortality

MR. MICHAEL R. WINTERFIELD: The diverse backgrounds of our three speakers will enable us to discuss these topics from the standpoint of a career agent, general agent or brokerage oriented company.

Before I turn the program over to our speakers I would like to briefly comment on four of the major annuity developments over the course of the last year.

1. Investment Policy

Let me start with deferred annuity investment policy. This is currently the highest stakes game in the annuity field. A year ago many of us thought we could have the best of both worlds. We could invest short and simultaneously offer a reasonably competitive rate and protect ourselves against investment anti-selection.

Today the reversion to a sharply lower traditional yield curve has changed all that. We must once again face head-on the problem of striking an appropriate balance between marketing needs and minimizing risk. In this kind of environment every company will have to make its own judgement as to what represents a prudent risk. However, it is critical for us to make informed judgments based on an absolute quantification of the risk levels under alternative interest rate scenarios and investment strategies.

2. Alternative Investment Options

The raging bull market which began last August and the brilliant marketing successes of Merrill Lynch and Fidelity are perhaps the catalyst for meaningful expansion of stock and other separate account offerings. At Equitable we have seen an increase in our new business stock account allocations to approximately 30% - this is more than double what it was a year ago.

SPDA/IRA Sales

There has been a definite slowdown in industrywide SPDA activity due to both the TEFRA tax changes and the public's concerns about the financial strength of some of the writers.

Meanwhile IRA sales continue to chug along at higher levels than any of us anticipated back in 1981. Nevertheless we have to fight harder than ever to maintain our market share in competition with the banks, brokerage houses and mutual funds.

4. Immediate Annuities

Lastly I would like to note the resurrection of an old friend, the single premium immediate annuity. With money market rates down to the 8% level, immediate annuity rates once again are attractive to a certain segment of the market. At the same time the structured settlement market for personal injury cases is now generating better than a \$1 billion/year demand for immediate annuities.

MS. CATHERINE R. TURNER: Prudential and its subsidiaries sell a variety of annuity products but I will be talking primarily about our two flexible premium, fixed dollar deferred annuities sold in the qualified markets. With the IRA boom last year, we sold approximately 350,000 of these contracts generating about 500 million in premiums.

Description of Our Products

Since 1975 we have had a front-loaded flexible premium annuity which we refer to as FLEXI. It has been used in all the tax-qualified markets, IRA's, TSA's, and small Corporate and Keogh pension plans. Its sales had been fairly level at approximately 30,000 contracts per year with about 2/3 of those being IRA's. Although we had increasing numbers of field requests for a back-loaded product, we did not see enough additional sales from the development of such a product until ERTA. When we concluded that ERTA would probably be enacted, we moved to quickly develop a back-loaded product (called PRUFLEX) to be ready for sales the beginning of 1982. Obviously, we were thinking primarily of the IRA market at that point, although PRUFLEX is also available in the other qualified markets. FLEXI also continued to be sold in all markets.

Compensation

It is difficult to find the right level of field compensation for these annuities. With their high savings orientation, compensation must be low to permit returns to the client adequately competitive with alternate programs such as those of savings and loan associations. But if the commission scale is too low, there is obviously no point in introducing the product. FLEXI commission rates had been higher in the first year for most sales. Level compensation is particularly logical for PRUFLEX because of the lack of early year expense margins, but we wound up with a heaped first year commission for the smaller purchases there too. The first year rate plus lower renewal rates together have a present value of no more than that of the level scale we would have been willing to use.

With a heaped scale, it is important to keep the contract from being a high compensation way to buy a single payment immediate annuity. So we provided it could not be settled for an annuity payout on the contract-holder before the second anniversary.

Investment Philosophy

Before 1982 we were investing assets for this product in our general portfolio, and therefore primarily in long term bonds. Our experience in 1980 and 1981 with withdrawal rates under our front-loaded product had made us very conscious of those disintermediation problems everyone has been worrying about. Our annual withdrawal rates climbed from about 9% of reserves in 1979 to approximately 17% in 1981. We changed our dividend scale to effectively apply a nominal withdrawal charge in an attempt to stem the flow of dollars. We do not, of course, know what our withdrawal rates would have been in the absence of that change, but we do know that we saw no drop in withdrawal rates during that period. Since the general decline in interest rates last fall, our withdrawal rates on the front-loaded product have declined to an annualized rate of just over 12%. I will have a little more to say about withdrawal experience later.

As a part of developing our new product, and thereby committing ourselves to increased involvement in the fixed dollar flexible premium annuity market, we moved to segmentation of our general portfolio. Incoming cash for both our flexible premium products has been invested since 1982 in a separate portfolio segment. I will talk for a while this morning about how we are managing that segment and about how we are attempting to monitor the profitability of these products.

Our objective with the new segment was to maintain enough liquidity in our investments to allow responsiveness to future interest rate increases. We also, however, wanted to maintain some stability in the interest rates we would be able to credit in the face of interest rate declines on new money.

Our back-loaded contracts contain higher guaranteed interest rates for their first few years. We originally used 11% for the first contract year and 8% for the next four years; somewhat lower guarantees have been included in issues since last fall. And to state the obvious, because I will refer to it again later, an underlying objective of our investment strategy was that our products should generate a net profit to the company.

We settled back in 1981 on investing primarily in marketable fixed dollar securities with maturities of up to 6 years in the future. Some maturities of that duration were necessary in light of our interest guarantees. Although we originally targeted a relatively uniform distribution of maturities over the indicated range, including keeping a portion of our investments very short, we also planned on shifting the distribution within that range as market conditions warranted.

As Mike pointed out in his introduction, it was much easier in late '81 to design an investment philosophy which would satisfy all of our goals. Clearly, you just had to keep your investments fairly short. That would give you good new money returns and also allow you to take advantage of future interest rate increases. I attribute our high level of IRA sales in 1982 partly to the fact that we were ready with a product right at the beginning of the year,

and partly to the fact that our investment strategy was right for the interest environment which we were in at that time. Before telling you what happened to us when the yield curve shifted, let me describe briefly how we were running our new portfolio segment.

We had traditionally changed our rates on both new and old money every January 1st. Beginning in 1982, we were also prepared to change new money rates on an ad hoc basis during the year whenever necessary. We have monthly meetings between the Actuarial Department and the Investment area to review the yields actually achieved on the past month's investments and discuss the likely changes, if any, in interest rates for the coming month. At these meetings we also continue to explore what other types of investments might improve our overall yields. As I mentioned earlier, we did - and do - have every intention of keeping our annuity products self-supporting. So when interest rates dropped last fall, we dropped our new money rates accordingly. Our field force tells us that is the first time we have ever been leaders in changing rates.

What did that drop do to our sales? It is a little hard to say because of the seasonality of IRA business. Our weekly issue counts had been declining gradually since the end of April. The drop in interest rates was followed by further brief declines, but we continued to receive 3000 or more applications per week. Considerations received per week dropped quite sharply when our new money rates changed, but quickly leveled off, reflecting our greater inforce base, and then climbed back up, of course, as IRA season approached. Through April 15th of this year, we sold about 75,000 flexible premium annuity contracts as opposed to 170,000 sales in the same period in 1982. Although part of this decline is attributable to lower interest rates. I do not think that is the whole story. In part, there are now many other institutions pushing harder to get this IRA money. It is also true that the decline in interest rates plus introduction of some new life insurance products have increased our agents' activity in that more traditional part of our portfolio. The fact that we do still have a fairly strong level of annuity sales, and the fact that our total considerations are continuing to come in at a fairly level rate, indicate that a consistent profitability objective need not lead to great reductions in the income generated by a product.

The above described primarily how we responded to the interest rate drop. What about the shift in the yield curve? We have stayed fairly true to our original intentions, i.e., both to keep our investments relatively short, and also to keep our new money interest rates at the theoretically correct level. Nevertheless, we do continue to search for better ways to increase yields without sacrificing our investment or profitability objectives. There seems no way, however, that we could ever return to the very long investments that we used in the past on this type of product.

Monitoring Profitability

It is one thing to say that we are attempting to invest our funds and set our interest rates in a manner that will insure that our products are profitable. It is a much bigger job, however, to satisfy ourselves that we are currently meeting those profitability objectives. I would like to talk a little bit about the systems and methods we have been following, and hope to set up, to assure ourselves of those points.

We have some flexible premium annuity models which we use to project income and outgo from a single year, or period of years, of issues, given certain investment yield and investment crediting rate assumptions. One of the primary uses of these models is to determine the difference necessary between our investment yield and interest crediting rates. That difference, which I will refer to as a "holdback", differs between our front and backloaded products, of course. But it is in theory the same for both new and old money within a product. (An alternate, but probably impractical theory, would make it higher for new money than for old.) The holdback levels are set so that we expect to meet our target surplus levels within ten years after issue.

To set interest rates, however, we need to know not only the necessary hold-back but also what we are earning. Even on deposits from prior years, that question is not always easy to answer, given the intricacies of intra-company allocations of investment income, taxes, capital gains and losses, plus the need to have some share of any branch's assets in such things as home office buildings. The fact we are investing the assets for our flexible premium segment relatively short also means that we need to take significant amounts of investment rollover into account and estimate future interest rates, even in setting the current interest rates on old money.

I mentioned earlier our monthly meetings with the investment department. We maintain portfolio listings of actual investments in our segment with summarized aggregate yields, to give ourselves an indication of what we are earning on money we have taken in. We are currently attempting to refine the methods for correlating these monthly and accumulated reports of segment investments with the net investment income that is actually credited by the accounting department to the flexible premium annuity sub-branch.

Even given certain knowledge of both investment yields and holdback, the actual profitability of these products depends significantly on their persistency experience. There are two distinct types of persistency for flexible premium products: the length of time that prior deposits remain before they are withdrawn, and the rate at which additional deposits continue to come in on existing contracts. Changes in either of these persistency—type rates can mean that the originally indicated holdback is no longer sufficient to achieve profitability goals.

We watch company ledger withdrawals for each flexible premium product, month-by-month, and compare those figures with estimates of the beginning of month reserve. Our experience for several years on the front-loaded product shows that these rates are seasonal; they are generally lower in the summer months. So, there is some distortion in merely annualizing a monthly rate. Nonetheless, once one has gotton from a monthly to an annual rate, the implications of any difference between the experienced withdrawal rates and those assumed in our models are clear for the frontloaded product. Lower withdrawals mean more profits (assuming we have achieved the desired holdback) and higher withdrawals means less profit. The effect is not quite so immediate for the back-loaded product. Our surrender charges currently start at 7% and grade down to zero in year 11 (or earlier for issue ages over 50.) A withdrawal in the early years of the contract clearly helps one's financial position for the year in which it occurs, since our 7% withdrawal charge is more than the amount we would have held out of investment income. So withdrawals on a back-loaded product can actually help the current year picture but still reduce ultimate profit levels.

Premium payment persistency is another concern, a significant concern for us this year because of our very high sales level last year. I mentioned earlier the present value of our heaped commission scale. That calculation is clearly persistency dependent, and if none of these contracts was to make second year payments, we would not meet our surplus objectives as quickly. Under normal conditions, we would take a look once a year, when we were revising our model office assumptions, at our premium payment persistency experience on prior issues. For 1983 and 1984, we are setting up additional reports which will give us a quarterly indication of how premiums are coming in in later contract years from that big block of 1982 issues. Our initial, very early indications are that second year experience will be good. (Our model office assumptions are that 60% of 2nd year contracts pay additional considerations.) The information that we have to date is, however, probably overly optimistic. It is affected by the fact that all second year payments that we have seen so far have been within the April 15 tax filing deadline for 1982.

MR. G. THOMAS MITCHELL: Columbia National is a subsidiary of a major property and casualty holding company, in turn a part of the Financial Services Division of Armco. We are aiming at rapid development of the company, through multiple distribution systems.

We deal with our P&C agents and a small force of PPGA's. We also have some brokerage business and some direct response business.

In early 1982, we were convinced we could develop large annuity volumes, for our size, on a profitable basis, leading to acquisition of additional life business, as well.

Our investments are handled by our parent in a different investment environment. We have had to work hard to build the close investment communications and strategy needed to compete in annuities.

We contemplated making short-term investments, and setting our rates just below the big annuity writers.

Product development was done by looking at the big writers' policies, and adding some bells and whistles provisions, such as bail-out and other surrender charge waiver provisions. We also listened carefully to field input.

Carefully constructed, the program went into place just as interest rates plummeted. All theories and strategies were outdated immediately.

We feared overreacting, and disrupting our new distribution system development. Rate setting consisted of waiting for others to move. Perhaps too many followed this strategy — the rate drops were slow in coming. We followed rates down in orderly fashion, with sales fluctuating up or down about 50%, as we ratcheted down.

Annuity policy sales have not led to follow-up life sales for us. We have been happy with only a moderate flow of annuities, because more sales would be costly. We have turned our operating cash flow positive. Short term investment of the funds has dramatically improved our liquidity.

We get many requests on immediate annuity quotes, but because of a lack of fine tuned pricing and investment strategy, have had no success.

Because of our associated P&C operation, we have carefully reviewed structured settlements, with some future action probable.

Non-Qualified Periodic Premium Annuities

What is the market potential?

- The expansion of IRA's to all workers has dried up much of the market.
- TEFRA has made the area somewhat less attractive.

TEFRA changed taxation of interest so that interest is considered as withdrawn <u>prior</u> to principal, on a <u>partial</u> withdrawal. A second change was to add a <u>penalty</u> tax of 5% of interest withdrawn, with several exceptions:

- 1. Death.
- 2. Disability.
- Payee is age 59½ or older.
- 4. On funds in the annuity for 10 years or more.

Both reduced the attractiveness to the purchaser, but both are really incidental in real effect on the public.

Let us look at administration of TEFRA inside the insurance company. We have had no problem dealing with contracts that are all pre - or all post - TEFRA. For combination contracts (existing block of periodic contracts as of August 14, 1982) we are record keeping as if under the old law, with system warnings on withdrawals or surrenders for manual attention (subject to IRS regulations as they emerge).

Because of our low volume of existing contracts with partial withdrawal features, this gives us no problem.

A longer term problem is the penalty tax, and the 10 year rule. We are not sure how to compute the 10 year rule, but we feel we have 9 years left to figure it out.

Our data base preserves total detail — so, in theory, we will be able to handle this. A problem is our contract works LIFO on interest credits and the 10 year rule works FIFO. Add to this the LIFO rule on income taxation, and trouble is sure to be near.

There are other curiosities — the age $59\frac{1}{2}$ clause pertains to <u>recipient's</u> age. The recipient may differ from the annuitant, whose age is in our records.

A design issue is involved in first-in/first-out taxation of withdrawals of interest on principal. A policyholder ought to be better off with segregated purchases, allowing selective withdrawal of principal.

This applies to both SPDA's and periodic contracts. If applied vigorously, two negative things may happen:

First, the average size policy may decrease dramatically, a detriment to administration and profitability.

Secondly, the IRS would probably react if this were aggressively used, resulting in complex aggregation rules.

In summary, this is a troubled area.

Bail-Out Provisions

A bail out provision gives the policyholder an opportunity to surrender the policy without a surrender charge, if interest credits fall below a defined level.

The common provision sets a specific interest rate, 1% under the initial rate. For example:

"If we ever credit less than 13%, you can surrender the contract without penalty."

This waives, typically, a surrender charge of 7% in the 1st policy year, decreasing 1% a year. Strong arguments were made that such a clause is low risk to the insurer:

First, if the insurer continues to offer a competitive rate on rollover of old money, the policyholder has no incentive to move it.

Secondly, surrender, other than to transfer to another annuity, has tax consequences.

Thirdly, inertia is on the insurer's side.

Fourthly, its necessary for marketing, and the risk is minimal (maximum 7%).

Fifthly, "Economists now say we will never again see interest rates below ____." (Insert 3% points below current conditions).

Well, not all these arguments have worn well since summer of 1982. Rates fell at breathtaking speed. Not all competitors dropped rates accordingly.

Some of the reasons:

- 1) Simple timing delays needed to re-price.
- Temptation of increasing sales by just holding out on rates a few weeks.
- 3) Advance investment commitments by some insurers.
- 4) Possibility rates might rebound (fear of overracting).

Thus, argument #1 became very weak -- Yes, no one will switch if my rate is competitive -- but a competitive rate is a loser. I can pay too much interest, or risk exercise of the bail out.

The impossibility of radically lower rates needs no elaboration. We have spent much attention on risks of <u>rising</u> rates. There are risks to <u>lower</u> rates too, and these need equal attention.

A fixed rate bail out needs to be approached cautiously. At a minimum, I would advise increasing the spread between current and bail-out rates, as rates go higher.

Our approach was an indexed bail out, a bail out option if interest credited is less than a T-Bill rate less 1%.

The advantages are:

- 1) Adjusts to future conditions (less risk to insurer).
- Gives customer more protection if interest rates rise, while being understandable (and hopefully acceptable) on the downside.
- 3) May create lower reserving requirements.

Disadvantages are:

- 1) Indexes of less than government rates lack marketing appeal.
- Indexes greater than government rates create reserving problems (especially in California).
- 3) Timing differences and practicalities in definition:
 - Is the rate known in advance?
 If so, what happens if rate drops rapidly?
 - Is the rate not known in advance?
 - How is this administered?
 - Is the index tied to a similar maturity as rate guarantees and/or underlying investments?

I anticipate future creativity in bail out provisions. They serve a legitimate purpose in marketing and in giving customers an assurance of fair treatment.

We need to look for attractive and reasonable provisions.

Structured Settlements

This rapidly expanding market deals with creative handling of casualty and legal settlements. Typically, in lieu of a lump sum of \$100,000 or more, the claimant agrees to receive a structured series of payments, commonly referred to by us as an annuity.

The national market has exploded in size from approximately \$70 million in 1979 to \$1 billion in 1982. One estimate of the potential is \$5 billion annually.

The basic attraction is the ability to devise a series of payments which has greater practical value to the claimant than a lump sum. The payor can then strike a deal where both parties benefit.

The annuity principle is helpful, for example, in the case of an injured plaintiff with potentially shortened life span. An annuity can provide a far greater on-going income than a lump sum in most cases.

The structured settlement process has many stages -- we start with a legal claim, probably insured by a property/casualty company. In the course of claim settlement a structured approach may be proposed by either party.

In most cases, specialized consulting firms help one side or the other with the negotiations. In the midst of the negotiations, trial price quotes are needed from insurers. The eventual settlement results in a carefully drawn, typically customized, immediate annuity contract.

Relatively few insurers have been actively involved. As with all immediate annuities, price is the main object, and prices are directly comparable. Finely tuned investment strategy and pricing techniques are vital.

Unlike deferred annuities, structured settlements are <u>locked in</u> for very long periods of time. For example, a life annuity age 15, with 3% a year increasing payments, gives very long investment maturities. This should be the immunizer's paradise.

Other competitive factors are:

- 1. Experience in the field -- knowing how to do this business.
- Ability to customize design, beyond traditional "settlement option" formats.

For example:

- contingent payments on children's lives, or spouses.
- increasing annuities.
- lump sum payments at stated times in the future, possibly with contingencies.
- 3. Quick quotation capability.
- 4. Financial strength of insurer acceptable to all parties.
- 5. Substandard annuity underwriting capability.
- 6. Capability to withstand large surplus strains.
- 7. Favorable taxation phase.

Factors in the growth of the market have been:

- Increasing P/C company awareness, heightened by underwriting loss problems.
- Increasing acceptance and enthusiasm by plaintiffs' attorneys (after early skepticism).

Incidentally, there is a heavy element of "taking sides" — consultants, and to some extent insurers work one side of the house only — plaintiff's or defendant's

- 3. High current long term interest rates which can be locked in.
- Increased legal acceptance resulting in HR-3470's passage, October 1, 1982.

This bill put into federal law simple rules for achieving proper tax status for the claimant.

If properly constructed, the settlement will not have tax consequences. Investment income built into the annuity price does not become taxable to the claimant. Because the price is discounted for future interest, the losses of the defendant are reduced, resulting indirectly in taxation there.

Methods of financing structured settlement:

- 1. Life insurance annuity.
- 2. Novation Assignment to another casualty company.
- 3. Casualty reinsurance.
- 4. Self-financing by plaintiff.
- 5. Defendant Self-financing.
- 6. Use of captive insurance companies.

The strategy in choosing a vehicle involves negotiating strategy, taxation, reserving, investments, risk management, and legal niceties.

The availability of alternative funding methods increases the need for life insurers in the market to be aggressive and innovative, in order to retain their current high share of the market.

In summary, this market is a strong, growing one, but demands considerable specialization for success.

MR. JOHN M. LENSER: My assignment was to answer the question "Where is the SPDA world today?"

I have chosen to subdivide the broad question into three pieces:

- Where is the SPDA World Today? (Including the Route We Took to get to "Today")
- 2. In What Direction is the SPDA World Moving and What Forces are Moving it?
- 3. What Products will be Distributed in the Near Future by the Marketing Organizations that have been and are the Major Forces in the Marketing of SPDAs?

Perspective

Before addressing these three questions, let me present a little of my background.

I am with the consulting actuarial firm of Milliman and Robertson. The perspective that I bring to the set of questions we are addressing is somewhat different from the other speakers. I have worked extensively over the past five to eight years with a number of major securities firms which have been marketing single premium deferred annuities for some time now. Our work with them is basically a part of the due diligence process which they go through before marketing a particular supplier's product.

This process includes general evaluations of the products to be marketed. It also includes evaluating C-3 and other risks associated with both the marketing of the products and with the investment of related funds. Studies of surplus requirements and profitability issues are, naturally, part of the risk evaluation.

In addition, we have helped these firms evaluate their future marketing thrusts since they sell other accumulation type products along with the SPDA.

The Route To Today

Let me first describe the route we have taken to get to the world we are in today. That route very much influences my view of what the SPDA world is today, the direction in which this world is moving, the forces that are moving it and the products that will be distributed in the near future by the marketing organizations that have been and really are the major forces in marketing SPDAs.

Life insurance companies have, of course, written large volumes of SPDA premiums. However, the real impetus for the take off of this product from the early '70's to today has been the marketing of the product through other kinds of marketing organizations, in particular securities firms and some of the wholesalers who act as the middlemen in the process.

In the early and middle '70's, there was an initial group of companies which were really pioneers in writing highly competitive single premium deferred annuities. These early SPDA's offered very, very high interest rates, no front end loads, and were generally more highly competitive contracts than had been previously offered by insurance companies. There was Anchor National which did an immense volume of business for that period of time and wrote it, to a high degree, through securities firms. There was IDS, and Capitol Life came in about '74 - '75 .

This was a period when interest rates were high. It was the time of the oil embargoes, sudden inflation and increase in interest rates — that would have been about '74 — '75. The product was really appealing under those conditions. We were emerging from an environment in which insurance companies had invested very long term and, to some degree, continued to do so.

Contracts were being offered at very, very attractive rates, varying generally between 6.75% and 7.25%. The interest rates really looked great and large volumes of business were written.

Business dipped between '75 - '76 when the rates dropped from highs around $7\frac{1}{2}$ % down to around 6.50%.

After 1976, interest rates rose again, peaking about late 1981. During this time, the volumes of premium that were written on these contracts increased dramatically from year to year. And also during this period of time, insurance companies developed marketing relationships with many of the securities firms - Merill Lynch, Dean Witter and Hutton, for example. It got to a point where even today, the smaller regional firms, eg., A.G. Edwards, Piper-Jaffray, are writing SPDAs in sizeable volumes.

These new marketing relationships brought responses from some of the larger traditional insurance companies. Equitable is a good example of that. The Equitable used EVLICO, a stock subsidiary, and wrote sizeable amounts of premium. Then there was New York Life which came into the market late with a very competitive product; again they used a stock subsidiary.

In summary, the '70's were characterized by i) rising interest rates, ii) the growth of new marketing organizations, iii) the entry of some of the traditional insurers to the SPDA market, and iv) the entry of some of the largest insurers to the market.

During the late '70's and early '80's, the initial group of companies was replaced by a new group of major SPDA writers. These include:

- i) the National Investors/University Life companies which have had so much adverse publicity in the last several months - they were subsidiaries of Baldwin United,
- ii) the Charter Security Life Companies in New Jersey, New York, and in Louisiana - they have written around three and a half billion dollars of premiums,
- iii) Executive Life companies ~ Executive of California and Executive Life of New York. Executive was selling with the original group, but did not have much capitalization and hence grew rather slowly. But in the period 1980 - 1982, it had better capitalization and it really took advantage of the large volume of sales that could be made in 1981.

Interest rates reached a peak in late 1981. In late September, early October of 1981, the Moody AA Bond Index went to about 16.50.

In the last quarter of 1981 some companies were offering contracts with a $15\frac{1}{2}$ %, one year guarantee and with a bail-out. Through 1981, companies were offering a plain vanilla product, that is, it had a very high initial guarantee, but for one year only. There was a bail-out rate 50-100 basis points less than the guarantee. It had a typical 10% free corridor and a penalty on anything else. The penalty was typically at the 5-7% level and disappeared after 5-7 years (often on a graded basis).

Today, the plain vanilla product is still around and it still produces a large volume of business. However, there was a movement between '82 and '83 into some more esoteric versions of the SPDA.

Today

1. Products

Let us now turn to some of these new products and how they have changed. We went into '82 and '83 with that plain vanilla product still being one of the big ones. In the tail-end of 1981, and in early '82, interest rates had begun to fall. The yield curve was still inverted, but there was a sharp fall-off from the 16.50% peak that we saw in about September/October '81.

There was some interest, reasonably enough, on the part of clients, in contracts that guaranteed the high rate of interest for a longer period of time. Get away from the one year guarantee and go to three, five, or maybe seven years.

In response, there was a departure from those contracts that had guaranteed periods and rates tied to short term asset investment strategies. In '81 with the inverted yield curve, it was easy to write contracts that guaranteed a very high rate of interest and were backed by the funds invested in T-Bills, commerical paper, CD's or something very short term providing a very, very high yield. Those contracts were popular and involved a good deal less investment risk, obviously, than did contracts with longer guarantees.

However, there was a movement away from the short term guarantees by the late part of 1982 because short term rates had fallen from the 16 - 17% level to an $8\frac{1}{2} - 9\%$ level by August of 1982.

Executive Life went to a product called Five Plus Five which provides a five year guarantee and a bail-out provision that seemed to imply that the guarantee was renewable for another five years.

Sun Life of Canada's U.S. subsidiary came into the market in the middle of 1982 with a product offering a five year guarantee.

A little company in Arkansas offered a product with a seven year guarantee and also incorporated a market value adjustment.

We are also seeing a movement towards what I would call indexed products and "better of" products. The short term annuity products were a little bit like an indexed product even though they were generally not tied into a specific index. There were also indexed life products. There was Occidental's T-Bill plan; there was Life of Virginia's Challenger which had the "better of" feature - you could get either the short term rate or the long term rate both tied into government securities i.e. you could get the better of two rates.

We have begun to see indexing on some annuity products. The National Home Group's Pacer, a product that is tied into a long term bond index, has been around for a couple of years and generated a pretty sizeable premium volume last year. The interest rate guarantee is linked to a long term bond index, I think its the Salomon Brothers' long term public utility index, and it changes quarterly after the first year.

We have also seen a move to a market value adjusted contract on a group basis — I already mentioned the Arkansas product. There is some uncertainty as to that contract's acceptability, but it has been used in a limited number of states and the company mentioned that it has approvals in some other key states. The contract involves a market value adjustment which does not precisely follow the change in the market value of a bond portfolio or a particular bond. Instead there is a formula written into the contract which attempts to follow pretty closely the changes in market value of a particular maturity bond.

As a consequence of these new products, we are beginning to see more hedging in the investment strategies and portfolios of the big annuity writers.

So, we have seen some significant changes: the move to market value adjustments, the "better of" products, the indexed products, the movement away from the plain vanilla one year guarantee. We may also be seeing a small reduction in the volume of business, but not a significant amount.

2. Volume and Related Factors

There is a tremendous appetite for the product on the part of account executives and on the part of their clients. If there is a product available, there are plenty of marketing organizations to write it. However, there are some factors which are tending to depress the market right now - tending to drive down the level of sales.

In some of those bigger companies, those three major companies that I cited for example, surplus levels are starting to drop. It is hard to acquire adequate surplus relief to maintain surplus at a level that is satisfactory when you are writing the large volumes of business they have been writing. The cost of purchasing surplus relief - basically the surplus relief for the excess reserve requirement - seems to be skyrocketing this year and that makes it difficult to get the surplus you need to sell that product.

This product as it is sold by the securities firms, is sold with an unbelievable emphasis on its security. As far as they are concerned, the insurance world is a world that cannot fail - the annuity product is just totally secure. The legal reserve life insurance system makes the product almost as safe as something that is backed by the FSLIC or the FDIC, etc.

The adverse publicity that you have seen lately is cutting away a little bit at that security in the minds of people who market the product and in the minds of the buyers of the product. That may, at least temporarily, cause the market to shrink a little bit.

There is another question which I want to mention briefly. Five or six years ago, the SEC questioned whether the SPDA, given the way it was being marketed, was a security. I would not say they concluded that it was not but they did not lay down any rules that made it appear as or made it stand as a security. Now they have revived that examination based on a complaint brought by a company that Charter Security was trying to acquire. What is the SEC going to say about this product? Are they going to try to classify it as a security? That could have an adverse impact, obviously, particularly if they follow through with some kind of severe restrictions on it.

Interest rates are lower now than they were a year ago and that always, at least temporarily, decreases the attractiveness of the product.

For insurance companies, the perception of investment risk at this particular point in time is probably greater than it has been over the last few years. Some of the companies may feel that we are at the trough in interest rates since they have been falling for some time. If you are at the trough, you do not want to be writing large volumes of business. When interest rates take off again, you face the classical disintermediation problem - this investment risk that companies faced through the late '70's and early '80's.

TEFRA restrictions probably had a minimal effect on sales of the product. There is some belief that the marketing of the SPDA prior to TEFRA emphasized the withdrawal features of the contracts, and perhaps it did. My impression, though, is that in practice, the partial withdrawal feature probably was not used very heavily. It appears that the restrictions on partial withdrawals do not appear to seriously impact the marketability of the product.

The performance of the stock market is impacting the sales of the product currently and will continue to, at least temporarily. Since so much of this business is sold by securities firms and since the stock market's performance has been so good over the past eight months - since about August of last year - there is another product that is an easy sale. Back in the days when SPDAs were sold in huge volumes, like late '81 for example, they were a very easy sale. General interest rates were very high, interest rates being offered on contracts were very high and sales were easy, especially since the stock market was not performing so well. Today, with interest rates down and the stock market up, the easy sale may be the common stock sale.

Then there are some factors which tend to restore the market and drive sales volumes back up again.

There are cadres of people in individual offices in the securities firms who market SPDA's very successfully. SPDA's may be the only thing or nearly the only thing they sell, they make a lot of money selling them, and they are familiar with the wide variety of products. When new people come into these offices and see others very successfully selling SPDA's, the new people are attracted to the product. The new people then in turn try to get other new people to sell the product. This cycle is a very strong impetus for sales.

In addition, the distribution system is in place - it certainly was not in '74 and '75. You did not have nearly as many securities firms writing the product, and internally they were not set up the way they are now. Now there is a very large number of companies writing the product and they are well set up to distribute it.

On the part of the buying public, there is a comfort level and a certain common knowledge aspect of the product. It is something with which they are familiar — it has been around for a while. Both the buyers and the account executives feel more comfortable. I cite as a couple of examples i) Fidelity Management Company which sells a variety of securities and insurance annuity contracts and sells them on a direct mail basis, not through account executives and ii) Dreyfus which has done the same thing with the variable version of this product. This suggests that if you can mass market a product through the mail, it has a pretty high degree of acceptance.

The ultimate response to the lower interest rates will not be one that keeps people away from the product. For example, I indicated that around 1975, interest rates of 7½ were being paid on annuity contracts. In fact, there was a drop in rates at one point to a 6.75% level. When that happened there was a little reduction in sales temporarily. Just before the reduction, there was a great effort to get money into the contract at the higher rate. So there is a temporary sales reduction when interest rates drop but I think you will see the sales pick up. Another reason I say that is because basically this contract is compared to a CD or savings account to see how well the interest rate, as a tax deferred interest rate, compares with those other alternatives.

Future Products

Now I will turn to the products you will see offered in the future. These are not all SPDAs, but they will be largely accumulation type products. They are quite like SPDAs in terms of their appeal to buyers and sometimes in terms of the risks and profit margins they provide to insurance companies.

The variable annuity seems to be coming back. Its sales through the securities firms really took off prior to the adverse tax ruling in 1981. It had really grown very quickly before that ruling came out and it just went down to nothing after that. But interest seems to be building again. There are a number of companies with products they are pushing pretty hard. MFS (which is now associated with an insurance company, the Sun Life US Company) has a product called Compass that it is marketing through the securities firms. American General also has a product they have been marketing through the firms.

We are also beginning to see a little bit of, and we will see more of, what I might call dedicated products - to use a term, from another field. First there were money market funds backing products when money market funds were doing really well. Now typically, if you take a product such as that marketed by Merrill Lynch, it has maybe five or more funds behind it - a couple of bond funds, the stock fund, the money market fund and others. If we have not seen it already, you will see products that are backed by just a real estate operation. There will also be others that are as specifically or as narrowly dedicated to a particular asset type.

You will see some variations in SPDA's and I have gone through most of them already - market value adjusted contracts, the "better of" contracts, indexed contracts, etc.

Tom mentioned structured settlements. We are even going to see some of these coming into insurance companies by way of securities firms.

Of increasing importance in those firms will be products like Universal Life, Variable Life and the Deposit Universal Variable Life, especially if there is ever a firm clarification on writing the contracts. There are immense amounts of interest in the securities firms in single premium whole life, but everyone is just standing around trying to figure out what is allowed and what is not allowed in terms of product design under TEFRA. There is a lot of interest in Single Premium Variable Life - there is the Monarch product which is marketed by Merrill Lynch and you will see even more of those pretty quickly.

Then there is something which does not fall into any of the other categories but I thought I would mention it anyway. These firms have been marketing something that the insurance companies marketed for a long time, the minimum deposit genre of products. Hutton put one together called Omni which they have been marketing for a few years now. Another group of marketing people who left Hutton a year or so ago set up their own shop and put one together called Dynaplan. This is being marketed by a number of the major securities firms and will be marketed by many more.

It is not the kind of product that is written by the account executives who write the other kinds since it is clearly a tax shelter product. It is designed to produce tax losses over a period of time and flexibility in using them. It is going to be an important product.

MR. GREGORY CARNEY: First of all I would like to congratulate the panel on an excellent presentation - I was stimulated quite a bit. I have a question for Cathy that relates to the front load and back load products. I believe we will see a difference in persistency. This difference stems from both the product design as well as the distribution system. Prudential is distributing their products, as I understand it, through their agency force, as well as through Bache. You are using two different distribution systems, and you have two different products. My question is, Do you have a rate differential between those two products, and do you have different investment strategies because of the different expected persistency?

MS. TURNER: No, we do not have a rate differential based on who sells the product. As a practical matter, our Bache Account Executives who can sell the Prudential annuity products are used to the annuity rates from the types of firms John was talking about; we have not seen too many sales of our flexible premium products through them. I think you are probably right in theory, there could be differences based on who was doing the selling, but we have not set up any distinction for this.

We do have a difference between the front-load and the back-load but this difference is based on our calculations of the hold back we need. Currently, we are investing the funds the same way and our new money rate for the front-loaded product is 1% higher than for the back-loaded product. As we get more experience, we may learn enough about the withdrawal experience for the back-loaded product that we will know what the difference in strategy should be.

MR. CARNEY: In effect, you can utilize a lower margin on your front-load because of the front load.

MS. TURNER: Yes

MR. CARNEY: You seem to have had problems with the annuity non-forfeiture law. I have been complaining about it because of the problems encountered when discounting in calculating non-forfeiture values for a back-loaded temporary surrender charge product. Does your product have a temporary charge?

MS. TURNER: Yes, it has. The charge grades down basically over ten years to zero in year 11. Because of the non-forfeiture problems, the charge grades down more quickly if we issue above age 50. Our maximum issue age is 64.

MR. CARNEY: There is an ACLI Task Force that is doing some work on the nonforfeiture problem. The NAIC will be considering some potential changes (probably at its December meeting) based on the recommendations of the ACLI. If anyone has an interest, he might want to contact the ACLI or the NAIC.

Tom, I was very interested in some of your comments. Maybe you can comment on the investment strategy for a deferred annuity - the investment strategy you would utilize when you are setting your guaranteed rate based on where your competition is as opposed to what you are earning in the marketplace.

MR. MITCHELL: That is an interesting one to contemplate because some of the competition may not even have strategies to copy. Remember that our size was very small relative to everyone else we are talking about. We eventually finessed our strategy because we did not have nearly as much short term liquidity as we wanted in the company as a whole. So we very simply sank our cash into assets that were 120 days and less because we needed, as a company, to build up a liquidity pool.

MR. CARNEY: I have a question on the bail-out provisions. There is some uncertainty as to whether you can take credit for the surrender charge in computing reserves when there is a bail-out provision. There is much discussion, certainly when there is a fixed rate, that the surrender charge cannot be credited if the guaranteed rate ever drops below the bail-out. When you have a minimum guarantee of 5% as you have in calculating future cash surrender values, can you take the surrender charge into consideration? The indexed bail-out provides even more risks to the company and yet it seems that that may fit through a loop-hole. Tom, this is the point I think you were trying to make about the reserve law.

MR. MITCHELL: The best reference to the subject matter was J. Jaffe's paper on the reserving for annuities which was presented last year. I think the indexed bail-out does fit through a loop hole. The position we have taken is that where there is a fixed bail-out interest rate, it is a part of the terms of the contract and when one goes through the mechanics, it is really an offset against the surrender charge. When the bail-out rate is defined as being less than or equal to a prescribed index, take Treasury bills less something for example, we assume we would be able to earn the required rate so that basically it does not enter as a debit into the reserving calculation. Obviously, there is a logical inconsistency somewhere between those two approaches. I think the California reserving requirements are addressing the same issue, except each company is supposed to file its demonstration

- of how it is going to invest funds and so forth. Neither J. Jaffe, nor the California Department, nor anyone else has figured a way to really value a hefty index, i.e., where there is a significant risk on the index.
- MR. CARNEY: If I remember Jaffe's paper correctly, he takes the position that you cannot utilize the surrender charge in the reserve, regardless of whether it is a fixed charge or an indexed charge, if there is a bail-out provision.
- MR. MITCHELL: I thought he was a little more open on the subject.
- MR. CARNEY: That is my recollection of the paper. The bail-out is still a questionable matter as it relates to the valuation laws and I am not sure how any of the states have really interpreted it.
- MR. MITCHELL: Reserving gets very interesting. To get the proper reserves, you have to evaluate the whole contract look at all the relevant facts. It is not a simple, straightforward task.
- MR. CARNEY: John, I enjoyed your historical comments. I remember being at a Society meeting in 1977 with representatives of Capitol Life, IDS and Anchor National. Those three companies had written 900 million dollars of premium the year before, out of an estimated one billion premium market. We were then asking the question "Would the market expand any? Were we at the market saturation point?" The three companies you indicated as the new majors each wrote over a billion dollars worth of new business.
- MR. LENSER: We face that question all the time. We think the market must have run out of capacity, but the public keeps on buying as long as there is a product available.
- MR. CARNEY: You mentioned a product which I believe is a deferred annuity that is indexed to the Salomon Brothers long term yield rate. How do you invest to provide the liquidity needs of the company and still have a rate that will be equal to or better than, and provide you with the margins of, the Salomon Brothers long term index?
- MR. LENSER: I am not very familiar with the product. It is called Pacer, and I know how the guarantees work. I am fairly certain the company maintains its ability to meet the guarantees through a hedging process that involves frequent purchases and re-sales of portfolios, but I am not familiar with any of the mechanics. There are other companies that are doing the same kind of thing, though. I would add that in some products of this type, a part of the risk is essentially passed on to a non-insurance company, the company that is involved in the hedging process. It will be interesting to see how the reserves for these contracts will be established.
- MR. CARNEY: In some of the states, of course, you have problems with futures and things of that nature. The Texas Department, for example, prohibits them.
- MR. WINTERFIELD: We cannot yet do futures in New York, but it is expected that we will be able to shortly.

MR. CARNEY: To what extent is there strong coordination between actuarial and investment personnel in rate setting? We have been talking about all of this for years at some of the Society meetings, and things have gotten fairly hot and heavy in this field recently with the C-3 task force work. I am becoming very confused in looking at some of the rates today, and in trying to determine what types of investments should be made to support the rates, while providing adequate margins.

MR. WINTERFIELD: I do not mind commenting on the experience that we have had at Equitable. I would have to say it is a very long, tedious process. We had a task force set up to determine what maturity levels would be appropriate for our deferred annuity business. I think that worked pretty well. There is still a lot more work to be done, but we did manage to get an agreement regarding the types of maturities we wanted to work with. In our case, we are essentially working within a one to five year maturity framework. This, however, is leading us to a need for a second task force. Once we settled on the maturity range, then we were told that the investment people could not find anything in that range other than Treasuries. So now I expect that another task force will be appointed to try to determine what different types of investments we can get into that will go along with the types of maturities we are looking for. This will involve taking a look at instruments like variable mortgages. We are expecting a significant expansion of direct placements away from the longer end into the shorter end. Conceivably, we will be looking at things like picking up a piece of a commercial loan portfolio from a bank. It is open territory and right now, this is an area in which I am spending probably about half of my time - I expect that to continue for a long time.

MR. LENSER: Just let me add a brief response to that. As you know, much of the work that we have done over the past five years or so with the securities firms has involved looking at the asset liability matching question since we are concerned with the amount of risks these companies are incurring and how much they can handle. Much more work is being done today, as opposed to five years ago, on the asset/liability matching question. Of course, not everyone is looking at the question carefully, but certainly among the big companies we look at, it is a process that is gone through much more today than previously.

The second part of your question had to do with the things companies might be investing in to give the kind of guarantees they are giving today. A couple of things have been happening over the past six months or more. Many companies have forgotten what happened ten years ago by going long and since the differential between long and very short is significant, there is a little more movement towards longer term maturities. Also, some companies are investing in more Baa quality assets. Here, the yield differential, the spread between what they are earning and what they can credit, is probably a reasonable spread.

MR. CARNEY: Let us assume that you had priced, for example, off of Treasuries, and you have matched your assets and liabilities. Now, in order to get the rate that you need to be competitive, you extend your durations. You have now created a C-3 risk. If you go to Baa's you have created a quality risk - whether this is true is not the purpose here. We do not have anything being set up as a contingency reserve for the C-3 risk and what I am afraid is happening is that we are taking on additional investment risks which I am not certain we really understand. If we turn around and pass that risk out to the client through the first year guarantee, and if we start bringing in

- to profit that higher investment income right away, we are therefore not setting up any contingency reserves. We are not recognizing and establishing any reserves for this additional risk that we are taking.
- MR. LENSER: I would agree with the basic point, Greg, that the companies should look at the risk carefully. Whether they are is a different question.
- MR. HAROLD DERSHOWITZ: I would like to ask Tom a question about his statement that when you have structured settlements, you have to be prepared to have a reserve strain. I was wondering what the nature of this strain was.
- MR. MITCHELL: The interest element just depends on where the valuation rates come out versus what you put into the price. Also, there is substandard annuity valuation. It is not at all clear, for example, that you can take a quadraplegic age 30, with a life expectancy of three years and value it that way. You can generate surplus strains of 300 and 400% of the premium that comes in. Somebody else who may be more expert in that area than I may want to comment.
- MR. STEVEN SMITH: In the settlement annuity area, the typical average age is something more like 35 and not 65. Even though the valuation interest rate which we could use under the dynamic law was 134%, I just did not feel that I could invest in 134% forever. Hence, we ended up using a reserve that was 125% for 20 years, 6% for the next 10 and 5% thereafter. Under those circumstances, the strain does not go away. You have to sign the statement - certifying that all those reserves are there that ought to be and if you use 134% forever (and I have seen companies that have done this, and I know what their average age is) you will have to do some reserve strengthening later, if you are at all prudent. The method I have chosen will automatically grade into a stronger reserve. If you use 134% forever, you had better be prepared to keep your board of directors alerted to what happens when interest rates are down and the state comes in and says. "Well, I realize that this is the law, but the law, as it was written, was not intended and did not anticipate age 35 annuities. It was written for age 65 annuities." The question of reserves under settlement annuities is now under investigation by a couple of task forces.
- MR. WINTERFIELD: I went through some similar exercises with the Equitable individual immediate annuity portfolio. We ended up essentially in the same place. We also used a rate that was less than $13\frac{1}{4}$ %. In doing our reserves, New York asked us to run out many different interest scenarios with rates going up and down. We could not support the $13\frac{1}{4}$ % rate on that basis.
- MR. DERSHOWITZ: Do you in fact use a reserve method that takes price factors into account?
- MR. MITCHELL: No. One of the things that happens many times where there is a large mortality uncertainty, is a tendency to actually write an annuity with, say, a casualty company. It is not a refund annuity but there may be a certain period of some sort. There is some sort of arrangement where possibly not all of the mortality risk involved in the actual settlement is absorbed by the life company. Some of it may still be effectively held by the property casualty company.
- MR. DAVID WALCZAK: Mr. Lenser, it has come to my attention that some of these single premium deferred annuities, non-qualified annuities, are actually certificates arising from group annuity contracts.

MR. LENSER: Many of them have been for a long time.

MR. WALCZAK: I have not really been following SEC changes, but back in 1977, they published a no action letter relating to when they would consider group annuities as securities, to when an agent had to be licensed to sell them, and to when a prospectus had to be given to a client. How are these companies skirting the SEC? You indicated that one company actually had a market value adjustment.

MR. LENSER: The company that is currently under examination, or whatever the right term is, by the SEC is one that is writing an individual contract not a group contract. The things you mentioned about their prior examination are not things that were important factors at that time. The ones that I recall were the emphasis of advertising materials and the overall approach to selling the product. I cannot quite address the specific point you made but I know the group version of the product has of course been around for a long, long time — it came around '77 or so. The reason was that the valuation interest rate which could be used on the group contract was much higher than it was on an individual contract.

MR. WALCZAK: I guess I was thinking of the no action letter that was written for group annuities when people were selling them to pension plans. At that time the SEC said they would not regard such contracts as securities. Now I guess my real concern here is that we are being too aggressive in this market.

MR. LENSER: I do not have a good answer to your concern.

MR. RANDAL PHILLIPS: I would like to lend some perspective to this situation of deferred annuities from the Canadian point of view. In Canada, we are free from a number of restrictions that you have in the U.S. We do not have minimum cash value laws, for example, and our deferred annuity market developed in the mid to late '70's, much closer to the banks and other financial institutions. Now as we look south of the border, there are a number of things I see that, to be quite honest, alarm me as an Actuary and as a participant in the insurance industry. One is that I see interest rates being very sluggish in declining among member insurance companies. We have seen a dramatic decline in short term rates and that just has not been followed by all of our single premium deferred products. Secondly, I see a move to longer term guarantees but I do not see too many people sticking in market value adjustment provisions. I see somewhat of a disregard for that risk. Thirdly, I see companies getting into structured settlements. I do not see a great regard for that reinvestment risk that could occur long in the future. I am concerned about these things because one of the key marketing assets that insurance companies have is security. There are very few companies which have failed. My concern is that we, as actuaries, should take proper care in pricing these products, some of which involve very significant risks.

MR. WINTERFIELD: On the individual contracts there are problems with existing non-forfeiture laws relating to the introduction of market value adjustments.

MR. LENSER: On the group side there are some questions also. However, there seems to be more willingness to pioneer here.

