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### DEFERRED ANNUITIES

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- o Product design
- o Risks and how to deal with them
- o Special features
- o Valuation considerations
- o Investment strategy
- o Regulatory developments

MR. RYAN LARSON: Fifteen years ago, deferred annuity products were quite similar to insurance contracts. They had fixed premium schedules and rather rigid payout options. The environment in which they existed had relatively low stable interest rates, low inflation, and little concern about economic volatility. The product's primary appeal was its mortality guarantee, that is, the guaranteed rates at retirement. The annuities were viewed as a funding vehicle for retirement savings with little concern about their use as investments. These products commonly featured front-end sales loads, portfolio interest accrual, relatively low interest rates, and little transfer flexibility. Installment premium annuities were more popular than single payment contracts. The tax advantages for certain market segments played a predominant role in product design and marketing. The tax sheltered annuity (TSA) market was growing, and its potential seemed endless.

About the middle of the 1970s, the economic environment changed drastically. This had a profound impact on the annuities both in their design and marketing. Interest rates began to fluctuate wildly, reaching highs never before attained and subsequently falling dramatically. The tax deferral feature of annuity contracts drew much more attention. In addition to providing retirement income, annuities were an integral part of tax and investment planning, since the deferral

feature became much more valuable to high tax bracket customers.

This new economic environment demanded that annuities change. The portfolio interest rates were no longer appropriate. High interest rates produced contracts in which interest was credited on a new money basis. Interest rates were changed frequently to correspond to changing money market conditions. Front-end sales loads disappeared and were replaced by rear-end surrender charges. By the late 1970s, the single premium deferred annuity (SPDA) dominated the annuity marketplace. Its attractive investment aspects drew attention and complemented the appeal of guaranteed retirement income.

Current versions of the SPDA are relatively similar from company to company, and the product has become a sort of commodity. Competition is high and the product is easily compared. Contracts can be moved from company to company with relative ease. These contracts feature high interest rates guaranteed for a period of one year or longer. Rates for new business change frequently, corresponding to interest rate cycles. There is generally no front-end sales load, and acquisition costs, such as commissions, are recovered by interest rate spreads over the contract's life. To compensate for the lack of sales load, there is a series of surrender charges which have two purposes: (1) to penalize contracts which terminate prematurely and (2) to recover unamortized acquisition expenses on those that leave.

There are several options in the contracts offered by various carriers. Many companies offer extended rate guarantees of three to five years or longer. Some companies offer a money-back guarantee whereby surrender charges are waived and the customer is guaranteed to receive at least the premium amount at surrender. The common bail-out feature allows the customer to get out without paying the surrender charge if the company drops the interest rate below a certain predetermined level. The bail-out rate is typically related to the interest rate at the time of policy issue, often 1 to 2 percent less.

While contracts appear similar from company to company, the SPDA product is not static. Recent innovations indicate that change should be expected in the future. There is a growing movement toward a market value adjusted annuity whereby the surrender value is modified to reflect current asset values. Presently, this product is marketed on a group basis. However, steps are being taken to make such contracts available on an individual format. The fact that carriers are moving away from accepting risks is based in part on the failures of one or two major SPDA writers and the resulting scrutiny from regulatory bodies. This direction contrasts with at least one product which has no surrender charges, no loads, and guaranteed interest rates of four years or longer. These examples indicate that product design ideas for SPDAs are expanding and diverging.

The activity in the installment annuity market has been somewhat overshadowed by the SPDA line. The installment business is still dominated by the TSA market, which leveled off in the late 1970s. The new money concept of interest crediting and rear load surrender charges adopted by SPDAs have also been incorporated into installment

contracts. Perhaps the biggest impact on installment annuities has been the advent of the individual retirement account (IRA) and its availability in 1982 to most taxpayers. Many carriers have modified or created products aimed at the huge IRA market. These products feature lower minimum deposits and withdrawal provisions coordinated with IRS rules: for instance, a waiver of surrender charges after age fifty-nine and a half.

Variable annuities, which had blossomed in the early 1970's stock market boom, leveled off in the mid-1970's corresponding to mediocre equity performance. Around 1980, wrap-around annuities were developed, whereby an annuity could be wrapped around various investments. This was a successful approach until the IRS ruled that annuities could not be wrapped around investments available to the general public.

Annuities are increasingly being sold by investment brokers and financial consultants as well as insurance agents. Tax and investment planning have become a vital part of retirement programs and the annuity product design corresponds well. In fact, the payout or benefit features are sometimes down played by sellers and customers. Many contract holders take the account values in a lump sum rather than annuitize, in spite of carrier incentives such as waiving surrender charges at settlement. In periods of high interest rates, payout benefits, despite their lifetime mortality guarantees, become less popular with customers who don't want to tie up capital permanently. Unless settlement rates are updated frequently, the benefit rates are exceeded by interest yield on many fixed investments, without touching the principal.

Rapid changes in the economic environment have presented deferred annuities with many new and different risks. The duration of the product's liability cash flow stream is being shortened steadily as the customer increasingly looks for product liquidity. Contracts are being enhanced with more liberal surrender provisions. The customer is better educated about market interest rates and competitor products. Carriers must counter this demand for liquidity by meeting customers' expectations for the products, thereby eliminating the incentive to surrender.

Increased liquidity makes it essential to link the asset portfolio closely to that of the liability cash flow to avoid capital loss risk upon contract termination. This is done by matching durations or using hedging techniques. However, these are not a cure-all. Competitive pressures limit these methods, since they affect available investment margins. This presents a critical product management challenge and requires careful monitoring of flows on the liability as well as the asset side. Carriers recognize the need to hold predetermined levels of target surplus, most of which is used to protect against capital losses.

The capital loss or C-3 risk draws the most concern for annuity carriers. However, there are several other risks to be considered:

1. Credit risk refers to the danger that borrowers will default on their obligations. In today's competitive atmosphere, there is pressure to acquire investments which are poor quality or which are entirely inappropriate.

2. There is a mortality risk for annuities, although not as severe as for life insurance. The problems posed by improving annuitant mortality have been cushioned by better than assumed investment performance. However, as payout rates are revised frequently with higher interest assumptions, this margin evaporates. The mortality guarantee feature of variable annuities is also a risk since all investment performance is assigned to the customer. Further, since most carriers waive surrender charges at death, adverse mortality can hinder recovering acquisition costs.
3. Some risks are presented by sources other than investments or customers. First, there are proposals to eliminate the tax deferral of inside interest buildup. This feature is critical to major annuity writers and is drawing considerable management attention. Second, many states are setting up guarantee associations to fund the obligations of carriers which cannot continue to operate. Companies which attempt to operate and compete on a sound basis are in effect assessed penalties to pay for those which don't. Finally, state insurance departments may interpret valuation legislation adversely. The bail-out feature is a current example.

Annuities are facing increasing competition from banks and investment houses. Banks offer certificates of deposit which are more competitive and many times aggressively sold by commissioned salesmen. Many of the products that investment houses offer, such as unit investment trusts and bond mutual funds, stack up competitively to annuity products. Although these products generally lack the tax-deferral feature of annuities, they are in the same market arena.

My company has about 3.5 billion dollars in annuity business. In addition, we write about .5 billion dollars of single payment annuities each year and about 50 million dollars of installment business. Our historical pattern of product design has followed the industry. In the past we have marketed primarily through our captive sales force; however, we are exploring various distribution facilities with our parent, American Express.

MS. DONNA CLAIRE: The multifunded variable annuity product will offer a fixed fund, which will pay a guaranteed rate of interest, and allow you a choice of investments (either common stocks, bonds, or the money market). Metropolitan has recently come on the market with this, and several other companies have had some success.

MR. PAUL LE FEVRE: In looking at the variable annuities offered by quite a few companies, there seems to be a sort of blasé attitude about the mortality risk on the pay-out options. When you project what can happen there is a significant risk for quite a few companies. If your company offers a variable annuity, examine the assumptions used for the settlement options. Even though the mortality in the deferred period of an SPDA is not a major risk, examining the effect of policy provisions is important.

MS. CLAIRE: Metropolitan sells nonqualified deferred annuities through a subsidiary, Metropolitan Insurance and Annuity Company, and other deferred annuities through Metropolitan Life. Our sales in the deferred annuity market top several hundred million dollars a year. We have become one of the largest SPDA companies in the country with the recent acquisition of the Charter Insurance Companies. Presently, Metropolitan is active in leading the industry effort to bail out Baldwin-United. These experiences acquainted me with many of the problems associated with deferred annuities.

If you're in the deferred annuity business, you should have an investment strategy. You should not have your investment department investing in whatever it thinks is best, while the product department independently designs products and declares rates. Managing the deferred annuity line without a proper investment strategy can be financial suicide. Baldwin-United comes to mind as a classic example of what not to do. In that conglomerate, a good portion of the money from deferred annuities was invested in other Baldwin subsidiaries. These did not provide the needed return and were not liquid investments - two necessary characteristics in this business.

Most annuity writers do have separate investment strategies for deferred annuities. For those who don't, this can be set up in several ways:

1. Be mainly a deferred annuity company - therefore, what the company as a whole invests in should be what is best for deferred annuities.
2. Establish a subsidiary to sell only deferred annuities. Considering that each company must have its own investments, you can buy the assets that are preferable for deferred annuities.
3. For those companies which have segmented their assets, a separate segment can be established for deferred annuities.
4. Establish a directed (dedicated) asset pool for the annuities. This can be done without segmenting the entire company but by establishing a system in which the investment records of the company identify which assets belong to deferred annuities.
5. Those companies which aren't large enough in the deferred annuities market to warrant separate investment pools could invest the assets with other products of similar characteristics - universal life is one such product.

Deferred annuities, where interest rates are guaranteed for a year or so, are short-term risks. Many people view these annuities as investment products and will move their money rapidly.

One possible strategy is to play the interest rate curve and invest in the highest yielding assets possible. This was no problem in the early 1980s, when there was an inverted yield curve. (See Fig. 1.)

Companies that bought short-term assets were able to credit high interest rates, keep their agents happy, and still be comfortable knowing that they did not risk bankruptcy if people started surrendering. However, the yield curve has returned to a more traditional form. Some companies have made a conscious decision to invest long, trying to catch interest rates at their peak. This is known as gambling. Charter was one of the companies which had this strategy. It would have worked if it could have picked its parent better. The Charter Insurance Companies' assets were very long, but they were earning higher rates than current short-term assets. When Metropolitan purchased Charter, the present value of its assets actually exceeded the present value of its liabilities. If the Charter Oil Companies had not gotten into trouble, the Charter Insurance Companies would still be a major competitor in the market. I am strongly against investing long for this business because of the great risk. Metropolitan is currently shortening the duration of the assets from Charter.

If interest rates rise by 4 percent, five-year assets, which are earning 10 percent, could earn 14 percent. The rates we are crediting would be below those of competitors. There may be high surrenders, and one may be forced to sell assets to pay for those surrenders. Bonds would probably be sold at a loss in this higher interest rate environment. Fig. 2 shows the potential market value loss if one had to sell one million dollars of assets after rates had gone up 4 percent. If one-year assets have to be sold, the loss would be about 40,000 dollars, which isn't too bad. If five-year assets are sold, the loss would be 130,000 dollars. If twenty-year assets are sold, over 200,000 dollars could be lost because of changes in market value. Since we are not in the business of losing money, the risk of being that long seems to outweigh the advantages.

In order to properly determine the best investment assets for a deferred annuity company, one should model the product under different interest scenarios. Michael Harwood, an ASA at Metropolitan, recently completed an MBA thesis on the C-3 risk for deferred annuities. We have since expanded his model to reflect our own product, but figures 4 and 5 are based on modeling done for his paper. His models are based on a generic, but realistic, flexible retirement annuity product.

Certain assumptions about the product were made (see Fig. 3). With these assumptions, an interest rate holdback of 1.1 percent per year would let the company break even after ten years on a single year's issue of business. A ten-year horizon in this business is about as long as you should go; in fact, the entire line should be profitable within ten years, and a single year's issue within five or six years to reflect the average duration of the liabilities. On top of this holdback, one must add profit margins, say 40 basis points, for a total holdback of 150 basis points without counting the C-3 risk. (In order to get the entire line in a profitable position in ten years, another 50 or 100 basis points probably has to be added to the holdback.)

The lapse assumption was related to the spread between the actual interest rate earned in the market and the credited rate. The lapse rates of policies sold through brokers are estimated to increase by 10 percent for every 1 percent a company is below the competitor's credited rate. The lapse rates on policies sold by a captive field force are not quite as high, since the agent probably doesn't have the additional motivation of earning further commissions on the product.

The effects on pricing of various interest scenarios were examined. The tenth-year surplus targets were studied. The C-3 risk graded from 25 basis points if one to three-year asset maturities were used, up to 85 basis points if eight- to nine-year assets were used.

Currently a draft of a proposed regulation is before the New York State Insurance Department. It requires that an actuarial opinion be given on all annuities and guaranteed interest contracts. This opinion must cover the asset/liability match. In order to hold the lowest reserve, the assets must match the liabilities. The exact definition of asset/liability match is not yet determined, but the current proposal states that there is a mismatch if the duration of the assets exceeds the duration of the liabilities by more than two or three years.

Fig. 4 shows the asset cash flows for one of the directed asset pools of Metropolitan. Most of the assets mature in the next several years.

A number of different investments are available in the two to five year range shown on Fig. 4. Let me explain some of the advantages and disadvantages of each investment.

1. The advantage to T-bills, bonds, and notes is that they are in plentiful supply and they are very liquid. The major disadvantage is that they aren't earning enough to support competitive rates. With three year Treasuries now earning around 11 percent, it's hard to support the current credited rates on deferred annuities which are also around 11 percent.
2. Short to intermediate corporate bonds used to be good vehicles for insurance companies. Investment departments had the expertise to pick decent grades - such as A or AA rated bonds - and earn the extra premium with relatively little risk of default. There are now several problems. The yield spread between corporate bonds and T-bills has narrowed because the federal deficit has kept Treasury rates up. There is also a supply problem with corporate bonds. The demand by all company investment managers for intermediate (two to five year) maturities is now in billions of dollars, and there are not enough of these bonds to go around.
3. Private placements used to be the major investment vehicle for insurance companies. There was not only the extra premium for investing in corporates versus Treasuries, but there was also an additional premium for liquidity. There are currently very few deals to be made for short or intermediate terms.

4. Adjustable rate mortgages are a good investment for deferred annuities. The rates on these mortgages will change every one, two or three years in response to the interest environment, which is exactly what you want for an interest-sensitive product. Although they are not as easily sold as bonds there is little market value loss on surrender because the rates are kept current. The going-in rate for these mortgages is sometimes below the market rate as an inducement for people to buy them; this can mean a potential loss in the first year or so. Mortgages can also be prepaid, which means that the cash flow can be somewhat unpredictable. There are also additional investment expenses associated with mortgages as opposed to bonds. However, the advantages seem to outweigh the disadvantages.
5. Agricultural mortgages are close relatives to adjustable rate mortgages. They can be made for fifteen to twenty years and can have interest rates which will change every three or five years. The difference is that normally no principal is repaid until the end of the third or fifth year when the loan is renegotiated. Besides being interest sensitive, this type of asset has a fairly high yield. However, it is fairly expensive to maintain, because each loan, with an average size of less than a quarter of a million dollars, must be negotiated separately. Also, farms aren't doing well in today's economy, so if a loan defaults, we might wind up actually owning farmland, which certainly doesn't meet the needs of deferred annuities.
6. There is a market for Freddie Mac mortgages of various durations. A possibility is to buy a pool of mortgages with eight years to run. Because these do have prepayments, the average duration will be closer to six years. This is probably a little too long for the deferred annuities. However, a small percentage of the deferred annuity directed asset pool could be invested in this manner.
7. The duration of common stocks is considered to be either zero, because they are highly liquid, or infinity, because they never mature. One tax law ago, it was fairly tax efficient to have common stocks. Now, however, the tax advantages of common stocks are minimized. Common stocks aren't the most suitable asset for deferred annuities. The dividends paid on common stock are rarely as high as those on bonds. Some or most of the return on common stock is due to capital gains, which cannot be counted on because the market is so volatile. When interest rates are high and there is a period of high surrenders and the need to sell assets, the stock market may be low because of inflationary fears and the costs of borrowing for businesses.



8. High-coupon callable bonds are another type of security investment departments are considering. These bonds issued a few years ago carry coupon rates of 14 percent or more. The first call period is within a year or two, and the odds are that the company will recall the bond and issue lower coupon bonds. However, interest rates may turn up in the next year or two, the bond may not be recalled, and you may be stuck with a then relatively low yielding asset.
9. Futures backed with long-term bonds is theoretically one way to have a high yielding long asset backed with the protection of a short-term asset. Buy long-term Treasuries, then sell short futures for all or part of the Treasuries. The problem if you have futures backing 100 percent of the portfolio is that the yield by the end of the transactions is not that much different than buying short-term Treasuries in the first place. It is possible to hedge part of the portfolio and thereby gain at least partial protection. Simulations indicate the gaining of some yield; however, many investment departments do not feel comfortable enough to recommend the strategy at this time. Another possibility is to buy long-term corporate bonds and sell Treasury futures. The problem with this is that one is assuming that the spread between corporates and Treasuries will remain fairly constant - a risky assumption.

There is no perfect investment for deferred annuities. This is what makes investment strategies for this product so interesting. Considering that the average rate being paid on deferred annuities is probably around 11 percent, some of the deferred annuity writers are probably using fairly interesting investment strategies to earn the 12.5 percent to 13.5 percent needed to support this rate.

There are contracts being sold with longer guarantees, such as three, five, or seven years. The rates on the longer guarantees are normally a little higher than the rates of contracts with one-year guarantees. To be assured of earning these rates, the company must invest in suitably long securities. There is additional C-3 risk to these products. If earned rates go up suddenly, a reasonable rate this year may be below the one-year guaranteed rate next year. This can cause high surrenders, as people do not want to remain locked into a lower rate for the next four years. Because the investments backing these risks are long, the potential market value risk is larger. One way to reduce the potential loss is with a product design which has a fairly high surrender charge, such as 7 percent, but allows a free or reduced surrender charge at the end of the interest guarantee period. This was the contract offered to the Charter contract holders who switched to Metropolitan contracts. This free or reduced surrender charge should be enough of an inducement to keep surrenders at a reasonable level for short-term interest guarantees. If the interest guarantee was, say, for the next ten years, there are potentially huge market value losses. This risk should be reflected in the interest rate holdback.

Much has been said for and against bail-out clauses. A bail-out adds risk and can influence investment strategies. Bail-outs, which allow free surrenders when the interest rate drops at all or only .25 percent under the originally declared rate, are very liberal. They force the company to invest long. If rates go up, companies must increase their rates - similar to the problem of annuities with long-term interest guarantees. If rates go down, lower credited rates would allow free surrenders, perhaps before first-year expenses are amortized. But a bail-out could be instituted based on the investment philosophy one wants to use. For example, if one invests in short-term assets and credits the same rate on new and in force business, a bail-out could be stated in terms of a free withdrawal if interest rates drop more than 1-2 percent below the previously declared rate. With this type of bail-out, the customer has some comfort in knowing rates won't drop dramatically, and the company assumes only a small amount of extra risk. One bail-out provision that seems extremely safe is one which allows a free surrender if rates are below the passbook rate paid by banks. This type of bail-out would cause little or no additional C-3 risk.

A possible variation on the deferred annuity product has been called a modified guarantee annuity. The Hartford has strongly supported the adoption of enabling legislation and is currently selling this type of product on a group basis. The proposed changes to the New York insurance law would allow modified guaranteed annuities to be sold on either a general or separate account basis. Its basic principle is that at specified times, such as every five or ten years, there will be a guaranteed amount of principal and interest, and in between, the value of the contract would be subject to a market value adjustment. This adjustment may or may not be related to the market value of the underlying assets. In the proposal before New York State, it is not allowed to be related to the assets. An example of this adjustment is one which is dependent on the relationship between the rate credited on the contract and some outside index, such as five-year Treasuries, which may allow market value adjustments both up and down. This type of product provides a new way to credit high interest, guaranteed for a long period, with less risk to the insurance company if surrenders are high. The most logical investment strategy would be to match the asset duration with the interest rate guarantee period. Otherwise, a company can be clobbered on the market value adjustment. If, for example, one invested in ten-year assets for a five-year guarantee and the yield curve changed, the amount of the market value adjustment at surrender may bear little relationship to the actual market value loss on the sale of the assets. If modified guarantee annuities are allowed, actuaries must make sure the investments are suitable.

Actuaries used to be responsible for the pricing of products and investment people for the investing. With the recognition of the major role C-3 risk plays in deferred annuities, it is important for the actuaries to be aware of the asset/liability match.

MR. DES ROCHERS: Do you believe that the marketplace is ready for modified guarantee annuity products? Do you anticipate many companies will develop them or that they will become popular with the sales force?

MR. LARSON: The product has been quite popular, in the United Kingdom for a number of years. And as it comes on the scene, carriers will start to tighten their book-value payout products.

MR. LE FEVRE: We determined about a year and a half ago not to proceed with that product. We're watching the reception of the Hartford's product and are interested in getting a product that has a different investment structure than the SPDAs we're currently selling. Since the variable annuity has not caught on, we are hopeful that the product will be well received. Of course, current events at the Securities and Exchange Commission (SEC) have some bearing on that; the Hartford product is registered. If the product has to be a registered product, that will have some effect on the speed with which people can bring it to market.

MS. CLAIRE: If it does become a registered product, you can only sell it by registered agents and not all career agents are currently registered.

MR. DES ROCHERS: Ms. Claire said it is necessary for actuaries to become involved in investment strategy. How have the investment officers reacted to this? Do you find a great deal of cooperation?

MS. CLAIRE: We meet at least twice a month with our investment department, and we are on the phone at least once a day talking about our various directed asset pools or segments. It was a learning experience on both sides. We spoke different languages.

MR. LARSON: We have a formal meeting bi-weekly with the investment department and are in contact daily.

MR. LE FEVRE: We are owned by a mutual fund company. Over the last five years, we've gone from a situation where there was very little contact to a situation where we get together often.

MR. DESROCHERS: Mr. LeFevre is going to talk about some of the regulatory and tax issues which are significant in the deferred annuity market.

MR. LE FEVRE: The last decade has been one of dynamic change in the annuity business. We have seen:

1. the SPDA rise as a product that provides considerable premium income and asset growth for several companies;
2. the emergence of stock brokers as distributors of life insurance company products, particularly SPDAs;
3. the use of tax laws, creative intercompany accounting, and SPDA premium dollars to finance the transformation of a piano company into a large conglomerate whose collapse sent waves through the industry that are still being felt;

4. a period of increasing and widely fluctuating interest rates which has awakened the industry to the devastating implications of ignoring the C-3 risk.

During this period the states, the NAIC, the Treasury department, the Congress, the SEC, and the brokerage firms reacted to the events that were occurring. The collapse of Baldwin-United was a major event that accelerated much of the regulatory activity.

After the Baldwin-United situation surfaced, many states paid attention to the types of assets that were in a company's portfolio as well as the types of reinsurance agreements that existed between affiliated companies. Some states became concerned about the reserve methods that were used by SPDA companies, and the debate about the effect of bail-out provisions on reserves began.

The NAIC established a working group of the Examination Oversight Task Force in June of 1984. The formation of this group was a direct result of the Baldwin-United situation. The charges to this group were:

1. examine the SPDA environment as it currently exists;
2. identify critical problems;
3. propose solutions.

The group worked predominantly in closed door sessions, because it was examining specific companies. The report of its December 1984 meeting included these interesting items:

1. preliminary work on a "surplus solvency index" to identify companies whose production of new business should be reduced or ceased;
2. discussion of solutions to the bail-out "problem," with solutions ranging from banning bail-outs to dealing with the bail-out in the reserve.
3. ways of dealing with asset/liability mismatches including requiring additional reserves for mismatched contracts.

Since December, an industry advisory committee was formed and work continues. The working group has endorsed the handling of bail-out provisions with reserves and not the outright banning of the provision. This proposal's major feature is that in calculating Commissioners Annuity Reserve Valuation Method (CARVM) reserves, the future nonforfeiture benefits may not be reduced by surrender charges if they are contingent. In addition, the working group plans to recommend that the NAIC support laws and regulations permitting the writing of market value adjusted annuities.

Quite a few states have promulgated positions with respect to the reserves on bail-out products consistent with the approach discussed.

A few examples of specific developments are:

1. The release of Bulletin PF-15 by the Connecticut Department on February 15, 1984. This bulletin withdrew the approval of all filed SPDA and single premium whole life (SPWL) policies. The policy forms could be resubmitted, but policy forms with certain provisions would not be approved. These provisions were:
  - a. a bail-out provision;
  - b. an interest rate guarantee existing beyond one year other than the contractually guaranteed rate;
  - c. surrender charges smaller than 5 percent grading to 1 percent over five years.

In addition, companies that sold acceptable SPDAs and SPWL policies were prohibited from reinsuring these products with affiliates, subsidiaries, parents, or insurers that are controlled by related parties without prior approval. There was also a prohibition against investing the assets backing the reserves in parents, subsidiaries, and affiliates. In its application of this bulletin, the Department also prohibited the indexing of renewal interest rates for annuities.

2. The release in Oregon of Bulletin 85-2 on March 12, 1985. We experienced difficulty in getting our current SPDA approved in Oregon. The state finally formalized its position with the release of the bulletin stating that the commissioner is concerned about annuities, the ability of insurers to fulfill their guarantees, and the potential that such contracts could impair the solvency of an insurer and, thus, impair the financial condition of other companies doing business in Oregon. The requirements for approval of individual annuities include:
  - a. a demonstration of compliance with the "current interpretation of the CARVM" and its handling of bail-out provisions;
  - b. requirements similar to Connecticut with respect to affiliate investments and reinsurance agreements;
  - c. a narrative explaining that the declared rates, the investment strategy, and the actual investments must be filed with the policy; (in addition, all changes in declared interest rates must be submitted and approved prior to implementation. It appears that this requirement applies only to declared rates at issue, not renewal rates.)
  - d. a provision that declared interest rates other than contractual minimums not be guaranteed beyond one year;

## PANEL DISCUSSION

- e. a provision that all previously approved forms be resubmitted for compliance prior to July 1, 1985. Forms may not be endorsed. They must be reprinted.
3. Maryland has stated that its practice is not to approve policy forms which have an indexed interest rate or a bail-out.
4. A bill (H.1185) was recently introduced in Oklahoma that would outlaw bail-out provisions. The bill was changed in committee (with help from the American Council of Life Insurance (ACLI)) so that the thrust is to amend the valuation law to provide for the CARVM treatment of bail-out contracts.

One of the main reasons for the growth of the SPDA market and the appeal to stockbrokers was the tax deferral of the growth in value combined with the "first-in-first-out" treatment of withdrawals. After it became clear in 1978 that death benefits paid under annuity contracts were not subject to the stepped-up-cost basis, creative ways of postponing the eventual distribution and taxation of the growth were used. These methods revolved around the designation of the annuitant (generation skipping) and the use of contingent annuitant designations.

Tax Equity and Fiscal Responsibility Act (TEFRA) began the attack on the product as an attractive instrument for tax planning and Deficit Reduction Act (DEFRA) put on some finishing touches. The major changes under TEFRA were:

1. The manner in which withdrawals are treated was changed for tax purposes. Under TEFRA withdrawals are treated as taxable interest first and nontaxable principal only after all the interest has been withdrawn.
2. A penalty tax of 5 percent is imposed on certain premature distributions. "Premature distributions" excludes distributions after age fifty-nine and a half, after disability, as a result of death, or paid out as an annuity of at least five years. The penalty tax applies only to distributions allocable to investments made in the previous ten years.
3. There were certain grandfathering provisions and an important provision that preserved grandfathering of 1035 exchanges.

Companies that sold nonqualified flexible premium annuities and were involved with 1035 exchanges of these contracts had an administrative nightmare. Adding the cost of administering the withholding provisions of TEFRA indicated clearly that nonqualified flexible premium policies and riders would be difficult to market profitably. Even after the TEFRA changes, however, it appeared that annuities could still be set up in ways that indefinitely postponed the taxation or at least allowed the contract to be controlled in such a manner that distributions could

be timed to minimize taxes. This was attacked in DEFRA by the inclusion of Section 72(s).

Under this new approach, the tax laws require that in order for a contract to be treated as an annuity, it must contain certain provisions for required distributions upon the death of the holder. The requirement of 72(s) can be summarized by concentrating on the death of the holder prior to the start date. If the holder dies before the annuity start date, the entire interest must be distributed within five years.

There is an exception. If any portion of the holder's interest is payable to a designated beneficiary, such portion will be distributed over the life of the designated beneficiary or a period not to extend beyond that person's life expectancy. Such distributions must begin within one year after the death of the holder. If the designated beneficiary is the spouse of the holder, the spouse may step into the role of holder and the contract may continue.

In the law, "designated beneficiary" is defined as "any individual designated as a beneficiary by the holder of the contract."

I got involved in the industry's reaction to 72(s) quite early as chairman of the ACLI subcommittee preparing an issues list for the Treasury on this part of the law. There were several questions relative to the language and applicability to specific contracts. The major questions revolved around the apparent changes in the roles of the people referenced in a typical nonqualified annuity contract.

Every contract must have an owner or owners. The contract can also have a contingent owner. If it doesn't, you could get involved in the owner's estate when the owner dies. Some contracts have provisions for the passing of ownership if the owner dies.

Every annuity contract must have an annuitant. A contingent annuitant is utilized by a lot of companies. This provision was controversial to the degree that companies allowed changes in the contingent annuitant. The contingent annuitant is a person who takes the place of the annuitant, if the annuitant dies, allowing you to avoid distributing the funds.

The beneficiary in most annuity contracts was the person who received the traditional annuity death benefit upon the death of the annuitant.

The wording of 72(s) and statements made in the committee report indicated that the holder was the owner. However, the "designated beneficiary" was less clearly defined, appearing to be either the beneficiary or the contingent owner. To avoid this ambiguity, two beneficiaries can be used - one for death of the owner and one for death of the annuitant.

The Blue Book made it clear that the holder and the owner were synonymous. The language for the designated beneficiary was "for

these purposes, the 'beneficiary' is the person who becomes the new owner of the annuity contract and controls the use of the cash value of the contract." This language can support an approach where the role of the designated beneficiary is assumed by the contingent or possibly a joint owner, if applicable.

We took the approach that the "designated beneficiary" is determined by virtue of a contingent owner designation. If there is no contingent owner, the owner's estate is the new owner, and distribution must occur within five years.

In order to examine the implications of this interpretation, let's look at some examples. In the first, all roles are utilized and played by different people (see Fig. 5).

If A, the owner, dies before the survivor of C and D, then B becomes the owner and the contract can be distributed over B's life if such distribution begins with one year. If B is the spouse, then the contract can continue with B as the owner. On the other hand, if the survivor of C and D dies before A, then E, the beneficiary, receives the traditional annuity death benefit. If A dies first, the roles of the annuitant and beneficiary are preserved only if B, the contingent owner, is the spouse.

The most common situation is where the owner and the annuitant are the same person (see Fig. 6). A contingent owner and beneficiary may or may not be specified. In our approach, the contingent owner and beneficiary, if specified, must be the same person. If A dies first, there is the question of whether he died as the owner or as the annuitant. We took the approach that he dies as the owner, and B, the contingent owner, becomes the key person. If B is not the spouse, the contract must be distributed over B's expected lifetime. If B is the spouse, the contract continues with B as owner, and there should be a contingent annuitant to play the role of annuitant. In our approach, we automatically make the spouse the contingent annuitant if none is named.

The third situation, when the annuitant is the owner's spouse, is awkward under other approaches (see Fig. 7). We say that the contingent owner must be the spouse. That assures that the ownership of the contract passes to the spouse if the spouse is predeceased by the owner. When ownership passes to the spouse, he or she is still the annuitant. A contingent annuitant is optional. The beneficiary cannot be the spouse. The beneficiary is important only when the spouse as annuitant dies before the owner.

There are many other approaches to use in designing a plan. Our approach requires field training and close scrutiny of applications. There are also some pricing and reserving implications to our approach because the expected cash flows of the product are altered.

For example, our SPDAs were being sold with 30-35 percent having the contingent annuitant actually being named. This was pre-72(s). That



factor allowed us to look at the cash flows and the pricing of the product in terms of the death benefit which, like most annuity death benefits, did not charge a penalty. At death, we gave up the money and failed to recover our acquisition costs. When you price a product like this and assume that that event does not occur on the first death but on the second, you pick up some margin. Our pricing with a 30 percent contingent annuitant usage gained us somewhere around 7 basis points. Now, we have the potential in certain designs that the death benefit could be payable on the first of two deaths instead of the second of two deaths.

Our approach means having to decide when and when not to forgive penalties. Contractually, you only forgive penalties on the death benefit when the annuitant dies. If the owner dies, you have an option, though the market place may require you to forgive any penalties. Each situation has pricing implications.

There are two other items in DEFRA worth commenting on:

1. The 5 percent penalty on premature distributions was retained. However, the applicability of the penalty only to distributions allocable to investments made within ten years was removed. In general, this is an administrative plus.
2. The new law did not utilize the TEFRA grandfathering approach for 1035 transfers.

The recent changes in the tax laws have also affected the impact of annuities on a company's tax. Prior to TEFRA, the issues related to company taxation revolved around excess interest and interest paid and the possibility of dividend treatment. Tax reserves were basically equal to statutory reserves. Annuities could be used creatively in tax planning.

TEFRA clarified the excess interest/dividend question, including a requirement that for advantageous treatment of excess interest, it had to be guaranteed for at least one year. It also prohibited the tax reserves from reflecting any excess interest guaranteed beyond the end of the tax year.

DEFRA completely changed the taxation of life insurance companies. Federally prescribed reserves were introduced. The method of calculating tax reserves is the "Commissioner's Annuity Reserves Valuation Method prescribed by the NAIC which is in effect on the date of issuance of the contract".

Congress specifically intended that, if the NAIC acted in 1984 and clarified that surrender charge factors are to be disregarded under the CARVM for contracts with bail-out provisions, then such clarification would be considered in effect since issuance of the contract. But the NAIC did not act. For bail-out contracts, the tax reserve should be calculated with a reduction for the surrender charges. For tax purposes, the reserve will be lower than the minimum reserve which most states are beginning to require.

The application of the CARVM to variable annuities is another area which is unclear. Many think that for a variable annuity with surrender penalties, the tax reserve is the surrender value - the value net of the penalties in effect.

The new definition poses some problems for calculating annuity tax reserves under some contract designs. The interplay between the prescribed method and the requirement that the reserve calculation not include reserves for interest guaranteed beyond the end of the tax year in excess of the prevailing state-assumed rate could present some computational problems. However, for products with a normal penalty structure and statutory reserves calculated at the prevailing rate, developing numbers should be an easy by-product of developing statutory reserves, since the statutory reserve will be the cash surrender value.

It should also be noted that the new Section 808 requires that interest credited in excess of the prevailing rate during a tax year be treated as paid to the policyholder and returned by the policyholder as premium. Thus, these amounts must be calculated and shown in your tax reporting.

Annuities have been treated as exempt securities by Section 3(a)(8) of the Securities Act of 1933. In 1979, when faced with annuity contracts that were being marketed with an emphasis on investment features, the SEC issued release 6051 stating its policy and containing references to the necessity of a meaningful mortality and investment risk being assumed by the company. In addition, it said that "often it would be necessary to review all relevant promotional material and the manner and method of selling and distributing the contract."

On November 21, 1984, the SEC proposed Rule 151. The rule would create a safe harbor for compliance with Section 3(a)(8) by specifying conditions under which a contract will be deemed to fall under that provision.

Among these conditions are that:

1. the company issuing a contract must be subject to state regulation as an insurance company;
2. the company assumes an investment risk; and
3. the contract not be marketed primarily as an investment.

The SEC further discussed condition (2). Several points with respect to the definition of "investment risk" are that:

1. the value of the contract cannot be determined by the experience of a separate account;
2. the principal must be guaranteed;
3. a specified rate of interest must be credited; and

4. declared rates cannot be modified more frequently than once a year.

Variable annuities are not in the safe harbor; fixed annuities are covered. What about contracts like the Hartford's market value adjustment product? There is much discussion about this.

The major areas of concern are:

1. Is there anything to be gained from a safe harbor?
2. How can the application of the marketing rule create a safe harbor with any certainty?
3. Is the one-year interest guarantee appropriate?
4. What about market value adjustment products and the Hartford-type separate account?

During this activity, the stockbrokers, in a sense, became another regulator. They were hurt by the collapse of Baldwin-United both financially and with respect to their credibility. They began to take their due diligence examinations quite seriously.

These examinations are performed by the firms before they agree to distribute a product. The examinations take many forms. Some firms retain actuarial consultants to prepare a report for the committee. Others use internal personnel to review the company's financials. There is usually a meeting with the top management of the company.

In general, these examinations revolve around:

1. the competence of the management of the company, especially with respect to the risks inherent in the products;
2. the so-called Baldwin-United series of questions which address affiliate investments and reinsurance;
3. the company's ability to administer the business as well as its administrative capacity;
4. the company's investment strategy and portfolio, particularly the company's strategy for dealing with the C-3 risk;
5. the company's statutory balance sheet with emphasis on the conservatism of the reserves and the adequacy of surplus;
6. the recognition of profit on a GAAP basis;
7. the compliance of the products with new tax law definitions.

In general, the member firms want to be as careful as possible with the products they sell.

MR. BOB JORDAN: There are more disadvantages to futures. You get some very unpleasant accounting outcomes from the use of futures when you look at gains and losses and the way you have to account for them.

Secondly, in some instances when you use futures to fix the maturity or duration of an asset, you find yourself in a position with an asset that now requires repricing or changing the interest rate being offered. At least the particular asset has had a change in the interest rate it generates.

Third, is a possibility of misleading yourself as to what you have done. For example, if you use futures contracts to establish a five-year duration, it may not be understood that there is still an asset fluctuation problem during those five years. If you experience a "run on the bank" during those five years, you may find yourself with depreciated assets.

Mr. Larson commented that it is desirable to structure the benefits to meet customer needs and thus keep lapses down. Could you expand on what you mean by meeting customer needs, what they are, and what you can do that relates to them?

MR. LARSON: As an alternative to meeting higher liquidity expectations, we might make the product more desirable to the customer and therefore make him more interested in keeping it. One method might be by avoiding long-term interest guarantees and staying with one-year guarantees. Then, we would have a little more flexibility in changing to current market interest rates.

MR. DIETER GAUBATZ: You spoke about the current state of SPDAs in the market but you didn't reflect on renewal rate philosophies. What are companies doing in that area, and are agents telling their people what the renewal rate philosophies are?

MR. LARSON: Currently all our products have one-year guarantees, and therefore at the end of one year, we have some flexibility in renewal rates. We will gradually move towards new business rates whatever they are, either higher or lower.

MR. LE FEVRE: In this business you don't want to state things so narrowly that your options are limited or you might have problems later. There are subtle ways to put expectations into people's minds which you should be aware of. These are the bail-out and indexing approaches. The bail-out sends a message to the customer that the company is planning to keep its original rate as long as possible. It says the company is probably investing long. The second approach is the index. We've seen indexes which are based on the better of long and short-term rates and ones that are based on just short-term rates. We've started using an index which we call a dampened index. It's an index that uses one-year T-bill rates, but that's only used as a base rate because it is readily available. We work with averages of T-bill rates to form a minimum guarantee for renewal rates. It is not the rate we are going to pay. It has an element of every T-bill rate that has been in effect since issue. It formalizes a general trend to new money rates. Any of these interest or index features send a message to the customer. You have to know whether it's the message you want them to receive.

MS. CLAIRE: At Metropolitan we used to have cells which matured every three or four years. When the renewal rates were below marketplace, we had high surrenders, so now we use a modified portfolio method. We invest for two to three years so our portfolio turns over very quickly. Thus, when our guaranteed rate expires, you will get the current market rate.

MR. GAUBATZ: That's over a three-year period?

MS. CLAIRE: No, we have a one-year guaranteed product, and whatever rate we are paying our new customers next year is what you are going to get.

MR. GAUBATZ: What is the rate?

MS. CLAIRE: Our SPDAs are currently at 11 percent and our flexible retirement annuities are at about 10 to 10.5 percent.

MR. JORDAN: If interest rates rose 2 and 3 percent in the year, would you still declare that 2 or 3 percent higher rate at the end of one year?

MS. CLAIRE: In effect, we lag the market both going up and coming down. If rates go up 2 or 3 percent and, assuming level issues, our next declared rate for new and inforce business will go up 1 to 2 percent.

MR. JORDAN: That's not quite keeping up with the current market rates, is it?

MS. CLAIRE: No, but because a lot of our fixed assets turn over each year, we're a lot closer.

MR. JORDAN: Because fixed assets turn over quickly, it is possible for you to declare a rate that you can justify and is produced by the assets you have, rather than identifying what the current rate is and letting it determine what you pay.

MS. CLAIRE: We set rates based on what our assets are earning, not on what the market is paying.

MR. JORDAN: That is a very important clarification.

MR. JACK GIBSON: When interest rates are falling, and you have a portfolio with a four-year average, you will be able to renew at a fairly high rate relative to the current market rate. There's been some talk about declaring a lower rate than what you are actually earning. Then when interest rates go up and you have the opposite problem, you will be able to give back more and keep buyers satisfied.

MR. LE FEVRE: This is a very realistic and is part of our outlook. It is impossible in today's market to be 100 percent immunized. Anybody that comes into this business and thinks he or she will create an investment strategy which will be riskless is going to be paying a very

low rate or kidding themselves. There are risks, and you have to look at them. It is realistic to expect that if interest rates have gone up, you will have to reduce your spread and force your rates up a little more than you want. The relationship between liquidations and the spread between the currently credited rate and a new-money rate is an exponential rather than a linear function. The liquidation rate accelerates as that difference gets bigger. If you model based on this assumption, you find that you do have to take a hit when rates are going up. That means that you're probably able to pick it back up when rates are going down.

MR. BILL WHITE: When an improperly filled out application comes back, what is the interest effective date? Is it the original application date or the revised application date? How did your management take to returning applications and then losing the money when it wasn't returned?

MR. LE FEVRE: This has only been going on for a little while and we are still getting the bugs out. We've returned very few applications. If money comes with the application, we will probably call the agent and get the application straightened out. Then we will issue the contract as of the date we received the money.

# U.S. TREASURY SECURITIES (AVERAGE YIELDS FOR CONSTANT MATURITY ISSUES)

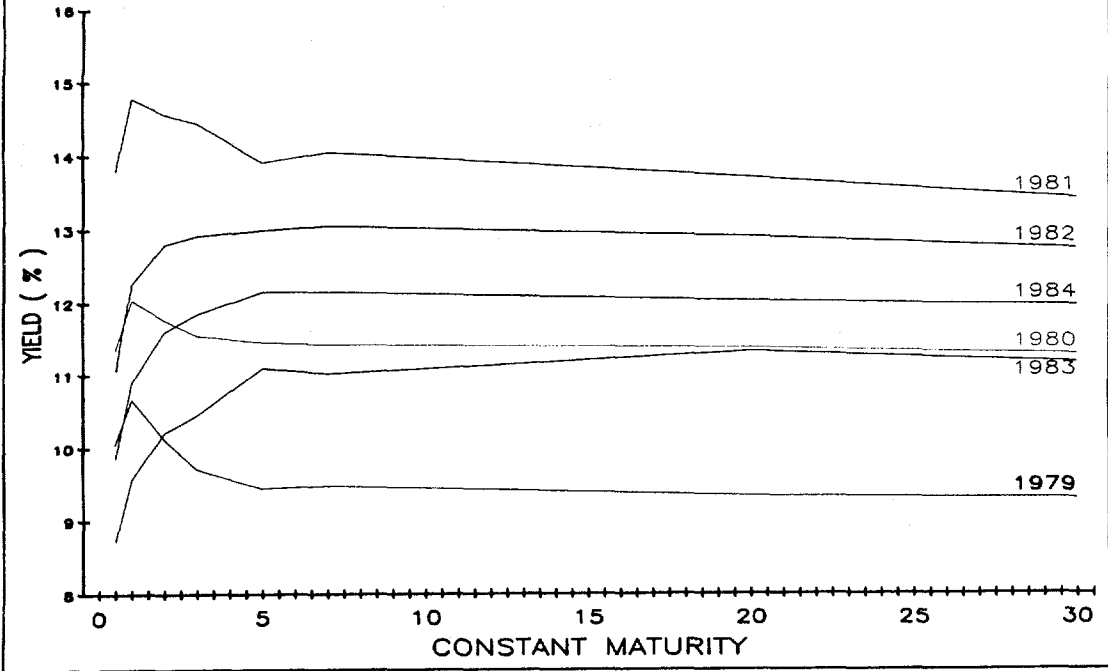


Fig. 1

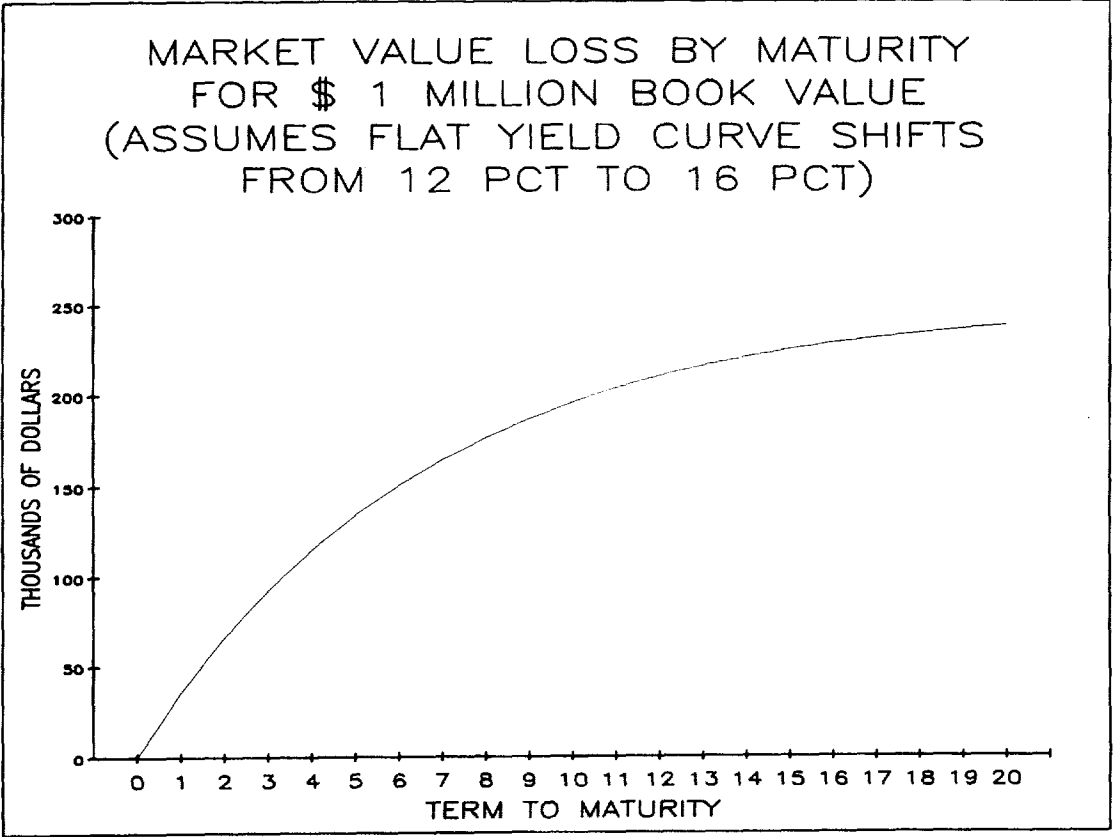


Fig. 2



**DEFERRED ANNUITY ASSUMPTIONS****Expenses:**

<b>Acquisition:</b>	<b>12.5 % of Premium \$ 45 per Policy</b>
<b>Maintenance:</b>	<b>.06 % of Premium \$ 30 per Policy</b>
<b>Termination:</b>	<b>\$ 30 per Policy</b>
<b>Average Size:</b>	<b>\$ 1,500</b>
<b>Dormancies:</b>	<b>10 %</b>
<b>Deaths:</b>	<b>1971 IAM</b>
<b>Interest Rate Earned:</b>	<b>13 %</b>
<b>Lapses:</b>	<b>10 % Base Formula: <math>.1 + \max\{ 0; 10 \times (\text{SPREAD} - .015) \}</math></b>

Fig. 3

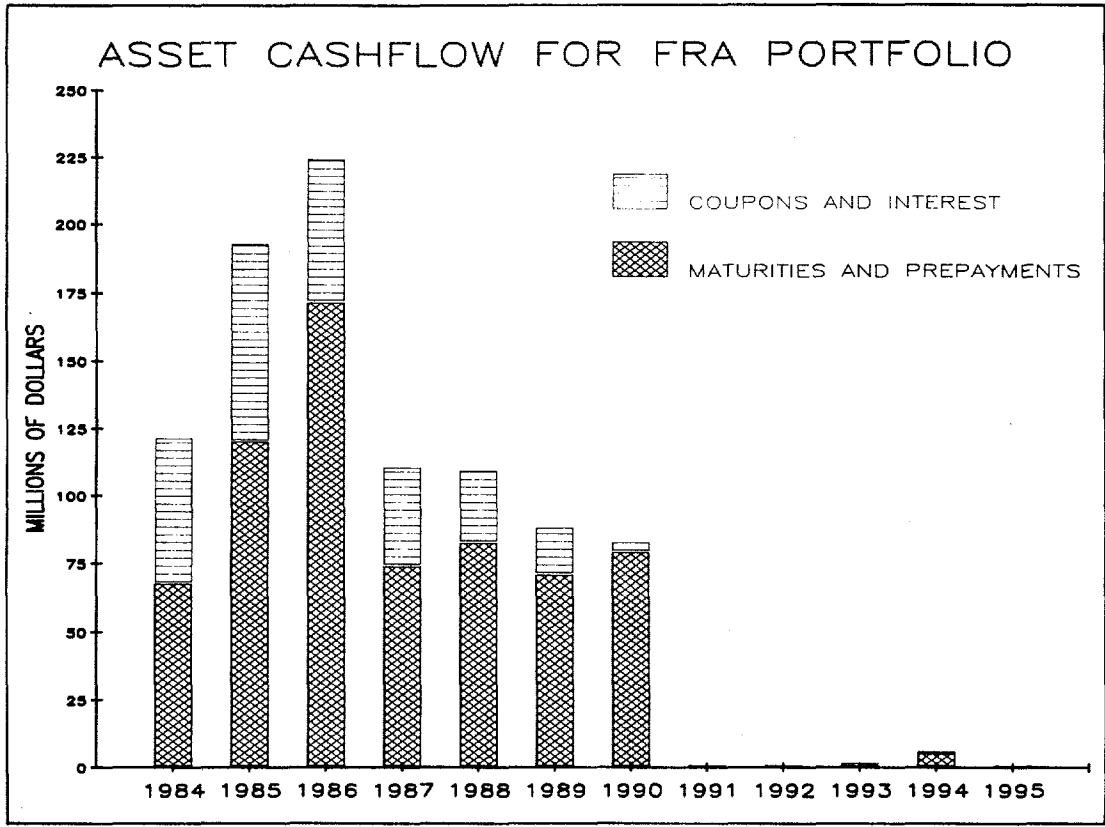


Fig. 4

# SITUATION 1

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**OWNER** ..... **A**  
**CONTINGENT OWNER** ..... **B**  
**ANNUITANT** ..... **C**  
**CONTINGENT ANNUITANT** ..... **D (optional)**  
**BENEFICIARY** ..... **E**

Figure 5

## SITUATION 2

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**OWNER..... A**  
**CONTINGENT OWNER..... B**  
**ANNUITANT..... A**  
**CONTINGENT ANNUITANT..... ?**  
**BENEFICIARY..... MUST BE B**

Figure 6

## SITUATION 3

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<b>OWNER</b> .....	<b>A</b>
<b>CONTINGENT OWNER</b> .....	<b>B (spouse)</b>
<b>ANNUITANT</b> .....	<b>B (spouse)</b>
<b>CONTINGENT ANNUITANT</b> .....	<b>C</b>
<b>BENEFICIARY</b> .....	<b>A</b>

Figure 7

