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## CURRENT ACTIVITIES RELATED TO DEFERRED ANNUITIES

Moderator: JAY M. JAFFE. Panelists: STEPHEN H. FRANKEL, GREGORY J. CARNEY, CATHY H. WALDHAUSER, JOHN R. THOMPSON

- Methods of reflecting fluctuating interest rates on new investments in amounts credited to contractholders.
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MR. JAY M. JAFFE: I would like to introduce the people on the panel and give you a little background about them. Steve Frankel is involved with product development at North Western Mutual where he has been for fifteen years. He is going to take a little different point of view here today. He says he is the token representative for those that are not in annuities, but might like to be. Greg Carney is Vice-President & Actuary of Anchor National Life in Phoenix. He is responsible for all the actuarial functions at Anchor. Anchor is a major writer of single premium deferred annuities, and Greg is specifically involved in this area, and he has been so involved since 1975. Cathy Waldhauser began her actuarial career in 1971 with IDS Life in Minneapolis. She obtained her fellowship in 1979 and currently works with annuities and group pension

products. We also have with us today John Thompson who is with Canada Life in the Canadian Individual Marketing Division. John will be approaching our subjects here today from Canadian perspective. I am a consulting actuary in Chicago. I obtained my fellowship in 1969 and have clients that are involved in this field.

MR. STEPHEN H. FRANKEL: We at NML continue to use a portfolio interest approach for our annual and single premium annuities in our general account. As you might expect, we have received numerous objections from our field force. However, I believe that the jury is still out on the question of portfolio vs. new money over the long run. With this in mind let me now take a few minutes to go over two items:

A reasonable defense of the portfolio approach.

Some comments about comparability of dividend illustrations for the two approaches.

NML bases its dividend interest rate on a portfolio rate that is the average earned rate on all of its investments. Although current rates on new investments are at historic highs, there are also many older investments that were made at lower rates. The portfolio rate reflects the total result of all investments - some low and some high. This rate will rise as older investments at lower rates are replaced by newer ones at higher rates. As proof of this, note that our tax-qualified dividend interest rate for annuities has gone from 5.1% to 8.5% in the last eight years. Note, that companies using the portfolio method apply the same interest rate to all payments, both new and old, each year.

Over the last 10 to 15 years, many companies have abandoned the portfolio approach and adopted a new money approach for flexible premium annuities. This approach reflects interest at the rate currently available on new investments when the annuity premiums are paid. That is, payments this year receive this year's rate, payments next year receive next year's rate, and so on. In periods of rising interest rates, this means that the highest rates are applied only to the most recent premiums. Lower rates are applied to the existing values arising from earlier premium payments. As a result, the overall effective earnings rate on the policy values is an average of the new money rates for the period of time during which the payments are made. This average rate is a "portfolio" rate for that period. In contrast, the portfolio method, described earlier, credits the same interest rate to all monies in the contract - new and old.

Funds accumulated under a portfolio interest credit may be higher or lower than those under a new money approach. It all depends on the time that each payment is made and the interest rates during the period. Note that the portfolio rate is not as responsive to change as the new money rate in periods of rising or falling interest rates. However, it provides greater stability.

At present, since interest rates are rising, the short run advantage is with new money. However, contract funds in the early years are small compared to balances in later years. The portfolio rate is rising. Accordingly, the long run advantage will depend on future interest rates.

When reviewing dividend illustrations for new money and portfolio annuities,

the following should be kept in mind:

A dividend illustration for the new money contract is based on the assumption that the current new investment yield for the company will continue at its present level for the next 10-20 years.

A dividend illustration for the portfolio contract is based on the assumption that the current new investment yield for the company will immediately drop to the portfolio rate and remain there for the next 10-20 years.

Neither of these two assumptions is likely to happen. Moreover, they are inconsistent. An example should highlight this. Assume two companies are both earning 10% on new investments. Suppose "Company A" offers a new money contract currently paying 9½%. It would illustrate 9½%, based on State law, for the next 20 years. Suppose "Company B" offers a portfolio contract currently paying 8½%. It would illustrate 8½% for the next 20 years, again based on State law. Here is where the inconsistency arises. Both companies are investing in the same economic climate for the next 20 years. If, although it is unlikely, interest rates are such that "Company A" can maintain a level new money rate of 9½%, then the 8½% portfolio rate credited by "Company B" will increase to 9½% during that time. As a result, the dividends actually paid by "Company B" will improve whereas the dividends paid by "Company A" will be unchanged.

In view of the above, comparisons of new money and portfolio illustrations, without qualifications, are misleading.

MR. GREGORY J. CARNEY: Before discussing the implications of the two methods, it is important to recognize the differences between the standard usage of these terms as it relates to dividends, compared to the specific usage as it relates to annuity contracts.

For example, the traditional usage of these terms, as they relate to dividends, would require a retrospective view of the portfolio earnings rate or the rate earned on new investments in the past year. Additionally, the method implies one interest rate for all policies issued in the course of the year.

In the context of the current deferred annuities, neither of these approaches are viable. The view to interest rates must be prospective, not retrospective, in nature. Current investment rates, not those earned over the past year, must be considered. Secondly, considering the competitive environment of deferred annuities, and the rapidly changing economic situation of 1979 and 1980, one rate for either of those years would not have been sufficient. Therefore it is important to recognize both the prospective nature of the rate credit and the issue date of the contract in the determination of the interest rate, whether that rate is determined by a portfolio or current rate basis. I use the term current rate because it more adequately describes the interest guarantee and does not confuse itself with the dividend methodology.

The current rate basis would be inappropriate for certain annuity designs, for example, annual or flexible premium annuities. This would be because different contributions would receive different interest rates within the same contract. The result would be an administrative nightmare in

valuing each policy and create significant policyholder confusion.

Within the single premium deferred annuity form, the current rate basis can be used. Renewing contracts would be credited with a different interest rate than the rate credited for new issues. The renewal rate would obviously be a function of the initial rate at which the original investment was made and the anticipated reinvestment rate for the interest income associated with those investments.

During periods of rising interest rates, the "current rate" basis will produce higher yield rates for new money and therefore attract more new business than a portfolio rate. However, the use of the current rate basis will increase the spread between the new rates and renewal rates and likely add to the disintermediation problem for older issues. The result would likely cause an increase in the surrenders of older issues at a time when the original investments are depressed in price. In a period of declining interest rates, a current rate basis would have the effect of virtually eliminating any new business.

The portfolio basis would keep new issues and renewals at the same rate. During periods of increasing interest rates, the portfolio rate would increase slowly. Companies using a "portfolio rate" basis would be at a competitive disadvantage and new business would likely be depressed. However, the spread between the current rate and portfolio rate would not be as great for older issues as would be the case under a company using the current rate basis and this may help with the disintermediation problem. During periods of declining interest rates, the portfolio rate stability would produce more new business.

My company utilizes, mainly, the portfolio method for determining rate credits. For a new company, or one with significantly increasing business, there is a significant correlation between the portfolio rate and the current rate techniques.

In 1978, we recognized that short term rates were increasing and that disintermediation, in the classical sense (i.e. short term rates exceeding long term rates) was occurring.

Our response was to develop a contract specifically designed for this interest inversion period. The contract itself is called QPlan and has the basic characteristics of our other single premium deferred annuity, with one exception. The exception is that the investments underlying this annuity are extremely short in nature and a high degree of rate volatility is expected.

The method of rate crediting is neither a portfolio nor an investment year basis but has attributes of each. For example, the rates credited are based on the current short term rates available, which sounds like a current rate basis. On the other hand, because the underlying investments are so short, the renewing contracts at any quarter receive the same rate as new business, which reflects the portfolio method.

This product in its short duration has been quite successful for us.

MR. JAFFE: Where does the name QPlan come from?

Mr. Carney: Q is for quarterly which is how the interest rate is calculated.

MS. CATHY H. WALDHAUSER: IDS Life has a fairly large portfolio both in installment and single premium business and since late 1978 we have been very concerned about the difference in rates on a new money vs. a portfolio basis. We did something similar to what Anchor has done, that is, we introduced a single premium annuity that follows money market rates. Funds under these contracts may be rolled over into another new money contract with rates reflective of longer term investments.

One other comment on portfolio and new money rates; I would have to disagree with statements that the portfolio interest method is more viable in the installment annuity market. We have portfolio installment annuities and what we see is that over a period of time, even though interest rates may average out as new money rates go up and down, the portfolio rate will generally tend to deteriorate simply because net cash flow drops when new money rates are high and increases when they are low. It is true that you do have renewal premium available to pay withdrawals from existing business, but the problems caused by differentials in rates are still significant. As a block of installment business matures, growth in the underlying portfolio will slow and yield adjustments will be limited to those resulting from reinvestment of maturing assets.

MR. JAFFE: In preparing for today's discussion, we added a topic which is not on your agenda. The area of investment philosophy, is central to all of our discussions. About two or three weeks ago, a client, a very small company, came into our office and wanted to develop a single premium deferred annuity product; actually they wanted to revise their current single premium deferred annuity product. I asked him on what basis and are you getting the interest rate you are declaring? He had essentially picked it out of the air and did not have any real appreciation for the problems of coordinating his assets with his investments. This bothered me of course, and we had a long discussion because of the fluctuations in interest rates that are now going on in the market place. Steve has some remarks that he would like to make in this area.

MR. FRANKEL: Earlier, I argued in defense of the portfolio approach. Now, let me move to the other side for a few moments. It is no secret that buyers today want a current rate of return. However, I wish to assert that high new money rates and guarantees in a general account are inconsistent. If a buyer wants a current rate of return, he should get a total current rate of return. The word total includes not only the investment and dividend income but also the asset changes, both positive and negative. In other words, the buyer, if he receives a new money rate, should also bear the investment risk.

Let me explain the concern that I have which leads me to this conclusion.

Current new money rates can be credited using either a guaranteed general account or a separate account. However, there is a basic conflict between a new money credit and a fund that does not recognize asset fluctuations. A company should not risk crediting new money rates on a guaranteed principal contract. Let us first examine the general account product.

New money rates can be paid on a general account contract. However, during the last credit crunch, many companies took huge investment losses

in their general account when surrenders of these guaranteed fixed dollar contracts took place. Essentially, the following happened. An annuitant purchased a contract that guaranteed principal and interest at 10% for 10 years. The company backed this contract with an investment at 11%. (The 1% margin is to cover expenses.) Assume that interest rates then rise. The annuitant surrenders his contract to buy another one guaranteeing 12%. The company now has to liquidate its 11% investment in a 13% market, thereby suffering investment losses. Most withdrawal penalities only consist of interest. As a minimum then, the annuitant gets back 100¢ on his \$1.00 (he loses his interest), but the company gets back only 88¢ on its \$1.00 of investment. There are two other disadvantages of a general account individual product with permanent mortality guarantees:

- (a) For the purpose of Federal income tax, all the interest credited is not tax deductible.
- (b) New York Regulation 33 is most complex and must be complied with.

Now, let us look at a Separate Account product. In today's rapidly changing economy, the separate account product offers protection to the company because the market value is paid on surrenders. Accordingly, the investment losses described above are borne by the annuitant, not the life company. Because of the recent credit crunch, many companies are moving toward this concept. Additionally, all the earnings paid to the annuitants escapes taxes. The company pays taxes on only:

- (a) The earnings it retains through asset charges.
- (b) Long term capital gains in a non-tax-qualified fund.

Lastly, New York Regulation 33 is not a factor.

Accordingly, I would argue for a separate account that can invest in bonds, stocks, or short term securities depending on the economic climate.

MR. JAFFE: In listening to the remarks, there are a few things I would like to clarify for the benefit of everybody. If you are not really engaged on a daily basis in this, you may be a little puzzled by the term basis points which is really hundredths of percents. Ten basis points is 1/10 of 1%. You will hear that terminology very frequently. Secondly, in a kind of a broad sense we are talking here of contracts that are either sold under a group or an individual vehicle. Probably a better way to put this is that we are really concerned about individual account products. We are not getting into TSA contracts, deferred comp and other things.

Finally, a point which I think will help clarify some of the remarks that Steve made about sophisticated investors. It is not unusual to have average individual single premium annuity investments in the area of \$15,000 or more. So, people are not exactly doing this lightly. They are making conscious decisions about where they are placing their money.

MR. THOMPSON: My role is to give a brief outline of what is currently happening in Canada in the deferred annuity market. I will try to place the emphasis on the type of products that are successful in the marketplace.

While many companies still offer participating annuities with guaranteed cash values, they are meeting increased market resistance.

A large proportion of the premium in the deferred annuity market is attracted to various versions of non-par 5 Year Interest Rate Guaranteed products. The interest rate guaranteed is typically in the range of 1 to 1½% below 5 Year Residential Mortgage rates at the time the premium is paid. This rate is guaranteed for a 5 year period. At the end of each guarantee period another interest rate is set and guaranteed for the next 5 year period.

The contracts typically have no loading charges at issue so the gross premium accumulates at interest. There are charges defined to cover unamortized expenses in the event of premature surrender. These charges are a percentage of the accumulated amount and they frequently decrease as the size of the premium paid increases. In addition, if interest rates are greater at the date of issue than they were when the interest rate guarantee was set, a charge is assessed to protect the Company from Capital Loss. These charges, in combination, should protect the Company from loss due to unrecovered expense and provide protection from financial anti-selection. The charges do not appear to be so large that they would be a source of profit. The charges may be 10% or so in year one grading down over 10 years or in some cases they are expressed as a proportion of the interest credited during the prior year.

These products were designed to compete with the 5 year interest certificates offered by Banks and Trust Companies. As such the emphasis is on the interest rate guaranteed in the contract. Insurance Companies' products offer tax deferral of interest build-up while the money is in the contract. Trust Companies on the other hand, offer yearly declared interest so the taxpayer can get the \$1,000 Interest Allowance in his yearly tax return. In the Registered Market these products are very similar in their impact on the taxpayer.

Commissions to the Agent are typically in the 2% to 3% range. The Trust Companies will frequently offer a fee to the Agent to bring in money to the Trust Company. These fees are usually in the 1% deposit range. So the products offered by Trust and Insurance Companies are quite similar and the differences can be easily identified.

The asset backing is typically 5 Year Residential Mortgages. Since these are used to determine interest rates, there is an obvious attempt to match asset and liability cash flows. The Valuation Actuary can easily satisfy himself that the asset backing is adequate and appropriate and able to support the guarantees made under the contract. The Valuation Actuary then strikes an appropriate valuation basis which is usually the amount of guaranteed cash value at the end of the current interest Guarantee Period discounted at a rate of interest of 1% to 1% below the rate guaranteed. So reserve strain is not a big problem on these contracts.

The Companies operate this product portfolio off the spread in interest rates between the rate obtained on the assets held over the rates guaranteed to the policyholders.

There are many variations of this sort of contract and needless to say I do not think I have described any one Company's product so far. The

variations we see on this product type include:

- Contracts with front end loading charges, but no surrender charges (except perhaps for a charge to protect the Company from Capital Losses).
- (2) Contracts with no surrender value during the Interest Rate Guaranteed Period. These are called locked in Contracts. Surrender can only take place at specified dates.
- (3) Contracts with periods other than 5 Years or perhaps a range of choices in one contract, these periods could range from 1 to 10 years.
- (4) Daily Interest Annuity where the rate credited may change from day to day. The contract may have a minimum rate that could be used. These Contracts would be backed by 60 or 90 day Corporate or Government Paper.

Policy Loans are on the increase in Canada but the typical policy Loan Interest Rate is in the 12 - 13% range (except for contracts issued prior to 1969 where the 6% loan clause still applies) so the loan rates are not unreasonably attractive in relation to the cost of money from other Financial Institutions. In addition, there is a great increase in surrenders of the traditional par Guaranteed Cash Value Deferred Annuity Products. A lot of the money released from these old style contracts seems to be recycled into the type of Deferred Annuity Contracts I have outlined whether they are in Trust Companies or Insurance Companies.

In summary, the Deferred Annuity Products now offered in Canada are becoming more competitive with products of other Financial Institutions. As such the compensation to Agents, and the Company and the benefits to policyholders are similar between these Institutions. Insurance Companies try to protect themselves from loss on premature surrender but otherwise the 1 to  $1\frac{1}{2}\%$  spread is needed to cover maintenance expenses, recover initial expenses, cover risks and generate profits. So this product line has become a low margin, high volume area of operation in Canada.

MR. MICHAEL R. TUOHY: I would be interested in the experience of a company offering both a portfolio product and a new money product, whether there was serious disintermediation from the portfolio product to a new money product? If this was the case, is not one in a rather seriously mismatched situation with a new money product being matched by the long term bonds that were built by the portfolio product?

MS. WALDHAUSER: IDS Life has been in precisely that position. We do offer both a portfolio single premium annuity and a new money single premium annuity. We have been doing so for the last year. I do not think that offering a new money contract significantly increased the terminations of our portfolio contract. We did attempt to trace transfers from one to the other. They generally occurred in the larger policy bands, where we do not have a high concentration of business. We took the position that if we were going to have terminations of our portfolio annuities, and we were having them whether we introduced the new money contract or not, that we would rather have that money come back in house than go outside. But it is true that you have wiped out part of the

anticipated profit margin on your portfolio business to the extent that you encourage such turnover. You can control it to a certain extent by not paying commissions on the new policy. But in those instances where it is clearly in the policyholder's best interest, and it is a large account, there is going to be some movement.

MR. GENE ECKSTUT: I am not sure whether my question is germane or not, but for the type of contract which can be considered excess interest, where you are free to increase the guaranteed interest rate in case interest rates go up, there is a controversy whether the excess interest is a dividend for tax purposes or not. Could we have discussion on it?

MR. CARNEY: Anchor National is obviously extremely interested in the "Is the excess interest a dividend?" question. We do not have a ruling request pending with IRS. There are two companies that do. Earlier this year, in Washington, D.C., we sponsored a meeting of some interested companies. Many of the companies that were at that meeting have worked together on a position paper that has recently been presented to the IRS. As yet, no decisions by IRS have been reached. The only thing that I can add is that we are cautiously optimistic with regard to the rulings.

MR. HAROLD SEGALOWITZ: (to John Thompson) Have you done any studies of the reinvestment risk or premium that you would need to cover your cash flow mismatch? I know on reinvesting in semi-annual coupon bonds, if you assume you could reinvest all the time at 3% below your market rate, your risk premiums are about one-third of one percent. Do you know what it is for mortgages?

MR. THOMPSON: I have not looked at whether it is one-third of one percent or not. We have done asset shares on this sort of a product with various reinvestments and we have discovered, that there is a risk, but when you are looking only at a 5 year period the risks are not as great as if you are looking beyond 5 years. I think you can be more confident that you are making the kind of assumptions that you are going to realize in a 5 year period, especially with the economy the way it is right now. A lot of companies have stayed away from this for exactly that kind of a problem.

MR BRUCE CALDWELL: (to John Thompson) John you commented that Canadian 5 year mortgages are used as a vehicle for your investments backing up single premium deferred annuities issued in Canada. How do the historical yield curves of these mortgages compare with alternative intermediate term investments available in Canada, such as certificates of deposit or corporate bonds?

MR. THOMPSON: Typically the interest rates on 5 year mortgages are higher than a 5 year corporate bond yield. In the past year, we have seen that relationship reverse itself though, at least for a one month period, where the corporate bonds were in fact yielding more than residential mortgages for a while, and at that time a lot of companies did start matching using bonds rather than mortgages. Right now the mortgage interest rate in Canada would be somewhere near the 14% range and this sort of contract would be granted to a policyholder somewhere around 12½% to 13%.

MR. CALDWELL: Greg, you commented that QPlan was designed to guard against disintermediation. It would appear that whenever the rate credited on QPlan is higher than the rate credited on AnPlan, rollovers from AnPlan to QPlan might reasonably be anticipated. In the event of wholesale rollovers in such a situation, it would appear that your company would have one of two choices:

- liquidate AnPlan assets, presumably at a capital loss, in order to generate cash rolling into OPlan; or
- (2) pay the QPlan (new money) rate on such rollovers while the underlying assets are earning the AnPlan (portfolio) rate. How then is QPlan effective in guarding against disintermediation?

MR. CARNEY: First of all we do not permit rollovers if we know about it. I should probably mention that AnPlan is our name for our regular single premium deferred annuity. If a person surrenders that contract, gets his cheque back and resubmits an application for a QPlan contract, obviously we are going to take it. It is a little more difficult for us to track but we try and watch it and make sure that no commission is paid on the new QPlan contract when that does happen. The interest differential between the QPlan contract and the AnPlan contract is really not as great as you might imagine. The AnPlan is 8 3/4% guaranteed for a year and the QPlan contract is currently 9.51 guaranteed for one quarter. So there is not really a substantial rate differential existing between the two and we really have not had that problem.

Mr. MICHAEL WINTERFIELD: Steve, I would like to comment on your separate accounts discussion. I would like to talk about the policyholder view point. I think, there are essentially two approaches. The money market approach is a totally viable one since essentially there is no prospect of an invasion of principal. On the other hand, I think that essentially any kind of bond-based separate account in today's environment is pretty much unsaleable. You might have read Henry Kaufmann's remarks last week, where he said a bond today is essentially a speculative investment. In the last few years bond volatility actually has somewhat exceeded the day by day volatility in the stock market.

MR. FRANKEL: The only comment I have on that is, looking at the past 6 or 7 months, I would agree with you that the money market is the way to go, because that is a separate account product which has no asset fluctuation. However, 5 years from now, 10 years from now, 15 years from now, some time during that time period, it is quite possible that rates of return on bonds, or stocks, will be substantially higher than in the money market. You will not have an inverted yield curve and so all I was really suggesting is to have on the shelf, let us say, a separate account which has more than one pocket. It would have a money market pocket, it would have a bond pocket, it would have a stock pocket. Perhaps there might be other pockets too that you might want to add, so that the policyholder, if he wishes to, could switch from one account to the other. We have also been thinking of selling our own company's investment expertise, as part of the package, in saying that we will try to shift you from one to the other. For example, we did a study, taken over the last 10 or 15 years, that showed that had you stayed with either bonds, stocks, or the money market, and just kept putting your money in that,

that you would have earned somewhere around 7 or 8% annually. They all would have been the same, but you would have to stay in the same sort of investment. Had you always made the wrong decision, in other words if you are going to switch among the three, but you always switched at the wrong time, you would have lost about 3%. Had you, however, always made the right decision, you would have made about 15% annually. So this is why I make the statement that perhaps it might be wise to have more than just the money market.

MR. CARNEY: I am somewhat surprised to see the topic "Annuities with back-end surrender charges" under the heading "Recent Innovations". My company has been selling these products successfully since 1974. There are basically two types of products:

- Disappearing surrender charge The concept here is to charge the client for expenses which have not been recovered at time of surrender. For most contracts, the surrender charge will wear-off in the 5th through 10th year. The surrender charge may be a level percentage of the premium, a level percentage of the accumulated value or a declining percentage of either.
- Permanent surrender charge The concept is similar to the above but additionally it is hoped that the permanent penalty will be a deterrent from surrender. Normally, the surrender charge whether permanent or disappearing would be waived on annuitization.

The major problem I have with a permanent surrender charge is the logic of charging a policyholder an increasing amount to surrender the longer he persists with the company. Normally, by the 5th or 10th year, the acquisition costs will have been recovered by the company. It seems illogical to me to charge an individual who has persisted to, say the 20th year, and on whom the company has recovered its acquisition expenses and made a profit, an amount that exceeds the charges to an individual who surrenders in the 5th or 10th year. Because of what I believe is a distortion of equity in the application of a permanent surrender charge, one must believe that the permanent penalty is a significant deterrent to surrender.

Annuities with back-end load charges can also be broken down into individual or group contracts. The group contracts resemble very closely the individual contracts and have been referred to as individual contract group annuities. The purpose of the group classification is to take advantage of the higher discount rates applicable to the group annuity line. The principles of CARVM are still applicable to these products but the use of the higher discount rate results in lower surplus strain.

We considered this approach in 1975 and 1976, but determined that there were some problem areas. First, if the group consisted of clients of a large GA or brokerage firm, the movement of the group would be at the discretion of the GA, not really the individual clients. This caused us concern if we envisioned another company offering a more competitive product, a more competitive interest rate, or a "sweetheart deal" to the firm.

The second problem area we had was in the actual definition of the group.

For example, does a legitimate group consist of all individuals who purchase the group contract? Or does a legitimate group consist of all clients of the XYZ firm? We envision some legal problems with these definitions.

I should note that the proposed changes in the valuation and non-forfeiture law to be presented to the NAIC next month, removes the distinction between group and individual deferred annuities as it relates to the interest rate used for valuation. Whether this will result in any companies reclassifying their contracts from group to individual remains to be seen, but, considering the current structure of the annuity products, I am pleased that the valuation distinction is being removed.

MR. JAFFE: It is worthwhile to note that, if you do get involved in the back-end surrender charge contract, the slope of those surrender charges may effect your reserve valuation on a statutory basis, depending on how fast the surrender charges run off.

Within the last 5 to 10 years the stockbrokerage community has become a major factor in the sale of single premium deferred annuities, and these people have natural outlets. They are treating these contracts as investments for their clients. To touch a little more on some of the things that Greg just mentioned, these people do consider moving people, i.e. their clients, from one company to another if things so warrant. The stockbrokerage companies do have consulting actuaries that perform due diligence analyses where they investigate the companies and look at the products on a competitive basis. If you go into an investment office some time, you will see on the blackboard that such and such an insurance company is coming in to give a discussion of their product this afternoon at four o'clock if you want to be there. So it is an extremely competitive market, but it is a very effective distribution system for these people or the companies. It is interesting to note that the stockbrokerage firms are acquiring their own insurance companies, and this should tell you something.

Special marketing groups probably will refer to things like the deferred compensation, and tax sheltered areas. These are very very special marketing programs and they are effective. The tax laws permit such groups to put money away tax free. The same investment problems exist. Turnover within these groups is slightly different than individual annuities, but there is not much that makes it different than what we have been talking about.

There are companies that are beginning to advertise in newspapers; there certainly has been much more advertising of their single premium products. Much of the advertising, I believe, is being done in conjunction with stockbrokerage firms. Certainly, it does mark a new era in the relationship between insurance companies and our distribution systems.

MR. CARNEY: The current innovation is the no-load variable annuity. These contracts have a back-end load on surrender, either permanent or disappearing. MSF/Nationwide is one such example. Some variable annuities may offer the client a choice to invest in an all bond portfolio, which would produce a product resembling quite closely the current single premium deferred annuity. The fact that the client, rather than the insurance company, bears the investment risk coupled with Regulatory, IRS and SEC involvement, in the deferred annuity area, may make this an important

product for the future.

Quite recently, IRS published Rev. Ruling 80-274. The ruling is quite specific and deals with Savings and Loan wrap-around annuities. At this point, there is an indication of concern that this ruling will be extended to other wrap-around and variable annuities. As a matter of fact, it is my understanding that the SEC wants the prospectus of these types of contracts stickered with notification of a potential adverse tax ruling.

It is also my understanding that a number of companies are currently involved in this area and are having discussions regarding the applicability of the ruling.

MS. WALDHAUSER: A wrap-around annuity is simply a variable annuity, usually with more than one investment option. The most common wrap-arounds now invest in mutual funds including some type of money market fund, a bond fund, and one or more equity funds. Nationwide's contract has eight or nine different options. Some have only one or two.

Interest in these contracts came first out of the investment community. Wrap-arounds were a way for mutual fund companies to expand their markets by providing tax deferral on accumulated earnings as well as other traditional annuity benefits to their investors. Individual Income Tax is deferred on the net accumulation within each fund option, and also on any accumulation transferred between options providing flexibility that no stock or mutual fund investor currently has outside of a tax-qualified retirement plan.

The advantages from the insurance company standpoint are fairly obvious — one is that you have pretty well eliminated the investment risk, and yet you are able to credit high new money rates directly to your customers through the performance of the separate account. Another advantage is that you have a built—in marketing force, the brokerage house that normally distributes the mutual fund. So, if your sales representatives have not worked with equity products before, they may not have to.

A side benefit of using the wrap-arounds from an annuitant's standpoint is more favorable tax treatment than under a traditional variable annuity. In a non-tax-qualified situation, all of the capital appreciation earned by a variable separate account is currently taxable. It is also taxed as ordinary income when the balance is later distributed either in the form of a surrender or retirement income. With a wrap-around annuity, at least the short term gains of the wrapped mutual funds, generated by trading within those funds, would not be currently taxable. They would be distributed to the separate account as dividends and, therefore, to the extent applied to increase policyholder reserves, they would be fully deductible. Presumably then, the assets of the underlying fund could be turned over frequently enough to avoid long term gains entirely, thereby avoiding double taxation.

Some other characteristics of these annuities are: (1) They are generally sold with a very low level commission, considerably lower than on a traditional fixed annuity. We usually hear of figures of 1 to 2%. Traditional annuities pay 3% or more. (2) They are usually no-load on the front end; although there are some loaded contracts; and have a disappearing surrender charge.

(3) Most of them have a flat administration charge, a common feature now on installment annuities. You are then able to recoup administration costs outside of your management fees, keeping those fees as low as possible.

Greg was mentioning the advantages to the annuitant of having a variety of investment options available. We have looked at the historical performance of different types of mutual funds as they would flow through a wraparound annuity. Over the last ten years, the accumulative return on a selected bond account would have averaged 6%, on an equity account 6%, and on a money market account 7%. An individual annuitant could have achieved returns substantially above or below these averages depending upon when transfers were made between options. What we found to be significant was that the equity account performed fairly well, even after taking the tax consequences of long term appreciation into account.

Wrap-arounds have some rather peculiar risk characteristics: (1) If you offer a fixed or a guaranteed option, you have not eliminated the disintermediation risk. People presumably will transfer into the fixed side when that rate is more attractive than your bond or your cash management return and vice versa. (2) You may have expenses that exceed the fees guaranteed in your contract. (3) If a minimum death benefit is guaranteed during the accumulation stage, in other words a return of premium, the insurance company could be on a significant risk for depreciated account values at death. A given person making all the wrong moves could parlay their account into a fairly low value in a short period of time. Single premium annuities have, in our experience, an average issue age of 55 or over. (4) You could see unexpected mortality improvement during the payout stage with losses compounded by increasing income payments if the investment return on the variable account is also very good during that period. Another consideration to keep in mind is that profit margins will probably be smaller than for a fixed annuity. The wrap-around will be competing with traditional investments where commissions and other costs borne by the distributor are very low, lower than most insurers are accustomed to covering. Also, we generally make less if we assume less risk.

The most recent development affecting wrap-arounds is IRS ruling 80-274 which came out in September. The ruling specifically withdrew tax deferral from the wrap-arounds offered by savings and loans. There the insurer sets up a custodial account with a bank for each annuitant to be invested in certificates of deposit or another form of bank account. In effect a miniature separate account is set up for each annuitant. In that way the guarantee of principal by the Federal Deposit Insurance Corporation is retained. Normally these wrap-arounds do not offer a number of investment options, although they did prior to 1977. The bank would have a number of investments that the individual annuitant could move among and still be covered by the annuity wrap-around. The IRS, in 1977, ruled that because of the control individuals had under these old investment annuities, the insurer had in fact given up all control of the assets and they were, for all practical purposes, owned by the individual. Any investment income was therefore currently taxable to that individual. This concept was carried one step further with this most recent ruling. Even though an individual annuitant can no longer change investments within the account, the control that they have is still essentially the same as if they bought a certificate directly from the bank, without the annuity wrapper. A

number of companies are looking at that ruling and they may have some success getting it changed.

It is rumored that the IRS will also be reviewing the tax treatment of mutual fund wrap-arounds. The only feature that differentiates these from the S & L type is that there are no individual accounts for each person; assets are not allocated to individual annuitants. However, the annuitant still does retain substantial investment control; the insurer will move the account values as directed by the annuitant. We are now waiting for the IRS to take a more definitive position.

One suggestion for dealing with the unknown is to use mutual funds that are only offered through annuities, that is, funds that are not otherwise available. The thinking here is that then you are not offering an investment that could be bought without the annuity. Another thought is that you may be able to remove the insureds' apparent control of the investments underlying their account by not offering a number of options within the same annuity, say, by only offering a bond fund or a money market fund but not both.

Another area of regulation that we must deal with is the SEC. A proliferation of no-load wrap-around annuities may revive the commission's interest in the type of risk charges and fees taken by insurers on variable annuities in general. About once a year over the last few years, they have asked variable annuity companies for statements regarding the need for risk charges and the adequacy of their loads. Regarding variable annuities in general they have taken the position that if the risk charges are reasonable compared to other companies' they will not challenge them. Mutual funds, on the other hand, operate under very tight restrictions on the amount of expense they can recover from charges against assets. Eventually the SEC may look at such fees on variable annuities relative to the limits they enforce for mutual funds.

MR. JAFFE: We have a couple of other things on these wrap-around products. The current state valuation laws just do not seem to fit; it is like trying to put a square peg into a round hole. How do you reserve for these contracts because there is a back-end surrender charge? I want to emphasize one other thing. Revenue ruling 80-274 is, as I understand, a proposed ruling, not a final ruling.

MR. FRANKEL: We have been talking about new ideas for annuities visa-vis accumulation of dollars only. I think it may be appropriate to take a few minutes at this point and broaden our horizons. Let us talk about the future and life insurance combined with accumulation funds.

During the past decade, underlying inflation rates have increased dramatically. The inflation rate has increased from the 4-5% range to the 8-10% range. The more volatile CPI has temporarily reached levels as high as 18% for a 3-month period.

At the same time that the built-in average overall inflation rates have risen to historic highs, the economy in general and the financial markets in particular have become increasingly volatile. Bond prices have fluctuated almost as sharply as common stock prices. These trends have already materially affected the markets for financial-intermediation services.

Money market funds are taking deposits away from banks and savings and loans. High interest savings certificates are taking funds away from savings accounts. Both are probably taking funds away from life insurance companies in the form of policy loans or in the form of surrenders. A continuation of the trends of the past decade into the future cannot help but strain ordinary life insurance. Nevertheless, the basic need for protection against dying too soon or living too long will continue. Also the need for professional investment management services will continue.

These economic changes are forcing the entire insurance industry to re-examine its traditional product line. "Will high cash value life insurance policies with guaranteed policy loan rates be as viable in the 1980's and 1990's?" is a question that is being seriously asked. There is a growing concern that the answer to this question may be "no". Some companies believe that the product of the future is a two-part policy - pure risk protection, plus savings where the company is protected by direct recognition of loans. They are currently selling such a product with relatively good results. Perhaps, the final answer must go further - direct recognition plus the investment risk borne by the consumer.

In view of this, what am I suggesting? I am not suggesting that we discard all our traditional products and start anew with this "two-piece" product. I am suggesting, however, that we must re-examine our current product line by looking at product alternatives better adapted to an inflationary environment. These product alternatives could, very likely, have some type of an annuity as their foundation. The primary objective of this "two-piece" or "combination" product is the preservation of the current market - both for the company and for its agency force. In order to achieve this, two items are essential:

- 1. The customer must receive a competitive total current rate of return. Total rate of return includes, as stated earlier, interest and dividends as well as plus and minus changes in asset value. Remember, the only way a customer can receive the total rate of return is if he, not the company, carries the investment risk.
- A combination of services must be offered which will justify adequate margins to compensate a field force, namely, competitive risk protection, company investment expertise, and Home and Field services.

MR. CARNEY: Two recent product innovations that should be mentioned. First is the high window contracts - these contracts have no penalty charge if the credited rate ever goes below some rate specified in the contract, for example 10%. Some contracts allow the penalty to be waived if the interest rate credited is ever below prime.

A second type of contract is where the interest rate credit is tied to an outside index. At least one company has an annuity product that guarantees that the minimum rate credited to the contract for any six month period will never be less than 3/4 of the prime rate.

MR BRUCE L. CALDWELL: With regard to the minimum guarantee being linked to some kind of index, would any of the members of the panel care to comment on what investment risk or other risk can be identified with these types of contracts?

MR. JAFFE: Hope that you can match the index that you are investing against.

MR. CARNEY: If you have a situation of disintermediation as we are in right now, you have to be totally short and if you go back to a normal yield curve, I guess you should be long. Hopefully, you have a good crystal ball and you can go back and forth to wherever you have to be.

MR. FRANKEL: Essentially, this is a problem of replacement when a company introduces a new more competitive contract. It must be viewed in two parts: load and interest credit.

- Load: If the new load is more attractive, I would suggest making it retroactive to the existing contracts. This may cost some money, but that cost is more than offset by the goodwill you will credit. For your information, we recently did this when we introduced a new FPA with a lower load.
- Interest Credit: The problems are different depending on the type of approach used.
  - Under a portfolio approach, there would be no problem within the company since the rate credited to all funds is the same. The real problem is replacing these existing contracts with other contracts from another company. I know of no way to prevent this other than to use some defense of the portfolio approach, similar to the one I gave earlier.
  - Under an approach that does not guarantee cash values, such
    as a separate account, replacement should not be a problem.
     All accounts would be brought up-to-date automatically through
    asset value changes.
  - The new money approach could put you between a rock and a hard place. The only way I know to prevent replacement is a surrender deduction large anough to offset any gains to the customer from surrendering his existing contract and moving to the new one. The problem is that a surrender deduction large enough to accomplish this may not be marketable. On the other hand, it seems most unsafe to have no surrender deduction. In this case, annuitants would merely move existing funds to the higher rate each year. This could prove disastrous for the company.

MR. CARNEY: Disintermediation is a function not only of interest yields, but also product design, marketing concepts, the type of policyholder, and the type of distribution system utilized. I believe product design has an important impact on the extent of surrenders in a period of disintermediation of interest rates. For example, with a contract that has a disappearing surrender charge, the removal of the surrender charge in a two to three year period is an extremely important "carrot" which may tend to decrease surrenders. Similarly, a contract which provided for a retroactive decrease in interest rates if surrender occurred before a fixed number of years, would also provide a significant "carrot" to the policyholder to continue.

It is my belief that a permanent surrender charge will not act as a deterrent to disintermediation because there is no reason for the policyholder to remain in the contract, i.e. he has to pay his charge no matter when the termination. The most positive aspect is that the company can collect a charge to offset the portfolio loss. It is, however, slightly less than comforting to realize that the product may encourage surrenders and allow the company to collect a 10% charge when the portfolio is selling at a 25% loss.

The type of policyholder also has an important impact on the actual effect of disintermediation. For example, there is not much difference between the individual with a five or ten thousand dollar annuity or cash value life policy but individuals with 100,000 or more should be assumed to be sophisticated and more movement at that end of the spectrum should be anticipated.

The type of distribution system may also play an important role. For example, it is possible that business sold through stockbrokers may persist better than that sold through regular life agents. The reasons this may be true are:

- Stock brokerage firms have extensive compliance and due diligence reports which would either make replacement difficult or possibly forbid replacement.
- 2. Brokerage firms and stockbrokers have not had record keeping systems developed for annuity customers. That, coupled with a company not providing renewal notices to the firm does not give information to them regarding their existing client base to utilize for replacement.
- Turnover among brokers is fairly high and most leave the business as opposed to going to another firm.

The major point to consider is that disintermediation will not cause surrenders and investments into other vehicles. Because of the tax ramifications, terminations would normally go into other companies' annuity products utilizing a 1035 tax free exchange.

The most effective way to prevent disintermediation is to make exactly the right investments at exactly the right time. A good crystal ball would be essential to that method.

Investments in completely short instruments would offer virtually complete freedom from market risk and ensure that the rate paid to older issues would be exactly the same as the new issues and competitive with new issues. The problem is that the high volatility of short term rates could encourage surrenders and lack of new business as interest rates decline.

A problem with disintermediation is the potential of negative cash flows. A modification to the immunization technique could be utilized whereby a projection of cash flow is developed based upon anticipated maturities, surrenders and loans for each future year, and then, a schedule of investment maturities, coupled with investment income is drawn up to coincide with the expected cash out flows. This does not protect against disintermediation but should protect against negative cash flows if the assumptions utilized are conservative.

MR.JAFFE: Where a policy loan provision does exist in the policy, we can take steps to credit only the minimum guarantee on that portion of the policy on which there is a policy loan.

MR. STEPHEN D. BICKEL: Would one of the panelists comment on the policyholder tax issues and the Security First Bill, or the ACLI idea of a penalty tax on surrender before a certain age, and how you feel this would help on the disintermediation question?

MR. CARNEY: The Security First Bill is a proposal that would not allow tax deferral to a deferred annuity if the contract had a pay-out option of less than 60 months. That Bill has been tabled until the next session. If you had it, obviously, it would help in terms of disintermediation, because your payout would be extended over a five year period at a minimum, or would be under a life annuity basis. So, it would certainly help from that standpoint. The real question is whether or not the product would then be a saleable product or a viable product if that constraint was put in. It is difficult from a sales standpoint to imagine purchasing a contract that you could not in an emergency get your money out, and I am not sure that it would make the product viable if that Bill was passed.

MR. CALDWELL: With regard to the question on disintermediation and is it possible to avoid disintermediation, I think the answer to that probably goes back to the time you are considering the product design initially. I believe the product must be designed with full recognition given to the investment strategy which will be utilized for that policy, and with that in mind you must work closely with your investment committee.

I believe it is possible to build safeguards into your product designed around your investment strategy, but the point to be emphasized, at least in my opinion, is that the product design and investment strategy must go hand in hand with these vehicles.

MR. FRANKEL: Coming from the conservative view again, I am not sure that you could design adequate safeguards and I guess that is what I am saying. Ten years ago you might have thought you had it, but I do not think you would have anticipated what happened in the early part of 1980. I guess, that is my concern on any safeguard; I do not think anything helps, other than as I said, total market value. Somehow I think that you have got to take the risk; I do not want to. It is that sort of a thing. Or perhaps it is possible to lock somebody in forever. I do not know if we can do that, or if we can say you cannot surrender for at least 5 years or 10 years.

MR. THOMPSON: I have a couple of comments on the Canadian environment. Both of these approaches are in fact taken. Market-value cash values are one approach taken, and the locking-in feature is also used in certain circumstances, but whenever those are present in a contract at some particular point, and particularly at the end of a 5 year interest guarantee period, the cash value is guaranteed. So the cash value does arrive at a contractually guaranteed basis every once in a while. During those periods, where there is an interest build-up, the guarantee is gone.

Basically, in Canada, we have our Ottawa statement, which was revised

a few years ago, and I made some reference in my earlier comments to the fact that the principle considerations are to the adequacy and the appropriateness of the reserves. We do not have a statutory reserve basis defined as such. The valuation actuary has to satisfy himself that the reserves that he is setting up are both adequate and appropriate. He has to look at the assets that are backing the contract, and the expenses that are involved with the contract at issue and in maintenance, in trying to establish this adequacy and appropriateness. The intent, I believe, behind the Canadian legislation was to try to get a GAAP type of basis. Now we are not quite there because there are constraints on the amount of provision that can be made for expenses and dividends, but we are very much moving in that direction. I did mention that the reserves that are being established for a deferred annuity contract includes an interest rate that is perhaps \%% or \%2 of 1% lower than the rate that is guaranteed in the contract. That is also true of Immediate Annuities, so you find in Canada that you are essentially on a gross premium basis. We do not even have deficiency reserves. The reserve strain is not a big problem up here and most of the pressure is on the valuation actuary to in fact establish reserves that are adequate and appropriate to the liabilities that are incurred.

Our tax reserves are a little different. There we do have what is referred to as a prescribed basis, but there the prescription really is that the interest rate that is used is ½ of 1% less than the interest rate that is on the gross premium basis, but I believe there is some question as to whether in fact this is the proper interpretation of the rules. It may be that we should be using interest rates for tax purposes up to those of the gross premium basis. The only other comment I would make is that some companies are, in Canada, using GAAP reserves for internal purposes, with even more liberal approaches than the Ottawa statement would allow and it seems very strange to me not being a valuation actuary, that the actuary in signing his Ottawa statement would in fact say that he believes his reserves are adequate and appropriate, and then for internal analysis he uses a different basis. That I find rather interesting, but it does happen quite frequently in Canada.

MS. WALDHAUSER: Our most recent dealings with the New York department involved filing our no-load single premium annuity and we had a difference of opinion regarding their interpretation of the CARVM reserve method. They do not use the CARVM method in that you take the largest present value of guaranteed benefits at the valuation interest rate as your statutory reserve. The difference is in the way they apply it. The valuation interest rate you use to discount guaranteed benefits cannot exceed the accumulation interest rate guaranteed in your contract. This means that you have to carry larger reserves on a no-load annuity that guarantees essentially the same benefits as a loaded annuity. Our contract has a surrender charge that declines from 7% to 2% over five years and guarantees interest at 4%. If we had charged a 7% load and guaranteed 5% interest, our initial reserve would be  $93\overline{8}$  of premium. Since the contract is not loaded, however, we have to carry a reserve in New York equal to 98% of premium at issue. In other states we discount future guaranteed benefits, including the decrease in surrender charges, at a valuation interest rate of 5% and carry an initial reserve of only 93% of premium. Therefore we have a 5% surplus strain in New York that we do not have in other states.

MR. CARNEY: There would appear to be two approaches for calculating GAAP reserves for Single Premium Deferred Annuities. The traditional method would calculate a GAAP benefit reserve utilizing an interest rate for GAAP purposes in excess of the credited rate. This reflects the fact that the company will earn a higher rate that it will pay out. The GAAP interest rate will normally vary from ½% to 1% greater than the credited rate. The higher the GAAP interest rate is in relation to the credited rate, the lower the initial GAAP liability will be. Under this methodology, a deferred acquistion asset would not be established since the policy is a single premium policy. A reserve for future maintenance expenses should be appropriately established.

The major problem with this methodology is that it can result in a front-ending of profits, which would be contrary to GAAP principles. A secondary method designed to avoid this problem is to establish the statutory reserve as the GAAP reserve.

This has the advantage of not front-ending GAAP profits, but instead show the investment profits as they are actually earned. It would also eliminate strange financial statements in years of reduced new business or terminations which dramatically exceeded the assumed rate, which would result from the first method. This second approach however presents a major problem for single premium policies which do not have a frontend load.

Since there is no front-end load to cover acquistion expenses, the use of the statutory reserve will result in a first year GAAP loss. This is due to the principle that a deferred acquisition asset cannot be established for a single premium policy. Unfortunately, this first year GAAP loss presents less than accurate financial statements.

I believe that the investment profit in future years should be assumed to be used to offset the deferred acquisition costs and that, if the statutory reserve is established as the GAAP Benefit Reserve, a deferred acquisition cost asset should be amortized over a 5 or 10 year period as opposed to the maturity date of the contract. Beyond that period, GAAP and statutory reserves would be equal.

If the GAAP reserve is the statutory reserve calculated using the principles of CARVM and the most conservative interpretation is adopted, it is likely that the statutory reserve will exceed the actual cash surrender value. The GAAP reserve would theoretically be overstated. The amount of the overstatement would be the ratio of the interest guarantee exceeding 5½% to the GAAP interest rate for that period. Using the method of GAAP reserve equal to the statutory reserve would not require a reserve for future maintenance expenses. Since profit is being recognized in the year it occurs, a matching of revenues (interest spread) and expenses is occurring.

While the first method is probably more common, I believe the second method more accurately reflects the basic principle of GAAP, matching revenues and expenses, even though it sets up a deferred acquisition cost asset for a single premium product.

The two contracts I mentioned earlier pose some interesting GAAP problems. On the "high window" type contract, if the surrender charge is taken

into consideration for the statutory reserves, should an adjustment be made to the GAAP reserves when the window rate is less than the GAAP assumed interest rate? If this is done, GAAP benefit reserves would exceed statutory reserves.

The contract with the interest rate tied to an outside index presents special problems if that benefit is not reflected in the statutory reserves. The first question is, "Is the guarantee that the credited interest rate will never be less than, say, 3/4 of prime, a benefit?". If it is a benefit, should it be accounted for by GAAP? And, if it should be recognized, how is that recognition achieved?

I am not suggesting solutions to the above, but it is important to note that the annuity area, as currently structured, is new. And such new product innovations must be carefully considered, especially in the areas of statutory and GAAP accounting if the desired financial results are to be achieved.