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ANNUITIES—WHAT'S NEW?

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This session will provide an update on developments in the annuity market, including product trends for both the fixed and variable markets, such as compensation, bailouts, guaranties, and other product features.

MR. NOEL J. ABKEMEIER: The area of annuities covers a fairly broad spectrum. To have a full portfolio, you perhaps need variable, fixed, and market-value-adjusted annuities, the three-legged stool of the annuity business. We want to look at all three parts of that, and we're fortunate to have two deeply immersed young actuaries who are very close to the product development process.

Our first speaker will be Novian Junus, who is director of product development at Providian Capital Management. Novian has been involved in the fixed annuity and indexed annuity product development of some leading-edge products. Next, on the topic of variable annuities, we have Thomas Berry, associate actuary of Life of Virginia. He has been involved, over a period of time, with the innovative variable annuity developments in the Life of Virginia products. After that I will address market-value-adjusted annuities.

FIXED ANNUITIES

MR. NOVIAN E. JUNUS: There are essentially three categories of fixed annuities that I'm going to address—compensation, product features, and product types.

Compensation

My company does not have their own career agents, so we distribute through independent general agents (IGAs), banks, and stockbrokers. In terms of first-year compensation levels to the broker/dealer, the group annuity (GA) level or the bank, the commissions for the IGA channels are usually much higher than at banks, although banks are creeping up. Brokers currently have the lowest first-year commission. This is just a generality. You can find instances when this is not the case, but this is what I have encountered.

There are first-year credited rate bonuses in all the three channels, even though the brokerage area does not really like to pay a first-year bonus. Essentially, there is a give-up in commission in the first-year rate to the agent, but the customer will get a credited rate bonus of 1–2% the first year.

Next I'm going to talk about levels of commissions for contract-based surrender charges versus premium-based surrender charges. Contract-based surrender charges are those that do not restart again with additional premiums. Therefore, at issue you have one set of surrender charges. The commission level for premium-based surrender charges is such that you pay commissions equal to the first-year commissions on additions. This is in the bank, IGA, and broker channels, but I have noticed that in the 403(b) channel where you do have a lot of premium-based surrender charges, it is

not necessarily the case that the commission for additions is equal to the first-year rate. For contract-based surrender charges you have to force the commission on additions to be lower than the first-year commission rate. Each premium does not carry its own set of surrender charges.

Concerning compensation levels at my company, we generally don't issue anything above age 80 and we reduce commission for ages 76–80. Some other companies reduce commission only at age 81 and above. In fact, they are issuing it to age 90. Another approach to higher issue ages is to limit the death benefit to the cash surrender value or a similar amount. The reductions in commissions for those older ages can be grading, such as 1% reduction per year of issue age. For example, at age 76 a person will have full commission; at age 77 it will be 1% less than that, and so forth. Alternatively, there could be just a complete step down to a 50% reduction in commission at those older ages.

Next I'm going to talk about renewal compensation, which is quite prevalent in the brokerage channel. What they like to do is internally exchange old products into new products for a new set of surrender charges and a reduced commission rate. There are quite a few pricing considerations here. First of all, there may be unamortized deferred acquisition costs, loss of the present value of future profit, and unrealized capital gain and loss on the assets. Currently, with interest rates being low, you can basically afford to let customers leave without hurting yourself too much. In fact, you may be having a gain on your assets.

Another thing to note is that when you internally exchange an annuity, you cannot expect the policy to last for another 15 years. You may have to price it for another exchange at the end of the surrender charges. Internal exchanges and new compensation are currently not acceptable in New York.

Future Trends

I think the renewal commission structure with internal exchanges is going to be a trend in the future. This is primarily because many agents look to the end of the surrender charge period as the maturity period. You're going to have to price for this. Another trend that I see is the use of trailer level commissions. The salesperson can look at it as retirement income and it's good for the company in the sense that you will be able to link the distributor incentives to the company's desire and need to maintain persistency. Of course, you cannot pay too much trailer commission.

I think the distributors are more interested in trailer level commissions. In the brokerage area, the Securities and Exchange Commission (SEC) is restricting commission practices. In Florida there is antichurning legislation and a few outcries for leveling of commissions as a remedy to churning. Trailer commission will provide a better income once the agent is established. For newer agents you may have to find some way to finance them because they need high first-year commissions to be able to gain enough assets to afford a really good trailer level commission structure.

Now I'm going to address product features—the designs that we see out there in the products. Bailouts are becoming nearly nonexistent, primarily because it is quite expensive when interest rates are coming down rapidly or just coming down at all. The problem is you can't reduce your credited rate without crossing the bailout rate.

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Your renewal rates may be sticking out there as quite high. The bottom line with this is that you need to be priced correctly at issue and you cannot have a subsidized first-year credited rate.

Return-of-Premium Feature

Apparently in the bank channel there is a need to have a return-of-premium feature and, for the broker and IGA systems, it's good to have.

Minimum Rate Guarantees

I think everyone has moved down to 3% instead of 4%. The market rate experience of 1993 may be repeated in 1995. Rates have been coming down for the past few weeks.

Systematic Withdrawals

This is called by so many different terms, but systematic withdrawals is a facility where you automatically withdraw a certain amount of money per month, per annum, or over any regular period. They're systematically withdrawing money from your deferred annuity. There's an apparent need in the marketplace, primarily because people are getting older and they want income. But they also want to have this income paid out without losing control of the asset, as they would with annuitization, and they do it this way. It's not too tax-efficient, and it will be wise for insurance companies to provide immediate annuities with a payout where there is some kind of lifetime guarantee. This can be more tax-efficient because of the exclusion ratios.

Surrender charges

The duration of surrender charges usually is longer in the IGA channel than it is for the banks. The banks and the brokers like it to be about five or six years. This corresponds to the commission levels that are being paid out.

Cliff surrender charges are more prevalent in the bank channel. I am referring to charges that, for example, go to zero from a level 7% for seven years or, as another example, are 8%, 7%, 6%, 5%, 4%, and 3%, and then abruptly drop to zero.

Accidental death benefit

This is being offered in a few products. If death is due to an accident, you can get two times the account value. In some other products the insurer charges back commissions upon early death, but if it's an accidental death, then it won't charge back any commissions. One thing about the accidental-death-benefit feature of two times account value is that it is not very tax efficient. With annuities, a death benefit is essentially a cash-out and thus is a taxable event.

Future Trends

I think there is a movement towards putting return-of-premium features and some other product features as an option versus prepackaging of the benefits in the product. The customer can choose only what's needed and basically he can have a better or more attractive credited rate, but like universal life the unbundling exposes the cost versus the perceived benefit of value. The customer will have to decide whether it is worth paying x amount of credited rate for this feature.

The trend for the future is shorter surrender charges. When people begin to understand what commission levels and other features do to the credited rate and relate this to the value they want in their annuity, I think they will start wanting to move to shorter surrender charges. Of course, with shorter surrender charges, you should have a corresponding reduction in compensation, which would be going against the grain, especially in the competitive annuity market. But I think if you want to penetrate the annuity market base, you might want to do something like this.

Other Product Types

Quite a few companies have come up with an equity index product in which they guarantee the greater of a total fixed return or growth commensurate with the Standard & Poor's (S&P) index after a specified number of years, if you hold it for that many years. The appeal is that you're getting some degree of stock market return with little downside risk. The limitation on downside risk comes into play when they will also guarantee that you will never get any less than principal plus 3% accumulation or some similar guarantee.

Investment strategy here is you're going to have to use futures and options unless you want to risk running it without them. Also, you may be subject to basket limitations on investments. I know one company uses over-the-counter options or calls or long-dated calls to invest behind this product. The equity index annuity is widely talked about in the brokerage and the bank channel. I'm not too sure about the sales level as yet, but the appeal is there. If a fixed annuity is viewed as low risk and low return and a variable annuity is high risk and high return, then you have something in the middle with the equity index. There is potential for high return with low risk.

Another kind of index is a renewal rate index guarantee in which the insurer names an index to which your credited rate will be tied. If you use an outside index like the five-year Treasury, it's really going to be hard to invest for it. That is primarily because the five-year Treasury index that is available is not a total return index, meaning that it's basically a yield for new issues. Now when you buy a five-year instrument or six-year instrument at issue, you're going to lock into that rate period and if you need to cash it out at any point in time after that, you're going to get realized gains and losses.

Essentially, that means you're going to lock into the investment rate that you got at issue. If you're going to promise a five-year index or a new issue index as a renewal rate, you may have to have quite huge spreads in your pricing. With a five-year Treasury you may have to reduce credited rates by 150 basis points. Two other designs are (1) to use an index as a minimum guarantee, saying that the credited rate will never fall below this five-year index less a specified amount, or (2) to use a rolling average index so that it mimics your portfolio.

Another renewal rate index that I've seen out there, and this is primarily in the IGA channel, is portfolio less spread. The insurer will guarantee that the renewal rate will always be equal to a net portfolio yield less a specified spread. You specify in the contract what the spread is, but you haven't defined what your net portfolio yield is. It is quite a bit appealing, but it's a bit ambiguous.

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There are now bank-sold proprietary fixed-annuity products, where the bank essentially manages the assets. The bank will be a member of the rate-setting committee and, of course, the bank will have to follow strict investment guidelines. It's similar to an insurance company that does not have any investment capability hiring an outside money manager to invest the assets. I know of one structure in which the bank is receiving compensation for selling the annuity and also will get their investment management fee if they can get yields in excess of a threshold that has been defined in the contract between the insurance company and the bank. It is a bit problematic because you really need to be true partners in this instance. The insurance company still has the liability. The bank is selling the annuity and managing the assets. There may be some conflicts there. There are quite a few risks to enhance yields and you may not want to take on undue asset/liability risk to achieve those yields and fees.

Future trends

On other product types, I think there is a movement towards a "nontrust me" renewal credited rate. You may have to use an index guarantee or provide longer guarantees. I think it's quite competitive right now in the marketplace such that first-year rates are being subsidized and customers and policyholders are seeing that; the result is that they may think that they can't trust the insurance company anymore. In order to entice them into buying annuities now, you may have to provide some kind of "nontrust me" renewal credited rate.

Another future trend may be that banks will want to underwrite. With the Glass-Steagall Act coming down soon, you might want to own a bank.

VARIABLE ANNUITIES

MR. THOMAS SENIOR BERRY, JR.: I think most people selling would agree with one specific comment Novian made: you can't pay them too much commission.

My topic is, "What's new in variable annuities?" What I will talk about trends in compensation, guaranteed minimum death benefits and a little bit about investment options and strategies.

Variable annuity commissions have been paid upfront when each premium is paid. The trend now is away from fully upfront commissions to various combinations of front-end and trail commissions to provide some renewal compensation. Trail commissions are usually just a percentage of assets payable now and while the contract remains in force. Preference for up-front versus trail compensation may vary by distribution channel, by distributor, by producer or even by client. An established seller who doesn't need the cash flow may benefit more from a trail. As Novian said, they can use it for retirement income or, if they're new, they may want the money upfront.

If you're looking to modify your existing arrangement by adding a trail, there are several things to consider in determining the trade-off between the two—time value of money, the trail percentage amount, favorable or unfavorable effects on persistency, potential antiselection if you allow the agent to pick the trail or no-trail by client, agent retention, investing of trails, how your agent contract is structured, and the cost of administrative support.

Maybe you want to use a single factor for converting back and forth between various trail and front-end trade-offs. The range in which a factor like that can be used reliably will vary depending on your pricing assumptions. It's usually pretty small, but it also depends on your measure for comparative indifference. In other words, if you're using return on investment, you may find that it affects the present value of profits differently. Furthermore, if you try to take a factor like that, whether it's 5:1, 8:1 or so forth, you may find that someone asks you if they could just use that factor to make it all trail. That usually doesn't work for me very well.

A growing number of new contracts will pay level commissions. They may or may not be no-load, that is without a surrender charge. There are at least two products with that structure in SEC registration, according to a recent article in *The National Underwriter*. Tweaking an existing product to provide a level commission may prove difficult, but in some cases could still be cost effective compared to a new filing. This is favorable for the insurer, meaning that there is minimal strain with a level compensation. Trails have been below producer expectations because insurers just haven't been able to pay as much as the producers think it should be worth.

In terms of banks, I think as everyone here seems to have thought, banks will continue to sell more annuities, although state-by-state, there's a lot of turmoil as to whether states are for or against it. We don't know what's going to happen. But in states where banks have used third-party intermediaries, the intermediaries will need to redefine their roles as banks increasingly learn to deal directly with insurance companies, although some banks will prefer to have an independent marketing staff on the premises.

Compensation to banks has been higher for us, but it will depend on the level of services they provide or require. Banks may decide they'd rather have more money and get less service from the insurance company or vice versa. In general, the total outlay from your insurance company probably won't change much unless the prior arrangement paid more to a third party than the value of its services.

Moving on to death benefits, there are at least three distinct forms of variable annuity death benefits in the marketplace. I'll refer to them as return of premium, ratchet and roll-up. You may know them by different names.

First is the return-of-premium benefit. Nearly every contract has at least that much, although perhaps not after some issue-age or attained-age limit. Most contracts will have an account value floor; that is the surrender charge is waived at death. The second type of benefit is the ratchet benefit. This is a modification of the return-of-premium benefit which began to be used several years ago. The death benefit periodically ratchets up to lock in any gain in account value. With most contracts that I've seen, this happens at the end of the surrender charge period. Ratchets may occur only once or many times. Initially, this benefit was primarily considered a persistency feature and was designed to avoid an external policy exchange. It was intended to accomplish the same result for the annuitant.

Some companies have a reset that is mildly different from a ratchet. The reset can go up or down whereas the ratchet allows only an increase. In other words, the ratchet is

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compared to both the current account value and the prior maximum value, but the reset is based only on the current account value.

The next type of death benefit is a more recent development. This would be the premium accumulated at some fixed rate, and I'll call this a roll-up. Interest rate guarantees as seen in the market range from 3% to 7%, but most of them are in the 4–5% range. That can be compounded daily or annually, or it can be calculated with simple interest. I think there may be one that steps up only at the end of the year by a fixed percentage. The benefits also have a wide range of benefit caps and limitations, more so than ratchets. There may be an issue-age limit for coverage, or benefits may be frozen or reduced beyond some attained age. The number of ratchets may be limited or might stop at some attained age. For roll-ups, a maximum benefit of two times premium is common.

Withdrawals affect current benefits, either dollar for dollar or proportionately. They also affect maximum benefits under the roll-up. There's another type of limit on roll-ups. Some subaccounts may be explicitly carved out of the calculations, such as a less volatile fund with a low expected return. If you had a 6% guaranteed minimum death benefit (GMDB) accumulation, you wouldn't want people just putting all their money in the money market and holding it until death. These types of limitations are used to limit the benefit cost, but they may increase your administrative cost to some extent.

Several articles concerning pricing have been published in the *Product Development News*, the newsletter of the Product Development Section. The December 1994 issue (no. 37) has an article that references most of the others ("Valuing Minimum Death Benefits and Other Innovative Variable Annuities" pp. 13–16). Pricing could be done using an option pricing model or you can use scenario testing, or both. I was in a session earlier in which someone indicated that they use their reinsurer as a pricing method.

Option pricing with the Black-Scholes model directly gives you the total upfront benefit cost as a percentage of premium, if you can fit your form into that model. You need to specify a risk-free rate, the annual dividend yield of the portfolio and the annual variance of portfolio return. Scenario testing allows you to express results in a form of your choosing but requires you to define a market model and how your portfolio behaves in it. Typical results may show a small expected cost, but with a huge variance, so you need to define your pricing objective accordingly, namely, what percentile you want to be in. There has been a lot of reinsurance activity in this market during the last year and some people have entered and some people have exited. Some people have come back in. Prices have gone up and down. If you want to write the benefit, but you can't absorb the risk, there are plenty of reinsurers out there right now. And it's not a bad way to check your pricing.

The reserves for the GMDB are under discussion (there was another session devoted to that topic). If you're interested in that, you can get the report of the SOA Task Force on MGDB reserves from Jean Rosales at the Academy. Basically, the only thing that's come out so far is a letter from Connecticut that says you should treat it like variable life with a one-third drop in account value. You should probably get the report if you're interested.

Finally, some remarks about trends and investment options and strategies. As variable annuities have proliferated, so have the number of portfolio options. The average number per contract is now about twelve compared to about nine a year ago. Several contracts have 20 or more funds to choose from and at least one has more than 30. In my company's product, you can't be in more than seven subaccounts at any time. I don't know whether other companies do that. As far as I know, the Internal Revenue Service (IRS) has never ruled on how many subaccounts are too many, to qualify for the look-through, which keeps your contract a tax-deferred annuity. They have been reported as saying that four are not too many. The issue is how much control over investment selection the policyowner has or appears to have.

Among the various sectors, stocks and bonds and so forth, most of the growth in the past year in terms of the number of subaccounts has been in international subaccounts. Other rapidly expanding sectors for variable annuity portfolios include real estate and utilities. There's only a handful of those so far, though. Although the number of subaccounts has expanded very rapidly, much of the growth has come not from new funds, but rather from fund managers marketing their product to insurance companies.

Most variable annuities have a guaranteed rate or fixed-account option. Typically this has been a one-year rate with plenty of restrictions on transfers between the variable and fixed accounts to keep the one-year money from being disintermediated. The rate is probably a little higher than it might be for a one-year rate on a fixed annuity.

Several companies have added a market-value adjustment (MVA) to their fixed account. That has enabled them to extend the rate guarantee period from one to seven or more years. With a market-value adjustment, as Noel will tell you, a higher rate can be credited for a longer period than you otherwise could. The market-value adjustment would apply if you transfer back to the variable account, so that you have less need for that type of restriction. Since you already have a registered product, there's less resistance to the registered form of an MVA, which has a larger stick and carrot with it.

Proprietary, or private label, variable annuities are also becoming popular, especially among managers and distributors of such funds. A fund distributor may want an annuity wrapper for their own retail funds. First they need to clone the funds. The insurance portfolio is often structured to approximate the retail fund's composition. It's not uncommon for the manager to cap the expenses during start-up periods at the retail fund level. If you can use your existing annuity contract and load structure, it saves time and money.

The fund manager is usually affiliated with the distributor, and gets a management fee. That may help you in setting the compensation to the distributor. Recently, there has been a move away from paying extra compensation for proprietary products in the mutual fund industry. This will probably carry over to these private label type annuities as well.

Several fund managers have adopted a master feeder structure. That's a generic term for something that is registered under the trademark, Hub and Spoke. Under this arrangement, a separate account buys only shares of a feeder fund which, in turn, buys only shares of a master fund. This allows fund managers to offer shares of the same

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underlying portfolio at different prices to different customers, which reflects different expense levels. A recent private letter ruling appears to confirm that the IRS will apply the look-through rule to this structure, so that the separate accounts are considered owners of the underlying assets of the master fund for tax purposes. I think when people came up with this design, they were hoping to merge retail funds with insurance funds, but I think that will probably never happen, so you will be stuck with cloning.

As the number of investment choices has increased, so has investor confusion. Some insurance companies have begun to offer asset selection assistance, although not always advice. These usually fall under the heading of strategies.

Asset allocation is just diversification across asset classes or sectors—50% stock, 40% bond or 10% money, for instance. The idea has been around for some time, but it seems to have attracted more attention lately in the variable annuity world. Many annuities already have one or more asset allocation or balanced portfolio. It is thought that a self-directed asset allocation gives the investor more control over the results.

Sectors and percentages are based on the risk profile of the client, which is learned by asking questions. The subaccounts that you have are then classified by the sectors you've identified. The client selects one or more subaccounts for each of the sectors in the indicated percentages. There is commercial software available for the asset allocation questionnaire or you can develop your own. Several packages have recently been released and reviewed in *The National Underwriter*. You may even be able to integrate it with some illustration software so that the customer answers the questions, selects the portfolios, and then gets a customized hypothetical showing the past or even hypothetical gross performance of that premium allocation.

Portfolio rebalancing is an enhanced version of asset allocation where you periodically go back and true it up or check to see if the customer's risk profile has changed. For instance, perhaps they've crossed some age band that would make them more conservative. It's not really a new idea, but it is in the news. What's really new is that companies are offering to do it automatically as a service at no specific additional charge. It's not really a good substitute for a periodic review of the plan.

Dollar-cost averaging is a way of implementing your investment plan gradually. The purpose of that strategy is to reduce the risk of purchasing all your assets on the wrong day. Also, by spreading your purchases over a period of months, you buy more shares when prices are lower and fewer shares when prices are higher. In a variable annuity context, total funding is usually done upfront using a money market or fixed subaccount as a holding account. Your desired allocation is achieved by periodic transfers, usually made each month. You can get similar investment results with bank draft premium payments directly to the allocations, but not all companies accommodate that.

On the flowing-out side, there are some income strategies. With systematic withdrawals, you can get regular income using automatic partial surrenders, and Novian has already described that pretty well. Usually, this arrangement is available for the free withdrawal, which is usually 10% a year or the earnings. Lately some companies have been enhancing the liquidity by offering free withdrawal up to 15% a

year or some percentage of premium in addition to earnings. Systematic withdrawals generally fail to qualify for an exception to the penalty for premature distributions if the contract is nonqualified. For qualified contracts, several companies will pay according to the age 70.5 minimum distribution requirements. Most companies will waive the surrender charge under required distribution, but will also try to avoid issuing a contract where that will happen. I think variable annuitization is a future growth area for companies, but I don't know how much is being sold.

My idea was to tell you about the principal factors affecting variable annuity sales and what's new with them. Commissions are becoming flatter as sales forces become better established. Also, distribution through banks and private label arrangements will be new markets for many companies. Of guaranteed minimum death benefits, their apparent cost is getting a little more respect and attention, but not necessarily from consumers. In our contract this is an elective benefit and we've had about 15% of the customers take it. The number and variety of funds available through variable annuities have increased which raised the profile of investment strategies that can be selected from among them. Finally, as liquidity features are expanded and emphasized, they're being utilized increasingly. This trend represents an increase in the cost of doing business.

MARKET-VALUE-ADJUSTED ANNUITIES

MR. ABKEMEIER: I want to look at three dimensions of market-value-adjusted annuities—the customer perspective, the company perspective and, finally, possible legislative changes. In relation to legislative change, there's a considerable question of when they might occur.

In a market-value-adjusted annuity, there are two annuity product designs. The first is one in which the market-value-adjustment period is independent of the interest guarantee period. This is a design whereby the product looks like a fixed annuity in all respects, except that there is a market-value adjustment superimposed, generally for the length of the surrender charge period. The purpose of this is to establish a higher exit penalty in the event of increased or spiked interest rates which thereby improves persistency. The result of that is a narrower required spread, which can be used by the company to provide benefits which are better appreciated by the customer or the agent, namely, higher crediting rates or a higher commission rate.

The other kind of MVA product, and one which I'll dwell on more heavily, is that in which there is a series of guarantee periods, or buckets, that can be chosen by the customer. Each of these buckets will guarantee an interest rate throughout that period. Initially when the products were introduced a number of years ago, it was common to offer ten options to each customer, and that is still done. It is an attractive way to sell the laddering concept through stockbrokers. However, there is somewhat of a trend and more popularity in having selected buckets of guarantee periods such as one, three, five, seven, and ten years. This provides the same general range of flexibility for the customer, but with a little more simplification.

In relation to the products, the surrender charges can be on two bases—either a policy year surrender charge, where there is one schedule which runs out over a period of seven or eight years, or a guaranteed period based surrender charge, under which there is a reinitiation of surrender charges in some form during each guarantee period. The

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general movement is more strongly toward the guarantee period based charges. Within these, you may have constant surrender charges. For example, each and every guarantee period may have a 6% surrender charge. Another possibility is that there will be a decreasing surrender charge starting at the beginning of the guarantee period whenever a new guarantee period begins. For example, it starts at 7% and trails down during each period. Another possibility is that for each guarantee period, there is a distinct level of surrender charge. For instance, a three-year period might have a 3% surrender charge throughout. A seven-year period might have a 7% charge throughout. This would reflect a general correlation between the compensation level being paid and the surrender charge, which serves to help amortize such costs.

At the end of the surrender charge period, there is often a free withdrawal window. This provides total liquidity to the customer when he is in transition from one guarantee period to the next guarantee period. Commonly, these would be 30-45 days. They are almost invariably present in contracts where the surrender charge period reinitializes with each guarantee period. However, they may be eliminated if there is a single surrender charge period for the contract. In that case, utilization of the window could break the amortization opportunity to cover the initial commission.

For death benefits, there are two philosophies at work. One philosophy is that when a death occurs, certainly the surrender charge should be waived because it was an unexpected event, but at the same time, the market-value adjustment would be put into action. The thought there is that the market-value adjustment was appropriate the day before death, so why is it not also appropriate at death? Furthermore, when a payout is made, it is available for reinvestment at market rates, so a market-value adjustment makes some sense.

On the other hand, there is the philosophy that there should not be a market-value adjustment at death. This would be extending the concept that since it is an unexpected event, you should not surprise the beneficiary with a surrender charge. Similarly, don't surprise them with a market-value adjustment. It also happens that regulators tend to prefer that there not be a market-value adjustment at death and, as a result, more commonly you will see that there is not one at death. The product providing the market-value adjustment at death would have an alternative benefit of the cash value as a floor. Consequently, the customer would get either the account value or the cash value. This, you can tell, has some additional cost because there is the potential of the upward market-value adjustment inherent in the cash value.

Ideally, a market-value adjustment would operate without any limits on it, so you could get true market value. In reality there are a number of limitations imposed on it. A return-of-premium guarantee is the most common one and this is provided to customers in some cases to provide additional guarantees and a comfort level, such as when the product is being sold in the bank market. It also happens that the return-of-premium guarantee serves as the foundation stone for establishing that a contract is nonregistered from an SEC viewpoint, so it's the reason for having it. Another limit is what I call a rising floor. That is a minimum guaranteed account value of the premiums accumulated at a rate like 3%. This is used for a couple of reasons similar to the return-of-premium guarantee. It gives more certitude to the customer. Also, in a nonregistered product, which tends to be offered through an individual contract, many states do not have the Modified Guaranteed Annuity (MGA) Model Act;

therefore, the insurer faces compliance with the standard nonforfeiture law requirements. The rising floor mimics quite closely the retrospective standard nonforfeiture law.

The third kind of limit is one introduced for marketing purposes; it is a symmetric limit on the market-value adjustment in some fashion. It may be that the MVA is limited to accumulated interest in the contract or there may be a limitation on the spread between the initial interest rate and one in effect at the time of the market-value adjustment. From a company viewpoint, it's a bit interesting. If the symmetrical limit is superimposed on a contract which already has a rising floor, it has nonsymmetrical benefits for the insurer, because the downside limitation has already been put in place partially by the rising floor. So this could be a way for the insurer to bring things a little more in balance for itself.

The market-value adjusted annuities initially were offered on a free-standing basis. The product was sold separately. However, there has been considerable movement in recent years to move it into variable annuities. In variable annuity products, book-value fixed accounts are being replaced with market-value adjusted accounts. The great appeal there is that the MVA provides very good liquidity between the fixed account and the separate account, whereas a true fixed annuity tends to have a limitation on how much money can flow out at a given time because of disintermediation problems. At the same time that the MVA is becoming more prevalent within variable annuities, there are some companies that are also pulling their free-standing product off the market when they include it in their variable annuity.

In determining how to present and offer the product, one decision is whether they should be group contracts or individual contracts. For registered MVA contracts, group contracts are preferred. It's the quickest and simplest way to get things done, but the one problem there is that these contracts tend to be based on discretionary groups and not all states recognize those. As a result you may be forced into using individual contracts in selected states. On the other hand, if you have a nonregistered product, you tend to start with an individual version because the product will fit into that fairly neatly. However, only ten states have MGA regulations. Therefore, you are dealing with the interpretations of insurance departments superimposed on the standard nonforfeiture law and you often face the true constraints of the standard nonforfeiture law.

The choice of whether to offer a registered or a nonregistered product is generally driven by the sales environment. If the sales force that is to be selling it comprises registered representatives, then it becomes quite natural to offer a registered product. On the other hand, if it is either a conservative market, such as a bank market, which would like some guarantees, or the sales force is not registered, then the nonregistered product is more appropriate. As a very mild correlation, it's more than likely that individual contracts are nonregistered and group contracts are registered.

The market-value adjustment formula (shown below) can come in a couple of varieties—geometric or linear. Within the formulas you see here, i represents the interest rate established at the beginning of the market-value-adjustment period. Most commonly, i would be the rate that is guaranteed throughout the period so it's in effect at the time the market value adjustment is being made. You can see that j is the rate

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then available at the time of the market-value-adjustment calculation. Generally, it's the rate then available on a new purchase for a period equal to the remainder of the market-value-adjustment period.

MVA Formulas

Geometric

$$\frac{[(1+i)/(1+j+k)]^N - 1}{1 - [(1+i)/(1+j)]^N}$$

Linear

$$g(i-j-k)N$$

Bias in MVA Formula

Choice of Formula

Initial-guarantee-period based (Which j is used?)

Additions to current rates (What is k ?)

Another approach might use the same i as I indicated, but j would be the interest rate related to the initial length of the MVA period, but at the current offering level. You will note that this latter approach recognizes only shifts in the yield curve, whereas the first approach I described recognizes some walking down the yield curve when you're calculating an MVA adjustment.

In the formula, you will note k is an additional bias factor that might be used to increment the j value, and N is the number of years remaining to the end of the MVA period. It will more commonly be expressed in months, but years is a little bit simpler to show here.

You will note the second geometric formula looks very simple and clean. It interestingly has bias built into it. There's nothing wrong with bias; it's just an interesting way of presenting a biased formula. The linear formula is becoming more and more popular. It is an approximation to the geometric formulas, and it's used in order to present a simpler formula for both the customer and the salesperson and later for the customer service person. In this formula, the value g might be 0.8 or 0.9, a number which is appropriate to give a good approximation to the geometric formula.

I've been mentioning bias and I want to emphasize that there's nothing wrong with introducing moderate bias into an MVA formula. The bias will narrow the required spread for the insurer or will increase profitability first, but what it really provides is an opportunity to take some extra value and translate that into other benefits for the customer.

In introducing bias, you could use an interest rate correlated to the initial MVA period for the value of j . Another approach is to gear the product to some outside index—for example, at the time the product is issued, i would be the five-year Treasury rate. At the time the MVA is calculated, j would be the then-current five-year Treasury rate. As you can tell, this will adjust for shifts in yield curves.

The compensation for the product is offered in two versions. It could be single compensation at the time of sale and nothing else being paid when subsequent guarantee periods are rolled in. This reflects the concept of the contract as a continuum of guarantee periods. Recurring compensation, which is more common and becoming even more common, is based on the concept that the contract is a series of

new subcontracts. The payment of recurring compensation is a wise move in light of the ease of the agent making 1035 transfers, and, of course, the agent's desire to earn extra compensation.

When recurring compensation is paid, there are two possibilities—trails or bullet compensation. Trails are not very common and I'd say they're becoming less common. Bullet compensation, which is additional single compensation at the beginning of each renewal period, is prevalent. Within those bullets there is an increasing use of reduced compensation. Not all companies do it, but it is becoming more common. For instance, paying just 75% of the initial scale, if it is a renewal, or paying reduced compensation for shorter renewal periods, but paying full compensation for longer renewal periods is a way to encourage the sale of longer renewal guarantee periods.

Another issue from the company perspective is how much risk-based capital is appropriate? This is more an observation than a movement. Under the risk-based capital formula, the C-3 component for a product with market-value adjustment should be 1.5 of 1%, but the question is, if you have a return-of-premium guarantee, you have limited some of your market-value adjustment. A rising floor magnifies that. If you have some kind of muted market-value adjustments, you again veered away from pure market-value adjustments. On the other hand, a biased formula reduces some of your risk. So perhaps you could consider the ability to counterbalance some of these other factors as a technical justification for having a biased formula, particularly as you're looking at risk-based capital.

If individual contracts are used, compliance with the standard nonforfeiture law comes into the picture. The retrospective aspect is easily met with the rising floor. The prospective or smoothness test runs into problems in several states. A number of regulators view a market-value adjustment as another kind of surrender charge, not as a separate entity. As a result, when you're looking at the smoothness test in several states, you lose your capability to have negative market-value adjustments, which will put you out of the market at that point. There are some states in which you're not going to be able to get an individual MVA product.

In the area of SEC registration, the question is, what does it take to justify a contract as being nonregistered? It is quite clear that if you have a return-of-premium guarantee and if you have a 3% compound growth guarantee, you have enough characteristics so that it clearly is not a security in the SEC's eyes. On the other hand, there are some people who feel that perhaps just the return-of-premium guarantee is sufficient. That happens to be a gray area. The whole issue remains gray insofar as the issue does not get approached directly with the SEC. It is for the company to decide whether it feels it should register a product or not and, generally with the advice of outside counsel, it will come to some conclusion. The result is maintained in the files of the insurer and will be subject only to later audit by the SEC, if they so desire. It is not an issue that is easily solved and there are different opinions in the marketplace.

Another issue is the federal income tax (FIT), if a separate account is used for your market-value-adjusted assets. FIT reserves are capped at your statutory reserves. In a situation where you have falling interest rates, your market-value adjustment is

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positive. Therefore, the cap does not come into play. However, if you have rising interest rates, which then give you a negative market-value adjustment on the liabilities, you will find that your FIT reserves are reduced. Despite the fact that you don't have any real profit, you do have a phantom profit on which real tax must be paid.

Finally, I'm going to look at where things are headed in the future. About a year ago, it was felt that the proposed Model Annuity Nonforfeiture Law was imminent. Its passage was anticipated last December and then again this spring, but that did not occur. Even throughout this summer, there was the expectation that it was going to be passed any month. However, about a month-and-a-half ago, the National Association of Insurance Commission (NAIC) moved to a position that they would like to approach the annuity nonforfeiture law revision at the same time as the life insurance nonforfeiture law. Now the anticipated time of adjustment of passage perhaps is in years, not months. Of course, attitudes can change and things can make a 180° turn. However, I want to comment on some of the changes that are contained in the proposal that has been developed over the last couple of years.

The current MGA model directs funds to the separate account. The new law proposal would allow general account usage if it was permitted by state law. Nonregistered products would have a limitation imposed of plus or minus 25% market-value adjustment. The available period for an unfettered market-value-adjusted annuity would be limited to three through ten years. There is a definition of a restricted surrender provision annuity (RSPA), which is the category that contains the market-value adjusted concept, and it is one that has a limitation of three to ten years. If you wish to have a product with a one- or two-year guarantee period, you're not precluded from doing it, but it would be subject to the limitations of the continuous access annuity, which would preclude windows and would impose a rising floor at perhaps 2.25%. It's not an onerous requirement, but it would cramp your style a little bit.

Within the proposal, the MVA considerations are independent of other considerations, which simplifies understanding. The prospective standard nonforfeiture law would no longer be applicable. Another interesting area is that the market-value adjustment could apply to death benefits. As you recall, before I said regulators are somewhat adverse to having an MVA on a death benefit, but the change would be that the MVA could apply. However, the beneficiary must be given the option to defer receipt until the market-value adjustment period expires. Actually, this is an improvement over prior versions, and it is quite acceptable.

The very final concept is that the certification of the equity of the market-value adjustment formula must be kept on file at the insurance company. That is what is in the hopper, but we do not know when it is going to be a reality.

MR. JOSEPH A. KENNY: Bonus interest is becoming quite popular. I know it has fairly recently come around, but is there any real feel for the persistency, primarily second-year persistency when the bonus drops off, such as when you have one-year bonuses? Another question is, with litigation becoming so popular, are we starting to see anything from policyholders when the bonus comes off claiming that they weren't told that it was a bonus, that they were expecting to continue to get 10% interest forever? Has there been any activity as far as that goes?

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MR. JUNUS: In terms of persistency after the bonus drops, the bonus usually comes in the first year and the surrender charges are still around and chances are they may not move. In terms of policyholders not liking the fact that they have lost and the credited rate has dropped by so many percent, that has a lot to do with how you have positioned the marketing of the bonus. With our company, it's very specific that this is a 1% bonus and everything else points to that fact. If you do that, I think it would be OK. I have not really heard about customer complaints, but if there is an implicit bonus like a subsidized first-year rate which is not explicitly stated anywhere, then the policyholders will complain to the company.

MR. LARRY J. BRUNING: Mr. Junus, did you say the accidental death benefit (ADB) was taxable on the annuities?

MR. JUNUS: I think it's not going to be treated like a life insurance death benefit. People can get an IRS tax ruling for that and I don't know how aggressive you want to be in terms of positioning that as a true death benefit or not. But at least from the way I see it, I don't think it's a nontaxable event.

MR. BRUNING: I just wondered because your version was two times the account value. It probably doesn't matter much. The other version I see with single-premium annuities is just equal to the premium—the ADB benefit. You get the account value and then your premium back if you die accidentally. I don't know if unhooking those would have any stronger basis for treatment as life insurance.

MR. JUNUS: I've encountered a few, maybe two or three, and on two of them it's essentially a variable annuity.

MR. ABKEMEIER: I think there is a dispute about whether the ADB benefit is treated as an annuity benefit or as a life insurance benefit. Is the cost of the ADB benefit each year a taxable withdrawal from the annuity and is it turned into a life insurance premium, which could say then you have a life insurance benefit, or is it all contained in the annuity and then you have an annuity benefit?

MR. BRUNING: That's a good point, too, because when I was talking with our systems people about how you're to administer it, I decided to price it as an interest spread, but I also thought you could probably take some kind of cost-of-insurance deduction out of the annuity account to pay for it as well and not put it in the interest rate spread.

MR. BRADLEY D. LEONARD: Like the accidental death benefit, have you seen much activity in other ways to have the annuity be more than just whomever is paying a quarter percent higher interest rate later on? A few years back there was a company that did some neat things with long-term care, for example, expanding the payout if certain situations occurred. There's probably a whole range of possibilities of ways that you could build in, in effect, persistency enhancements which would have a tremendous impact on cash-flow testing. I guess we haven't thought of it yet, but I have a feeling there are people trying to come up with ideas. Have you seen anything?

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MR. JUNUS: I know of one company, although I don't know whether this relates to a variable or to a fixed product, which has a disability benefit. Essentially it's kind of like a nursing home waiver then.

MR. LEONARD: There's a waiver of surrender charges. You can waiver for different reasons, but I'm talking about something beyond that. Of course, if the limitation is you have to pay for it with basis points, then you have the interest rate problem. You can stretch it to an extreme perhaps and even charge for benefits. If you can pay four times the account value in the event of a certain contingency, that might be worth something.

MR. JUNUS: That might be worth something then, but, like Noel said, which was very intriguing to me, was the fact that there's a definite cost to it and if the IRS sees that there is a definite cost to that, then the yearly cost for that benefit may be treated as a taxable withdrawal.

MR. LEONARD: Even if the benefit is attacked, it's still a benefit.

