

# RECORD, Volume 27, No. 2\*

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## Session 46PD

### OPPORTUNITIES IN INCOME PRODUCTS

**Track:** Product Development

**Moderator:** JONATHAN HECHT

**Panelists:** STEVE P. COOPERSTEIN

JOSEE DEROY

JONATHAN HECHT

*Summary: Income options within annuities have been only lightly used, but many commentators expect rapid growth in this area as many Americans, particularly Baby Boomers, reach retirement age and enjoy a lengthening lifespan. This panel discussion addresses the forces influencing the direction of growth in income products.*

**MR. JONATHAN HECHT:** I'm a consulting actuary with Tillinghast-Towers Perrin in New York. My areas of practice include product development with a recent focus on payout annuity products. I will give an overview of the market and discuss some of the factors or drivers that might be driving this market in the future.

The first panelist is Josee Deroy. She is the vice president of Reinsurance Solutions at AXA Corporate Solutions (AXA Re) in New York City. She has been with AXA Re for three years and is involved with reinsurance transactions on death benefits and living benefits on variable annuities. She will be discussing some of the new product features available and their pricing considerations in more detail.

Also on the panel is Steve Cooperstein. Steve is the founder and president of Steve Cooperstein and Affiliates, which was founded in 1982. Before that, he was with MetLife for about 20 years. His firm focuses on entrepreneurial market development and lately, he has been concentrating on the seniors market. Steve will be primarily discussing two new product ideas that he has.

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**Note:** The chart(s) referred to in the text can be found at the end of the manuscript.

There has been a considerable interest in this topic. Just by looking at the amount of people in this room, I think it is safe to say that there has been considerable interest and speculation about the payout market and what might be driving it. We think that there are three primary factors that might be driving the payout market: (1) the growth of accumulation assets, (2) general demographic trends, and (3) less reliance on traditional sources of retirement funding. Despite all of this, the market is still relatively small. It is estimated at about four percent of the deferred annuity market. The question is, is there potential to grow this market?

The first factor driving the market is that demographic shifts have led to increased interest in retirement planning. In particular, the elderly population is the fastest-growing segment of the overall U.S. population by far. There are many statistics, graphs, and depictions to support this. Chart 1 shows the change in the demographic profile in the U.S. from 1950 to 1998, with projections into 2050. Each bar on the graph represents a five-year age bracket. The width of the bar represents the percentage of the population that resides within that graphic. The left-hand side on each chart represents males and the right-hand side represents females.

You can see the change in the shape of the graph or charts. In particular, in 1950 about nine percent of the population was age 65 and older. That has grown to about 12 percent in 1998 and will exceed 20 percent by the year 2050. In addition, the dependency ratio, which is defined as the population of those age 65 and older, divided by the population of the working population, which is defined as those that are age 20 to 65, has grown from about 14 percent in 1950 to 21 percent in 1998. It is projected to be almost 40 percent in the year 2050. In addition, the average retirement age has been declining and the average time spent in retirement has been increasing.

A second force that could be driving the market at the same time the demographics are changing is that the amount of assets built up in accumulation products is growing dramatically, particularly in recent years. This is seen in both qualified and nonqualified markets. For example, growth in mutual fund assets has been flat in the year 2000, but generally, over the last 10 to 20 years, it has grown dramatically to the current amount of about \$6 trillion. In addition, variable annuity (VA) sales have grown pretty steeply. They were about \$150 billion last year, and total VA assets are exceeding a trillion dollars (Chart 2). These and other examples, like the growth in IRA and 401(k) assets, present a significant opportunity for conversion to payout annuities.

Finally, a third factor driving the market is that, in general, financial responsibility for retirement has shifted and is continuing to shift from government (Social Security) to employers and, finally, to individuals. Social Security might have been the major source of retirement income in the past, but it hasn't kept up with rising income, wages, or the equity markets. It's not expected to be a significant source of

retirement income for many people going forward. Also, employers are now offering fewer and fewer defined benefit (DB) pension plans. And, ultimately, the responsibility is shifting to individual savings and individual responsibility.

These three trends, and others, all point to potential growth in the payout market. This is where I think insurers have a unique opportunity to capitalize on the market. While the growth in accumulation assets has benefited mutual funds and other investment management firms the most, insurers should be the biggest winners when we turn to the payout side. Mutual funds and others will continue to benefit also because they'll be managing some of the underlying assets, but the payout product is unique in serving this market and insurance companies have a unique opportunity to capitalize on it. Only insurers offer a payout annuity product, and insurers are experienced in providing life contingent guarantees, managing life contingent risk, and structuring ongoing payments. So again, we think there's a unique capability there that insurance companies have to serve this market.

With this in mind, Tillinghast-Towers Perrin did a study of the market last year. The first aspect of the study was to estimate the size of the individual payout market. We started with the total individual annuity market, including deferred and payout. A couple years ago the total market was about \$140 billion in sales. About \$4.5 billion of that was payout and the rest was deferred.

Payout itself is broken down into two components. The first component consists of immediate annuity purchases, which are new purchases of immediate or payout annuities. The second component is made up of annuitizations from deferred annuities. These two components are roughly the same at \$2 to \$2.5 billion each, making the estimated total size of the payout market \$4.5 billion. It's important to note that it's difficult to obtain data on the size of the market. We based our estimates on available public information, including information from the American Council of Life Insurance (ACLI) and the Life Insurance Marketing and Research Association (LIMRA).

In doing this estimate, we found it difficult to hone in on one number. In particular we found that there might be inconsistencies in how companies report sales compared to the way they report annuitization versus new purchases such as the way group is split from individual and whether or not structured settlements are included. This estimate is meant to exclude structured settlements. Structured settlements are about a \$4 billion market. Nevertheless, we thought this was a reasonable estimate. I'm beginning to see updated estimates that might be a little different than this. In particular, these are a little higher.

We also studied the typical annuity purchase. We found that it varies by whether you look at annuitizations or new purchases of payout annuities. In general, the purchase of a new payout annuity is part of an overall retirement strategy in which a portion of a person's retirement assets is applied to purchase the annuity. It may occur several years after retirement and generally follows a process in which

pension fund assets like 401(k) or 403(b) are rolled over into an IRA. Then, down the road, the funds might be applied to a payout annuity.

In general, we found that people do not take all their money and buy a payout annuity when they retire. As would be expected, retirees want to grow accustomed to retirement for a period of time and get a feel for what their needs and requirements are. Maybe two, three, or four years down the road they can get a better handle on that and decide if it's time to have a certain part of their income guaranteed for life. This is when the annuity purchase would take place.

In terms of annuitizations, we find very few from nonqualified deferred annuities, but it's more common in certain markets such as 403(b) or 457. Also, as with most insurance sales or products, the purchase process typically, but not always, involves a financial advisor who has some influence over where the assets will be placed.

We also estimated the potential size of the market in the near future as part of the study. Starting with our estimated \$4.5 billion in sales, where might the market be going? The first step was to estimate what drives the current sales. We found that it was a function of three things. The first is the annuitization rate, which is the rate that deferred annuities are annuitizing. The second is the rate at which new annuities are being purchased. The third is the growth of the underlying assets. We developed different assumptions for these factors that varied by things such as qualified versus nonqualified money and fixed or variable rates.

We estimated the size of the market based on three scenarios: low, medium, and high. In the low scenario we assumed variable assets were growing pretty modestly, reflecting both separate account returns as well as new deposits. The high scenario is more aggressive.

Based on our estimate and our projections, we came up with three estimates of where the market might be going. The low scenario basically assumes no change in the underlying behavior of individuals, no change in the annuitization rates, but some modest growth of the underlying assets from which annuities will be purchased. That shows the market growing from a current rate of \$4.5 billion to a little over \$7 billion five years from now. The high scenario, which is more aggressive, shows the market growing to almost \$20 billion five years from now (Chart 3).

Despite all of the favorable trends that I mentioned, such as the aging baby boomers—I think the first boomers are turning 55 this year—there are still significant barriers to growth in this market.

The first barrier is product complexity. The product is still viewed as complex, whether by agents, producers, or the public, who is the ultimate consumer. Items such as different benefit options, certain periods, fixed versus variable annuity, what an assumed interest rate (AIR) is, and the tax treatment are still viewed as

complex by the consumer.

The second barrier is that there are other alternatives to the payout annuity. In particular, things such as systematic withdrawals or leaving money to accumulate in mutual funds or deferred annuities are considered good alternatives by some people.

A third barrier is volatility, particularly in respect to variable immediate annuities. Retirees may be uncomfortable with the concept that their retirement income could vary up and down—particularly down—with the markets.

A fourth barrier is the lack of control over funds, with respect to both the consumer and the agent. Consumers may feel that once they purchase a payout annuity they have no control over the money anymore. Similarly, agents may feel like it's the last sale they're ever going to make with this money and they don't have control over possible future sales.

The fifth barrier is the idea that if the retiree would die the next day, they've just given up a big lump sum of money and haven't gotten anything in return.

The sixth barrier is distributor commissions. Commissions on payout annuities tend to be less than on deferred.

The seventh barrier is an individual's perceived needs at retirement. I continue to see studies that show retirees underestimate what they will actually need at retirement. In particular, they underestimate the effect of inflation.

The eighth barrier is a limited focus on this market, both for consumers and agents. Agents and insurance companies have had great success on the deferred side and the accumulation side but generally haven't focused on the payout side yet.

A final barrier is an accumulation mindset, whereby individuals retiring are still focusing on accumulating money rather than receiving income.

What's needed to overcome the barriers? I've listed four categories, each of which might address some of the barriers I have just discussed. The categories are (1) education and training (both for agents and consumers), (2) product positioning, (3) distributor compensation, and (4) product features or product modifications.

With respect to education and training, we feel that many distributors and consumers still have limited knowledge of payout products and a limited focus on payout products. In particular, distributors need to learn how the product can satisfy client needs and can fit into a retirement planning process or package. The education process could include items such as specialized marketing materials focused on payout products, more rep training, or items such as a dedicated newsletter.

With respect to product positioning, insurers and distributors should consider how to position the payout annuity into financial planning discussions, which would include effective use of illustrations for payout annuities. Payout annuities can make a quantum leap if the financial planning community were to embrace the product. I think we're seeing more and more significant money being controlled or influenced by financial planners or financial advisors. I think these individuals typically shy away from annuities and payout annuities in particular. If this group was to accept the concept of a payout annuity and the unique benefit that it provides guaranteed income for life, it's possible that sales could take off.

Redesigning distributor compensation could also have a big impact on the future of the product. In particular, insurers should consider trail commissions in addition to an up-front percent of premium commission. This would provide an ongoing compensation stream. It could address concerns such as the possibility of this being last sale you'll ever make, the last commission you'll ever make or losing control over your money. Trail commissions are typically a percent of assets or maybe a percent of reserves. I have seen one or two products that offer trails as a percent of the annuity payments, which I thought was interesting. In particular, for a variable annuity, if the payment generally grows in the future, the commission would grow in the future too, which would be attractive to both the agent and the consumer.

Finally, product modifications or product features are another area to address or another area that might cause the market to grow. Josee will talk about this more in detail, but I'll just mention a few product enhancements or product features. They include stabilization of benefit payments, whereby the annuity payments would change less frequently than on a monthly basis, such as on an annual basis, thereby stabilizing the payments. A payment floor or guaranteed minimum payment could be offered, with the floor being 100 percent of the initial payment, or something less such as 85 or 90 percent. Certain guaranteed minimum death benefits (GMDBs) could typically be offered in a certain period. Liquidity is now becoming a common feature, particularly in the certain period, although some liquidity features are available in some products and even in the life contingent period. Premium credits or bonuses are typically associated with larger payments and larger contracts. Multiple investment options are a must. Most variable immediate annuities (VIAs) offer at least 20 investment options—usually more than that. Transfers to or from the fixed income option could be generally available with some limitations. And combinations of any of those are possible.

Still, design considerations remain. In particular, products are complex. They're difficult for distributors to understand and that makes them difficult for consumers to understand. Some products are difficult for actuaries to understand. I know that was the case for me when I was reading through some of the prospectuses. It could be challenging to administer. In particular, taxation still holds some open issues with benefits such as liquidity or guarantees. All of the features I have discussed are

interesting and they address certain barriers, which could be quite expensive. The features and benefits are attractive, but come with a cost.

**MS. JOSEE DEROY:** The agenda that I'm going to cover is outlined in the following bullet points:

- A look at the current environment that we see on the payout side—acknowledging the annuity as the solution
- Marketing the annuity
- Existing products currently on the market
- Pricing some of the desired features
- Future developments (building on what Jonathan just discussed)

In terms of the industry perspective, there are some significant barriers to entry. These include product complexity, payment volatility, lack of control, and income needs. In addition to the industry perspective, we have to take the retiree's concern into consideration. Retirees are concerned that they might outlive their assets. They know that the cost of living is constantly rising. They want to have some sort of hedge against inflation to protect their future revenues. And they also have some needs in terms of estate planning. Attached to that are some misperceptions about payout annuities. These include the possibility of a loss of principal, the contract being completely irrevocable, and misperceptions regarding the tax treatment of annuity payments.

In general, with all the money being directed to mutual funds and variable annuities, once the future retiree gets to the point in time where he or she needs money, he or she is either going to make systematic withdrawals to get future income payments or buy some sort of a bond portfolio. But, as you can imagine, if baby boomers start to buy bonds, the price is going to go up and the yield is going to go down. And in both cases, whether it's withdrawals or bonds, they will not get the protection that they are looking for—protection against outliving their assets. That's why we say the only product that could respond to that need is definitely the payout annuity.

Annuities can be used for three purposes: (1) in the accumulation phase, as a long-term savings product, (2) to provide some sort of income protection, through the use of a guaranteed minimum income benefit (GMIB) feature, and (3) as a source of income for retirement, once the annuity is in payment status.

In terms of market status, the deferred VA market has been growing significantly over the past 10 years. In 1990, sales were about \$17 billion, and last year was a record year with \$137 billion in sales. We have a mature product in a well-established market on the savings side. Income protection is provided by variable annuities with the GMIB built into it. There are many types of combinations, as well as various products, but it's still a younger market. The income side is definitely the smallest of the three. Products are complicated, and we don't know yet where we're going to be in the future.

In terms of marketing the annuity, there are requested features coming from various sources. The first source is the client. The client will be looking for a brand name. If he's willing to give his money, he wants to make sure that he gives it to an industry leader. In terms of income, he wants to be able to predict what kind of income level he is going to get. So part of the funds could be placed into a fixed annuity, but he may also want to have some upside potential, so he could put another portion of it into an immediate variable annuity. In this way, he's going to be able to maintain some sort of cost of living and have some flexibility. The client wants to be able to make sure that he can move his money into different types of funds, so he needs a choice of investments. And, despite the fact that he's investing in all those various funds, he wants to have some sort of downside protection as well.

As for distribution, as Jonathan mentioned, the compensation structure will be very important. This is because annuities are not being bought; they are being sold. You have to have the incentives to get your financial planner to introduce this product to the market.

With the existing products, we've seen companies addressing issues such as liquidity, death benefit, and investment flexibility, in addition to adding new riders such as floor protection or having some provisions where payments are leveled through retirement.

I looked at some products currently in the market. The industry has introduced many new products recently, but Fidelity has been selling them for quite some time. The Fidelity product allows the investor to direct the assets among 28 funds. Last year, Fidelity introduced a liquidity feature into their product. As a result, their sales increased by 70 percent. It was very successful and the mortality and expense (M&E) charge is 100 basis points for that product.

Minnesota Mutual was the first one to come up with a floor protection. All of the assets needed to be invested in the Standard & Poor's 500 (S&P) Index-type of fund. The floor was 85 percent of the initial payment. The M&E was 95 basis points and the cost of the guarantee was 125 basis points.

A year later T. Rowe Price came up with something that was a little bit more flexible. There was a choice of six to eight assets to base allocation on. The floor was 80 percent. The product featured some liquidity during the first five years and some death benefit protection during the first 15 years. The M&E was 55 basis points and the cost of the guarantee was 85 basis points.

Last year, Nationwide, American Skandia, and Allmerica introduced new products.. Nationwide went a little bit further than the others by offering all the funds that they have in their deferred variable annuities. They have a liquidity feature. There are surrender charges that are charged to the policyholder. Fidelity has no



surrender charge on liquidity.

Death benefit was introduced at a cost of 20 basis points. It's applicable in a term-certain annuity. You get the accumulated value based on the largest payment you have before time of death or before age 80.

Levelized payments are another feature. The way they work, when you annuitize, you get your annuity payment, and that annuity payment will be guaranteed for the year. The company takes some sub-account assets, redeems them, and moves them into the general account, which provides for the next 12 months of payments. Then, on the anniversary of the contract, the company resets the benefit guarantee that is applicable for the next 12 months.

Skandia has other features in its product. It offers 39 funds and has a bonus in its product that primarily varies by issue age and size of the initial consideration. Skandia also has liquidity features and some sort of a floor. I call it the floor protection concept of 100 percent.

The Skandia product defines a period that is equal to your life expectancy. There is a cash value trigger that is also defined as a percentage of the initial payment. These are adjusted over time based on the performance of the underlying assets. If the assets are not performing very well, this period gets adjusted and the cash value trigger eventually comes into the picture. When this period gets to zero, the floor guarantee of 100 percent of the initial payment kicks in. So, essentially, it's a floor, but it's deferred until you hit that moment. The floor protection costs 100 basis points and the M&E is 125 basis points.

Allmerica introduced an immediate product with all the same funds as its deferred product. They have some liquidity features, and the M&E is 145 basis points.

If we put that into perspective, the question becomes, how have these companies answered the consumer needs? The needs that we were looking at were liquidity, death benefit, investment flexibility, floor protection, and levelized payment. Fidelity has the liquidity feature and the investment flexibility, and in the year 2000 their sales were \$443 million. Minnesota Mutual requires all the assets to be in the S&P 500 type of funds, so the only guarantee that they have is the floor protection. Minnesota Mutual's sales were low last year at only \$3 million. T. Rowe Price offers liquidity, the death benefit, the investment flexibility, and floor protection. Although they had all these features, they only sold \$400,000 last year. Nationwide's product has liquidity, death benefit, investment flexibility, and levelized payment. They did \$12 million in sales. Allmerica had liquidity and investment flexibility, and sales of \$10 million.

I got this information out of Vards. Vards currently keeps track of only eight contracts, and Skandia is not one of them, which is why I don't have their sales figure. But some distributors I have spoke with say they believe that Skandia has a

very flexible product. So I suspect that it might do very well in the market. But if we look at the industry as a whole, total sales last year were \$750 million, and Fidelity has a 60-percent market share.

In terms of pricing the desired feature, we're going to concentrate on the floor protection. As background, both deferred and payout annuities have options embedded in their contracts. During the accumulation period, it's the death benefit. This is the GMDB. Once you convert to payout status it's a GMIB. As payments progress, there are payment floors.

The option type that we have for GMDB is a single European put. The other parameters of the option are that the maturity extends from issue to time of death. It will be exercised at time of death. The average cost that we see in the industry for GMDB is around 20 basis points.

The GMIB also has one option. However, this time it's an American option. This put option can be exercised after a waiting period. That's the difference between an American and a European option. The exercise date is the annuitization date and it can be exercised at any time after the waiting period, usually around the anniversary of the contract. It costs around 45 basis points.

When we get to the payment floor, we have multiple European puts. You have one that's going to be applicable every time you have an annuity payment. So it's based on the annuity form. The exercise date will be based on survivorship, and we don't know how much that will cost yet. As far as the industry goes, there are no standards yet.

There are three types of risks embedded in this feature: investment risk, longevity risk, and revenue risk. In terms of investment, the risk is shared between the contract holder and the insurance company. The insurance company has sold a series of put options to the contract holder. The risk that the policyholder keeps is the volatility in the annuity payment and the floor protection. The insurer retains longevity risk and revenue risk.

Mechanically, how does the guaranteed floor work? Essentially, in order to maintain the annuity payment, the funds of the subaccount must earn at least AIR plus fees. The assumed interest rate usually is around three to five percent. Total fees are anywhere between two and three percent. So, you're looking for a total return between five and eight percent. The belief is that in the long run, capital markets should be able to do that. But the annuity payment is subject to the current volatility within the market and the possibility of a prolonged bear market. So the annuity with a floor protection will receive the greater of either the floor value or the annuity payment. The net amount at risk is the difference between the floor and the calculated payment. The cost will be based on the persistency rate or the amount of contracts still in force.

What could such a floor guarantee cost when pricing this with the Black-Scholes model? Two parameters that need to be defined here are the strike price and the notional amount. Initially, the strike price will be based on the floor percentage increased by AIR and reduced by fees. And then, depending on whether you want to hedge for five, ten, or fifteen years, you're going to roll your strike as the maturity goes on.

The formula for the notional amounts can be described as a floor payment adjusted by the AIR, fees, and persistency (since you have to buy the puts for the contracts that are expected to persist).

Table 1

**PRICING THE DESIRED FEATURES**


**Floor Protection (GPAF) - Example**

**Hedging 100% risk for 5-25 years**  
 Total B-S Cost = 4.10% to 23.50%  
 Annual B-S Cost = 0.85% to 1.05%

Assumptions


- Annuity Basis:
  - AIR = 4%
  - Annuity Form = Life with 10-year guarantee
  - Mortality = Annuity 2000 Valuation Table
- Product Characteristics:
  - Floor guarantee = 90%
  - Total fees = 300 bps (including cost of GMAP)
  - Funds invested in S&P Index Fund only
- Market Environment:
  - Interest rate = varying from 5.2% to 6.5% (based on the option's maturity)
  - Implied volatility = varying from 26% to 30%

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Table 1 is an example in which the annuity basis is based on a four percent AIR. The mortality is from the Annuity 2000 table. The form of annuity is life with 10-year certain. In terms of product design, I used a 90 percent floor, with an S&P 500 fund only. Total fees, which are the M&E, fund fees, and management fees, as well as the cost of the guarantee, come to a total of 300 basis points. The puts embedded in this contract are valued using an interest rate varying between 5.25 and 6.5 percent, based on the options maturity. Volatility is around 26 to 30 percent. Depending on whether you want to hedge at 100 percent of the risk, and if you want to hedge for five or 25 years, the Black-Scholes costs vary between 4 and 23.5 percent. That translates into an annual charge of 85 to 105 basis points.

Table 2

PRICING THE DESIRED FEATURES

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Floor Protection (GPAF) - Example

B-S Price Sensitivity on GMAP design - Hedged over 25 years

- AIR:
 

- AIR = 3%	B-S cost = 19.3%	(-17%)
- AIR = 5%	B-S cost = 28.2%	(+20%)
- Floor:
 

- Level = 80%	B-S cost = 19.3%	(-22%)
- Level = 100%	B-S cost = 29.1%	(+24%)
- Mortality Improvement:
 

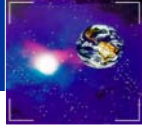
- 1% overall	B-S cost = 22.7%	(-3%)
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**Conclusion:**  
- Expensive, hard to sell, too restrictive

**Solution:**  
Mitigate the risk through product design

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I continued the example by testing the sensitivity of some of my parameters (Table 2). As I mentioned earlier, in order to maintain your annuity payment, you've got to make sure that you earn AIR, plus fees. For this example, if I lower the AIR, I expect a lower Black-Scholes cost. If we look at the 25-year hedging period, I was able to reduce the cost by 17 percent. Likewise, if I increase the AIR to five percent, my cost increases by 20 percent. Then I played with the floor. We had a 90 percent floor. If we lower it to 80 percent, we get that the cost is being reduced by 22 percent. If the floor is increased to 100 percent, there's a 24 percent increase in cost.

Assume that there is a one percent mortality improvement regarding longevity risk. It might sound a little surprising, but you get some savings here. As mortality improves, your annuity payment is going to be smaller, and therefore, your claim is going to be smaller. People will be there longer. There are savings because you're going to be collecting revenue for a longer period.

Minnesota Mutual is charging 125 basis points for an 85 percent floor, and Security Benefit Life or T. Rowe Price is charging 85 basis points for an 80 percent floor. The conclusion is that it's expensive, it's hard to sell, as you saw the numbers, and it might be too restrictive at times. One solution could be to mitigate your risk through some product design. I believe that's what Nationwide and Skandia did by having the levelized payment feature and the kind of deferred 100 percent floor.

In terms of future development, we see an environment in which assets are close to one trillion dollars of variable annuities alone. These assets, and those in mutual funds, will continue to grow. In eight to ten years the baby boomers will retire. Social Security and pensions will provide only a part of their retirement. A proposal that's going to be presented this year to the administration could help the industry grow. The National Association of Variable Annuities (NAVA), the ACLI, as well as a variable annuity committee put it together. They're trying to have annuity payments taxed at capital gains tax rates, as opposed to being taxed as ordinary income.

Client concerns and misconceptions will remain and education will be key. Education also will be important for the distributor, as well as the compensation structure incentives offered in the product. Right now, producers are looking for shelf space. They're obviously experimenting.

What is the winning combination? As on the accumulation side, the most common GMDB options are the annual ratchet or the maximum anniversary value. On the payout side, we don't know if the accepted features will be a 100 percent floor, a temporary floor, or if the floor is even desired at all because it's not cheap. Although some flexibility is required, it's going to come at a cost, and companies will have to manage the risk embedded by offering all those different combinations.

**MR. STEVE COOPERSTEIN:** My discussion will focus more on the opportunity. I was interested in this ad I saw in the paper that I received yesterday morning. It said, "Are the best opportunities found in bull markets or in bear markets?" I think opportunities are found in all markets, but you have to look and know the process of finding the opportunities. I'm going to focus on how to go about finding those opportunities.

The SOA suggests that we start with learning objectives. What do we expect to learn out of this session? I'd like to have you learn insight into the process of identifying, considering, and prioritizing opportunities. I will give some examples of opportunities in income products to consider.

With respect to demographics, we should consider our market and the niches within that market. You can't only look at the baby boomers. What are the elements in baby boomers? You then look for the needs within the demographics. The product and service offerings are our response to these needs. Then we have to look at the distribution. How is distribution done? Will existing distribution work, or do we need a new distribution approach? How do we promote it? How do we integrate what we say and what we give the salesperson with what we give the consumer? How do we integrate this into that demographic sector with the response, whether it is product or service? These five elements (demographics, needs, products and services, distribution, and promotion) become interactive in looking for opportunities.

With respect to the need for income, I suggest that you look at different facets of income when you're looking for opportunities. There's income replacement, disability, unemployment, widowhood, key person insurance, and retirement. There's also income maintenance, such as deferred compensation. There's also longevity insurance, which is the main focus of my discussion. Income needs are also for leisure time, education, purchasing a home, and long-term care (LTC). But the bottom line when we're looking for income is, where is the money and where are the unfilled needs?

In 1981, I handled a strategic plan for Metropolitan and the key thing I was looking at was life insurance. In looking at life insurance, it seemed like a very mature market. I looked at the senior market and saw that it was a very unfulfilled market, a very immature market, and a very new market.

That brings us to our subject matter. People age 65 and older total 34 million now. There might be 70 million people age 65 and older by 2030. I took a different estimate in which I did not look at what we sold in defining the market, but what the market itself is. What do these 34 million people need in terms of personal income? I came up with \$15,000. If you take Social Security into account, and you take pensions into account (those that have DB pensions), what is their excess need? I figured, conservatively, \$15,000. Clearly, that's more than some people might need and are getting by on right now, but it's also much less than some other people.

If you just take those two figures together and you look at the current need—the 34 million times the \$15,000—it gives you \$500 billion. That's in current dollars and in current numbers of people in retirement. Now, \$500 billion starts to become a pretty interesting figure in terms of assets that we could go after with our unique product. That is versus what we have now. In terms of income, I estimate the immediate annuity in force to be only \$6 billion. So we're only picking up one percent of the market. That's a pretty small piece of the market. We're not doing a very good job in really capturing the market. I trust that, obviously, money is coming from somewhere. It comes from mutual funds, deferred annuities, CDs, and maybe under the mattress, but we're not doing a very good job if we're only getting

\$6 billion out of the \$500 billion with the immediate annuity product.

Let's break it down in terms of those five categories again. Regarding the category of demographics, you can look at baby boomers. People are living longer, and that's another demographic item that we have to recognize as part of the market. The family unit is changing. There are a lot more single women in this market. People are entering into different stages of retirement—leisure, slowing down, ailments, death, and transferring to heirs. Those are all elements of the demographic perspective that you might look at in examining the opportunities for income in retirement.

The first need in retirement is income replacement. Some people are no longer working. Some are working part-time. They're getting Social Security and have pensions and 401(k) assets. The second need is income maintenance. I consider the Corporate Owned Life Insurance (COLI) market part of this income and retirement opportunity. There's an income need for a spouse or a partner after a person dies. Another need is income expansion—leaving some to your children. What happens to that income? How can you ensure that some of that income might go to your heirs? How does that income keep up with inflation? What about LTC? End of life experiences other than LTC can be something that you want to consider when you're looking at the opportunities for an income product in retirement.

The product and service responses to these issues can be broken down into four categories—investments, LTC, wealth transfer, and longevity. In the investment area, our current investment vehicle responses have very tight margins. There's a lot of competition for the savings dollar. Particularly, our deferred products are hard to distinguish. The more complex they get, the more different they are. But they're even harder to distinguish in some ways. We only differentiate in small ways.

These products don't deal with longevity. Brochures of deferred products mention guaranteed income, but it's in a very faint way. It's in the brochure, but the agent doesn't push it.

Equitable tried to incorporate LTC in its products a few years ago but it got too complex and didn't work well. John Hancock is incorporating a LTC feature into its product, both from the bank market and otherwise. Golden Rule has an annuity with an LTC feature. There are companies that are starting to take their life insurance products and incorporate LTC.

The companies are starting to touch on the care cost needs. Life U.S.A. has a product that has a payout annuity that adjusts if you get into an LTC situation. It goes up 30 or 60 percent, depending on how many activities of daily living (ADLs) you have, but that product hasn't sold at all because the focus hasn't been there. In terms of care coverage, I call it the "ostrich syndrome." Everybody's got his or her head in the sand. I was amazed. I asked the Renegade Actuarial Discussion Group, "Do you have LTC, and if not, why not?" I was amazed at how many

actuaries said they couldn't trust the companies and their rate guarantees when we don't know what's going to happen 30 years out. With actuaries saying these things, there were excuses for saying I don't want to buy the product.

My wife recently pushed me into the product and it was interesting. After I bought the product, I realized it was catastrophic insurance. I bought a 365-day elimination period and it becomes catastrophic insurance. I think the fact that our medical care has always been paid for by insurance is a syndrome that we have to overcome. I'm mentioning that here because LTC is an income product. It is an opportunity that a lot of people are increasingly looking at.

With respect to wealth transfer products, life settlements are certainly an area where insurance companies are meeting income needs. COLI, as I said before, is another income-in-retirement type of response. There are a few reversionary annuity products out there now. There's a patented product that provides income for a person whose spouse dies, which provides income in a dependency situation. Charitable giving, in the form of charitable remainder trusts, provides income and then the trust is left over to the charity. Those are all areas of other ways in which the insurance business has been responding to income needs.

The longevity need has been growing since the early '90s. I've been calling the payout annuity a dinosaur product. It could easily rule the world. We have the best little technique in the world—survivorship. And we're the only ones that can provide it, but we don't really focus on the survivorship element. We could rule the world with this just like the dinosaur, but we haven't.

I think it's a scary product for somebody at age 65 or 70 to put all their money into what I call a black hole. For example (on the fixed side), you put \$100,000 down and you get a nice return. Let's say you get \$10,000 back a year, which sounds like 10 percent back on a guaranteed basis. That sounds okay. But you're giving it to an insurance company. What if the insurance company goes down or rips me off? They're buying the black hole and they don't know what's going to happen to that \$10,000.

I think it's a scary and mysterious product for some people, even though on the fixed side, it seems kind of simple. Certainly, the variable products with all the features are very hard to understand. There are too many strange names, such as immediate annuity. Both of those terms are an anathema to a consumer. They don't know what an annuity is or what this immediate term is all about. These are terms that I try to avoid.

And, in terms of interest and mortality, futures on it, are pricey. And, lastly, the breeders, being the salespeople, need to give up too much to sell. They need to give up too much in terms of control and potential rollover sales, or at least that's their mental positioning on it.



I'm going to talk about two opportunities: reforming the immediate annuity and responding to care needs. The first product that I'm going to describe has been filed and approved in 38 states.

The technical breakthroughs of the product are patent protected. It's an unbundled featured. Just as Universal Life (UL) unbundles whole life, this unbundles the immediate annuity. The difference is when you unbundle UL you end up with a cost-of-insurance charge. When you unbundle an immediate annuity you end with a thing we call living credits, which shows a positive element back to the insured. So once you unbundle it, you can become interest- and mortality-sensitive, which is something that we haven't done in this product. It provides safety for the insurance company, and ultimately, a better payoff, in my opinion, to the consumer.

It also provides for a guaranteed return of principal plus. The plus is an important feature. A lot of companies provide guaranteed return of principal-type features, but the plus is that you can get your money back, even if you want to take your money out and withdraw. A lot of companies are now providing liquidity only up to the commutation amount. It doesn't provide full liquidity. The plus here is that you continue to get income even beyond the commutation payments.

If you unbundle, just as in UL, you have an account value. This is a Fackler approach, basically. You have the account value. You show your investment return whether that's an equity index, a fixed product, or variable funds. Then you have, as I described before, a thing that we call living credits. This is the insurance element whereby you enter a sharing mechanism with other contract holders. The living credit in this example can start with \$2,000 at age 70 and go to \$15,000 at age 80 or 85. And you show that this gets into their income-generating retirement account.

Table 3

# Unbundled

- Account Value
- Investment Return
- Living Credits™

**Guaranteed Values\***

Attained Age	Beginning Acct Value	Interest	Living Credits	Income	Ending Acct Value
70	\$100,000	+ \$5,000	+ \$2,124	= \$8,947	= \$98,277
80	\$71,000	+ \$2,862	+ \$3,234	= \$8,947	= \$68,712
90	\$44,795	+ \$1,792	+ \$4,697	= \$8,947	= \$42,336
100	\$20,131	+ \$805	+ \$4,697	= \$8,947	= \$18,877

\*As of April 1, 1998, including higher rates declared and guaranteed for the first year.

This chart is for a plan that uses interest, Living Credits, and account values solely to generate the \$8,947 of guaranteed annual income during the lifetime of the 70 year old man. Under this plan, there are no benefits on death or other access to the values. Death benefits and access to account values, though, are available desired under an optional plan discussed under SHAREway #5.

Table 3 is an illustration on a guaranteed basis with a \$100,000 deposit. Interest was five percent at the time we were creating this brochure. That was the guaranteed rate in the first year. Then the living credits of \$2,000 came to the person. This is on a guaranteed basis. They get \$2,000 into their account each year. They get \$8,947 as an annuity payment. They get the \$9,000 added to their account and their ending account value is \$98,000. But what they see is that this \$2,000 has been placed into their account. Think of the wirehouse broker calling somebody and saying not only do I have an investment for you, but I have an investment that has another source of earnings that just comes out of the sky so to speak. Just because you live one year, I'm going to put \$2,000 into your account. It becomes a different way of describing a product that we have. Showing this feature in this very different way allows the consumer to see what's happening.

Because we have conservative guaranteed rates, again, the insurance company doesn't have to take a risk. But we can then show on an illustrative basis interest and mortality beyond that. We can show reasonable annual declarations just like in a UL product. Certainly, the interest can be indexed so they have assurances that the company will provide for these increases. And increasing payouts are guaranteed. Now, the income levels will be guaranteed in some of the variable products.

In chart 4, the living credits really build up and show why you can get an increase

in income. This starts to address inflation. This is in a fixed product, which can be quite attractive to the consumer. The guaranteed return of principal is available on surrender as well as death. And the patented protective feature is ongoing income even after recovering the principal. So, not only do they get the commutation value back, they get ongoing principal. The salespeople need not fret. This is a key part of this product that I think is going to be really important. The salesperson can look at this return and say to a person, "You can get your \$100,000 back and you'll have an income for life even after that."

You put the \$100,000 in under this particular option and receive income payments. The payment is a little bit smaller in this example because it's the guaranteed return of principal (Chart 5). Then, when you've gotten \$40,000 back, you take a withdrawal of \$56,000. That's that larger line. You take that withdrawal in the fifth year after you've gotten maybe \$40,000 back in income, and even after you've gotten that money back, the company will continue on a guaranteed basis to provide this income feature, which is about a third of the original level that they got. They get almost all of the \$100,000. A year or two later they've recovered all of their money and they have this free, so to speak, income for life. I consider this a dazzling type of demonstration of why you should do it. You have no risk. You're going to get your money back if you want to withdraw after five years, no matter what state your health is in, and you still have this income feature. If you're comfortable with it five years later, you just let it roll. But if you aren't comfortable with it, you just take your money out.

We've talked about education at the consumer and agent levels. I think Fidelity has done a good job in educating its distribution as to what this product is about. I think there are two elements that are really important in the education. I don't know if Fidelity has been involved in the second part. The first part is that you don't have to put all your money into it right away. You don't have to put all of your savings into an income product right away. I think they're focusing on 15 to 25 percent of your asset base and putting it into an income product to provide that floor.

The second element of real importance is that the income coming out of the product can be used to generate new sales. Some companies tie into that to buy an LTC product in order to start buying a charitable annuity and to start buying life insurance. And, certainly, it's a market in the income field to buy an income product and then use the income to provide life insurance.

I will briefly discuss care coverage. I made an estimate of how many people might need income and retirement for care costs. There are 1.6 million people in nursing homes. A third of those people (500,000) turnover (die) each year. Ten percent are in the private pay group. That's a low estimate. Ten percent of those will assume \$100 a day, a \$100,000 of single premium. The nursing home market might be \$500 million, which is small, but there are also Alzheimer's facilities, home care, and assisted living, which increase their market. You're also buying into a market at a key point in those people's lives.

You could do a substandard LTC product or you could go with an impaired immediate annuity. We developed a seriously impaired annuity, which can open up new possibilities for not only income and retirement, but LTC coverage and retirement. There are underwriting and risk considerations. Where is the data? How do you underwrite these cases? We found some information and we have an underwriting guide. The product is in the market and it is selling. We are doing the underwriting. The financial strain was a consideration, but the NAIC recently passed Actuarial Guideline 9C, which allows you to take an impaired annuity where the expectation of life is reduced more than 25 percent. Using a substandard table that grades into the standard one can provide reserve relief. That is currently in effect. So, at least for the cases of the seriously impaired, you can get surplus relief from the law.

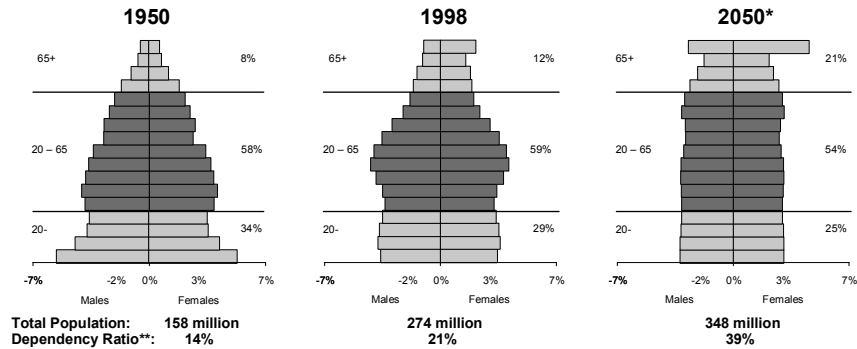
The features involved include a life income feature, an increasing annuity element, and a return of part of your premium, 25, 50, 75, or 100 percent. The distribution is interesting. It's being tested both in the brokerage market, which is difficult because it's such a niche product, but it's also being tested in the geriatric care market, which is a very complex market to work in. But it's a place where they are interested in the market. The promotion is also an interesting consideration because there is the question of how you get to the people and what are the key things that make them buy. For instance, repositioning an asset into a highly effective income product seems to be a promotional piece that really works.

In summary, there are opportunities in income products with expanded risk guarantees, LTC, and other unfolding needs in retirement. There is a whole area available waiting for us to capitalize.

Chart 1

Demographic shifts have led to increased interest in retirement planning

- Elderly population is the fastest growing segment of the overall U.S. population



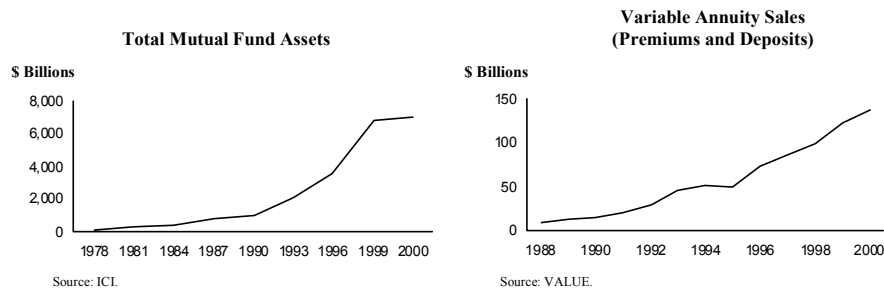
- The average age at retirement has been declining, and the average retirement period has increased

\*Forecast.  
 \*\* Population age 65+/population age 20 - 65.  
 Source: United Nations Data Bank 1998. nvo 2

Chart 2

MARKET OVERVIEW

The amount of assets built up in accumulation products has grown dramatically in both qualified and non-qualified markets



Large amount of assets presents significant opportunity for conversion to payout annuities

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Chart 3

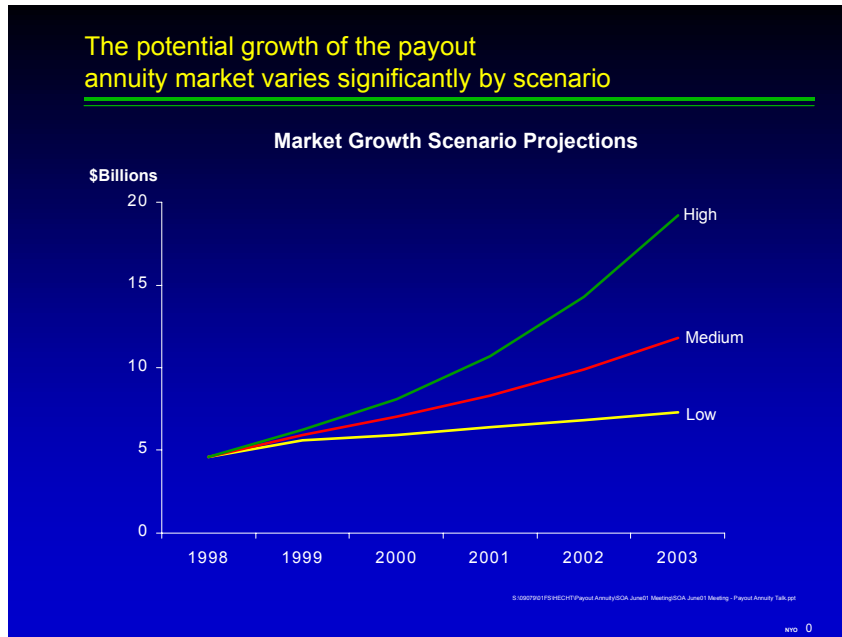


Chart 4

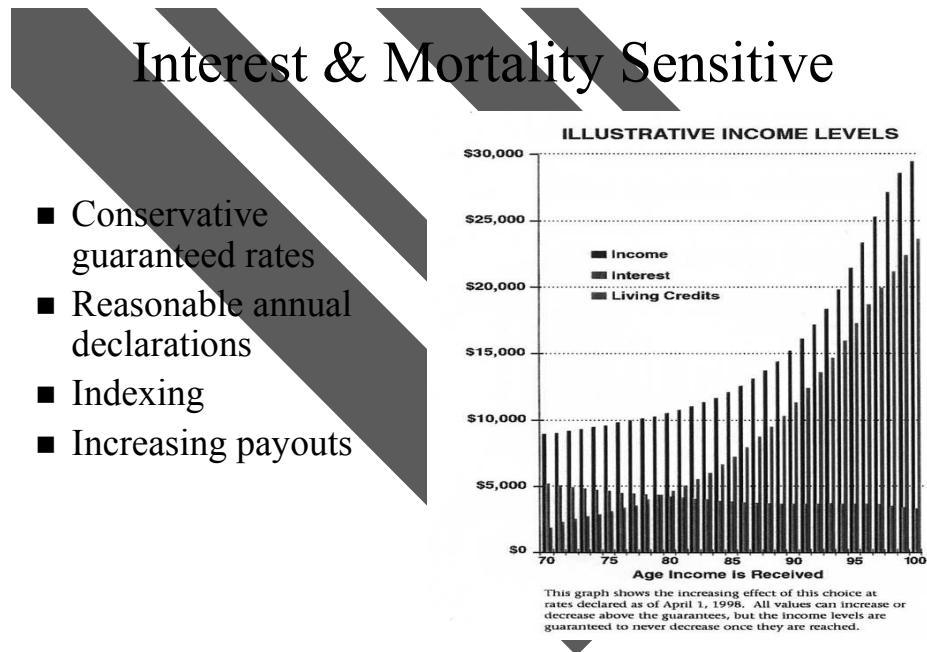


Chart 5

## Guaranteed Return of Principal

- On Surrender as well as death
- Ongoing income, even after recovering principal
- Salespeople need not fret

