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Nontraditional Products for the Retirement Market

Track: Nontraditional Marketing, Product Development

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Summary: This session focuses on new product concepts that are emerging to capture the huge retirement market. Panelists discuss concepts such as: incorporating defined-benefit (DB) concepts into defined-contribution (DC) plans; insuring the longevity tail; innovations in "traditional" annuities; 412(i) insured pension plans for small businesses; and highly impaired care annuities for people already incurring long-term-care costs.

STEVE P. COOPERSTEIN: I will introduce myself first. The first time I encountered the senior market I was vice president in charge of long-range strategic marketing for Metropolitan in 1981. One of the strategic focuses we identified was the retirement market. I left Metropolitan in 1982, and started Steve Cooperstein & Affiliates.

In 1985 my mother died, and I was exposed to the long-term-care environment and became involved in the need for better long-term-care insurance. Over the years I have noticed that a lot of people become involved in long-term care through similar personal experiences.

By 1991 I was seeing myself more and more involved in insurance solutions for

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†François Gadenne, not a member of the sponsoring organizations, is president and CEO for Retirement Engineering, Inc., in Boston, MA.

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

seniors and started to specialize in it. In that respect, I will later discuss a seriously impaired annuity product that I developed and brought to the market starting in 1994. Starting in about 1995, I developed an unbundled product that is somewhat similar to what Christine is going to talk about.

For purposes of clarity, you should know that Christine's company and I are in negotiation, so to speak, because her product was developed in another country and I have a U.S. patent on mine, and there is some overlap between the products.

In any case, I am on the Nontraditional Marketing Section Council, and suggested a session on emerging innovative products. Most of the innovations suggested were retirement-oriented, so we modified the session description. The reason I mention this is that some of the bullet points on your program deal with a number of markets that, as the panel evolved, were on other subjects than the domains of the panelist. I will therefore briefly report after Christine's and Garth's presentations on those bullets that the panelists will not be covering for those of you who may have come to hear about one of those subjects.

I think you will find the panelists very exciting. As I introduce them, you will see that they are all entrepreneurs in their own right. The objectives of this session are to share and discuss with you innovations being developed to capture the huge emerging retirement market. We all know it is huge, and it is emerging, and the panelists are going to share some real innovations in that market. We hope that you will discuss both the innovations that are presented as well as share the things that you see in the marketplace at the end of the session.

In this respect we will pose a couple of questions at the end of the session that we would like you to think about in the interim.

1. Why is the industry's unique payout feature not capturing the market?
2. Which of the approaches outlined would you, or would you not, be moved to buy and why?

We want your feedback, and we hope we will get into a discussion and will leave plenty of time for it.

I will first introduce our panel briefly. Christine Dugan is with Watson Wyatt Insurance & Financial Services, Inc. François Gadenne is a Frenchman, but a long-term U.S. citizen. François has his own company, Retirement Engineering Inc. (REI). Last but not least, is Garth Bernard, who is with MetLife.

Christine will be our first speaker. Christine has been a consulting actuary in the insurance business, mostly doing consulting in the product, mergers and acquisitions and litigation areas, for about 18 years. She was also with AIG in the product area. She will be describing an important concept that was developed in

England where payout annuities and the retirement market are more robust but not that dissimilar from our market place, so I think you will hear an interesting presentation. Christine will also review what is happening in "semi-traditional" payouts and non-payouts products in the U.S marketplace.

MS. CHRISTINE E. DUGAN: As Steve mentioned, I will be discussing innovations that the marketplace has come up with so far to capture some of the concerns and perceptions of traditional payout annuities, the problems that consumers have with them, problems that distribution has with them, and then go into Watson Wyatt's concept of reinventing annuities, basically giving annuities a very different kind of look.

First I will talk about the change in focus that the aging of the population presents to all of us. From the consumer perspective, you have consumers who have for years been accumulating assets and now have a fear in the back of their minds that their assets will not be there as they age; i.e., that they will outlive them. This mind-set is definitely a change in focus. On the insurer side, companies have concentrated their efforts during the last few years on selling death benefit protection life insurance products, deferred annuity products and other asset-accumulation-type products. After bringing all of these assets in-house, companies now must deal with the retention of those assets.

On the distribution side, there is a related change in focus of how to address the consumers who are nearing retirement age. Distributors are familiar with selling deferred annuities, etc., earning a commission for the sale, and then focusing on the next sale. The sale of retirement "instruments" requires a very different focus given educational and training process associated with the sale.

Given the well-publicized estimates of Baby Boomers due to retire over the next 10 years, insurers and other wealth management organizations are trying to grasp the perceived big pot of gold.

You have probably seen statistics about the size of the retirement market. We have over \$4 trillion of potential assets sitting out there that are available for rollover from 401(k) funds, etc., and recent statistics in the insurance marketplace show that the insurance companies alone probably have up to \$200 billion or so up for grabs over the coming years. As we all reach for this pot of gold, competition will obviously become very intense, and the people who are out there with the best vehicles, the most understandable products, etc., will be the ones that actually get the bigger share of this pot.

Through all of this, I think one of the major obstacles for insurers through the retirement wave is going to be the fact that there are some very unique benefits about the annuitization process that for some reason have not been appreciated by distributors or consumers. Significant portions of consumers probably do not understand what a payout annuity is. There is definitely an educational aspect out

there that will need to get addressed, and, again, many challenges lie ahead.

Let me quickly go through some of the challenges that lie ahead for the players within the retirement market. As I mentioned, the insurers have the whole problem of retaining assets going forward, and, in addition to that, there's a fear concerning longevity risk and its impact on payout annuities. There are probably two schools of thought out there about what can happen with longevity risk. One school says that even if there are major medical advances which occur regarding cures for cancer and other life-threatening diseases, life expectancy is not going to increase all that much. The other school of thought says that there could still be some vast improvements in medicine, drugs, etc., that will lengthen life expectancy and the 1 percent or so in improvement per year that we have seen over the last several decades will actually accelerate. Given the huge unknown with the spectrum of these schools of thought, insurers will have to step back and try to evaluate and mitigate this risk, and at some point maybe a secondary market to absorb this risk may develop.

Along with mitigating longevity risk and trying to retain assets, insurers obviously want to achieve a solid profitability threshold—which may be a significant challenge to obtain while offering competitive products. Lastly, the communication and training efforts required with sales in the retirement markets would be a major challenge for insurers going forward.

On the consumer side, obviously you want to have income maximization while at the same time addressing certain risk tolerances. Consumers have a few different risks they want to address. One is the fear of outliving assets. Another is getting an appropriate rate of return on investment while dealing with inflation and the risk of long-term-care needs and things of that nature. Again, trying to find products that have options within them that are understandable and are simple in terms of exercising these options are definitely going to be obstacles to overcome. From the distribution side, the obvious challenges again are the training elements and reengineering the compensation structures to be aligned with the efforts associated with income maintenance sales.

Given these challenges, there are definitely some perceived design shortfalls out there in the marketplace. Concerning traditional fixed income annuities, I can tell you Watson Wyatt U.K. has done extensive research on United Kingdom pensioners. For those of you who don't know, in the United Kingdom, as you roll out of retirement, you have to invest all your pension savings into an annuity. You do not have a choice. Watson Wyatt last fall actually conducted a survey of recent retirees to try to figure out how the retirees actually felt about that annuity purchase. What they found, from the cohort that they interviewed, was that 60 percent of them said that if it was not compulsory, they would never have put their money in annuity. The main reason behind this opinion was the lack of flexibility in the annuity product, i.e., once you lock into it, it is irrevocable.

The second-largest issue that came up was the "black box" element of the product that basically encompasses a few different mind-sets. One is that purchasers are locked into an investment in which they have no idea what they are buying: the interest element is not disclosed and the mortality component is not disclosed. At the same time, there is a perception that the insurance companies are actually sitting back and basically reaping gains when people die prematurely. These perceptions, although stemming from a cohort of individuals in the United Kingdom, generally parallel the U.S. consumer mind-set about payout annuities.

Concerning variable income annuities, we have some perceived product shortfalls. First, it is somewhat difficult for someone to understand exactly how the contract works, and, second, the potential for annuity payments to decrease does pose a risk for annuitants. Regarding systematic partial withdrawals on variable deferred annuities, these options have of late been marketed as a very viable alternative to income payment annuities. Given the fact that there is absolutely no intertwining of life contingencies within this option, there is a definite risk that you can outlive the payments coming out of such withdrawals. Variable annuities, whether within payout or deferred mode, obviously have some shortfalls.

What do we think the next generation of products should possess in order to meet all these challenges and perceived shortfalls? First on the list would be providing the consumer with a whole spectrum of different choices: allowing them to have buckets of funds in an accumulation account; allowing them to have buckets of funds in an income account; and allowing transfers back and forth between the two accounts in order to respond to changes in income needs over time. This first element of choice responds to the perceived lack of flexibility continually associated with traditional payout annuity products. The second requirement addresses the lack of liquidity concern that is associated with the annuitization processes. The next generation of products must allow access to funds. Obviously this is something that companies need to better understand and evaluate within their products, and we are definitely seeing that come through in a couple of designs, which I will go into later.

Concerning investment choices, again they run the gamut from giving people total return guarantees to options with no guarantees at all. Let the purchasers assess their risk tolerance and determine what they want to do going forward. Just as on the investment side where I recommend giving a full spectrum of choices, why not do the same on the life-contingent side? Regarding period certain payments, the standard five-, 10- and 15-year life and certain annuities may not always address the risk tolerance of an individual. Why can't someone say for the next 13 years I want 50 percent of my payments to be life contingent, or 75 percent? Again, the whole concept of flexibility is something that probably should be thought out a little more clearly.

Obviously people have theorized where the marketplace is going on the underwriting side, and potentially going forward it might become commonplace. I

have heard estimates that within five years companies may underwrite all payout annuity contracts over a certain purchase amount. We will have to see where that goes. Last but not least, we have the ongoing struggle of how to compensate agents fairly and appropriately given the ongoing advice and re-balancing efforts that may occur over time on both the accumulation side and the income maintenance side.

Given this mind-set about imperatives, we will quickly go into how the marketplace is currently recognizing market demands and responding to them. Concerning payout annuities, what are some recent developments? One that has been getting a lot of press lately is the concept of purchasing pieces of deferred immediate annuities out of payroll deductions, basically worksite plans. Somebody, while he is working, can basically take pieces of his 401(k) money and purchase deferred immediate annuities over time, which buys him pieces of "layered" income going forward. Within this structure, the consumer is essentially buying pieces of a DB plan from a DC plan. I will not go into this too much because I know our other panelists are going to address it, but this whole layering approach is making its way into retail products as well.

You have probably seen a bunch of hybrid products out there with deferred annuities and immediate annuities combined to mimic the layering process mentioned above. Concerning elements of traditional income annuities, we have seen some enhancements on certain provisions, one of which is liquidity provisions. A couple of companies have allowed access to funds for a particular time period. Maybe you can take 50 percent of your commuted value after a certain anniversary date, that kind of thing. They are still a bit limited, which I understand they definitely need to be, but at least they are emerging at this point, which I think is definitely good for the marketplace. Some products allow accelerated benefit payments. If you get to a point in time where you need the next two years of payments immediately, the product provides a lump sum for this amount and you then basically forego your next two years of scheduled payments. Although the amount of the accelerated payment may be limited, this product option is at least trying to address the fact that people have different needs at different points in time.

On the death benefit side, some contracts offer death benefits. We are continuing to see the basic return of premium with interest death benefit but also have seen a new generation of legacy-type benefits where you can actually leave pieces of the initial premium deposit or a piece of your benefit payment to beneficiaries for certain time periods. Concerning cost-of-living adjustment provisions, we are still seeing the typical 1 to 6 percent kind of increase ranges, but I have also seen a couple of contracts lately where they guarantee a certain percentage through maybe 90 or 95 years of age, and then drop that percentage. These benefits are not as generous in the later years as companies are trying to deal with the risk of offering such benefits by staggering the provision a bit. We also have seen a contract that is tying the cost of living increase to the Standard & Poor's 500

movement. This approach makes a lot of sense, but might be a little too expensive going forward.

Another provision that has been emerging is the concept of caregiver provisions. Here, if at some point you become disabled or need long-term-care benefits or just cannot really address your activities of daily life, you can assign a certain percentage of your benefit payment to pay those extra expenses. For instance, if you get \$100 right now, that payment would go up to maybe \$150 to fund certain of these needs. Again, companies are trying to address the fact that people have needs over points in time. A lot of these might sound like they are really not providing a lot, but at least they are doing something they were not before, which again is part of the revolution we think that the product marketplace is going through.

Those are innovations on the payout side. To quickly look at some innovations on the deferred side, we are seeing a significant amount of activity in terms of hybrid products where you combine both the deferred and immediate concepts into one product within a base contract or a rider that lets you buy pieces of immediate annuities. Some products require that you defer the purchase of the payout annuity for a period of 10 or 15 years. Others permit partial annuitizations from day one of the contract. The hybrid product definitely is out there, and several companies offer it right now. Those riders and contracts that I am talking about are basically the same kind of layering approach that we mentioned before with the DB in DC plans.

Another current design element on deferred annuities is the promotion of guaranteed minimum income benefits (GMIBs), guaranteed minimum accumulation benefits (GMABs) and systematic withdrawals as alternatives to income annuities themselves. They work, and they can be marketed, but, again, you miss out on that whole survivorship credit element of income annuities when you do something like that. Lastly, while we have had significant innovation on the deferred side with these combination products, there may still be a perception out there that there are a multitude of contractual constraints on these products (investment restrictions, minimum deferral periods, etc.) which limit their use as retirement planning tools.

I have gone through some of the innovations that are underway. I quickly want to go through an approach that Watson Wyatt has been promoting regarding income annuities. This concept is basically one in which the insurance company and the consumer share the risk of the whole income annuity process. It basically has three elements. The first element is that of a hybrid annuity chassis which combines both the accumulation and payout capabilities in one product. This element allows the consumer full flexibility to rebalance different funds within different accounts, meaning that there is an explicit accumulation account and there is an explicit income account that the consumer knows about and has full access to. The consumers can actually shift between the two accounts as they need to. I will explain this transfer element a bit later.

The second element of our annuity concept involves the decomposition of the investment and insurance components of the annuity product; i.e., to unbundle these components. The unbundling process is very similar to how the universal life product evolved as the investment and mortality components were unbundled and explicitly identified to the purchaser. We are applying similar concepts to the income annuity product in order to address the "black box" mind-set that I mentioned earlier.

The last element of our product design promotes the concept of temporary life annuities so that the consumer does not lock into a lifetime annuity at the point of issue. Our belief is that the consumer's attitude and risk tolerances regarding life contingent payments will vary over time. We believe they should transition to fully guaranteed payments over time. Within our design, you can have a 10-year life annuity, a 15-year life annuity, etc. I will illustrate this concept further for you in a minute.

Let me illustrate the concept of providing income and accumulation within the product itself. On the accumulation account side, an explicit balance would be stated and would be very similar to any kind of deferred annuity structure that you currently have. It could be a fixed deferred, variable deferred, single pay, flexible pay, etc. The whole concept of the accumulation account is that you keep the bucket of funds out there earning investment growth off equities, bonds, etc., whatever you want, and when you want to start funneling money into your income account to purchase annuities, you do so out of the accumulation account.

On the income account side, the income account balance would be used to fund purchases of income annuities. However, what we are proposing is that you would actually have an explicit declared interest rate associated with the income account balance (or a variable interest rate for separate account balances) and an explicit account balance. The income account would work very similarly to how your deferred annuity account balances and statements work today. You would actually see a roll forward of your account value from one period of time to another by showing the unbundled components. The main theme of all this is that your contract will stay in force as long as you have positive fund balances in either account.

Concerning the income account balance and the unbundling approach, again we want to totally separate out the investment component and the insurance component to provide full disclosure to the consumer. The concept of unbundling is no different than the disclosure provided within a universal life product. You have an account value for the prior period. You add in interest. Now you add a survival credit, and you subtract out whatever benefit payments you have received over that period of time.

As for the interest element, as the income annuity market becomes very competitive, we believe it will become a driving force behind a lot of sales; similarly

to the importance of this component in any other kind of accumulation product sale currently. The survival credit is essentially a straight by-product of the pooling of the longevity risk.

Given that fact that we have a lot of consumers coming out of accumulation accounts with explicit account balances, we believe that having an explicit account balance on the income account side makes a lot of sense. It will allow easier transitioning from unbundled accumulation products that consumers currently have and are hypothesizing what to do with when they face retirement.

With the last element of our product design, the promotion of temporary life annuities, you could actually layer your purchases. If you have that big well of money sitting out there as you enter the contract, you could say, maybe I need \$10,000 per month over the next 10 years. Maybe after the third year you reevaluate that need and say, let me up that up another \$10,000 a month for the remaining term of the initial purchase. Then maybe after the 10th year when the payments have ceased, you purchase 15 more years of annuity payments. The ability to respond to changing income needs and risk tolerances as consumers reevaluate their retirement goals, the "life-cycling" process as we call it, is best served by the purchase of temporary annuities. Note that the consumer can also respond to liquidity needs through this product structure by withdrawing funds from the accumulation account.

Our concept is more or less a program of flexibility to which allows the consumer to respond to varying income needs and risk tolerances at varying points in time without being locked into unknown interest and mortality component for life. Our belief is that this level of flexibility can only be provided through unbundling.

To conclude, we all believe the annuitization wave is approaching. Some people think it is already here. I do not think many people believe it is currently here, but we know it is coming at some point. Again, we see significant product innovation currently evolving; a lot of people are swimming proactively into the wave and trying to get market share before anybody else. Some companies are still sitting back on the shoreline and watching to see what everybody else is doing. The product revolution has definitely commenced.

Concerning company functionality, we have seen business units emerge out of nowhere within certain organizations in order to promote the whole retirement planning process and educational process, which is obviously wonderful. We have seen product development departments beef up their resources a bit to address some of these needs. At the same time we still see distribution going back and basically demanding better solutions and easier things to sell, which I believe is helping the process. There is still a big question mark about how effective all the education and training materials have been so far.

Lastly but not least, given that we have to come up with some wonderfully complex

and innovative options regarding income annuities, especially pursuant to liquidity, we have people worried a bit about their administrative capacities and how they will handle this innovation going forward. We will definitely be interested to see who gets the pot of gold. That is all for my remarks. I believe Steve will now address highly impaired annuities and 412(i) options.

MR. COOPERSTEIN: On the program, as I said, there are bullets that our speakers will not be addressing, so I will touch base on two of the three here. Highly impaired are for people who are already incurring long-term-care costs, whether they are in a home or a nursing home or assisted living. These people are incurring much higher living costs and shortened life expectancy. This is a niche market responding to that situation.

Many people in such situations get on Medicaid. But for those who may have assets of \$500,000 or more, they are going to be paying privately—perhaps \$50,000 or much more a year and their assets are clearly at risk. In such case, they could pay say \$200,000 of their assets into a highly impaired annuity and possibly get \$50,000 to \$60,000 a year for life, the amount depending on the degree of their impairment. So they can basically take \$200,000 out of the \$500,000 and pretty much ensure they won't go through the other \$300,000.

Positioning of the sale is really important. This has implications for even regular payout annuities. People try to figure out how long they will live. Especially when you are highly impaired, they say, I do not think my father or my aunt is going to live more than two years. They then make a quick mental calculation, of how much the insurance company will pay them based on their assumption and don't see much benefit in risking the \$200,000 if the person dies earlier. They miss the whole point that they are really insuring the tail and that it is worth taking a chance that you might lose as much as \$200,000 to make sure that \$300,000 of the \$500,000 remains.

Distribution is a place where you would think a product like this would work. Nursing homes, assisted-living facilities and geriatric care managers are centers of influence that would be interested in the product. And they are, but when push comes to shove they have a lot of other worries, and so it has been hard to enlist them. Distribution becomes a niche, as well as this being a niche product.

The last thing I will say about this is that being in the market gives insight into its potential. The market for just people in nursing homes was conservatively estimated to be \$500 million a year. The concept has been effective in England, and there is only one major company involved in it in the United States presently. There are opportunities to use this concept for variations on the theme, retirement planning, and perhaps most significantly, making long-term-care insurance products more effective. If anybody has additional questions, we can touch on them later in the session.

Another bullet was 412(i) offerings. I did not know what 412(i) was when I signed on as moderator, but it turns out that I am quite interested in it from a sales standpoint. It is fully insured DB plan for sole proprietors and small shops and is fully insured. It has been in existence for 30 years, but when the stock market turned down in 2000, these guaranteed plans were looked on more favorably. The low guarantee assumptions at the same time mean double or triple normal cost tax-deductible contribution levels compared to other qualified retirement plans.

From the point of view of my Income Solutions for Life marketing and sales company, it seems to me that this is a really pinpointed target market. As a result, a number of distributors as well as insurers have gotten into this market.

The one problem that you may have heard about in the 412(i) market is that some have been trying to create an additional benefit. Low cash values rates were being built in the early years, such that about the fourth or fifth year there was almost no cash value. The sales play was to show that the owners could then "buy out" the insurance policies and get their subsequent appreciation outside of the plan. The tax effect of the "buy out" distribution was almost nil, and they still had a life insurance or annuity product that appreciated after that. The IRS did not like that, and they squashed it down. There is still some conjecture about the IRS positioning. For instance, a couple of weeks ago the American Society of Pension Actuaries (ASPA) said that they are still concerned that the IRS really has not defined how the funding should be considered under these plans.

Now turning to our next speaker, François Gadenne is president and CEO of his own company, Retirement Engineering, Inc. (REI). He also has been in the financial services industry for about 20 years, as has Garth. When I count up my years, I have been around for 42 years. I still feel young, though.

In any case, François has created his company, and he will present this concept to you in terms of the company. Before that, François created another company to give mass-customized investment advice in 401(k) plans over the Internet. Well, he was one of the three best. He was eventually bought out by S&P and worked for them for a couple years, and then as a true entrepreneur he moved onto his next thing. Before that he was with several companies in the financial services industry. He was with Bank of Boston. Before that he was an associate at Braxton, which is a strategic arm of Deloitte & Touche, and he is also part of Common Angels, which is an entrepreneurial group of private investors. François, as you see, was educated in France but interestingly, got his master's degree in at the Kellogg Graduate School of Management at Northwestern University. I am sure you'll enjoy hearing from François.

MR. FRANÇOIS GADENNE: Thank you very much. You know all the jokes about actuaries making presentation, but I can tell you presenting to actuaries is even scarier. You all know much more than I do on the specific topics, and I am going to try to tell you something that you most likely know, so, bear with me.

This morning I went to a session focused on the current status of actuarial credentials and actuarial jobs. I am a chartered financial analyst and I have a master's degree in business administration, but I do not have an FSA. I am an entrepreneur. I compete in the market for ideas. I do not compete in the market for products. I do not build products. My clients build products.

I sold Rational Investors (my prior business) to S&P in 1999. If you remember Financial Engines, they were one of the big competitors. We provided mass customized advice to 401(k) plans. We learned something while we were doing Rational Investors. We learned that we had solved the wrong problem. We had solved the industry's problem. We had not solved the participant's problem. The industry's problem is that as a participant, I have all of these products, and at an enrollment meeting, as the provider, you cannot tell me which one to use. That is the problem Rational Investors was solving. However, if you are the participant, and you bought all of those wonderful investment products, you still have not solved your retirement problem, because what you want is income.

I think the market pendulum is swinging back in favor of the insurance industry. Investment companies took the retirement business away from insurers 20 or 30 years ago. The pension business was focused on fixed income. Investment companies walked away with it, but now the retirement business is coming back towards insurers. We are not only talking about accumulation. We are also talking about income. The real issue is the provision of a DBinDC, which property is actually a trademark and the business of Retirement Engineering

We believe in these statements. If you believe in these statements with me, we then have much that we can agree upon.

The first belief statement is: Retirement planning is income planning. Retirement planning is not just systematic withdrawal planning. It is not trying to sell mutual funds combined with automated investment advice. It is income planning before, at and after retirement. Retirement is not an asset. It is a liability. You need to match it with appropriate assets as soon as possible.

The second belief statement is: Starting income planning at the time of retirement is like planning a vacation at the airport. Do you do that in real life when you go on vacation? You do not, and you do not want your customers to do it. Why wait until retirement, and then we say, the asset allocation game has changed. Now we want you to do something else, income planning. Retirement income should be secured from the first dollar you save in a DC plan, which is, after all, where those retirement savings start.

The third belief statement is: Savers trade consumption now against income later. Why is it then that we do not give savers a daily price today for a dollar amount in retirement income for the maturity they are interested in? In the absence of such a daily price for a unit of retirement income, how can they make the trade-off

between consumption now and saving to income later?

MR. COOPERSTEIN: Because that is too painful?

MR. GADENNE: Yes, and this brings us to our final belief statement. Retirement savers are moving from hopeful accumulation to planned income, and this is what you saw earlier with Christine. The demographics are shifting under our feet. The demographics of the Baby Boom magnify the impact.

What is a successful DBinDC solution, as we, at Retirement Engineering, understand it? We see four criteria.

First criterion: This is a criterion that comes from the DB world: Security. Security means you will not die in poverty. Security means that there will be a floor under your retirement risk. You do not have such security in DC.

The second criterion is control. This is a criterion that comes from the DC world. Why did DC take off? Part of it is that the employers passed the responsibility onto you rather than keeping it, and for good reasons, otherwise much of American industry would have gone bankrupt. What made DC grow from the participant's point of view is control. The flexibility and the access are highly valued by the participants.

The third criterion is transparency. This is a criterion that comes from the DC world as well. The black box is not there. What you see is what you get. I have these funds. This is what I have. I can look at it daily.

The fourth criterion: This is a criterion that comes back from the DB world. You have hopeful accumulation in DC, not a guarantee of result. To get the guaranteed results, your need to have a DB in a DC product. This is what we think is the future of the retirement business.

We need the bridge to provide the security and results of DBs with the control and transparency of DC.

- Buy income as you go: We need to find a way of buying retirement income as-you-go versus trying to sell annuities at retirement time as the endgame transaction. Right now much of the product and process development is focused at retirement time. Why do you think you are only selling single-digit percent in annuities, versus other options, at retirement time? Could it be for the same reasons that you do not plan a vacation when you get to the airport?
- In units of future income: We believe that selling units of future income prior to retirement time is the big idea here. Units of future income are one of the key ideas that Retirement Engineering is pushing. We call this idea future-income-denominated products. Every investment product right now is a current-value product, with either a net asset value or a market adjustment,

defined in terms of what it is worth today. Nothing is packaged, marketed or built in terms of future income denomination rather than current value denomination. There are future-income products, deferred annuity and other products, but they are not sold, marketed and billed as future-income denominated products.

- Inside the DC plan: Retirement savings starts inside the DC plan. It is now clear that institutional vehicles such as DC have become the savings feeder to retail products such as individual retirement accounts.
- With familiar products: How do we create income products in DC that are like the familiar products for DC? How do we create products that are securities rather than contracts? Insurance contracts scare retirement savers. If we can create retirement income products for DC plans that are like mutual funds, retirement investors are much more comfortable.

Basically, you can deliver retirement income in two ways. The first way is with processes, and the other way is with products. There has been much technological innovation with processes, and as a founder of Rational Investors I was part of this process innovation. Investment advice processes used to be face-to-face, but you can only deliver face-to-face advice economically to the largest clients. The process innovations were how to make such advice available to the masses rather than the largest clients. We automated advice delivering it over the Internet. This automation did not work fully as intended. As a result, it kept changing and the latest implementation of this process innovation is the managed account. On the product side, there was nothing new for a long time. There were only current-value-denominated products. The innovation that I think we are bringing to the party here is future-income denomination.

I have a background in software. My professional experience comes from doing start-ups in financial software, artificial intelligence and related technologies. I like technology. What I like about technology is we understand it readily as inventions that can be patented and then we can build great companies around it. We do not think that way, as readily, in the financial world—at least until now. What you do, as actuaries, is technology just like computer software. The financial product technology we have today is the technology of current-valued product, an old technology.

You may remember the concept of S-curves. S-curves are good ways to represent what happens to technologies over time. Nothing happens for a good long time. I can tell you that. I have been doing this for three years. Nothing has happened. Then all of the sudden it takes off in a matter of weeks, and then it tapers out. Chart 1 represents financial technology curves. To ensure a proper interpretation of the chart, note that its axes are a little different than traditional S-curves. The traditional S-curve X-axis is time. This chart uses a conceptual scale representation of cost + risk for the manufacturer on the X-axis instead of time. Likewise, the Y-axis is a little different too. Instead of a unit cost or revenues measurement, here we show a conceptual scale representation of the certainty of income for the

investor.

The point of the chart is that we can approximate some level of certainty for investor income with the current valued product using hedging and processes. With future-income-denominated products, we show that we are shifting to a new technology curve that allows you to deliver higher in income certainty (Y-axis) with reduced cost and reduced risk (X-axis).

To provide product level details, let's review a side-by-side comparison of current-value denominated products (Chart 2). See in the second column accumulation-only products such as equity mutual funds; in the third column accumulation and payout products, such as traditional deferred annuity; and then in the fourth column future-income-denominated products. We show in green is the innovations that we have developed and for which we have filed patents and trademarks.

Looking at the top of the second and third column, you can see a formula definition for current-value denominated products ($\$ \text{ now} = ? \text{ or } X \text{ later}$). If you give me dollars now, either the result is unknown, equity, e.g., mutual fund—column 2, or it is a calculable guaranteed amount later, e.g., deferred annuities—column 3.

Let's now describe the differences between the columns using the dimensions identified in column 1. Current-valued accumulation-only products (investments) provide income at retirement with processes such as a systematic withdrawal plan. Current-valued accumulation and payout products, such as deferred annuity, provide income at retirement with products solutions, but do you need the double-tax deferral in DC? How do you bring the retirement income benefits in DC?

On the dimension of security: there is no guarantee with accumulation-only products, e.g., mutual funds, where past performance is no guarantee of future performance, let alone future income. On the other hand, accumulation and payout product provide life income. On the dimension of control, this is where you can see the difference between current-valued accumulation and payout and future-income denominated accumulation and payout. Guarantees with traditional insurance products require commitment. Future-income denominated products can provide guarantees with choice.

On the dimension of transparency: Transparency is very clear on the mutual fund side. It is not so clear on the accumulation and payout side, as we have seen from Christine's presentation, in terms of black box assumptions that are not readily revealed.

On the dimension of results: Accumulation-only products offer hopeful accumulation. Accumulation and payout products offer income guarantees that we know savers want. We also know savers are not buying traditional accumulation and payout products in sufficient numbers for our satisfaction, as again Christine identified earlier.

On the dimension of DBinDC: Are accumulation-only products DBinDC? No, they are not. Are deferred annuities DBinDC? Actually, it is more like DB outside DC. Then let us talk to what future income denomination is. If you give me x dollars now, I promise you \$1 a month or more in retirement later. You put it in units of, say, \$1 a month, which people will seem to understand because we get monthly paychecks. We have two types of such products that we have designed: flex-premium immediate annuities (interesting tautology) and synthetic deferred annuities.

What is a flex-premium immediate annuity (IA)? In DC plan accumulation, you can unitize the IA in future-income-denominated units, i.e., \$1 a month of life income, and then they buy such units with monthly contributions. You can use the income to invest in equities or you use it to buy more of these units. We call them "LincS" for life income securities. We have some software work on the information technology side and the administration side, because now you have small units that you need to start tracking. That is not rocket science, but a very nice little product.

What is a synthetic deferred annuity? This is another interesting idea. What if we were able to securitized longevity risk in the form of an option? What if we could make unitized longevity risk an option that is priced daily? Now we have a unitized market price for various maturities for longevity risk. The minute you do this, there are implications every which way, and we are running out of time, so we will discuss this afterwards in the Q&A if you are interested. Basically this option makes it possible to create products that deliver income guarantees with choice, because it solves problems of liquidity, problems of product design, and a lot of other product design issues that we heard earlier from Christine.

The result of future-income denomination and the other ideas shows in the fourth column of this chart is you can create retirement income products that are self-evident, have self-funding income guarantees with upside. This is what we call DBinDC.

The DBinDC vision goes after the big-picture idea of the life cycle hypothesis. You can also create new benchmarks. A daily price and return for naked longevity risk in the form of an option makes it possible to create a forward-looking benchmark that can change how we deliver financial planning. We will be able to deliver new methodologies and new product suites. Then there will new players. All sorts of good benefits happen.

As a closing note, never believe a salesman, your own or otherwise. I will now turn this over to Steve and Garth, who will tell about a real product.

MR. COOPERSTEIN: Garth is going to be our final speaker. I will quickly introduce Garth. He is in charge of fixed and guaranteed parts of variable deferred annuities, as well as income products, fixed and variable, at MetLife, and for all of their distribution systems and channels and everything else.

I have known Garth for a number of years. He was with Keyport, and I kept on pounding at their door because they were into income products for a number of years. Before that he was with Reliastar, the Northern Life part of it, and he has also been in the business for 20 years. Garth was educated in Canada, both at the University of Waterloo and the University of Toronto. He is from Trinidad, Canada. We have a Frenchman to the United States, to Chicago, to Boston. We have quite a group here. I am sure you will enjoy Garth's presentation.

GARTH A. BERNARD, SR.: Thanks, Steve. Some of the things have been covered already, so I will fly through some of this. Basically one of the messages I am trying to communicate today is that we have done a really good job of helping put the message out there that people need to save more for retirement or to do more to save for retirement. You look at the evidence of the results in the deferred retail annuity market for fixed and variable annuities. We sold over \$200 billion as an industry over the last year, and you add the mutual funds and the banks and all that, and I think we have basically done a good job of covering that. But when people have saved and get to the retirement point, they ask, now what? That is clearly an opportunity.

I will not go through all the statistics, but it has been covered before. There are more and more people moving toward the retirement point. There are trillions of dollars out there waiting to be distributed, and it is my opinion that the application of those savings vehicles to harvest income so far has been disastrous. The disaster has not really had an impact yet, because people have the money. The issue is that if they cannot make that money last for a lifetime or they do not have adequate income, then there is a problem. We have solved half of the problem really well.

What are some of the holes in the story? For 401(k) plans, for example, people are saving, and when they put money into the 401(k) plan, that does not really tell them whether they have saved enough, have saved adequately, or how much income they will have.

The income programs that we provide as an industry, the insured programs, have also fallen short of the mark. Just look at the sales results for fixed immediate annuities. I believe 2003 total sales were less than \$5 billion. For variable immediate annuities last year, they were less than half a billion. That is pathetic. I will not go into the shortcomings of the savings vehicles. François covered that. I will not go into the shortcomings of the immediate annuities. That was also covered by Christine.

At MetLife, we have been thinking about this. In fact, here is how I think about it. If retirees knew back then what they know now, you know what they say, right? They would have done a better job of taking care of their teeth, not really figuring out the income solutions that they needed to be really planning for.

This is one of the product ideas we have been thinking about. It is a flexible-

premium, paid-up, fixed annuity. In fact, these are what fixed annuities used to be when they were first developed. It is not an innovation. It is actually going back to the basics. This is where annuities started off, true deferred annuities.

Each premium payment buys a future defined income stream, and that way you can build up layers of income streams of known amounts. The beauty of it is that you are purchasing the future income stream at current prices, current annuity purchase rates related to interest and mortality. In order to differentiate it from an IA, there is a minimum deferral period of the greater of two years. You have to wait at least two years or to age 50 years, whichever is later, before you can start taking income, and at that point you can start taking income at any time you choose.

One way to address one of the obstacles to having consumers tie up all their money with the insurance company and give up access to their funds or give up control is to provide some form of liquidity. After income has commenced, we give a 60-day window where they can choose to take all or part of their future guaranteed income as a commuted value. There is some liquidity there.

This also addresses one of the obstacles, which is, if I give you all these premiums, and I do not make it to the point where I start taking income, what happens to my money? In that case, there is a death benefit that returns the premiums compounded at 3 percent.

You can look at all of this and say, so what? This is as exciting as a paper clip, I think. The power of it is in the application. Basically all it says is: Go back to the basics. We are here to provide insurance. If you live too long, we will pay you. It is the mirror image of term insurance. If you die too soon, we will pay you. It is a very simple, very easy concept to understand.

Let me talk about how it could be used, and I will give you some examples of premium rates. At MetLife, we have two different applications. We have a group product that we use in the institutional employer markets, and we have a retail product that is not out yet. The institutional version of the product was introduced in late April. The retail product is in the works. Here is how the positioning works between the two different versions of the product. Basically you target a younger client who is in the early savings mode. Let's say 25, 35 or 45 years old. They may be making 401(k) contributions. Maybe they do not have a 401(k) program at their place of employment, but this is basically conducive to payroll deduction of premium.

Therefore, you get people to make ongoing deposits like tax-sheltered annuities, 401(k)s and what have you. Each premium contribution adds, like we said before, to guaranteed future income. In that way you turn the DC that they are making into a DB. It is a type of DB in DC, as François described it, and for that type of client the income is likely to start at normal retirement age, which might be 55 or

65 years old. That is entirely up to them. It is completely portable. If you change employment, you take your benefits with you.

Of course it depends on whether there were premiums in there that were vested or not and what have you, but all their vested future income they can take with them. I think this is fairly flexible in that it can be provided in either qualified format or non-qualified format with after-tax dollars, let us say, voluntary employee benefits and, again, a very simple, very focused approach that solves both sides of the saving and income puzzle.

What about the retail product? This one would be positioned slightly differently, and here we would be looking at a slightly older client probably with an already saved sizable nest egg, and they are at the airport. They have already gotten to the point that was being described earlier. Now they are trying to figure out where to go for vacation. You have heard about the last-minute deals. This is what this product is trying to do. They are tentative about whether their income is going to be adequate or last the rest of their life, but you have probably seen some of the statistics that investors and their advisors choose systematic withdrawals today by a factor of 30-to-1 versus annuitizations. The market is voting with their dollars and with their feet to do this.

If you cannot beat them, part of the thinking here is that, maybe we can join them or help them, and let me give you a simple example. Let us say someone had \$100,000, and they were taking 4 percent constant withdrawals from their pot of savings. They are taking something like \$4,000 a year. Now, they might be invested in the market, and basically they are dollar-cost averaging out of the market. This cannot be totally good. That is why there is the potential to run out of money.

We can say, instead of putting all \$100,000 at risk, put \$90,000 into it, give me \$10,000, increase your withdrawal rate to 5 percent, and so now you are getting 5 percent of \$90,000. You have gone from \$4,000 to \$4,500 a year. You have basically stepped up your income by about 10 percent. I have been able to show you how to increase your current income on a current basis and protect yourself from outliving your assets, because the \$10,000 that you gave me will buy a future income starting somewhere, in this hypothetical example, of the same \$4,500. Of course, the percentage allocation between what you use in the systematic withdrawal program and what you put into this sort of longevity tail insurance program would be a function of the various withdrawal rates and the age of the client and all that good stuff. That was a very simple example of how this positioning would work.

Let me give you an example of some of the current prices, and this is based on today's prices of the institutional product that is currently available in the marketplace. Here I am looking at the younger client. Let me go back one step. I will give you some of these prices. For a \$100-a-month payment, where you will

start taking income at 65 years of age, I will describe to you what the benefit is at age 65 years. If they started at age 25 years, they would get \$1,114 a month. If they started at age 35 years, they would get \$560 a month. At age 45 years, it is \$255 a month. At age 55 years, it is \$91 a month for the rest of their life. To pull out the example, let us say age 35 years. You put in \$100 a month to age 65 years, and you will get \$560 a month at age 65 years for the rest of your life. You can see that it is relatively highly leveraged.

Now those benefits were not actually guaranteed, because for the payments that they will make tomorrow, I have to actually use guaranteed purchase rates that are embedded in the contract, and the guarantees are much less attractive than those highly leveraged rates that you heard there. As an example, for age 35 years, based on current pricing, if rates never change and mortality never changes, they would get \$560 a month. On the guaranteed basis in the contract, they would get \$224 a month, so about half.

We have the prices of the retail product, and this one is more of a single-premium focus. Basically when someone puts all their money into systematic withdrawals or some sort of program that does not have protection and I want a piece of it, give me a single-premium piece of it. Purchase all of your insurance all at once. In this case, let me talk about a \$10,000 single premium, where the benefit will start at age 85 years. It is far distant, like the longevity tail. If they made that \$10,000 premium contribution at age 55 years, they would get \$728 a month. At age 65 years, it is \$421 a month. If they put the money in at age 75, then at age 85 years they would get \$231 a month. Basically those are the prices for buying future income. That is guaranteed. Once you make the premium payment, the income is guaranteed. That is just to help you put it in perspective. It is not exciting. It goes back to the basics. In effect it is like pure longevity insurance for the masses.

I will whip through the rest of this so we can have time for questions, but basically there are some challenges to doing the kinds of things that we have been talking about earlier for satisfying retirement income planning. For one thing, administrative systems are going to be very costly. State filings for IAs, if they are deferred annuities, have to satisfy the non-forfeiture laws. There are some interesting twists and turns in the laws there.

Although I just described one product to you, this is not about products. It is about packaging, and, therefore, one of the things that you need to have is a suite of products to help customize the different clients' needs. Education came up before, of not only the external audience, consumers, but your brokers and agents and, probably most importantly, the internal folks who have to service the business.

Commissions were described earlier. We are doing some interesting things there as well. One of the things that we are looking at, and, again, this is not necessarily a new concept, but with the accumulation business there have been a lot of commission approaches where brokers and representatives are encouraged to build

up their asset book so they can get a trail off of the assets. We are trying to show brokers and representatives how they can build up an income book and get a trail off of the income, a percentage of the income payments, and we think that will go a long way to help pay representatives more appropriately for the amount of work involved in building these programs.

MR. COOPERSTEIN: Garth relates to François' presentation, and François relates to Christine's presentation. The program bulleted insuring the longevity tail, and I think Garth basically does that, but I just wanted to mention Moshe Milevsky. He is a doctor of philosophy at the University of Waterloo also. The SOA had a symposium in connection with Life Office Management Association and the Life Insurance Marketing and Research Association (LIMRA) on managing assets in retirement, and he was one of the presenters. He presented this concept that he calls "advanced life delayed annuity." It is an annual premium, real dollar protection of longevity risk, very much like Garth's but a little bit more extreme, and it is in real dollars as opposed to depreciated dollars.

This is analogous to some of the things that Garth was saying. We will talk about the age 85-year because that is the one that I think is more interesting. At age 35, that is male/female, with the ratio of 25-to-1. In other words, you put in \$4,000 a year to get \$100,000 at age 85 years. I am just talking very broadly. Would you at age 35 years put in \$4,000 a year to make sure that at age 85 years you would get \$100,000 a year in real dollars? I am getting one no.

Now this was priced by a Canadian company. He did some pricing in his paper, which is available. I can provide it to you. His ratio was much better than this, but this is what the company came up with. I guess they were more conservative with respect to what they wanted to put out, especially with respect to inflation. In the final analysis, he says in the paper that because of regulations in Canada and such, he wanted to buy the first one. He feels that insuring the longevity risk is the way to go, because then you can do whatever you want with your money, such as systematic withdrawal just the way Garth was describing. I wanted to mention the paper because it goes one step further than Garth, and it is a real meaty paper. You might want to take a look at it if you are interested in that sort of product.

Now we get to the fun part of the session. It is your turn. We look forward to your questions and sharing of other retirement and market traditional/nontraditional products. I posed two questions earlier. One was: Why is the industry's unique payout feature not capturing the market? And the second was: Which of the approaches outlined would you or would you not be moved to buy and why? A third question is what other products would you mention here as things that other people might be interested in.

MR. DANIEL D. HEYER: I am probably a little slow catching onto exactly what you were trying to describe, François. I did not completely understand the product you were trying to describe, but my impression of it was almost the concept of an

annuity future, that the policyholder or the investor or the 401(k) investor today could actually buy units of an annuity indexed into the future. Can you talk a little bit about how deep you would actually see the market for this instrument being and what some of the challenges would be creating market depth for that?

MR. GADENNE: That is a very good question. When we started this thing, we started exactly with that concept, which we called the normalized annuity option (NAO). It is exactly that, creating the equivalent of an annuity future, which could be underwritten by any and all insurance companies, and then you could create literally an options market, like any other options on some option market. That is like Star Trek. It would be lovely if we had it. The ratings agency would love it if it existed because the insurance company could manage a risk that they currently have a hard time managing on their balance sheets, and that would be very beneficial for ratings, etc.

We did that and worked on it for quite a while and then realized, Star Trek is great, but how do we get something in sub-orbital space, for starters? We went back and realized that from that idea derived many other ideas that were not necessarily quite as crazy but in the same mind-set that now brought a many new products. There is a family there that we call guaranteed retirement income security (GRINs) that you may have heard about. These ideas became the basis for thinking about an analogy: How guaranteed investment certificates (GICs) were unbundled and turned into synthetic GICs. We realized actually that this line of thinking made the same thing possible with deferred annuities, with what we call synthetic deferred annuities. The same way GICs evolved into synthetic GICs, deferred annuities can evolve as synthetic deferred annuities.

Then we realized this was more than a product and a set of product families, but could be a business. As we worked on it further, we realized this is actually even bigger than a business. It is a story. It is something that moves us beyond modern portfolio theory. We had point estimates that were long-term averages. A long-term average is good when you have no other basis of knowledge, when you are ignorant of other conditions. Using the long-term average is good. That is what we have done for a good long time on the investment side, and that gave us current-valued product, gave us benchmarks, gave us indices and gave us investment education.

The next big step was the whole realization that you need to bring in objective probabilities. This is the Markowitz framework and then the capital asset pricing model, and so forth. Take the long-term average and add to it variance. Variance is the story. Diversification is the game. That is modern portfolio theory in a nutshell. We learned that if you do planning, if you do advice, and if you do everything right, two things happen. One is you only know that you are right afterwards. There is no basis today to know whether my allocation is better than yours is. We will know that when we look back. That is not terribly satisfying if you are a client.

The other thing is, no matter what you do when you give the recommendation, the recommendation is about a range of outcomes, and at an 80 percent confidence interval, or plus-or-minus 1.2-standard deviation on a 50/50 portfolio, stock/bonds, using Ibbotson 1926 2001 data, so these are very conservative and perfectly understood benchmarks on the part of anybody in this room; this ranges still from 0.5 to 2x of the average. That is a 4x range. You do it perfectly right, and all I can tell you as a client is using modern portfolio theory, you have a 4x range in front of you. You may or may not retire the way you want to. That is not great. How do we go forward? We go forward by doing what I think the insurance industry is uniquely qualified to do, which are guarantees.

Basically you are able to go to the customer and say, we have done long-term average, and that was education and benchmarks. Then we went to variances, and that gave us advice and guidance and managed accounts. Now we are in the world of guarantees, and you can now bring into the financial planning framework, not only long-term averages, not only objective probabilities, but also the subjective impact of consequences. Large companies can play the odds by pooling at the individual level the consequences trump the odds every single day. When it is our time to retire, we have one roll of the dice, and how do we offer risk control and risk management solutions to ourselves and to our individual clients? This was a long way to say that risk control and risk management solutions (based on annuity futures and options) are what I think are next for the industry.

MR. BERNARD: I will add a little footnote to that. I think in order for the income market to become deep and successful, in my mind there are three success factors. One is we have to keep it simple. I think a lot of the products that are out there are very complicated, and it is very hard to get the education going. The simpler it is the easier the chance of success on that factor. Second is control. When we ask people to give up control of all their assets—remember they have saved for their whole working lifetimes, blood, sweat and tears—and then turn around and say, I will give you this amount of income for the rest of your life, if the trade-off is you have to give up the control and access to your funds, they will not do it, and they will vote with their dollars and with their feet. Third is it has to be cheap. It has to be a reasonable price. When people look at IAs, Christine was talking about the black box. It is a fairly simple proposition. You give me \$X, and I will give you so much per month. That is fairly simple, but, in fact, Moshe Milevsky had shown at the last National Association of Variable Annuities meeting a little study that showed people's personal discount rate is very high. It is something like 20 percent. It is not so much a black box. It is that when you say that you will give me \$100,000, and I will give you \$1,000 a month, they are thinking: "\$1,000 a month? You should be giving me \$5,000 a month." Then maybe I will consider those trade-offs. We have to overcome those three obstacles. That is how I would simplify it in my mind, and then I think we will be successful.

Mr. COOPERSTEIN: I would like to ask the panel, would you want to comment on each other's products?

MR. BERNARD: I can take a quick shot at this. I said earlier that the paid-up annuity is fairly straightforward. It is sort of going back to the basics, back to what annuities used to be. You put dollars in, and you get fixed dollars out, so no exposure to the marketplace, no equity exposure, no inflation adjustment and just a straight income. There are no cash values, so there is no liquidity. I think from my perspective, those are the primary differences. They are shortcomings or obstacles, and therefore, that is why I said it is not about products. It is about packaging. I think you need to have a suite, and I would never suggest someone put 100 percent of his or her money into this vehicle. You do this to shore up the longevity tail, as some of these other vehicles do, but you do something else with the rest of your money. Do you want to compare and contrast?

MR. GADENNE: I think it is unfair because what I have on the table is not a product yet. The people who are building those products—who will build those products—have not released anything yet. I can tell you that I was really happy when Garth came on the scene a few weeks ago with his product, because I was getting a little tired of preaching in a desert for three years, and the now the idea of retirement income seems to have caught on. If you remember the characteristics of DbinDC, the column on the left with the four characteristics, you remember control. Well, that is the single most important thing in all the research you have done and other people have done when you go to the DC world. People like control, and they pay a premium for it. They currently pay a liquidity premium that they do not need. Why do you need daily liquidity when it is something going to 30 years? They want control. The products that have to be built have to do that.

One of the reasons why the conversion at retirement time into traditional annuities is not so great is because the investor fears the loss of control—giving the investor control is the direction we have taken. We call it guarantees with choice. Again, when you go to this issue of whether it is a future on longevity risk or some intermediate approach that becomes things that we know how to do now without having to create that market, that is exactly what those products are geared to do, to give guarantee with choice, which is an oddity to us as a manufacturer but what the client wants to buy.

MR. BERNARD: I actually had a question for Christine on the product. When you do the unbundling, and now you can show an account value in an IA, what have the challenges been in the United Kingdom where, when you start showing people money, they want to get access to it? They want it. There it is. Give me some of that. How does that work out?

MS. DUGAN: Well, similar to the problems we have with liquidity in the United States, my U.K. colleagues have actually come up with different features. The fixed portion of the payments is commutable, meaning that you have access to those to a certain extent. We have market value adjustment-type concepts that we apply to the provisions as well, but as long as you fully communicate what is yours and what is not, they have not really had major problems with that.

MR. BERNARD: Is it fixed, variable or both?

MS. DUGAN: Both.

MR. COOPERSTEIN: I want to say that I think in both instances, we are talking about education. How many of you know, based on the amount of money that you have, how much retirement income that will generate? Have you looked at that? I was just looking at it because I am reviewing a piece of software that the SOA is going to put out. It is a very simple scenario-generating system, and it basically looks at, under various scenarios, how much income you have. I was really amazed at the sensitivity to the inflation assumption there. I was amazed at how I changed the inflation assumption by just a few tenths of a percent, and I went from red to black, back and forth, pretty amazing.

It is in the future, and we are accumulating money, but we are accumulating it mindlessly. To some extent I think what Garth and François are talking about is educating the consumer so that they increasingly start to understand what they are accumulating. They are accumulating for retirement. I think Christine is talking about when you start unbundling, it becomes a means of needs analysis. Single-premium IAs have always been one-shot commodity sales, but I think when you think about retiring, that is a need. That is a very sensitive need in retirement. People are determining what they are going to do for the rest of their lives, and there is real handholding necessary. We have sold a product rather than gone through the needs.

If you determine how much you need for retirement and how much you really need for legacy purposes, if you really look at the legacy component, and you leave some money on the table in separate funds, just as Christine has suggested, you do not put all your money into it. You get into a financial planning modality with respect to that money and really have the consumers understand what they are doing, and then they will not have that queasiness. They know that this is for my longevity. This is so I can live okay. The rest of the money that I want for my children or for emergencies will be in a separate fund. I think unbundling it allows that education in retirement.

MR. GADENNE: I just thought of this. When we were talking about education and retirement and comparisons, we wrote a comparison with Garth's product on our Web site, www.incomeatrisk.com, which you can read. We will be posting comparisons with anything that comes out, as it goes. The part that is really good is that products like this are coming out, and I think it is only the beginning of a wave of better and better coming from old places, including our panelists.

FROM THE FLOOR: You mentioned impaired annuities, and it seemed in the context of long-term care. Does that mean you basically get someone who is in a long-term-care facility or in need of that assistance with a shortened life

expectancy, and you are medically underwriting them at that point? Then basically it is long-term-care insurance except you are removing the incidence risk.

MR. COOPERSTEIN: Right, exactly.

FROM THE FLOOR: Then the incidence has happened. You have removed that uncertainty, but it is how long somebody stays in there. Can you talk about where you think that is headed and how you actually medically underwrite somebody at that point?

MR. COOPERSTEIN: The next session that I will do, I will be talking about impaired annuities. I will touch on that one as well. We did some studies, based on claims on the long-term-care policies, where the cause of the claim was identified, and we traced those people through to death. We got some statistics. Based on your evaluation at that point, we could evaluate how long you might live, and based on that, we established some underwriting criteria. We have actually established an underwriting manual, and we use that as a basis for going forward, and reinsurance is available for that.

FROM THE FLOOR: Does that make it a more priceable risk than trying to project incidence, which is probably the hardest thing?

MR. COOPERSTEIN: When I first got into this, I thought that should have been a risk factor. With most of the tail risks that we are talking about in this particular product, the variance really became a factor. The average was not what you should be concerned with. That is not the way it was ultimately priced. It was just priced with a lot of margin. This product is being used in the United Kingdom as well, I found out after we started working on it, and their experience has been pretty much in line with what they expected. While the insurer sits up at night worrying who will die, it has worked so far for them.

Chart 1

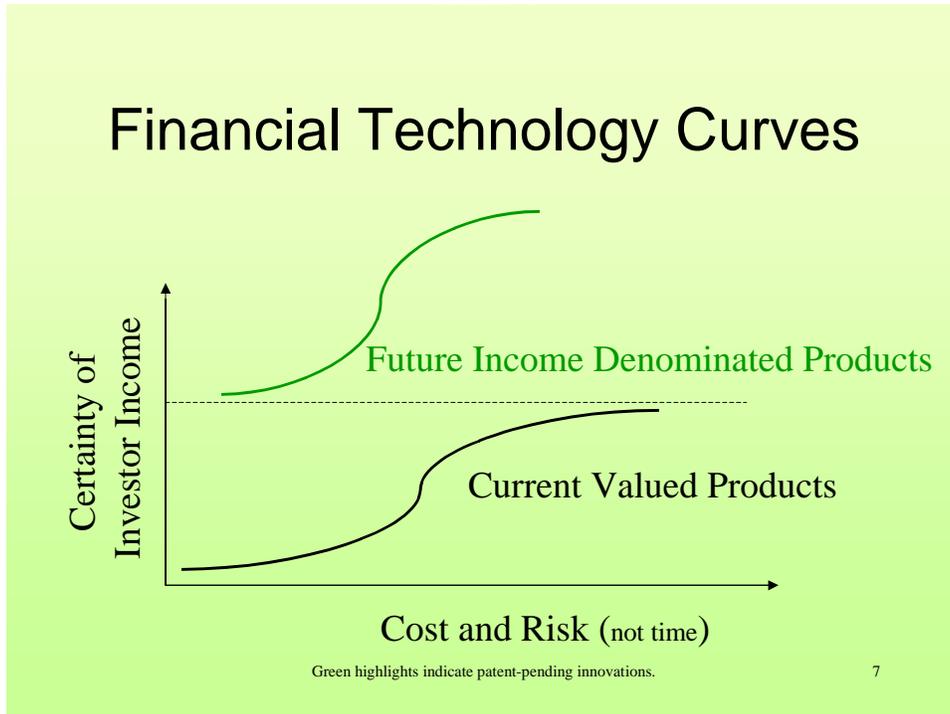


Chart 2

DBinDC Products in Context

	Current-Value Denominated (\$ now = ? or X later)		Future-Income Denominated (X now = \$+ later)	
Focus	Accumulation Only	Accumulation and Payout	Accumulation and Payout	
Instruments	Investment Products	Deferred Annuities	Synthetic Deferred Annuities	Flex-Premium Immediate Annuities
Accumulation	Fixed Income / Inflation-Indexed / Equity-Participating			
Income	At Retirement	Yes, but in DC?	Continual, in the DC plans	
Security	No guarantees	Life Income	Life Income	
Control	Guarantees require commitment		Guarantees with Choice	
Transparency	Yes	Illiquid	Self-evident Income Guarantees, with Upside	
Results	Hopeful accumulation	Income guarantees		
DB in DC?	No	DBoutsideDC?	DBinDC	

Green highlights indicate patent-pending innovations.