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**GICS AND OTHER INSURANCE COMPANY PRODUCTS --
ARE THEY STILL ALIVE?**

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Recorder: DARYLE G. JOHNSON

- General account products
- Separate account products
- Synthetic GICs and other alternatives
- Assessing the risks/benefits of alternative products
- Annuity products
- Solvency issues
- DOL, PBGC, 404(c), FASB, AICPA, etc.

MR. DARYLE G. JOHNSON: I'm with Pacific Mutual Life Insurance Company in California. Joe Buff is a principal with Tillinghast in its New York City office. Judy Markland is an economist with John Hancock in Boston. She has responsibility for risk analysis, and pricing, underwriting, and administration of all the guaranteed pension products at John Hancock.

I'm going to give a brief history of the insurance industry's involvement in the pension market. I'll talk a little bit about the growth of the GIC market and then talk about some of the market forces that are currently at work in 1992 and what the implications of all of this is for the insurance industry.

Joe Buff is going to talk about what I will call "advanced GICs." He'll be talking about the move away from traditional GICs to separate account products, participating products, synthetic GICs, indexed products, and some of those types of things.

Finally, then, Judy is going to be our clean-up hitter. She's going to talk about the risks and benefits of alternative products from a plan sponsor's point of view.

We're going to be telling you that GICs and other insurance company products are, as a matter of fact, very much alive. Much of the concern or self-examination that has been going on is quite good. I think it's good for the industry and I think it's good for GICs. I think the more that plan sponsors come to look at the insurance industry, the more they're going to come to realize the true strength of the industry. The more they look at GICs, the more they're going to appreciate the benefits that the GIC products offer the majority of employee participants. I think the insurance industry can be quite proud of its overall performance and strength. There have been some mistakes, sure. There have even been some failures, but with few exceptions, companies have not collapsed in clouds of accusations as have some banks and S&Ls. And on the whole, I think investment practices of the insurance industry have been quite appropriate and very well managed. I think one of the things that the

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industry needs to remember is that it is absolutely essential that it maintain the confidence of its policyholders, because few businesses can survive without the confidence of its customers. I think the more the policyholders look at the insurance industry and the better they understand it, the more confidence they're going to have in it.

Let me go to my quick presentation. Let me first give you a little historical perspective here. Table 1 is an illustration of the insurance industry's involvement in the private pension market. I have tabulated data that shows that back in 1960, the insurance industry handled 33% of the private pension plan assets. You can see the numbers in the far right-hand column in terms of it going from 33% to 27% in 1965 and so forth, up to where at the end of 1990 it was 39%. I think the thing to focus on would be that in the 15-year period from 1960 to 1975, the portion of the private pension plan market that was handled by the insurance industry in terms of assets, dropped from 33% to 24%, but in the following 15 years it went up from 24% to 39%. That is due in large part to the growth in the GIC market, of course. But this is just a little bit of a quick background and really the question here is, what is this data going to look like at the end of 1995 and at the end of 2000?

TABLE 1
Historical Perspective
Portion of Pension and Retirement Program Assets
with Life Insurance Companies (Billions of Dollars):

Year	Total Private Plan Assets	Private Plan Assets with Life Insurance Companies	Insurance Company Percentage
1960	\$57.0	\$18.9	33%
1965	101.7	27.4	27
1970	153.2	41.2	27
1975	297.2	72.2	24
1980	635.4	165.8	26
1985	1,219.7	371.3	30
1990	1,838.3	713.3	39
1995	?	?	?

Twenty years ago there was only one insurance company that was offering GICs. At the end of 1991, there were about 70 companies that each had GIC liabilities of \$1 million or more. Table 2 shows the actual growth of the GIC market. You can see that in 1986 there was \$23.5 billion of new sales. At the end of 1986, GIC assets amounted to a little over \$100 billion. In the five-year period from 1986 to 1991, the assets grew from a little over \$100 billion to just about \$160 billion. New sales escalated and then actually dropped in 1991 slightly from the 1990 level. But if you look at the asset growth rate, that's probably the more telling thing. You'll see that GIC assets increased in 1987 by 13%, in 1988 by 18%, in 1989 by 10%, in 1990 by 5%, and last year by only 3%. So there isn't any question, but what the growth of GIC assets has been slowing.

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TABLE 2
Historical Perspective
Growth of GIC market (billions of dollars)

Year	New Sales	Year-End Assets	Asset Growth Rate
1986	\$23.5	\$101.3	-
1987	28.1	114.2	13%
1988	31.8	130.2	18
1989	31.6	141.4	10
1990	36.6	153.7	05
1991	35.0	158.1	03

The close-out and terminal funding annuity market has declined rapidly. Some years ago it was \$8-10 billion in size. In 1991, it amounted to about \$1.5 billion, and that was down by a full two-thirds from the level it was in 1990. So in 1990 it was about \$4.5 billion. It fell off last year by two-thirds, \$1.5 billion in new sales. And like I say, that's down from levels quite a bit higher than that just a few years previously.

That's kind of a historical look. I thought it might be interesting just to share that with you. I want to have a look at some of the GIC market forces that are at work here with us in 1992. One of them, of course, is the fact that we've had a couple of large insurance companies fail, namely Executive Life and Mutual Benefit. This has caused widespread concern among plan sponsors. The three of us very much know that, and I'm sure that each one of you probably know that as well. The industry has had ratings downgraded by Moody's and Standard & Poor's. My company experienced a downgrade last year. Lots of insurance companies experienced downgrades. Plan sponsors read about this and it concerns them, so it's one of the forces at work.

Another force would be that we've had a very strong stock market here in the last couple of years. Last year the market was up - I think this percentage includes dividends if I remember right - but about a 30% return was available from the stock market last year. It would have been negative in 1990 and, of course, this year the market is up again. In fact, just this week, the Dow Jones industrial average made an all-time high of just about 3,400. The strong stock market performance is one of the forces at work, because as participants and sponsors think about where they should be investing their funds, one of the things they're looking at is good stock market performance.

Another factor would be lower interest rates. In absolute terms, interest rates are very low compared to where they've been in recent years. Today GIC rates are yielding somewhere in the 6-7% range, and not too many years ago you could have gotten twice that on a GIC rate. A year or two ago, you might have gotten 8-10%, but rates today are low. They're down in the 6-7% range.

There are a few more forces at work. Legal actions and proposed regulations by government agencies in the annuity market might have a spillover effect in the GIC market. I think you know that the Department of Labor has been telling plan sponsors that they have a fiduciary obligation when they seek an annuity bid when buying guaranteed annuities for their participants. They're obligated to take the safest bid available; not the lowest bid, but the safest bid. If governmental agencies are out talking like that, plan sponsors are going to start thinking the same way when it comes to a GIC contract. So, what the DOL is promoting could well have a spillover effect on the GIC market.

There isn't any doubt that many plan sponsors are shifting assets away from traditional GICs. But there aren't any clear preferences for alternative products that have emerged. Today insurance companies are offering participating products, separate account products, and a variety of other types of products, including synthetics. Many plan sponsors are looking for alternatives, but they're not sure exactly what they're looking for. I think plan sponsors, frankly, are a little bit confused about this array of alternatives that is being introduced.

In spite of all of this, the rank-and-file plan participant really hasn't been affected. We haven't seen much of a response from the plan participants, and in fact, when we talk with them, they seem to be quite happy with GICs. So there has been a lot of negative press about the industry and about the GIC product line, but rank-and-file plan participants seem to be quite pleased with the GIC product.

With those forces at work, let's have a look at what I see as some of the trends that are taking place out there. And one of them is that plan sponsors are reducing their exposure to GICs. We see it. I can tell you that at Pacific Mutual, although sales this year are on plan, our plan was reduced from last year. And guess what? That's what's happening. We're doing less business this year than we did last year. It's because sponsors are reducing their exposure to traditional GICs. Many sponsors will purchase a GIC from only a top-rated carrier. We certainly see this at Pacific Mutual. I think a lot of insurance companies are probably experiencing this. Today, I guess, the point would be that plan sponsors are paying increased attention to the ratings that the insurance company quoting on the GIC has behind it.

GIC selection decisions are being based more on not just credit ratings, but things like asset quality, liquidity, investment guidelines, financial reporting, and client servicing capabilities. We're seeing increased questions on the part of sponsors for this kind of information. I'm sure you've already heard this, but it used to be that the three most important things when choosing a GIC were rate, rate, rate. That's no longer the case. Rate is still an important factor, but sponsors are looking behind that rate at all sorts of things. Today, insurance companies are faced with having to be very proactive in communicating with clients, by telling them how the money is being invested.

Based on some market research studies that we've seen, about 50% of all defined-contribution (DC) plans are going to be shifting assets away from traditional GICs. So about half of all plans are going to be shifting assets away from GICs, and the 50% of these plans that are going to be reducing their exposure are expected to shift about 40% of their GIC assets. If you consider that about 60% of DC assets are in GICs,

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this 40% of GIC asset shift translates into a shift of about 25% of total plan assets. This shift is expected to take place over the next three years. Estimated assets shifting away from traditional GICs over the next three years is about \$40 billion. If you look at future growth over the next three years, the actual dollar amount that's going to be invested in traditional GICs may not decline during this period. At the end of 1991, total DC assets were \$300 billion; 60% of that was invested in GICs, or about \$180 billion. In 1994, if DC assets increase at the rate of 10% per year and you take account of the shift in assets that sponsors are expected to make, there will be \$400 billion of DC assets, with 45% of that in GICs, or \$180 billion. So in the end, there may not be a big fall-off at all in actual GIC assets.

What does all this mean to the insurance industry? During the 1980s, the emphasis was on product performance. We worried about meeting our sales plan, having asset growth, being able to afford attractive interest guarantees, and things of that sort. But during the 1990s, the focus, I think, is going to shift to the balance sheet and bottom-line results – profits, asset quality, things of that sort. I know at Pacific Mutual this is true. I have a hunch that this is true for a lot of the industry. I think there's going to be a return to what I call the old time investment religion of "better safe than sorry" – in other words, increasing the quality of the investment portfolio. We're going to see increased disclosure in communication with clients. It's really important today that insurance companies stay in touch with clients, tell them what they're doing, make them feel good about the company, about the financial strength of the industry, and about the merits of the product and things of that sort. We are going to see, I think, a wide array of new GIC products being developed. I think the 1990s will be a new opportunity for the insurance industry. There is no education like adversity. Customers have told us what they're interested in. The insurance industry is reacting to that, and I think in the end it's going to serve the industry quite well.

The focus, I think, is going to shift away from the level of interest rate guarantee to the quality and consistency of investment performance. More and more the sponsors are going to be looking for investment results, not just an interest guarantee. They're interested in book value accounting, obviously, but what they want is book value accounting passed through in a way so that they end up really getting the true investment results, not just some interest rate that happens to get fixed for the term of the contract at the outset of it.

One of the things I wanted to point out is that what we're doing at Pacific Mutual is focusing a lot of our attention on financial-strength-type issues. We're reducing our growth expectations. We're improving the overall asset quality of the investment portfolio. I think you're going to see insurance companies divesting noncore operations. I think you're going to see an increased focus on expense control and expense reductions. I think in the end, the insurance industry is going to come out a whole lot stronger for this. So I see it as a period of opportunity, and I'm very optimistic about the outlook for the industry, and in fact, for GICs and other guaranteed products.

Joe, as I mentioned, is going to talk about what I would call advanced GICs, or the new products and a bunch of alternatives that are being worked on.

MR. JOSEPH J. BUFF: The GIC market is definitely alive and like anything else that's living, it responds to stimuli and, in fact, it evolves. I will go through a number of interesting evolutions in the market (most of them date back within the last couple of years, but some of them are, in fact, newer than that) to see how the insurance industry and also some competitors of the insurance industry, banks and asset management firms or whatever, are striving to meet the needs of people who have money to invest in 401(k) plans and similar arrangements.

Let's begin by taking a look at the whole gamut of available products for defined-contribution plans. As I'm sure some of you know, there are two very, very broad classes of assets: those that are generally called stable assets and those that are variable assets. There's really no such thing as a stable asset, but what we mean here is that the values as they're accounted for in the statements of the plan participants are stabilized according to certain accounting conventions that are based on the risk-and-return characteristics of the investments or the contracts. Variable assets are those that involve some more very direct participation in the capital market volatility on the part of those people who are saving money in the plans.

The traditional GICs really break down into two basic types, as Daryle has mentioned. Typically, they're all in the insurance company general account. That means that they are backed by the overall faith and credit of the insurance company's general account, or its basic business operations. All of the liabilities there are pooled, and all of the assets there are pooled, and as long as the insurance company remains able to pay its claims, everything is fine. But as we've seen, when that is no longer the case, the insurance company becomes weak. Things then are not fine.

There are two basic kinds of profiles for the benefits or the promises in the general account GICs. There are those contracts that have a specified fixed maturity date, which might actually be staggered over several years of liquidation of the funds, and a credited rate, which is guaranteed for a period of three, five, or seven years, or whatever the life of the contract is.

Another interesting kind of product that has been popular at various times in the past and may very well become quite popular again in the near future is the whole category of indexed and floating products. There are several types of them. Some of them, again, have fixed maturities. Others don't. Some of them have a minimum holding period on the part of the plan sponsor, like two years or five years, after which you can then end the contract based on, let's say, six months' notice by either party. But the idea of these indexed contracts is that they provide a different sort of exposure to the risk-and-return profiles out there in the fixed-income markets. They have a credited rate that contractually is tied in to some external market index. That credited rate can rise or fall with new money rates. The contracts have several different kinds of indices. Sometimes they're tied into a commercial paper rate. Sometimes they're tied into an intermediate Treasury rate. An interesting contract that has emerged within the last six months or so that's getting a fair amount of attention is one that actually is tied into a 10-year Treasury rate. With the current yield curve condition, I think that's by far the most attractive of these types of contracts, based on their initial offered rate. However, you have no idea exactly what the accumulated return on these contracts will be over their life.

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Then there's a counterpart to GICs, or bank investment contracts (BICs), which two years ago were an important force; they held a lot of attractions to the buyers and generated a lot of discussion in the insurance industry. Right now, the BIC market is quiet. BICs are like GICs in the sense that, again, the assets are actually owned by the bank. What the insurance company is offering in its general account is really the same thing that the BIC writer is offering as a bank. It's a promise that's backed by the writer's general ability to pay the claims when due. But the investments, the bonds, mortgages, whatever they may be, are managed by the bank. However, these contracts are typically driven by looking for funds to match the lending activities of the banks, which tend to be relatively short term. So typically, in the past, BICs have been a relatively short-duration contract relative to GICs. So another reason for the BIC market to be relatively quiet now, is that given that the yield curve has a very positive slope, the rate on those contracts isn't as attractive as on longer GIC contracts.

Let's take a look at some nontraditional products, including insurance company separate account products. These products have evolved to address the basic concern that a lot of plan sponsors have about the creditworthiness of the insurance company and its ability to pay a claim in the general account. Then there are even more exotic kinds of products: the bank synthetics and synthetics that are at least in part offered by insurance companies. The synthetic products basically amount to an unbundling of the traditional GIC package. The GIC really consists of two things. First is, some kind of a pool of assets that is managed and invested. A rate is earned off of that portfolio, which net of some profit margin and risk charges, gives you the rate that is offered to the plan and to the employees. The other main piece is a set of guarantees that's usually referred to as the "book value wrapper," which means a guarantee that individual employees' money withdrawn under the benefit responsiveness provisions of the contract will never be less than book value. Although typically, for premature liquidation of the contract by the plan sponsor, that would be at market. But the guarantee to the individual employees to withdraw their money at book value is important. It's very much in demand in the market, and that guarantee, in turn, permits book value accounting of the account values to the employees, which is something that many employees out there are interested in.

What you have in a bank synthetic is a breaking of that two-part package into separate pieces, an asset management account of securities that are, in fact, owned by the plan. A major point there is that you have greater credit protection, because the plan is diversified into the capital markets. It's not subject just to the credit risk of the insurer. If you have 10 different bonds or one hundred different bonds, you have that much diversification. They're your bonds if you're the plan sponsor. Whereas, at the same time, they're getting some of the same protection as they get in an insurance product by virtue of that book value wrapper. That wrapper might be provided by an insurance company, such as a financial guarantee company. There are some life insurance companies that are offering them through a nonlife parent or through a subsidiary that isn't a life company. Apparently, in many states, in many of the major states in particular, a life company cannot sell the wrapper in isolation, because it is not a life insurance product. However, insurance companies, as I say, are getting into the act by teaming up with either affiliated or nonaffiliated asset management firms, to make arrangements somehow to participate in providing that wrapper in return for a risk charge. Also, in some instances, they are having a kind of partnership with the

asset management firm, where they're getting some portion of the asset management fees from the asset management firm. Both parties win. The insurance company continues to get something off of being involved in the management of a large pool of assets, and the asset management firm gets that large pool of assets to manage. The insurance company, facing the possibility of losing its own asset base of assets under management, is still able to participate in some of the profit opportunities. So these are interesting products. They have their problems, but they also have their appeal.

Then there are the other stable asset types, such as money market funds. Being short term, there's always security of principal, and you would also expect reasonable protection against inflation through the returns. Then you get beyond the money market funds to the shorter term bond funds. These instruments, by virtue of their relatively short durations or maturities, tend to have relatively low volatility with respect to interest rates, so they generate a fairly stable return.

The variable assets, just to mention some of them, include company stock, which, as some of you know, is an issue under 404(c). Other equity-type investments, such as mutual funds or a portfolio of common stock that's picked by the plan or its advisor; and then finally actively managed fixed-income funds, of which there are a number out there, with all sorts of different risk-and-return characteristics.

In other words, there are many different products that have all kinds of different features, and there are at least three different dimensions across which you can classify them. Chart 1 is a three-dimensional picture, this kind of Rubick's Cube, of available products in the 401(k) market. Not every little segment of this huge cube is currently represented by a product, but at least in theory that could happen. As you can see, one of the three dimensions is the interest credit process. How specific at the time the contract is executed is the actual rate over time? Then there is the duration or the maturity period of the contract. Is there, in fact, any fixed maturity date, or does it have an open-ended structure? Then finally is the question that keys in importantly to the whole question of quality and concerns about ratings, and concerns about credit risk: who owns the assets?

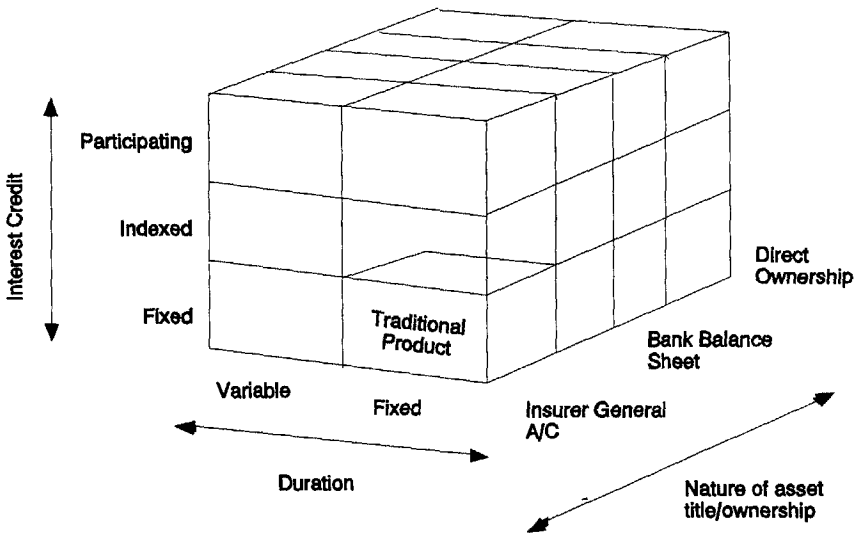
So let's work backwards and first talk about the dimension of who owns the assets. Again, there's a spectrum. At one end of the spectrum is where the vendor, the insurance company, the bank, or whomever, actually owns the assets; and in that sense, the credit protection may be good when the insurance company or the bank has high quality and diversified assets. The problem in the general account, as you know, is that other promises of the company are, at least in general practice, considered to be supported by the same assets that are supporting the GICs. So if you move toward a separate account product, you have more credit protection. However, a number of people still feel – and it has not been tested yet – that protection of the separate account may not be as strong as one might ordinarily think or hope. Going all the way beyond that to a pure fund of assets that's clearly diversified and clearly owned by the plan itself is as far as you can go along this spectrum.

Then, in a dimension of maturities or durations, there are those contracts that have a specified maturity date, and it doesn't really get simpler than that. However, there

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are some contracts that have no specified maturity date. They amount to a kind of constant-duration or constant-horizon actively managed fixed-income fund, where the terms are typically that at any time after a minimum holding period, these contracts could be cancelled. They'll always be cancelled at market, which is again not too different from the typical general account product. You also can take a look at self-liquidating contracts, which are those that have a series of fixed-income investments that are all buy and hold. So that when all the principal and interest is paid on those various bonds or mortgages or whatever, it is paid to the plan. When the last asset matures, that's the end of that contract. So that's another example of the way in which the maturity structure may vary.

CHART 1
Product Dimensions



Coming back to the question of the interest credit at one extreme is the fixed rate contract. That means you get 7% for five years, period, no questions whatsoever. Then you get toward products that have some variation, although it's one that, by contract terms, is tied into something specific in the capital markets, the indexed products. Both the indexed and the fixed products make interest-crediting promises that have nothing to do with the performance of the actual investments behind the particular contract.

The so-called "participating products" make up a very interesting series of contracts. No two really are the same, but they're very popular and there are billions of dollars worth of assets in these plans now. The participating products themselves, again fall into several major subcategories, but all of them have one thing in common, which is that they are basically experience rated. There is an initial rate that's credited, which may be guaranteed only for a period of six months or a year. The rate is then reset during the life of the contract, maybe every six months, and it's driven in very large

part by the performance of the assets. However, it is experience rated with respect to certain risks that the insurance company is passing to the remaining employees in the plan. For example, the cash-flow risk or the employee withdrawal risk in the participating plan is basically experience rated. Provided that the experience is not horribly volatile, that will, in fact, be passed on to the remaining employees over the life of a contract, rather than being something that the insurance company is at risk for. Some plan sponsors find these products very attractive. Some people have expressed some concern as to what might happen in adverse interest rate environments, where the credited rates to the remaining employees drop very rapidly over a short period while external interest rates, in fact, rise. People understanding how these products work would understand the natural tie-in there, and the issues of disintermediation, mild as they may be here, relative to say single premium deferred annuity (SPDA). But the question is, how will the employees understand and how would they react if that were to happen? So that is a potential pitfall of the participating contracts; but again, there are many billions of dollars worth of assets in these plans right now.

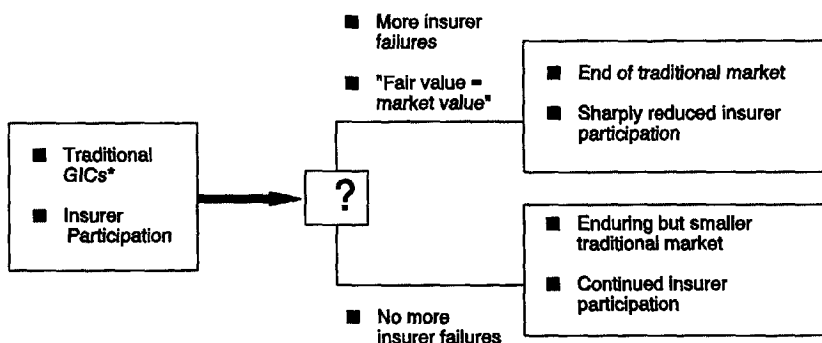
The question that's interesting to speculate on is, what's the future of the GIC market? A lot depends on whether there are more major insurance company insolvencies. These views are based on a survey that we conducted recently for one of our clients. We talked to a number of GIC intermediaries, brokers, consultants, and managers, as well as people in companies that are major GIC writers, plan sponsors, Fortune 500 companies, and smaller companies. The general view is that the stable asset products like GICs will remain in demand. However, there are going to be some inroads gradually by the variable products. In some instances, plans have already been amended to replace the so-called guaranteed fund that had nothing but GICs by a more actively managed fixed-income fund that is accounted for at market. There's also no question that the safety issues are shifting monies to the nontraditional products. However, there are other things that are drawing attention and plan asset dollars to these newer type contracts which, as we've described, offer a remarkable degree of flexibility when you think of that entire cube, as opposed to the basic characteristics of credited rate and maturity structure and whether you participate in the performance of an actual fund of assets. You now can go out there and purchase a product that offers you many combinations of features. A number of buyers are attracted more and more to the power and flexibility of being able to go to a fixed-income fund manager in a synthetic or to a separate account in an insurance company and say, "This is the kind of profile I want, and this is what I want in terms of management style. Is it buy and hold? Is it actively managed or immunized?" et cetera, et cetera. This offers more flexibility to the degree that a lot of this is being done in separate account products. It's a major opportunity for the insurance company to retain an aggressive asset base and an aggressive share of the market based on the statistics Daryle was showing. At the same time, it also means that the insurers are responding to concerns of their ultimate customers.

However, if there are more major insolvencies of insurance companies, it's possible that the market will change drastically in form and size. Probably shrinking as well as changing the nature of the products. Chart 2, we summarize by this kind of flow diagram or decision tree as to what could happen. Quite simply, if you take a look at the question of traditional GICs and the participation by insurance companies in that market, and if there are no more major insurance company failures, then the market is

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expected to endure. Based on this overall survey, the general consensus was that the market would endure, but it would be smaller than it is in relative terms; in other words, in market share terms, for the traditional products. However, there's going to be major continued insurance company participation and quite probably, some of the future breakthroughs in product design and investment practices will still come from the insurance industry. Some of the most experienced people are working with these areas and have really learned the most from the period of adversity that Daryle's mentioned.

CHART 2
Further Insurer Failures Could Trigger a
Major Move Away from Traditional GICs



* Excluding BICs.

However, if there are major failures, then it's quite possible that money is going to stream rapidly, especially as the contracts mature, out of the traditional market into the synthetics or the fixed-income funds, and this is going to reduce the traditional form of insurer participation drastically. What form might that participation take in the future? The book value wrapper continues to be viewed as a very, very significant feature in a lot of these kinds of contracts, and that is basically a kind of insurance benefit, although maybe legally it's not a life insurance benefit. There are non-insurance entities like commercial banks or Wall Street firms that will provide that wrapper. Nonlife insurers, like financial guarantee companies, will continue to be able to play in that market, both in terms of the risk charges and the profit for the wrapper. Also in a share of the management of the assets, by getting involved as the insurer or the underwriter of the wrapper within an overall synthetic. Life insurance companies have a number of different pieces to their organization or the flexibility to create new subsidiaries.

There are a number of products out there – many more than there were six months ago – that are structured exactly like that, where an insurance company has teamed up with an asset management firm. In some cases, the asset management firm is an affiliate. In some cases, the asset management firm is not an affiliate. One of the things that we've seen as an evolution of that is what I call somewhat tongue-in-cheek, the "pseudo-synthetic contract." It is actually an insurance company separate account product; the separate account assets are owned by the insurance company

in the usual manner, but are, in fact, managed by an asset management firm that is a distinct legal entity from the insurance company. So it's a sort of turnabout in fair play, where the insurance companies that are doing this are in a sense appealing to those who were drawn toward the synthetic products and saying, "Hey, come back to us, the insurance company. We can give you something that's almost exactly what you're looking for."

The companies that are participating in this nontraditional market have gone through a major learning process, but I think it's something that's been done with some success. For one thing, it's important to appreciate that the separate account and the synthetic products are probably going to gradually increase their market share in the near term.

Also, the indexed products that meet specialized niches within the overall market will probably continue to be a small portion, something under 10%. It's hard to estimate exactly. They do form an important part of the market, and the general consensus of the people in the survey was that when the yield curve tends to flatten out more, as it very well may if we move into an economic recovery that seems to be gradually occurring, then the shorter term yields will rise relative to the longer term yields, and people will feel that the indexed products are more attractive than they have been in the past. Another issue is that some people may be drawn toward the indexed products. If there's some uncertainty about which direction interest rates will take, but there's a feeling that they are more likely to go up than down, the indexed product lets you participate in the higher rates.

However, the increasingly complex products that we're talking about here do require some special product development efforts and, as will become clear in a moment, the criteria that affect success vary depending on what kind of product you are looking at. Certainly some of the most important critical success factors for the separate account or the synthetic products are somewhat different than what they have proven to be up to now for the more traditional general account products. Another important observation is that the ways in which the insurance company makes money -- what its sources of profit are, what the risks are that it's participating in -- also vary by product.

Table 3 has identified some of the major criteria for doing a good job, being able to sell a product that makes a reasonable profit for the vendor. Those are the rows of this table. The columns are these basic different kinds of products: the traditional products, the fixed guarantee that is in the general account; the indexed products; the separate account products; and finally the most exotic, the synthetic products.

The criteria that were identified as being important (see Table 4) include expenses, the credit rating of the company, and its asset-liability management, which means that you have to coordinate the assets and the liabilities carefully and make sure that your underwriting is consistent with your risk appetite. Also asset management, the pure investment aspect of it, the portfolio management, is equally critical. Product design is important, how complex and nonhomogeneous are these products? What are the latest features that really count? What can you do to distinguish yourself, and be able to sell a product that people will want to buy? Also included is underwriting -- conservative underwriting or aggressive underwriting? Also important is an





























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investment track record. Do you need to have a good proven track record of five years or more in fixed-income management of the intermediate duration type, or is that really critical in your ability to sell.

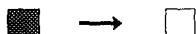
TABLE 3
Sources of Profit Also Vary

Sources of Profit	Type of Products		
	Traditional	Index	Separate/Synthetic Account
Participation in investment gain or losses	Full	Full	Varies
Compensation	Spread	Spread	Fee for Service
Benefit responsive wrapper	Full	Full	Full

TABLE 4
Requirements for Success Vary by Product

Critical Success Factors	Traditional	Indexed	Separate Account	Synthetic
Expenses				
Credit Rating				
Asset-Liability Management				
Asset Management				
Product Design				
Underwriting				
Investment Track Record				

Relative importance



High

Low

Let's see how these things are similar or different for the different kinds of products. Expense control is important for everybody. The credit rating is somewhat less important for the separate account products and for the synthetics, because those automatically provide a greater level of diversification or protection against credit risk. We see here that separate account and synthetic asset-liability management is less important, because many of the separate account products are experience rated. In that sense, the insurance company is exposed to less risk and, hence, less can go wrong as quickly if things are not done well in the risk management area. The same thing goes for synthetics. In asset management, this is important for everybody, because in order to have a good saleable product and a good attractive rate to win bids at the point of sale and also to do well over time to make money, everybody has to be good at asset management. Product design -- we see that this is relatively more important for the newer products, the separate account and synthetic ones, again because there is so little standardization, almost literally not two contracts are the same. In that sense, it's important once more to be able to diversify, to differentiate your product from some of your competitors', but do it in a way that is rational relative to what your skills are. We see that underwriting is important, but somewhat less important for the participating separate account products.

Finally, the investment track record is not significant in and of itself for general account products. It becomes more important for separate account products, especially when they're participating. Then finally, in the synthetic products, with the very visible unbundled asset management package, the fixed-income track record is very significant. Some people think that you need a minimum, an absolute minimum of three years of good performance in intermediate duration fixed-income assets. Others say a minimum of five is needed to be considered seriously by some of the intermediaries like the GIC fund managers. It can be difficult for an insurance company that wants to get into these products and doesn't have the right sort of track record in the right kind of assets.

Just to wrap up then, let's take a look at some of the sources of profit and see how they're the same or how they differ from one product to another. There are basically three ways in which risk participation occurs and hence, profit can be made or losses incurred. One is participating in the investment gains and losses of the assets. Second is the whole area of compensation -- what is the basic way in which one is paid for offering certain guarantees or services? Then finally is the level of participation and the benefit responsive wrapper and whether that is, in fact, an element of profit and loss. The three different kinds of products that we compare here again are the traditional products, the indexed products, and the separate account or synthetic products. The participating and investment gains and losses really is absolute on the part of the insurer in the traditional and the indexed products, because the credited rates are guaranteed. With the separate account and synthetic type products, it varies for the participating products, with some participation on the part of the company as well as by the plan. But again, it's quite a hodgepodge in the market of what the individual contracts do. The contracts need to be read very carefully, and this is probably an area where the intermediary advisors are playing a larger role than they are perhaps in the placement of monies for the traditional products.

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One issue, again, about the synthetic products is that one major source of compensation for offering this product is a fee for service, an asset management fee or a risk charge, rather than a spread between a cost of funds and an investment return number. In general, the exposure to the benefit responsive wrapper guarantee by the vendor is absolute, and some people feel that as an isolated risk to take there could be the opportunity for a substantial return on equity. It's quite possible that the volatility of return on that split off from the asset management could also be very significant.

Finally let's end with some interesting questions to which there's, at this point, some disagreement and probably no one right answer. So I will not attempt to answer them. I'll just pose these questions for now. Does increased market share require a more flexible investment policy with respect to things like active management or immunization or whatever? Will large exposures to GIC business threaten the ratings of the insurance companies that develop these large exposures? Are separate account products or synthetic products needed by an insurance company to defend its market share and its ratings in the current market environment?

MS. JUDITH MARKLAND: It's always dangerous to follow two such excellent speakers, but maybe that's one reason I choose to look at this from the market perspective. I think it's traditional in actuarial circles to talk a lot about risks from the insurance company point of view and what I'd like to do is try and look at them from the customer's point of view. Hopefully you'll come out thinking that indeed the GIC is not dead as an insurance company product, and in fact, that there's a major role for life insurance institutions in the marketplace going forward.

Daryle talked a lot about the events that have influenced the market. The credit events last year were a very abrupt shock, and shock in the marketplace is change. Change leads to this conflict between traditional ways of doing things and new ways of doing things. At that intersection you get a lot of friction and a lot of interaction. It's very healthy, as both speakers noted. It's a strengthening force for the marketplace, but it causes some disruption. It causes new questions and new quests for learning, and that's obviously what we're going through now.

Daryle took you through the pension plan market from the life insurance company perspective. Let's look at it from the plan sponsor's perspective and look at the history of funds. The only historical source I know for fund utilization is the Bankers Trust survey of defined-contribution plans. They come out at irregular intervals, but for a trend analysis this is good, I think. In the 1960s, before mutual funds were common, it was typical to have a government fund as the safe source market value, sometimes a savings bond fund as well. As mutual funds became more common, money market funds appeared in the 1970s and these funds with principal risk declined. We didn't see GICs or what today we call "stable value funds" until the late 1970s. But by 1986, more than 60% of plans had them. So in that 25-year period, there was a total reversal, in a sense, starting with over 60% of plans with government funds and back to 60% with GIC funds. Now people are adding market values back. Hal Morley, whom I think many of you know, told me the other day that when he started in this business, people were adding GIC funds to bond funds for greater stability. Now people are adding bonds to GIC funds for diversification.

There's no accident that this historical trend occurred, because a GIC is a good instrument for a pension plan, for a defined-contribution plan. I think to some extent, we've started to take that for granted. I had a reporter call yesterday and interview me about the forgotten virtues of GICs. There is a certain maturity period. There is a zero-coupon interest rate that's predictable and easy to communicate to participants. You can have withdrawals without rate change, so that one participant's behavior doesn't affect another participant's rate. Joe didn't mention it, but I think that's one of the big drawbacks of participating products for plan sponsors. If the plan cash-value risk is passed through, one participant can influence another's return. It is a very handy thing to administer. But, of course, plan sponsors really like them because the participants like them. The participants like them because basically they get a medium-term bond fund with the liquidity of a money market fund, and this is that book value element. Liquidity – they can take their funds out and they get what's essentially a bond yield. That means if you look at it on a rate-of-return basis, standard risk return, capital market line theory, from the participants' point of view, this fund is right off the chart. It's a very good deal. They like it. All of you who went through your exams and know all this capital market material know that risk here is defined only as volatility of return. It doesn't get to the credit issues that are the current market issues, so we'll deal with that soon.

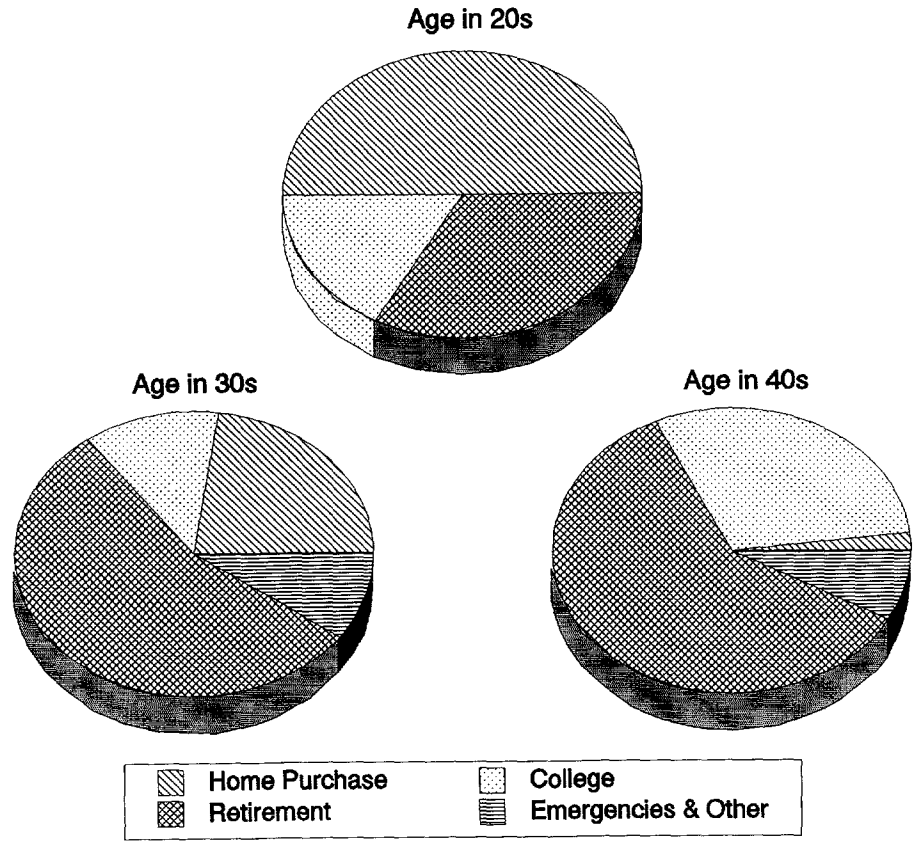
A lot of people are also saying that maybe fixed-income investments are too conservative for participants. Chart 3 is taken from a survey that we did a year ago in the pension department at John Hancock of 300 employees. We realized that we didn't know for our own GIC and 401(k) business how people really look at their 401(k) plans. Are they saving it for retirement? Is it something they want to use short term? Do they worry about risk short term? We discovered that although the bulk of people really do care about it for retirement, at younger age groups they have very different things in mind. When people are in their 20s, they're a lot more interested in home purchases than they are in retirement, which is logical. In their 30s, they're thinking about college education for their kids and home purchase. It's not until you get to the people in the 40s that retirement becomes a heavy major dominant use intention for the money. Maybe if we remember that two-thirds of participants in defined-contribution plans today also have a defined-benefit plan, this starts to make a little more sense. For many families, most families, this is the only major savings accumulation, and even when they have retirement as their primary savings use, they always have emergencies or college as a secondary use. So some conservatism in these funds maybe isn't bad. That, plus the risk return is a reason these have been so popular.

Last year we discovered there were some things GICs couldn't do. One of them is that they can't provide plan sponsors with total liquidity. At John Hancock that was because of arbitrage risk. It was awfully easy for a plan sponsor to find somebody else offering 25 basis points more than you were and cash in and get a better yield. That wasn't something we could live with. I think another historical reason was the relative illiquidity of our assets. That's something that markets have taken care of and most of our assets today, even private placements and commercial mortgages, are certainly a lot more liquid than they were 10 years ago. But now the main reason is preservation of this book value accounting.

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CHART 3

Primary Expected Use of DC Assets by Age Group



If any of you have been involved with FASB and the accounting issues, you know that it is very important to both FASB and the Department of Labor that a plan sponsor not be in a position to incur market value and thus pass it on to the participant. And to the extent that there's a risk that the participant might get market value, because the plan sponsor gave it to him or her, FASB's going to want it accounted that way. So we worked very hard at insuring that nobody can get market value in any of our contracts at any point in time. That does result in a lack of liquidity, which is a problem today. We have contract restrictions. That's to protect us against switches, to maintain equity washes. A lot of those kinds of things are to maintain that liquidity, and that's a problem. Obviously GICs can't eliminate credit risk. As Joe said, you look back to the assets, to the creditworthiness of the company as a whole.

I think what we want to do is think a little bit about what safety really is and what plan sponsors here are really looking at in trying to pick a conservative option for their funds, a safe option. Today the major issue is credit risk. We have to start thinking about some of the risks in the alternatives and why they're there and what they are and what safety really is. Is it a predictable income? If it is, are you talking total rate of return or just income? Do you care about principal risk? Do you care whether you incur market value risk, or do you care about credit risk? The world today has defined safety as credit risk, but I'm not sure that that's the case. In fact, I'm quite sure that that's not the case, and the reason I think that GICs are going to be around for awhile is because these other risks are on balance a lot bigger than credit risk.

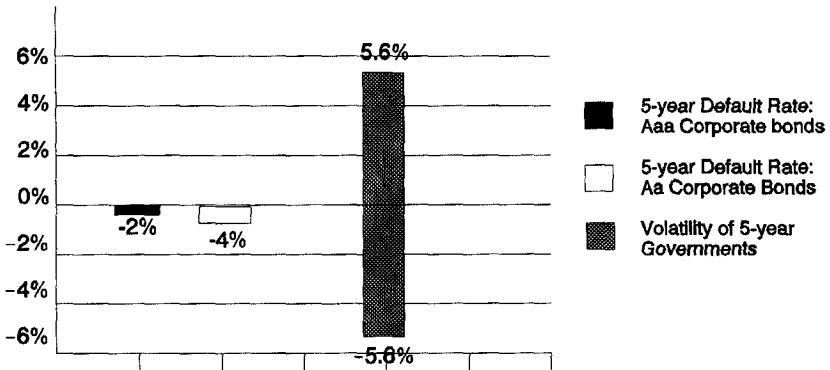
Think about what financial institutions are and what their purpose in life is and how they work and why they're there. The rule is to take asset risk, assume it, diversify it prudently, manage it prudently, and pass the benefits on to the customer. Life insurance institutions are, I think, the only financial institution that also has liability risk, and we do the same thing on the liability side. To do that you have to have a capital base. You can't assume risks without capital because they're cyclical. If it all came out in a nice even risk-charge stream, none of us would need capital, but they don't work that way. So if you're going to absorb risk, you need some form of capital. What's happening in today's world is that the plan sponsors are very anxious to diversify away their industry concentration. They want to diversify away from this dependence on this capital base, and by definition, that means that there's nobody to absorb the risk, because at the moment, they're not willing to diversify to a bank, which is the only other player in our marketplace that has the capital to absorb the risk. They're forced into a world where they have to pick up risks, and that's presented them with a whole new set of issues to look at and worry about. I think the issue that we're all facing right now is how to quantify those risks and explain them to people and help them understand the relative perspectives involved.

I said that I thought they were taking on more risk than they were escaping. What I've used for Chart 4 default risk here is Moody's corporate bond default average for the period 1971-91 and for five-year average default rates, 20 basis points for AAA corporations, 40 for AA. This is default risk, not loss of default. This is the incidence of default. If you took it to loss, Moody's would say it's only half of that. They measure loss in market value on the day of default. I think if any of you have looked at your investment people's performance over time, you'll find that they get 60 or 70% of the value back after a default. We also figure that an insurance company is

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a financial institution. Our assets are financial assets, not heavy equipment or aging fashion inventory or something like that that probably has more value than a lot of corporations. We have conservative accounting and so we figure that probably insurance companies on balance are going to do better than the average corporation in default. That would seem to be borne out by Executive Life, where people are talking of policyholders getting 85–95 cents on the dollar, and at Mutual Benefit even more than that. So let's say that maybe worse case for an insurance company at default is that you lose 25 cents on the dollar, and I think that's an overestimate. That's a quarter of those numbers, so you're talking five basis points for AAA and 10 basis points for AA in loss risk.

CHART 4
Default Risk vs. Principal Risk
(1971–1991 Average)



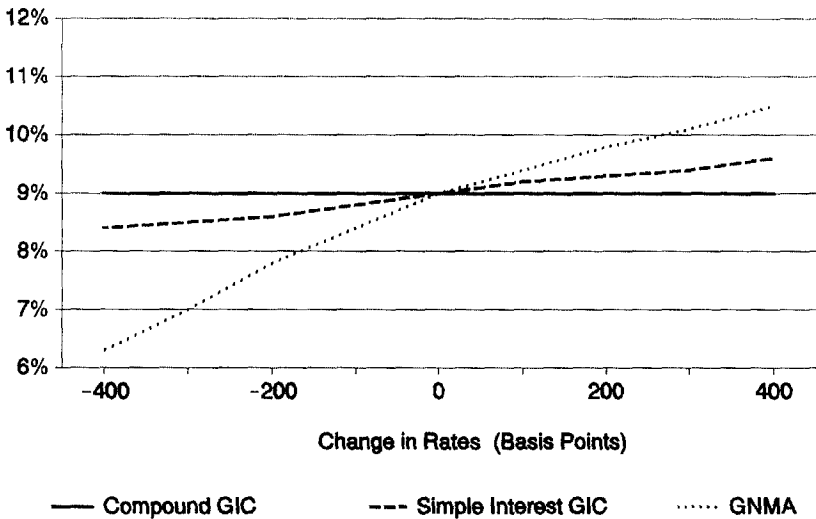
Source: Data compiled from Moody's Investor Service Corp. Bond Default Survey and Ibbotson & Association Database.

A lot of people are putting short-term government funds at market in their book value funds these days. I know one plan that has 50%. You can see on Chart 5 the capital volatility on a five-year government bond. It excludes the coupon yield, that's the volatility of principal, annual, plus and minus 5.5%. You do get the upside, but you're talking about something that is 40 times as big as the loss risk on a AA on the downside. And this is safe? They're putting it in there for a safe investment.

I think everybody really thinks that people are looking at book value instruments and those are all the ones that Joe just told you about. Again, these come in all kinds of sizes, shapes, and colors. Some of them absorb book value risk. Some absorb reinvestment risk. Some pass it all on. What we have created is a world where people really have to look at the products and understand them. Typically to avoid default risk, the people who are buying synthetics and alternatives are investing them in treasuries and agencies. Typically these are collateralized mortgage obligations (CMOs) that are backed by Government National Mortgage Associations (Ginnie Maes) or Fannie Maes. So you get into a world of both reinvestment risk and prepayment risk, and I thought it might be useful to look at those.

Chart 5 illustrates reinvestment by looking at the difference between a simple and a compound GIC. It is straightforward. If rates go up or down 200 basis points in a 9% coupon, there is roughly a 20-point difference. It's symmetrical. It's nice and neat. But there's some risk there. Most plans are willing to take that one for that degree. Look what happens when you take a straight Ginnie Mae. This isn't a CMO. It's not a tranche. It's a straight Ginnie Mae 9% coupon. With plus and minus 200 basis points, there is a very dramatic reinvestment risk and that's because these are backed by home mortgages. Home mortgages prepay dramatically when rates fall, but prepayments drop when rates rise. So you get prepayment risk when rates fall and extension risk when rates rise. You have a lot more money to invest when rates fall and you don't want it, and you get a lot less when rates rise and you wish you had it.

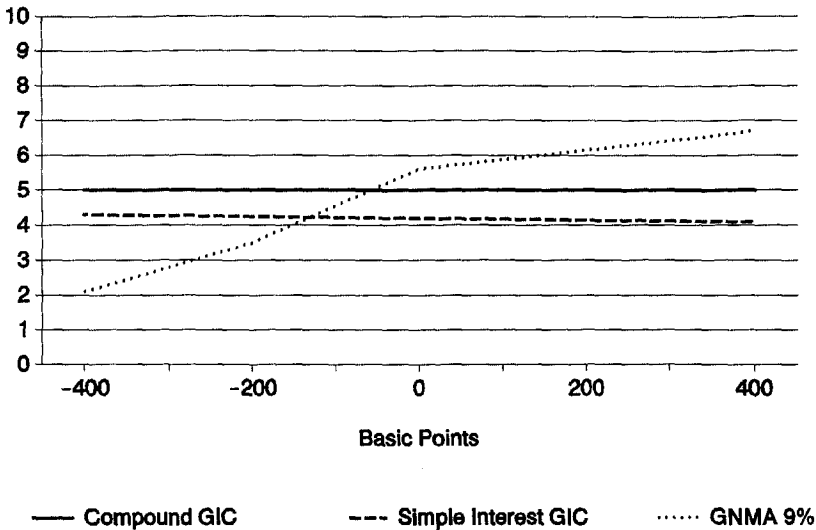
CHART 5
Comparative Reinvestment Risks
(Effective Yield; Rate Change Immediately After Purchase; 5-Year Period)



The effect of that can be seen looking at Chart 6 of the relative durations. The two GICs are constant, the difference by the different pattern of the interest rates obviously. Ginnie Maes shorten dramatically as rates fall and lengthen dramatically as rates rise. It's precisely the thing you don't want, so they're going to hold down the GIC fund, the blended rate in the plan, just at the time the plan sponsor most wants it to rise. They're going to push it down further just at the time he or she most wants it to stay up. Notice the asymmetry here. You don't get the same on the upside that you do on the downside. Plan sponsors and most of the investment managers are typically smart enough to use tranches. CMOs divide up Ginnie Maes so that they divide up the call risk. To the extent that the yield on these agencies is greater than treasuries, the market's saying that there's still some call risk there. I think some people have seen that there's a little more than they bargained for earlier this year when rates came down.

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CHART 6
Comparative Durations



So what we have is a world where people are going to have to start to learn to evaluate these kinds of things and think about them. Think about how much of them they want to assume. If you notice, we started talking about a lot of things that have very unpleasant experiences for plan sponsors when rates rise. Ginnie Maes hold down rates. Passing through the withdrawal risk on a plan holds down rates in a rising rate environment. Market value instruments hold down rates in a rising rate environment. We have a lot of things here that are not going to perform very well when rates start to rise, and they're going to raise the withdrawal risk on a lot of plans when they do. So it's a new world. What is very, very true is that the value the insurance industry and the financial institution presents in this world is the value to absorb risk. If there's a lesson I could give you to take home, it's that you remind yourselves of that and remind yourselves of the benefit of that to the market and start selling this, selling the GIC as an instrument that is very good for the plan and not sell Company X against Company Y.

To do this well we have to remind the world that our asset quality is not the same as our financial quality. The more we let the world think that all we are is assets – not risk-adjusted assets or assets backed by a substantial pool of surplus – the worse we'll be, because our value added is through risk diversification and that's what we're paid to do. And that's why I think GICs will be around for a while.

MR. RICHARD J. BARABINO, JR.: I have a couple of related questions for Joe Buff. You said that synthetics may be a material percentage of the marketplace in the near term, and I wonder if you mean that in the long term you're not sure about the prospect for synthetics, or do you see them as not being a significant piece of the market? You also said that you expect inroads from variable investment products. You basically said, "We've seen it happen," but you didn't really explain why you

think it's happening. Is it because plan participants are becoming more educated? Is that the reason, or is there some other reason?

MR. BUFF: I'll take the questions in order. First of all, on the whole question of synthetics, among the people we talked to, many of whom are the GIC intermediaries who spend all their time trying to figure out answers to questions just like yours, the perspective was that there is some question long term whether the synthetic products will be around. Currently they're selling well and acquiring a lot of market share. They meet certain needs that may possibly gradually evaporate or subside. If things go well for the insurance industry in the next couple of years, there's a general consensus that people's memories for some of the current problems, Executive Life, Mutual Benefit, whatever, will be short and that two years is a very long time. Or as one person mentioned when I was in their office during the survey, there are two basic emotions that drive the market: fear and greed. Greed is the more positive of the emotions, and it will emerge whenever fear starts to subside. That being the case, it's quite possible that there may be more of a drawback to the traditional GIC market, that when the money that's in the synthetic products that are being written now come up to mature or roll over. They will not go back into synthetics and there won't be so much new money going into synthetics.

MR. BARABINO: You had said you expected some inroads from variable products. Why is that? Because plan participants are maybe better educated about their relative value?

MR. BUFF: I think that some of it comes down to what you're saying, which I could rephrase, by using some of Judy's comments in terms of an efficient frontier, the whole idea of risk versus return. The question is, what's the purpose of GIC money or the equivalent? What are the 401(k) funds being used for? What are people looking for? If you feel that you want to use the money in the near term for something like buying a house or an emergency or whatever based on Judy's pie charts, then there's a feeling that you want to have book value accounting so that you know exactly what your money is. If you want to get funds out and spend them, you're not going to suffer losses because, say, interest rates are high and bond values are low. If you view the money as long-term savings for retirement or to fund a child's education, which maybe is 15 or 20 years from now, you're looking at a much longer time frame for liquidating the money from the plan and spending it on something else. There it's probably more efficient to go for whatever the highest expected return is, given that your notion of the inherent risk itself is different.

As an example, in my firm, Towers Perrin, at the end of last year, for a variety of reasons, senior management decided to switch from a guaranteed income fund backed by GICs to one that's now called the fixed-income fund, which has some GICs, some synthetics, and some actively managed funds. The book value wrapper has basically been removed, and the rate has only stabilized to the degree that there are some GICs there. We've moved to a form of market value accounting, which will become more extreme to the degree that there are less and less GICs as there may very well be. Instead of saying, "Well, your money is going to get 8% next year," the employee communications made the interesting and very vague statement that, "We expect the return to be somewhere between 6.5-8%." In the first quarter of this year, in fact, it was less than 6.5%. I think about the efficient frontier, and if I'm

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going to be in fixed income and I'm not going to get the benefits of that book value wrapper, I'm going to put the money into something that has a much better expected long-term return, because it is retirement savings. I put all of my new money last year into the common stock fund. I split half between growth stocks and income stocks, in case you're interested. So in a sense, the education or efficiency or long-term planning of the employees, I think, is a large part of it.

MR. ROBERT B. LIKINS: Judy, you had mentioned that there are some kinds of investments, where if some of the participants either get in or get out, it affects the value of the investment of the other participants. I just wasn't familiar with what that was and wondered if you could elaborate on it a little bit.

MS. MARKLAND: I guess I didn't explain it too well. I was speaking of experience-rated products, where one of the factors for which you experience rate is planned cash flow and withdrawal risk. I have heard several times, "But isn't that inequitable?" I also suspect that a lot of us who are blithely putting it into plans aren't realizing what it's going to do to the blended rate in an uptick of interest rates. I'm not sure whether we've priced the companion GICs that go along with it as well as we should have either, but that's a question for us to think about.

MR. BARABINO: On an experience-rated contract where you reset the rate to reflect the withdrawals of plan participants, isn't it true that basically all you're doing is spreading market value gains and losses gradually over the entire contract? Although at any given point in time you have nominally book value accounting for your product, ultimately it's just a market value instrument, and might this endanger the FASB treatment for the product?

MS. MARKLAND: That is a good question. It certainly doesn't help it, that's for sure. Nobody knows what FASB is doing precisely, except that it has offloaded the issue to the AICPA. It seems to be clear that as long as a risk is maintained completely and assumed by somebody, it is willing to assume that it's not there. To the extent that a participant has a problem in incurring a risk or sharing a risk, it messes things up and it makes it much harder to justify now. It is still true that at any point in time the participant gets the contract value. It's just that that contract value is adjusted. I think you're right, that it's not a good thing to become widespread, because it makes it much harder to maintain contract value accounting. I suspect that market tolerances will hold it down as much as fear of book value. I think that market demand is probably not big enough for that to be an issue.

MR. JOHNSON: Let me add a comment here. I think there are varying degrees of the kinds of products that pass through the market experience, if you will, through the use of a stated interest rate. Some of the contracts do contain benefit responsive features and, if at book value, a participant is entitled to something that exceeds market at that point, somebody steps in and makes good on that deficiency. That's a true make-up provision, if you will, so that you're not literally passing through even ultimately the true market experience. There are also products where, let's say that on a total return basis, there's an asset in the portfolio that defaults. Sometimes that default experience is reflected in the total return and passed through, but there are products where that is not passed through, where there is some sort of true

guarantee of principal that can take place. There are varying degrees of those things, I think.

MR. MARK A. HARGROVE: I wonder if the individual employee is going to get a little more educated, and if the asset allocation were a little more efficient, would GICs be seeing as much money as they are right now? I know that just on a personal level, people in my own company are thinking about it a little more, shifting more money to equities and balanced funds and things like that. That could have an impact on the recovery of traditional GICs.

MR. JOHNSON: We probably all have a slightly different view on it. I think you are going to see some increase in allocation to the other competing options, if you will, but I think it's going to be fairly minor. My view on this whole thing is that what participants are interested in when it comes to the defined-contribution plan is not "making a killing on their investments," but "protecting their nest egg." I think that's always been the case, and it's going to continue to be the case. There are about 3,000 employees and agents at my company, and we offer them three investment choices: a fixed annual yield fund, an equity fund, and a balanced fund. The fixed yield fund has 80% of the money and each of the other two funds has 10%. It's kind of interesting, and we're talking here with people who are dealing in this marketplace and understand all of this, and 80% of the money is in the fixed yield fund. So I think you are going to see some effect, but I think it's going to be fairly minor, frankly.

MS. MARKLAND: I know at our company, 45% of the people elect 100% of their contributions to the GIC fund. Don't forget that the older person has more savings accumulated and that a lot of funds allow retirees to stay in. I know at John Hancock 20% of the participants in the GIC fund are retirees. Some of those big companies that had savings plans in the 1960s and the 1950s have 40% of the participants in the plan that are retired. And that has a bearing on things. I think we tend to think that the typical participant is about 30 with a baby and a white picket fence and all of that. But I don't think that's it. I don't have any statistics, but I bet if you dollarweight the savings dollars in the funds the dollar-weighted age is over 50.

MR. HARGROVE: Along the same line, do you expect the mutual funds to perhaps make more inroads into the 401(k) market?

MS. MARKLAND: I do and I think it's because they're working at it much harder than we are. I think there are bond salesmen out there talking to plan sponsors and they are selling the benefits of their investments. We had the luxury of having something that didn't need to be sold for a long time, and we're not used to selling it. I think, to some extent, we're losing market share; not necessarily on merit, but because they're more aggressive than we are at this point.

MR. BUFF: I generally agree with what you say, Judy. There's an issue of market-eermanship involved in this at this point. The insurance industry does have some ground to recover in terms of being perceived as not just a safe place to put money but also as being aggressive in terms of coming up with new product ideas and also meeting the needs of the plans. It's very difficult to figure out how much of the total

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401(k) market actually gets placed through an intermediary like a GIC manager or a broker or through a consultant, but reasonable estimates are that it's a bit more than half, something like 60%. Historically, maybe you could sort of oversimplify things a little, by saying that the insurance companies played a role of having relatively infrequent contact with some of these intermediaries and then basically looked to sell the product by coming up with a relatively competitive bid and hoped that it would be selected, but they played something of the role of an order taker. However, I think the industry is becoming more active. If you just take a look at the advertising that the industry is doing, those companies with strong ratings are capitalizing on the advertising for their products with literature that is read by the head of human resources or a chief financial officer (CFO) in a company, who both are zeroing in more on the complexities of the 401(k) market and what the insurance company can offer. Very often the buying decision is made, maybe half of the time by a human resources person and half by a CFO or other financial person. So I think those are two key focus points: sources of leverage in the whole marketing game, as well as the intermediaries who are going to continue to play a major role and probably will control at least half of the total money for the foreseeable future.

MR. JOHNSON: I would agree with what Judy and Joe both said and I think it's simple. I think the mutual fund industry is well positioned to take advantage of the current trends and developments in the 401(k) market. I think it's really that simple. They are a force to be reckoned with. I don't think there's any doubt about it.

